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The AME2016 atomic mass evaluation *

(I). Evaluation of input data; and adjustment procedures

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Abstract This paper is the first of two articles (Part I and Part II) that presents the results of the new atomic mass evaluation, AME2016. It includes complete information on the experimental input data (also including unused and rejected ones), as well as details on the evaluation procedures used to derive the tables of recommended values given in the second part. This article describes the evaluation philosophy and procedures that were implemented in the selection of specific nuclear reaction, decay and mass-spectrometric results. These input values were entered in the least-squares adjustment for determining the best values for the atomic masses and their uncertainties. Details of the calculation and particularities of the AME are then described. All accepted and rejected data, including outweighted ones, are presented in a tabular format and compared with the adjusted values obtained using the least-squares fit analysis. Differences with the previous AME2012 evaluation are discussed and specific information is presented for several cases that may be of interest to AME users. The second AME2016 article gives a table with the recommended values of atomic masses, as well as tables and graphs of derived quantities, along with the list of references used in both the AME2016 and the NUBASE2016 evaluations (the first paper in this issue).

AMDC: http://amdc.impcas.ac.cn/

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1 Introduction

The mass of an atom equals the sum of the masses of its constituents (protons, neutrons and electrons) minus the binding energy, which includes both the atomic and nuclear binding energies. In general, the binding energy of the electrons outside the nucleus is well known. Therefore, the atomic mass reflects the net consequence of all interactions that hold the nucleons together in the nucleus. Since the strong, weak and electromagnetic interactions act among the nucleons, which on the one hand makes the theoretical description of nuclei very complex, on the other hand it gives us natural laboratories to study these fundamental interactions.

As a fundamental property of nuclei, atomic masses are widely used in many domains of science and engineering. A reliable atomic mass table derived from the experimental data, where the atomic masses and the relevant experimental information can be found conveniently, is in high demand by the research community. To meet the demands, the Atomic Mass Evaluation (AME) was created in 1950's and now serves the research community by providing the most reliable and comprehensive information related to the atomic masses [1].

The last complete evaluation of experimental atomic mass data AME2012 [2, 3] was published in 2012. Since then the experimental knowledge of atomic masses has continuously expanded and a large amount of data relevant to atomic masses has been published in the scientific literature. In this article, general aspects of the development of AME2016 are presented and discussed. In doing this, several local analyses will be given as illustrative examples.

The main AME2016 evaluation table (Table I) is presented in Part I. All accepted and rejected experimental data are given and compared with the adjusted values deduced using a least-squares fit analysis.

As in the previous AME versions, all uncertainties are

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one-standard deviation (1σ).

There is no strict literature cut-off date for the data used in the present AME2016 evaluation: all data, available to the authors until the end of October 2016 were included. Results which were not included for particular reasons, such as the need for a heavy revision of the evaluation at too late a stage, were added in remarks to the relevant data. The final mass-adjustment calculations were performed on February 28, 2017.

The present publication includes updated information presented in the previous AME including the data that were not used in the final adjustment due to specific reasons, e.g. data that have too large uncertainties.

Remark: in the following text, several data of general interest will be discussed. Mention of references that can be found in Table I will be avoided. When it is necessary to provide a specific reference, those will be given using the NSR key-numbers [4], listed at the end of Part II, under “References used in the AME2016 and the NUBASE2016 evaluations” (p. 030003-5) (e.g. [2016De15]).

1.1 Isomers in the AME and the emergence of NUBASE

In the early AME work, a computer data file (called *Mfile*) that contained the approximate mass values for nuclides in their ground and selected excited isomeric states was maintained. It was used as an approximate input to the adjustment program, which essentially uses the differences between the input and these approximate values in order to improve the precision of the calculations. The other reason for the existence of this file was for isomers, where one has to be careful to identify which state is involved in the reported experimental data, including decay/reaction energies or mass-spectrometric results. Therefore, it was judged necessary to make the *Mfile* as complete as possible. Thus, the NUBASE evaluation was developed to contain values of the main nuclear properties, such as masses, excitation energies of isomers, half-lives, spin and parities, and decay modes and their intensities, for all known nuclides in their ground and excited isomeric states. The NUBASE evaluation was published independently from AME for the first time in 1997 [5], and was greeted with interest from many colleagues working in the areas of nuclear structure physics, nuclear astrophysics and applied nuclear physics. In 2003 and 2012, the NUBASE and AME were published jointly, which is the case again with the present NUBASE2016 evaluation published in the first part of this issue (41-030001).

Isomers may be involved in mass-measurement experiments. This became even more important for new mass-spectrometric methods that were developed to measure masses of exotic nuclides far from the valley of β-stability, which have, in general, relatively short lifetimes. The resolving power of mass spectrometers has been improved significantly in recent years and many isomers can be clearly separated. But quite often only an isomeric mixture could be measured and an average mass value for a particular isomeric pair can be obtained. Since the mass of the ground state is the primary aim of the present evaluation, it can be derived only in cases where information on the excitation energies and production rates of the isomers is available. When the excitation energy of a particular isomer is not experimentally known, it is estimated from smooth trends in neighboring nuclides (TNN), as explained in NUBASE2016 (p. 030001-4). Two examples are given in Section 6.2.9 (p. 030002-27) and Section 6.8 (p. 030002-32).

1.2 Highlights

The backbone Nowadays, the highest precision values measured for the atomic masses are obtained by two different experimental techniques: direct mass-spectrometric measurements using Penning traps, and γ-ray energy measurements following neutron capture reactions.

In the present work, results obtained by both methods are combined consistently (with very few exceptions) to improve considerably the precision of the atomic masses for nuclides along the line of stability in a diagram of the atomic number Z versus neutron number N [6], thus resulting in a reliable ‘backbone’.

The highest relative mass precision $\delta m/m$ of 7×10^{-12} has been achieved by a Penning trap spectrometer [2004Ra33]. The masses of some stable alkali-metal nuclides and noble-gas nuclides [2010Mo30] have been determined with relative precision of 10^{-10} or even better, providing reliable reference standards for other mass measurements. While most stable nuclides, and some long-lived ones, could have their mass accuracy improved using Penning traps, the priority has been given by experimentalists to cases where there is a strong motivation from the physics point of view. For example, the $Q_{\beta\beta}$ values for nuclides relevant to neutrino properties have been determined with very high precision [2011Go23], strengthening at the same time the backbone.

Meanwhile, (n,γ) reactions ([2006De21], [1984Ke15] and [1998Wh01]) determined the binding energies with a relative uncertainty of 10^{-7}, providing mass determination with precisions at the level of 10^{-10}.

Exotic species The domain of nuclides with experimentally known masses has extended impressively over the last few years, thanks to the developments of radioactive nuclear beam facilities and novel mass spectrometers. In the past, masses of short-lived nuclides were mainly known from Q_β end-point measurements, while in the present evaluation, mass spectrometry dominates. Classical time-of-flight mass spectrometry stays at the frontier, exploring the light neutron-rich mass region, albeit with larger uncertainties. Penning traps and storage rings keep on playing an important role in mass measurements for short-lived nuclides. Meanwhile, Multi-Reflection Time-of-Flight spectrometers (MR-TOF) begin to take the stage. It can be concluded that the shape of the atomic mass surface, and hence understanding of nuclear interactions, has been changed significantly over the last 10-20 years.

Table A. Constants used in this work or resulting from the present evaluation.

1 u	=	$M(^{12}\mathrm{C})/12$	=		atomic mass unit			
1 u	=	1 660 539.040	±	0.020	$\times 10^{-33}$ kg	12	ppb	*a*
1 u	=	931 494.0954	±	0.0057	keV	6.2	ppb	*a*
1 u	=	931 494.0038	±	0.0004	keV_{90}	0.45	ppb	*b*
1 eV_{90}	=	1 000 000.0983	±	0.0061	μeV	6.1	ppb	*a*
1 MeV	=	1 073 544.1105	±	0.0066	nu	6.2	ppb	*a*
1 MeV_{90}	=	1 073 544.2160	±	0.0004	nu	0.45	ppb	*b*
M_e	=	548 579.909070	±	0.000016	nu	0.03	ppb	*a*
	=	510 998.9461	±	0.0031	eV	6.2	ppb	*a*
	=	510 998.89651	±	0.0023	eV_{90}	0.45	ppb	*b*
M_p	=	1 007 276 466.93	±	0.09	nu	0.09	ppb	*c*
M_α	=	4 001 506 179.127	±	0.06	nu	0.015	ppb	*c*
$M_n - M_H$	=	839 883.59	±	0.51	nu	610	ppb	*d*
	=	782 346.52	±	0.48	eV_{90}	610	ppb	*d*

a) derived from the work of Mohr and Taylor [7].
b) for the definition of V_{90}, see text.
c) derived from this work combined with M_e and total ionization energies for ^{1}H and ^{4}He from [7].
d) this work.

2 Units and recalibrations of α- and γ-ray energies

Atomic mass determination for a particular nuclide can be generally performed by establishing an energy relation between the mass we want to deduce and that for a well known nuclide. This energy relation is then expressed in electron-volts (eV). Mass values can also be obtained as an inertial mass from the movement of an ionized atom in an electro-magnetic field. The mass is then derived from a ratio of masses and it is then expressed in 'unified atomic mass unit' (u). Those two units are used in the present work.

Since 1960, the mass unit is defined as one twelfth of the mass of one free atom of carbon-12 in its atomic and nuclear ground states, $1\,\mathrm{u} = M(^{12}\mathrm{C})/12$. Before 1960, two mass units were used: the physics one, defined as $^{16}\mathrm{O}/16$, and the chemical one which considered one sixteenth of the average mass of a standard mixture of the three stable oxygen isotopes. This difference was considered as being not at all negligible, when taking into account the commercial value of all concerned chemical substances. Physicists could not convince the chemists to drop their unit. "The change would mean millions of dollars in the sale of all chemical substances", said the chemists, which was indeed true! Kohman, Mattauch and Wapstra [8] then calculated that, if $^{12}\mathrm{C}/12$ was chosen, the change would be ten times smaller for chemists, and in the opposite direction ... This led to an unification; 'u' stands therefore, officially, for 'unified mass unit'. It is worth mentioning that the chemical mass-spectrometry community (e.g. bio-chemistry, polymer chemistry) widely use the dalton unit (symbol Da, named after John Dalton [9]). It allows to express the number of nucleons in a molecule, at least as it is presently used in these domains. It is thus not strictly the same as 'u'.

The unit for energy is the electron-volt. The choice of the volt for the energy unit is not unambiguous. For example, one may use the *international* volt V, or the volt V_{90} as *maintained* in national metrology laboratories and defined by adopting an exact value for the constant ($2e/h$) in the relation between frequency and voltage from the Josephson effect. Since 1990, by definition $2e/h = 483597.9$ (exact) GHz/V$_{90}$ (see Table B). Already in 1983, an analysis by Cohen and Wapstra [10] showed that all precision measurements of reaction and decay energies were calibrated in such a way that they can be more accurately expressed in *maintained* volts. In fact, the gamma-ray energies determined in wavelength measurements can be expressed in eV$_{90}$ without loss in precision, since the conversion coefficient is an exact quantity. Here we take the measurement of the reaction energy for ^{1}H(n,γ)^{2}H as an example. In the experiment, the wavelength of the emitted γ ray is determined by using the Institut Laue-Langevin (ILL) silicon crystal spectrometer. In AME2003, the recommended value was 2224.5660(4) keV$_{90}$, based on the work of Kessler *et al* [1999Ke05]. This result had the highest precision for energy measurement in the input data, with a relative uncertainty of 180 ppb. In the later work from the same group [2006De21], the value was corrected to be 2224.55610(44) keV with new evaluation on the lattice spacing of the crystal. The value of the crystal lattice spacing is used as an adjusted parameter in the CODATA evaluation of Mohr *et al.*, but not expressed explicitly. Using the same value of the wave length in [2006De21], and the length-energy conversion coefficient, we derive 2224.55600(44) keV$_{90}$ as an input to our evaluation. During this period, the conversion coefficient with respect to the *international* volt has been changed by 5.5×10^{-8}, which is about one third of the measurement uncertainty.

Table B. Definition of Volt unit, and resulting mass-energy conversion constants.

	$2e/h$			u		
1983	483594.21	(1.34)	GHz/V	931501.2	(2.6)	keV
1983	483594	(exact)	GHz/V$_{86}$	931501.6	(0.3)	keV$_{86}$
1986	483597.67	(0.14)	GHz/V	931494.32	(0.28)	keV
1990	483597.9	(exact)	GHz/V$_{90}$	931493.86	(0.07)	keV$_{90}$
1999	483597.9	(exact)	GHz/V$_{90}$	931494.009	(0.007)	keV$_{90}$
2010	483597.9	(exact)	GHz/V$_{90}$	931494.0023	(0.0007)	keV$_{90}$
2012	483597.9	(exact)	GHz/V$_{90}$	931494.0038	(0.0004)	keV$_{90}$

The precision of the conversion factor between mass units and *maintained* volt (V$_{90}$) is higher than that between the former and *international* volt as seen in Table A. Until the end of the last century, the relative precision of $M-A$ expressed in keV was for several nuclides worse than the same quantity expressed in mass units. Due to the increase of precision of fundamental constants, now the relative precision of $M-A$ expressed in keV$_{90}$ is as good as the same quantity expressed in mass units, whereas the uncertainties expressed in *international* volts are larger than in V$_{90}$. For example, the mass excess of ^{4}He is 2 603 254.130±0.063 nu in mass units, 2 424 915.609±0.059 eV$_{90}$ in *maintained* volt units and 2 424 915.851±0.061 eV in *international* volt units. Therefore, as already adopted in our previous mass evaluations, the V$_{90}$ (*maintained* volt) unit is used in the present work.

In the most recent CODATA evaluation by Mohr *et al.* [7], the relation between *maintained* and *international* volts is given as V$_{90}$=[1+9.83(0.61)$\times10^{-8}$]V, which can be expressed as a difference of 98(6) ppb.

In Table A, the relations between *maintained* and *international* volts, and several constants of interest, obtained from the evaluation of Mohr *et al.* [7] are presented. The ratio of mass units to electronvolts for the two Volt units, and the ratio of the two Volts are also given. In addition, values for the masses of the proton, neutron and α particle, as derived from the present evaluation, are also given, together with the mass difference between the neutron and the light hydrogen atom.

In the earlier mass tables (e.g. AME1993), we used to give values for the binding energies, ZM_H+NM_n-M. The main reason for this was that the uncertainty of this quantity (in keV$_{90}$) was larger than that of the mass excess, $M-A$. However, due to the increased precision of the neutron mass, this is no longer important. Similarly to AME2003 and AME2012, we now give instead the binding energy per nucleon for educational reasons, connected to the Aston Curve and the maximum stability around the 'iron-peak' which is of importance in astrophysics. (See also the note in Part II, Section 2, p. 030003-3)

The defining values and the resulting mass-energy conversion factors are given in Table B. Since 2003, the definition has not been modified. Therefore, no recalibration has been necessary in the present AME2016.

Some more historical points are worth mentioning.

In 1986, Taylor and Cohen [11] showed that the empirical ratio between the two types of volts, which had of course been selected to be nearly equal to 1, had changed by as much as 7 ppm. For this reason, in 1990 a new value was chosen [12] to define the *maintained* volt V_{90}. In their 1998 evaluation, Mohr and Taylor [13] revised the conversion constant to *international* eV. The result was a slightly higher (and 10 times more precise) value for V_{90}.

Since older high-precision, reaction-energy measurements were essentially expressed in keV_{86}, we had to take into account the difference in voltage definition that causes a systematic error of 8 ppm. It was therefore necessary, for the AME2003 tables, to adjust the older precise data to the new keV_{90} standard. For α-particle energies, Rytz [14] has taken this change into account, when updating his earlier evaluation of α-particle energies. We have used his values in the present input data table (Table I) and indicated this by adding in the reference field the symbol "Z".

A considerable number of (n,γ) and (p,γ) reactions have precisions not worse than 8 ppm. In 1990, A.H. Wapstra [15] discussed the need for recalibration for several γ rays that are often used as calibration standards. This work has been updated in AME2003 (in a special file dedicated to this study, available on the AMDC website [16]) to evaluate the influence of new calibrators, as well as of the new Mohr and Taylor fundamental constants for γ-ray and particle energies used in (n,γ), (p,γ) and (p,n) reactions. In doing this, the calibration work of Helmer and van der Leun [17], based on the fundamental constant values at that time, was used. For each of the data concerned, the changes were relatively minor. However, it was necessary to make such recalibrations in AME2003, since otherwise they added up to systematic uncertainties that were non-negligible. The calibration for proton energies has also been undertaken in AME2003. As in the case of Rytz' recalibrations for α-decay energies, such data are marked by "Z" behind the reference key-number. However, there were cases where it was not possible to do so, for example when this position was used to indicate that a remark was added, the same "Z" symbol was added to the uncertainty value mentioned in the remark.

The list of input values (Table I) for our calculations includes many excitation energies derived from γ-ray measurements that are evaluated and published in Nuclear Data Sheets (NDS) [18]. Only in exceptional cases it made sense to change them to recalibrated results.

3 Input data and their representation - connection diagram

As mentioned above, there are two methods that are used in measurements of atomic masses: the mass-spectrometric one (often called a "direct method"), where the inertial mass is determined from the trajectory of the ion in a magnetic field, or from its time-of-flight; and the so-called "indirect method" where the reaction energy, i.e. the difference between several masses, is determined using a specific nuclear reaction or a decay process. In the present work all available experimental data related to atomic masses (both energy and mass-spectrometric data) are considered. The input data are extracted from the available literature, compiled in an appropriate format and then carefully evaluated.

In the AME data treatment, we try our best to enter the true primary experimental information. In this way, the masses can be recalibrated automatically for any future changes, and the original correlation information can be properly preserved.

One example that illustrates our policy of data treatment is the following. In [1986Ma40], the Q value of the ^{148}Gd(p,t)^{146}Gd reaction was measured relative to that of the ^{65}Cu(p,t)^{63}Cu reference reaction. In AME2003, the corresponding equation was $^{148}\mathrm{Gd(p,t)}^{146}\mathrm{Gd} = -7843 \pm 4\,\mathrm{keV}$. However, in the present work, it is presented and used as a differential reaction equation: $^{148}\mathrm{Gd(p,t)}^{146}\mathrm{Gd} - ^{65}\mathrm{Cu(p,t)}^{63}\mathrm{Cu} = 1500 \pm 4\,\mathrm{keV}$. Strictly speaking, those equations are not exact either. What is measured in the experiment is the energy spectra of the ejected particles. Since there are differences between the masses of the measured nuclides and the reference, the response of the ejected particles to the Q values are different for the measured nuclides and the reference, depending also on the angle where the spectra are obtained. While the exact equations are quite complex, we believe that the treatment by differential reaction equation represents the original data more reliably and that most of the primary information is preserved.

Nuclear reaction $A(a,b)B$ and decay $A(b)B$ energy measurements connect the initial (A) and final (B) nuclides with one or two reaction or decay particles. With the exception of some reactions between very light nuclides, the precision with which the masses of reaction particles a and b are known is much higher than that of the measured reaction and decay energies. Thus, these reactions and decays can each be represented as a link between two nuclides A and B. Differential reaction energies $A(a,b)B - C(a,b)D$ are in principle represented by a combination of four masses.

Direct mass-spectrometric measurements, again with exception of a few cases between very light nuclides, can be separated in a class of connections between two or

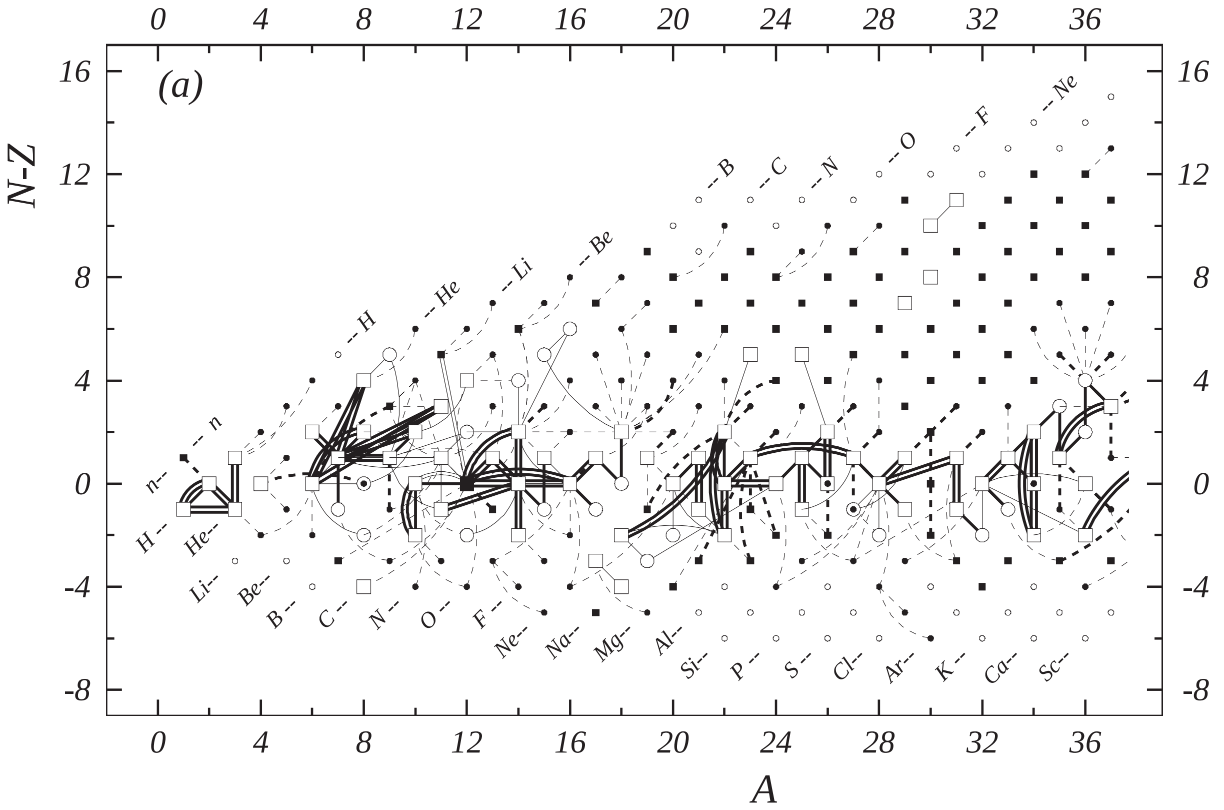

Figure 1. (a)–(j). Diagram of connections for input data.

For *primary data* (those checked by other data):

□	absolute mass-doublet nuclide (i.e. connected to ^{12}C, ^{35}Cl or ^{37}Cl);(or nuclide connected by a unique secondary relative mass-doublet to a remote reference nuclide);
○	other primary nuclide;
⊡ ⊙	primary nuclide with relevant isomer;
//	mass-spectrometric connection;
——	other primary reaction connection.
	Primary connections are drawn with two different thicknesses. Thicker lines represent the highest precision data in the given mass region
	(limits: 1 keV for $A < 36$, 2 keV for $A = 36$ to 165 and 3 keV for $A > 165$).

For *secondary data* (cases where masses are known from one type of data and are therefore not checked by a different connection):

■	secondary experimental nuclide determined from mass spectrometry;
•	secondary experimental nuclide determined by a reaction or a decay;
∘	nuclide for which mass is estimated from trends from the Mass Surface (TMS);
– – – – –	connection to a secondary nuclide. Note that an experimental connection may exist between two estimated TMS nuclides when neither of them is connected to the network of primaries.

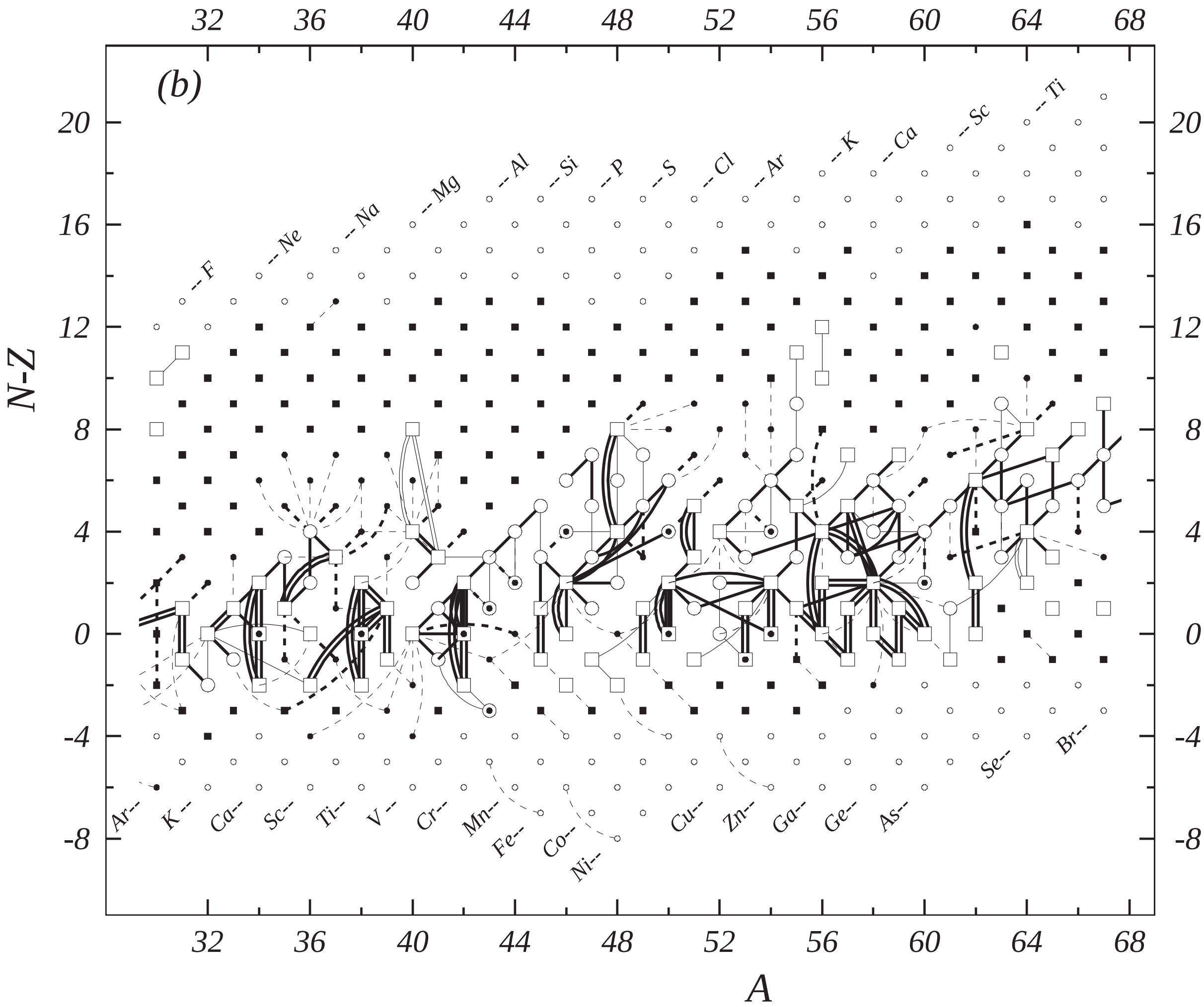

Figure 1 (b). Diagram of connections for input data — continued.

three nuclides, and a class that essentially determines the absolute mass value (see Section 5). Penning trap measurements almost always give a ratio of masses between two nuclides (inversely proportional to their cyclotron frequencies in the trap). Sometimes these two nuclides can be very far apart. Thus, those measurements are in most cases best represented as a combination of two masses. Other types of direct experimental methods, such as 'Smith-type', 'Schottky', 'Isochronous', 'Time-of-flight' and some 'Multi-reflection Time-of-flight' mass spectrometers, are calibrated in a more complex way, and are thus published by their authors as absolute mass values. They are then presented in Table I as a difference: ^{A}El–u.

For completeness, we mention that early mass-spectrometric "triplet" measurements on unstable nuclides (cf. Section 6.2.2, p. 030002-24) can best be represented as linear combinations of masses of three isotopes, with non-integer coefficients [19].

This situation allows us to represent the input data graphically in a diagram of $(N-Z)$ versus $(N+Z)$ as shown in Fig. 1. This is straightforward for absolute mass-doublets and for two-nuclide difference cases; but not for spectrometer triplets and differential reaction energies (see Section 3, p. 030002-5). In general, the differential reactions are more important for one of the two reaction energies. Therefore, we present only the more important one in the graphs. For computational reasons, these data are treated as *primaries* (see below) even though the diagrams show only one connection.

In the present work, all input data are evaluated, i.e. calibrations are checked if necessary, and the data are compared with other results and with the trends from the mass surface (TMS, see next Section) in the region. As a consequence, several input data are corrected or even rejected (see below). All input data, including the rejected ones (not presented in Fig. 1), are given in Table I. As can be seen from Fig. 1, the accepted data may

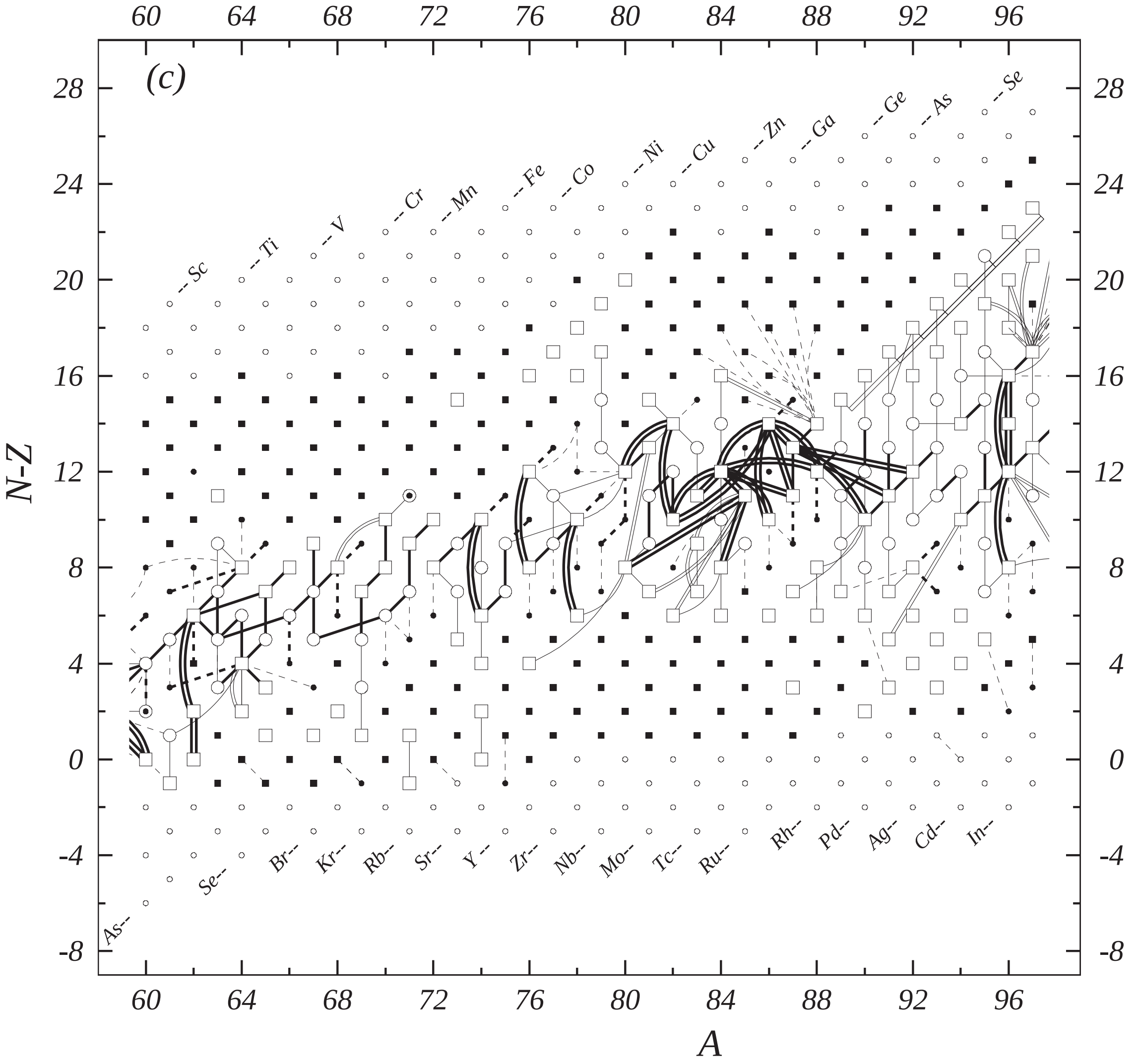

Figure 1 (c). Diagram of connections for input data — continued.

allow determination of the mass of a particular nuclide using several different routes; such a nuclide is called *primary*. Their mass values in the table are then derived by least squares methods. In the other cases, the mass of a nuclide can be derived from only one connection to another nuclide; it is called a *secondary* nuclide. This classification is of importance for our calculation procedure (see Section 5.3, p. 030002-19).

The diagrams in Fig. 1 also show many cases where the relation between two atomic masses is accurately known, but not the actual mass values. Since our policy is to include all available experimental results, we have produced in such cases estimated mass values that are based on TMS in the neighborhood. Also, in this data representation, vacancies occur, which are filled with the estimated values using the same TMS procedure. Estimates of unknown masses are further discussed in the next section.

Some care should be taken in the interpretation of Fig. 1, since excited isomeric states and data relations involving such isomers are not completely represented on these drawings. This is not considered as a serious defect; readers who want to update such values can conveniently consult Table I, where all relevant information is given.

4 Regularity of the mass surface and the use of TMS

When atomic masses are displayed as a function of N and Z, one obtains a *surface* in a 3-dimensional space. However, due to the pairing energy, this surface is divided into four *sheets*. The even-even sheet lies lowest, the odd-odd highest, the other two nearly halfway in-

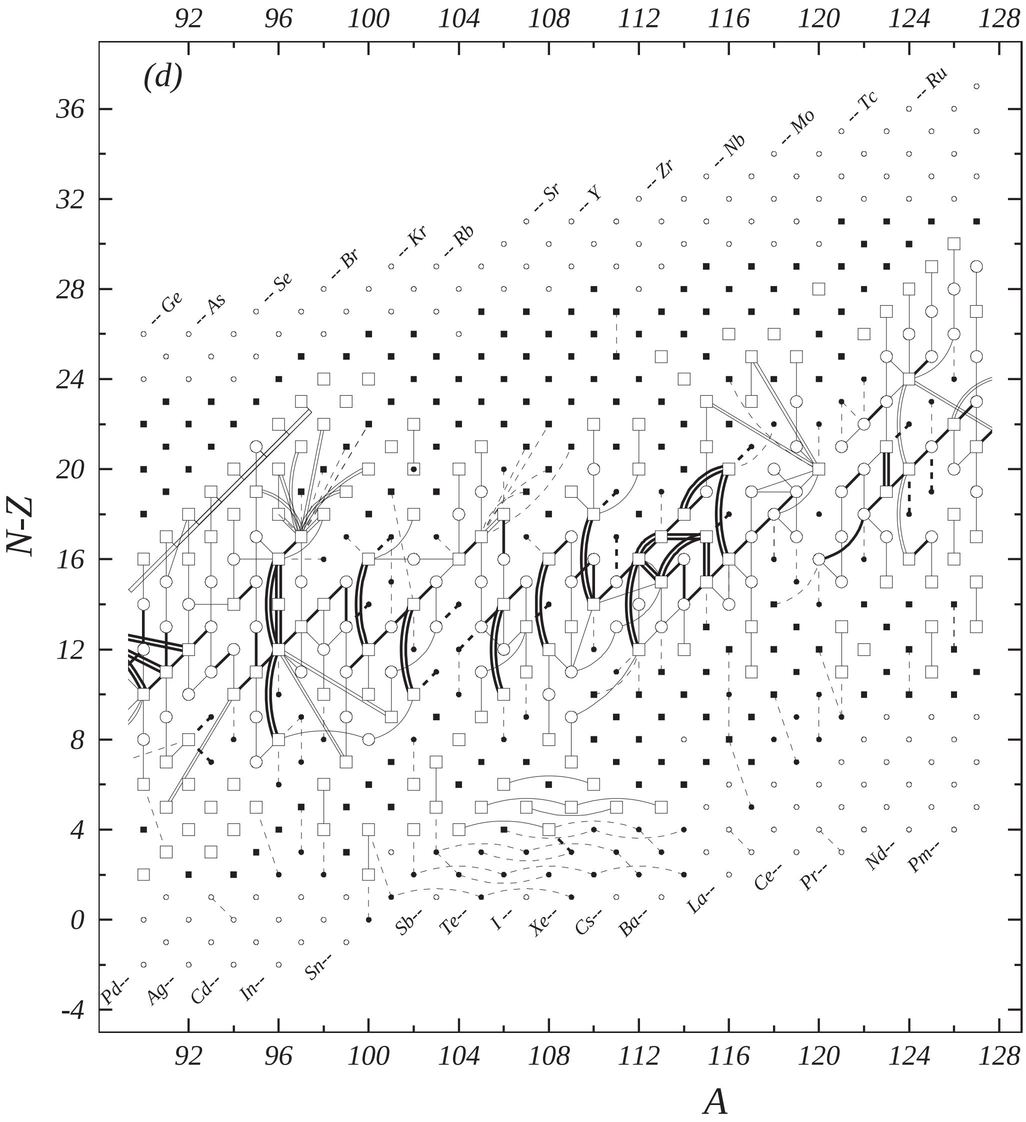

Figure 1 (d). Diagram of connections for input data — continued.

between, as shown in Fig. 2. The vertical distances from the even-even sheet to the odd-even and even-odd ones are the proton and neutron pairing energies, Δ_{pp} and Δ_{nn}, respectively, which are nearly equal. The distances of the last two sheets to the odd-odd sheet are equal to Δ_{nn}–Δ_{np} and Δ_{pp}–Δ_{np}, where Δ_{np} is the proton-neutron pairing energy due to the interaction between the two odd nucleons, which are generally not in the same shell. These energies are represented in Fig. 2, where a hypothetical zero energy represents a nuclide with no pairing among the last nucleons.

Experimentally, it has been observed that the four sheets run nearly parallel in all directions, which means that the quantities Δ_{nn}, Δ_{pp} and Δ_{np} vary smoothly and slowly with N and Z. In addition, each of the mass sheets also varies smoothly, but rapidly with N and Z [20]. The smoothness is also observed for first order derivatives (slopes, e.g. the graphs given in Part II, p. 030003-4) and all second-order derivatives (curvatures of the mass surface). They are only interrupted in places by cusps or bumps associated with important changes in nuclear structure: shell or sub-shell closures, shape transitions (spherical-deformed, prolate-oblate), and the so-called 'Wigner' cusp along the $N=Z$ line.

This observed regularity of the mass sheets in all places, where there is no change in the underlying physics, can be considered as one of the BASIC PROPERTIES of the mass surface. Thus, dependable estimates of unknown, poorly known or questionable masses can be obtained by extrapolation from the well-known mass values on the same sheet. In the evaluation of masses the property of regularity and the possibility to make estimates are used for several purposes:

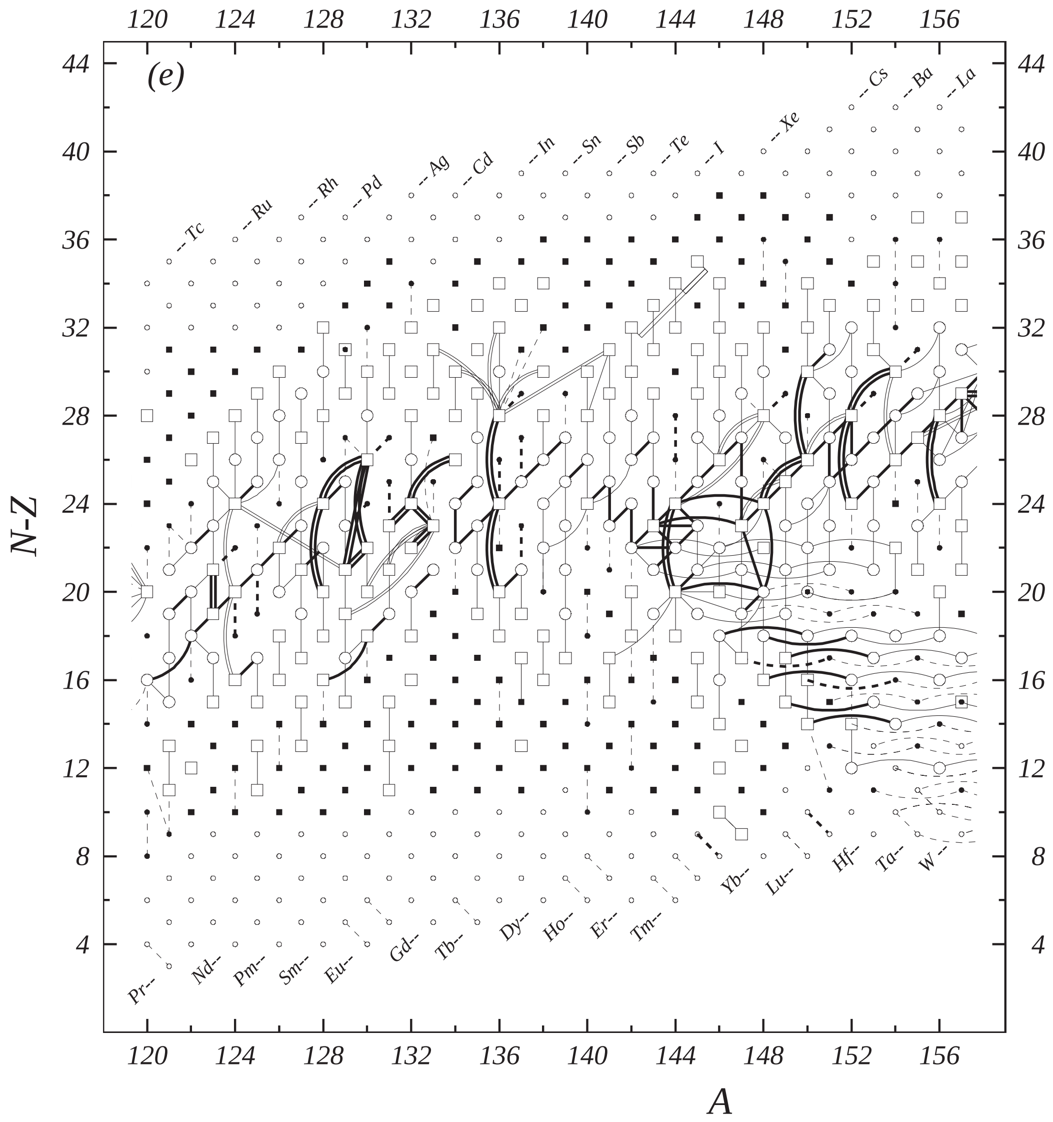

Figure 1 (e). Diagram of connections for input data — continued.

1. Any coherent deviation from the regularity, in a region (N, Z) of some extent, could be considered as an indication that some new physics property is being discovered. However, if only one single mass violates the trends from the mass surface (TMS) defined by the neighboring nuclides, then one may seriously question the correctness of the related datum. In such a case, there might be some undetected systematic [21] contribution to the reported experimental results for this mass. We then reexamine with extra care the available experimental information in the literature for possible errors and often consult with the corresponding authors for additional information. Such a process often leads to corrections.

2. There are cases where several experimental data disagree, but no particular reason can be found for rejecting one, or some of them. In such cases, the measure of agreement with the regularity can be used by the evaluators for selecting which of the conflicting data will be accepted and used in the evaluation, thus following the same policy that was used in our earlier work.

3. There are cases where masses determined from ONLY ONE experiment (or from the same experiments) deviate severely from the smooth surface. Such cases are carefully examined (Section 4.2).

4. Finally, drawings of the mass surface allow to derive estimates for the still unknown masses, either from interpolations or from short extrapolations (see below, Section 4.3).

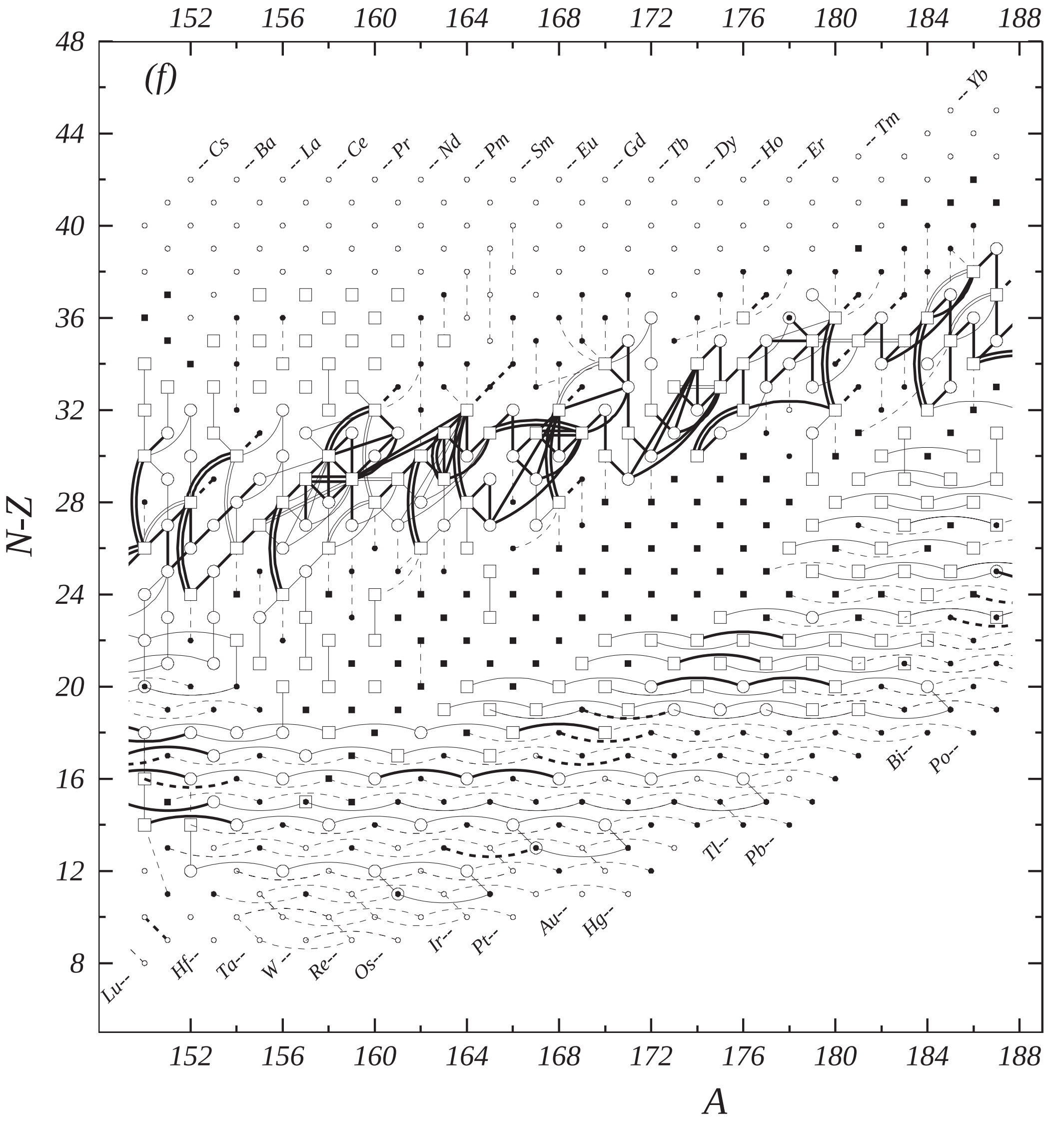

Figure 1 (f). Diagram of connections for input data — continued.

4.1 Scrutinizing and manipulating the surface of masses

Direct representation of the mass surface is not convenient, since the binding energy varies very rapidly with N and Z. Splitting it in four sheets, as mentioned above, complicates even more such a representation. There are two ways that allow to observe the surface of masses with some precision: one of them uses the *derivatives* of this surface, the other is obtained by *subtracting a simple function* of N and Z from the masses.

The derivatives of the mass surface By *derivative* of the mass surface we mean a specified difference between the masses of two nearby nuclides. These functions are also smooth and have the advantage of displaying much smaller variations. For a derivative defined in such a way that differences are between nuclides in the same mass sheet, their near parallelism can lead to an (almost) unified surface for the derivative, thus allowing a single display. Therefore, in order to visualize the trends from the mass surface, we found that the derivatives such as α-decay energies and separation energies of two protons and two neutrons are the best tools to derive such estimates. These three derivatives are plotted against N, or Z in Part II, Figs. 1–26, p. 030003-74.

However, from the way these derivatives are created, they give information only within one of the four sheets of the mass surface (e-e, e-o, o-e or o-o; e-o standing for even-N and odd-Z). When examining the mass surface, an increased or decreased spacing of the sheets cannot be observed. Also, when estimating unknown masses, divergences of the four sheets could be unduly created,

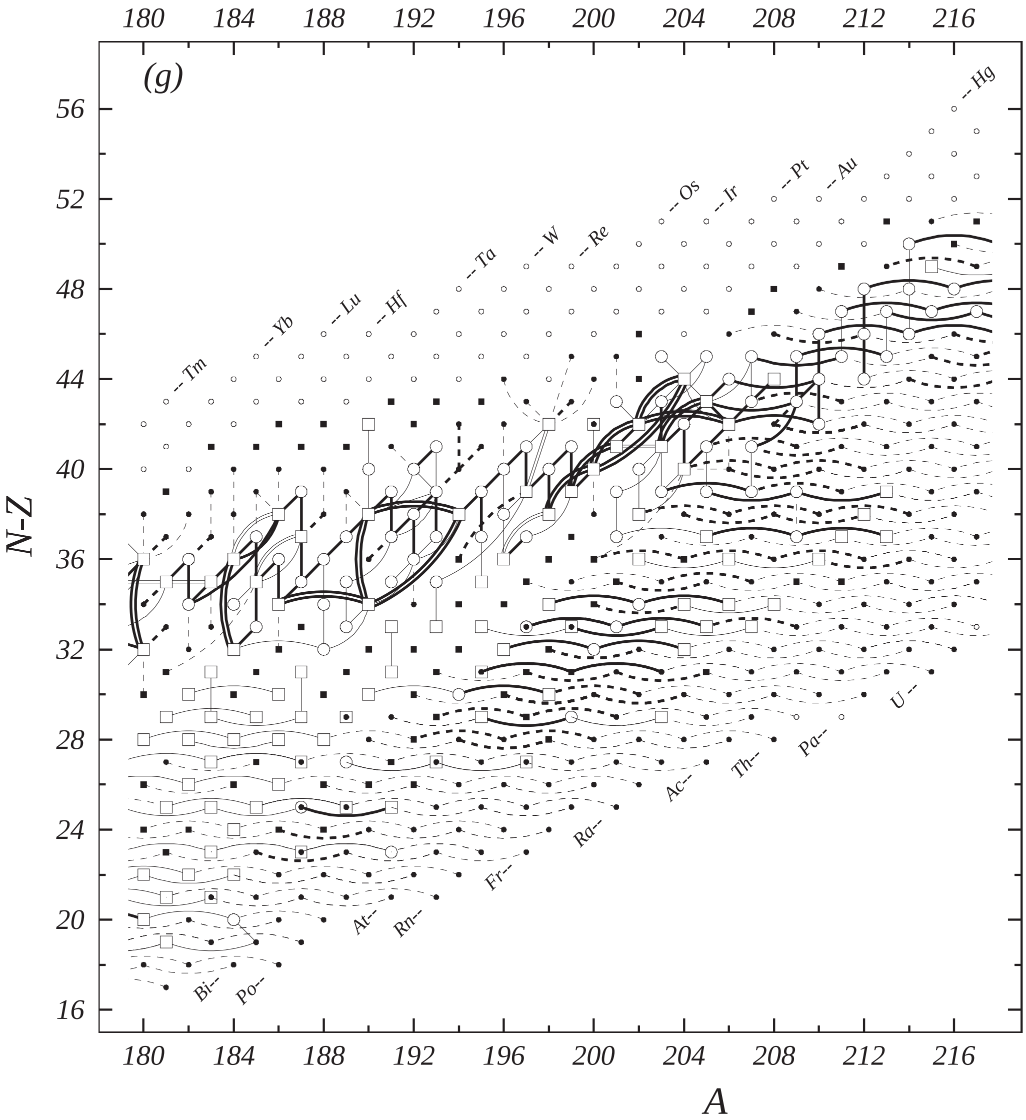

Figure 1 (g). Diagram of connections for input data — continued.

which is unacceptable.

Fortunately, other representations are also possible (e.g. separately for odd and even nuclides: one-neutron separation energies versus N, one-proton separation energy versus Z, β-decay energy versus A, ...). We have prepared a number of such graphs that can be obtained from the AMDC website [22].

The method of 'derivatives' suffers from the involvement of two masses for each point to be drawn, which means that if one point deviates from regularity, it could be due to either the mass of the nuclide it represents or that of the related nuclide, rendering the analysis rather complex. Also, reversely, if one mass is moved, then the two related points are changed in opposite directions, causing confusion in the drawing.

Subtracting a simple function Since the mass surface is smooth, one can try to define a function of N and Z as simple as possible and not too far from the real surface of masses. The difference between the mass surface and this function, while displaying reliably the structure of the former, will vary less rapidly, thus improving its observation.

A first and simple approach is the semi-empirical *liquid drop* formula of Bethe and Weizsäcker [23] with the addition of a pairing term in order to fuse more or less the four sheets of the mass surface. Another possibility, that we prefer [20], is to use the results of one of the modern models. However, we can use only those models that provide masses specifically for the spherical part, forcing the nucleus to be not deformed. The reason is that the models generally describe quite well the shell and sub-

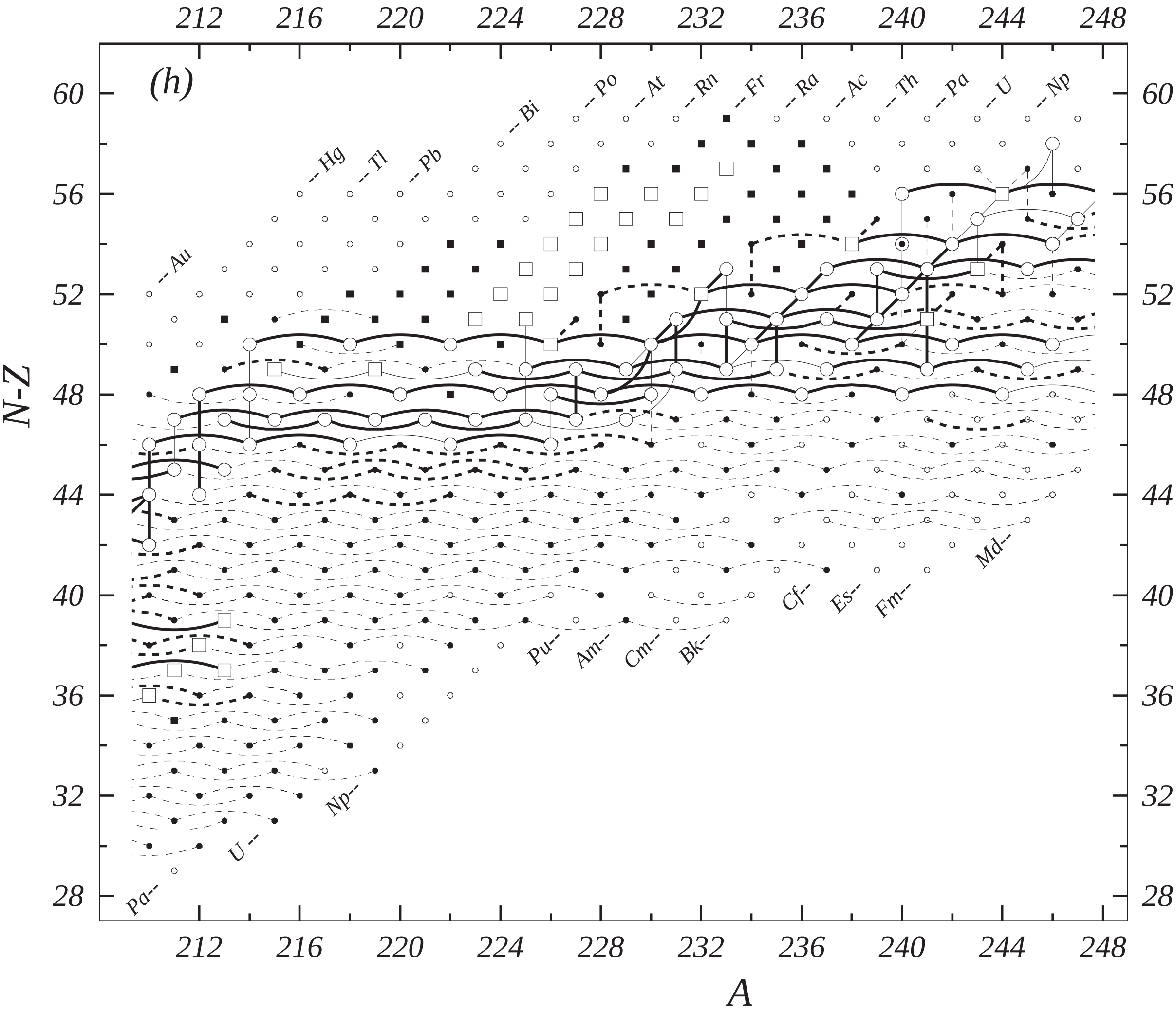

Figure 1 (h). Diagram of connections for input data — continued.

shell closures, and to some extent the pairing energies, but not the locations of deformation. If the theoretical deformations were included and not located at exactly the same position as given by the experimental masses, the mass difference surface would show two dislocations for each shape transition. Interpretation of the resulting surface would then be difficult. In the present work, we make use of such differences with models. The plots that we have prepared can also be retrieved from the AMDC website [22].

Manipulating the mass surface In order to make estimates of unknown masses or to test changes on measured ones, an interactive graphical program was developed [20, 24] that allows a simultaneous observation of four graphs, either from the 'derivatives' type or from the 'differences' type, as a function of any of the variables N, Z, A, $N-Z$ or $N-2Z$, while drawing iso-lines (lines connecting nuclides having same value for a parameter) of any of these quantities. The mass of a nuclide can be modified or created in any view and we can determine how much freedom is left in setting a value for this mass. At the same time, interdependence through secondary connections (Fig. 1) are taken into account. In cases where two tendencies may alternate, following the parity of the proton or the neutron numbers, one of the parities may be deselected.

The replaced values for data yielding the 'irregular masses' as well as the 'estimated unknown masses' (see below) are thus derived by observing the continuous property in several views of the mass surface, with all the consequences due to connections to masses in the same chain. Comparisons with the predictions of 16 nuclear mass-models are presently available in this program.

With this graphical tool, the results of 'replacement' analyses are felt to be most robust; and also the estima-

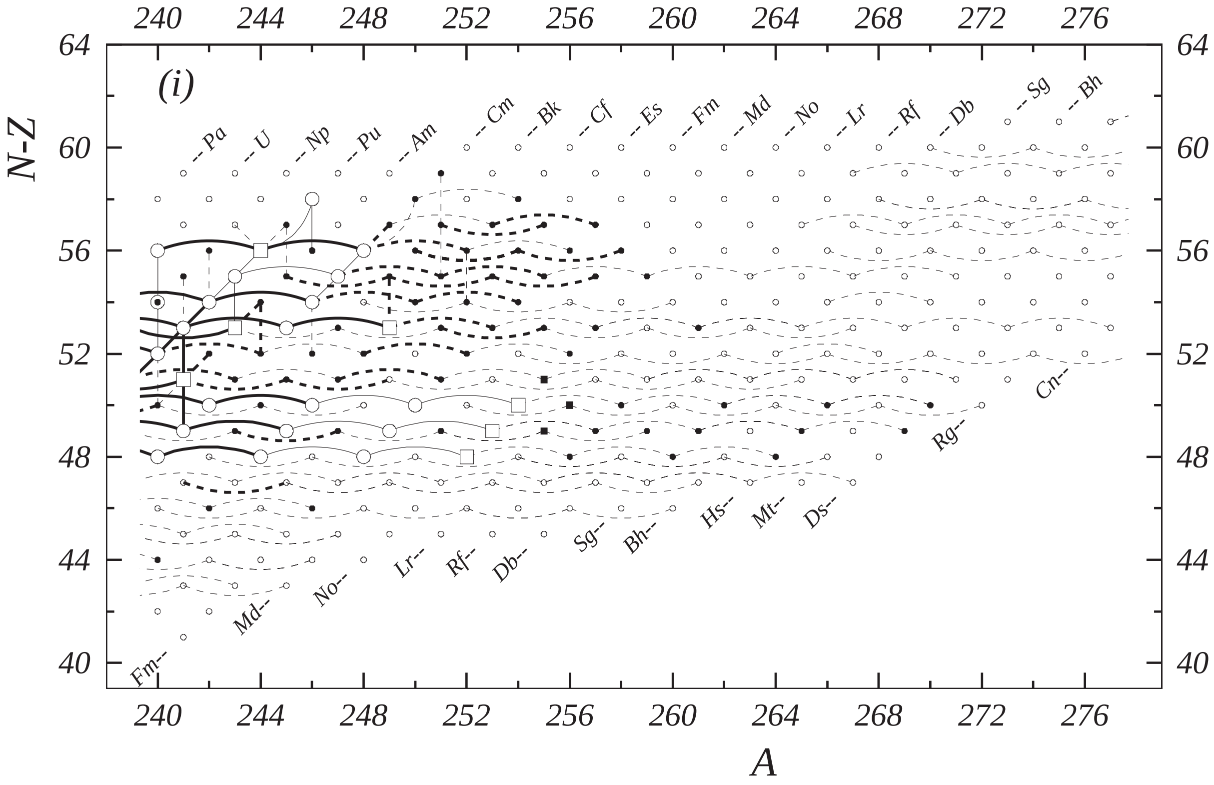

Figure 1 (i). Diagram of connections for input data — continued.

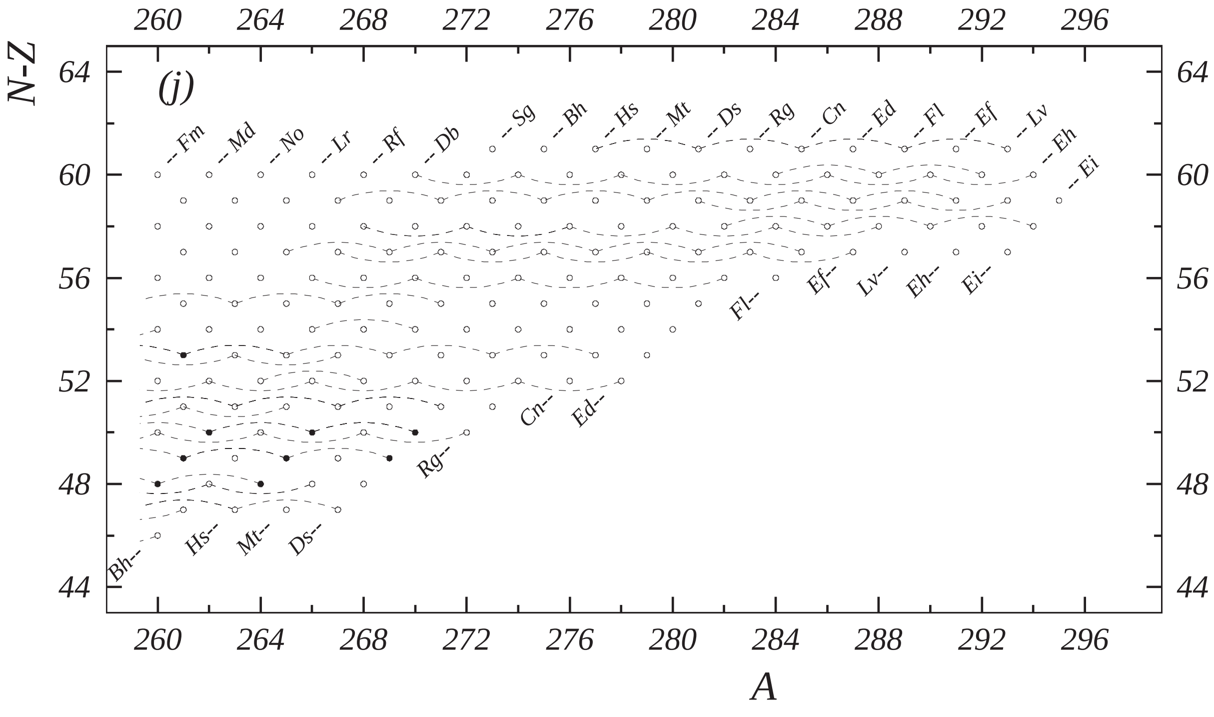

Figure 1 (j). Diagram of connections for input data — continued.

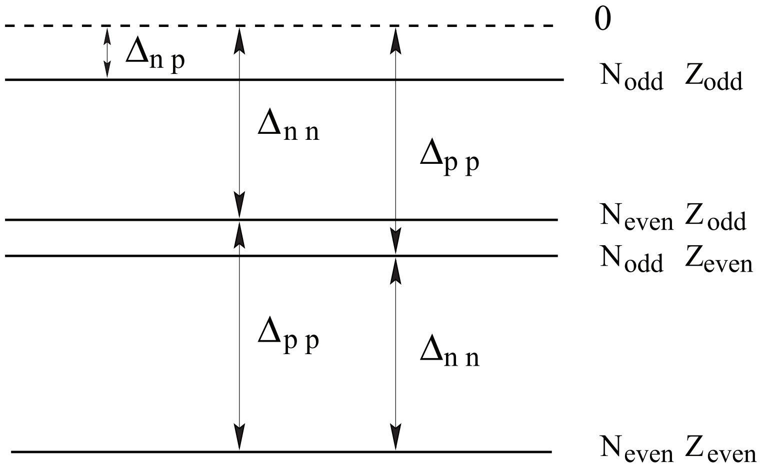

Figure 2. The surface of masses is split into four sheets. This scheme represents the pairing energies responsible for this splitting. The zero energy surface is purely hypothetical with no pairing at all among the outer nucleons.

tion of unknown masses is more reliable.

All mass values dependent on interpolation procedures and indeed all values not derived from experimental data alone have been clearly marked with the sharp '#' symbol in all tables, and elsewhere in the text.

Since publication of AME1983 [25], estimates are also given for the precision of data derived from TMS. These uncertainties are not based on a formalized procedure, but rather on previous experience with such estimates.

In the case of extrapolation, however, the uncertainty of the estimated mass will increase with the distance of extrapolation. These uncertainties are obtained by considering several graphs of TMS with a guess on how much the estimated mass may change without causing the extrapolated surface to look too distorted. This recipe is unavoidably subjective, but has proven to be efficient through the agreement of these estimates with newly measured masses in a large majority of cases [26].

4.2 Irregular mass values

When a single mass deviates significantly from regularity with no similar pattern for nuclides with same N or with same Z values, then the correctness of the data determining this mass may be questioned.

Our policy, redefined in AME1995 [27], for those locally *irregular* masses, and only when they are derived from a unique mass relation (i.e., not confirmed by a different experimental method), is to replace them by values derived from trends from the mass surface (TMS). Table C lists 31 such cases in the present evaluation that were removed, to avoid strongly oscillating plots (to be compared to 27 cases in AME2012, 27 in AME2003, 59 in AME1995 and 67 in AME1993). Although these numbers reflects a more strict use of this procedure, the user of our tables should not assume that the remaining 31 items are the same ones carried on from generation to generation. The opposite, however, is true: most of the old ones have been replaced by new data, thus showing that we were correct in our choice. Generally, only one experimental result is reported for such unique mass relation . But sometimes there are two measurements (2 cases) or three (in previous evaluations) that we still treat the same way, since use of the same method and the same type of relation may well lead to the same systematic uncertainty (for example a mis-assignment or ignorance of a final level). Taking into account the connecting chains for secondaries (Figs. 1a–1j) has the consequence that several more ground state masses are affected (and twice as many values in each type of plot of derivatives as given in Part II). It should be stressed that only the most striking cases have been treated in this way, those necessary to avoid, as much as possible, confusions in the graphs in Part II. In particular, the plots of α-decay energies of light nuclides (Fig. 18 and 19 in Part II, p. 030003-252 and 253) exhibit many overlaps and crossings that obscure the drawings; no attempt was made to locate possible origins of such irregularities.

Replacing these few irregular experimental values by the ones we recommend, in all tables and graphs in AME2016, means also that, as explained already in AME1995, we discontinued an older policy that was introduced in AME1993, where original irregular experimental values were given in all main tables, and 'recommended' ones given separately in secondary tables. This policy led to confusion for many users of our tables. Since AME1995, we only give what we consider the *"best recommended values"*, using, when we felt necessary and as explained above, *'values derived from TMS'*. Data which are not used following this policy are given in Table C and they can be easily located in Table I, where they are flagged 'D' and always accompanied by a comment explaining in which direction the value has been changed and by what amount.

Such data, as well as other local irregularities that can be observed in the figures in Part II, could be considered as incentive for remeasurements, preferably by a different method, in order to remove any doubt and possibly point out true irregularities due to physical properties.

Table C. Experimental data that we recommend replacing by values derived from TMS in AME2016.

Item	Reference$^{a)}$	Experimental value		Recommended value	
^{39}Al−u	2007Ju03	21653	676	22170#	430#
^{42}Si−u	2007Ju03	16275	623	17680#	540#
^{44}P−u	2007Ju03	10070	966	11220#	540#
^{47}Cl−u	2007Ju03	−9576	1074	−10500#	430#
^{49}Ar−u	2015Me01	−19110	1180	−18450#	430#
^{67}Mn−u	2015Me.A	−36600	670	−35920#	320#
^{69}Fe−u	2015Me.A	−42240	640	−41900#	430#
^{70}Co−u	2011Es06	−50370	320	−50060#	320#
^{74}Ni−u	2011Es06	−52830	1060	−52020#	210#
^{77}Cu−u	2006Ha62	−51850	540	−52200#	160#
^{79}Cu−u	2006Ha62	−46700	540	−44810#	320#
^{80}Zr−u	1998Is06	−59600	1600	−58360#	320#
^{94}Br−u	2016Kn03	−50242	429	−50890#	320#
^{94}Ag$^{n}(\beta^+)^{94}$Pd	2004Mu30	17700	500	20180#	300#
^{101}Rb$(\beta^-)^{101}$Sr	1992Ba28	11810	110	12480#	200#
^{113}Mo−u	2016Kn03	−57317	337	−56350#	320#
^{116}Cs$(\varepsilon\alpha)^{112}$Te	1977Bo28	12300	400	13100#	100#
	1976Jo.A	12400	900	13100#	100#
^{118}Ru−u	2016Kn03	−61879	196	−61470#	220#
^{118}In$^{m}(\beta^-)^{118}$Sn	1964Ka10	4270	100	4530#	50#
^{120}In$^{m}(\beta^-)^{120}$Sn	1964Ka10	5280	200	5420#	50#
	1978Al18	5340	170	5420#	50#
^{124}Pd−u	2016Kn03	−64617	399	−62680#	320#
^{126}Ag−u	2016Kn03	−65926	329	−65140#	220#
^{129}Nd$(\varepsilon$p$)^{128}$Ce	1978Bo.A	5300	300	5930#	200#
^{135}Pm$^{m}(\beta^+)^{135}$Nd	1995Ve08	6040	150	6390#	50#
^{142}Dy$(\beta^+)^{142}$Tb	1991Fi03	7100	200	6440#	200#
^{143}I−u	2016Kn03	−53849	495	−54350#	220#
^{150}Ba−u	2016Kn03	−55309	371	−53570#	320#
^{154}Ce−u	2016Kn03	−56404	619	−56060#	220#
^{220}Pa$(\alpha)^{216}$Ac	1987Fa.A	9829	50	9650#	50#
^{270}Db$(\alpha)^{266}$Lr	2014Kh04	8019	30	8260#	200#
^{281}Rg$(\alpha)^{277}$Mt	2013Og04	9454	40	9900#	400#

a) References are listed in Part II in this issue, Section 6, p. 030003-5.

The present authors insist that only the most striking irregularities have been replaced by estimates. Here we give the mass of ^{84}Nb as an example. The Q_β value was measured in [1996Sh27] with an uncertainty claimed to be 300 keV. However, trends from mass surface strongly suggested that ^{84}Nb should be 3200 keV less bound. Therefore the experimental value was labeled with "D" in AME2012 and replaced by an estimate. Recently the mass of ^{84}Nb was measured by mass spectrometry [2016Xi.A], and the value is very close (200 keV) to our estimate, which was given with a precision of 300# keV.

4.3 Estimates for unknown masses

Estimates for unknown masses also are made with the use of trends from the mass surface, as explained above, by demanding that all graphs should be as smooth as possible, except where they are expected to be affected by shell closures or nuclear deformation effects. Therefore, we warn the user of our tables that the present extrapolations will be wrong if new regions of deformation or (semi-) magic numbers appear.

In addition to the rather severe constraints imposed by the requirement of simultaneous REGULARITY of all graphs, many further constraints result from knowledge of reaction or decay energies in the regions where these estimates are made. These regions and these constraints are shown in Figs. 1a–1j. Two kinds of constraints are present. In some cases the masses of (Z,A) and (Z,A+4) are known but not the mass of (Z,A+2). Then, the values of $S_{2n}(A+2)$ and $S_{2n}(A+4)$ cannot both be chosen freely from the graphs; their sum is known. In other cases, the mass differences between several nuclides (A+4n,Z+2n) are known from α-decays and also those of (A–2+4n,Z+2n). Then, the differences between several successive $S_{2n}(A+4\mathrm{n},Z+2\mathrm{n})$ are known. Similar situations exist for two or three successive S_{2p} or Q_α values.

Knowledge of stability or instability against particle emission, or limits on proton or α emission, yields upper or lower limits on the separation energies.

For proton-rich nuclides with $N<Z$, mass estimates can be obtained from the charge symmetry. This feature gives a relation between masses of isobars around the $N=Z$ line. In several cases, we made a correction by including the Thomas-Ehrman effect [28], which makes proton-unstable nuclides more bound than what follows from the above estimate. For very light nuclides, we can use the estimates of this effect as proposed by Comay *et al.* [29].

Another often good estimate can be obtained from the observation that masses of nuclear states belonging to an isobaric multiplet are represented quite accurately by a quadratic equation of the charge number Z (or of the third components of the isospin, $T_z=\frac{1}{2}(N-Z)$): the Isobaric Multiplet Mass Equation (IMME) [30]. The use of this relation is attractive, since it uses experimental information such as the excitation energies of the isobaric analog states (IAS). New mass measurements regularly question the validity of the IMME, followed soon by other work showing that another member of the same multiplet needs to be questioned. For example, [2012Zh34] found, by measuring the mass of ^{53}Ni, a breakdown of the quadratic form of IMME for the $A=53$ quartet, from which a non-zero coefficient d was derived to be 39(11) keV. In a later experiment, the lowest $T=3/2$ state in ^{53}Co was established via the measurement of the β-delayed γ deexcitation of ^{53}Ni [2016Su10], which questioned the isobaric-analog state (IAS) assignment in a previous β–p decay experiment [2007Do17]. The validity of the IMME in the quadratic form was thus restored for $A=53$.

Up to AME1983, we indeed used the IMME for deriving mass values for nuclides for which no, or little information was available. This policy was questioned with respect to the correctness in stating as 'experimental' a quantity that was derived by combination with a calculation. Since AME1993, it was decided not to present any IMME-derived mass values in our evaluation, but rather use the IMME as a guideline when estimating masses of unknown nuclides. We continue this policy here, and do not replace experimental values by an estimated one from IMME, even if orders of magnitude more precise. Typical examples are ^{28}S and ^{40}Ti, for which IMME predicts masses with precisions of 24 keV and 22 keV, respectively, whereas the experimental masses are known for both from double-charge-exchange reactions with 160 keV precision.

The extension of the IMME to higher energy isobaric analog states has been studied by Wapstra [31]. The validity of the method, however, is made uncertain by possible effects spoiling the relation. In the first place, the strength of some IASs at high excitation energies is known to be distributed over several levels with the same spin and parity. Even in cases where this interference effect has not been observed, it remains a possibility, and as such, introduces an uncertainty in the energy level to be attributed to the IAS. In the second place, as argued by Thomas and Ehrman [28], particle-unstable levels must be expected to be shifted somewhat.

It also happens that information on excitation energies of $T_z=-T+1$ IASs is available from measurements on proton emission following β decays of their $T_z=-T$ parents. The authors, in some cases, derived a mass value from their results for the parent nuclide, using a formula, derived by Antony *et al.* [32], from a study of known energy differences between IAS. We observe, however, that one obtains somewhat different mass values by combining Antony differences with the mass of the mirror nuclide of the mother. Also, earlier considerations did not take into account the difference between proton-pairing and neutron-pairing energies, which A.H. Wapstra noticed have a non-negligible influence on the IMME constants.

Another possibility is to use a relation proposed by Jänecke [33], as done for example by Axelsson *et al.* [34] in the case of ^{31}Ar. In several cases we have compared the results of different ways for extrapolating, in order to find a best estimate for the desired mass value.

Enough values have been estimated to ensure that every nuclide for which there is any experimental Q-value is connected to the main group of primary nuclides. In addition, the evaluators want to achieve continuity of the mass surface. Therefore, an estimated value is included for any nuclide if it is between two experimentally studied nuclides on a line defined by either Z = constant (isotopes), N = constant (isotones), $N-Z$ = constant (isodiaspheres), or, in a few cases $N+Z$ = constant (isobars). It would have been desirable to also give estimates for all unknown nuclides that are within reach of the present accelerators and mass separator technologies. Unfortunately, such an ensemble is not easy to define. Instead, we estimate mass values for all nuclides for which at least one piece of experimental information is available (e.g. identification or half-life measurement or proof of instability towards proton or neutron emission). Then, the ensemble of experimental and estimated masses has the same contour as in the NUBASE2016 evaluation.

5 Calculation Procedures

The atomic mass evaluation is unique when compared to the other evaluations of data [20], in a sense that almost all mass determinations are relative measurements, not absolute ones. Even those called ‘absolute mass doublets’ are relative to ^{12}C, ^{35}Cl or ^{37}Cl. Each experimental datum sets a relation in mass or in energy among two (in a few cases three or more) nuclides. It can be therefore represented by one link among these two nuclides. The ensemble of these links generates a highly entangled network. Figs. 1a–1j, in Section 3 above, show a schematic representation of such a network.

The masses of a large number of nuclides are multiply determined, entering the entangled area of the canvas, mainly along the backbone. Correlations do not allow determining their masses in a straightforward manner.

To take into account these correlations we use a least-squares method weighed according to the precision with which each piece of data is known. This method allows to determine a set of adjusted masses.

5.1 Least-squares method

Each piece of data has a value $q_i \pm dq_i$ with the accuracy dq_i (one standard deviation) and makes a relation between two, three or four masses with unknown values m_μ. An overdetermined system of Q data to M masses ($Q > M$) can be represented by a system of Q linear equations with M parameters:

$$\sum_{\mu=1}^{M} k_i^\mu m_\mu = q_i \pm dq_i \,, \qquad (1)$$

e.g. for a nuclear reaction $A(a,b)B$ requiring an energy q_i to occur, the energy balance is written:

$$m_\mathrm{A} + m_\mathrm{a} - m_\mathrm{b} - m_\mathrm{B} = q_i \pm dq_i \,. \qquad (2)$$

Thus, $k_i^\mathrm{A} = +1$, $k_i^\mathrm{a} = +1$, $k_i^\mathrm{b} = -1$ and $k_i^\mathrm{B} = -1$.

In matrix notation, $\mathbf{K}$ being the (Q,M) matrix of coefficients, Eq. 1 is written: $\mathbf{K}|m\rangle = |q\rangle$. Elements of matrix $\mathbf{K}$ are almost all null: e.g. for $A(a,b)B$, Eq. 2 yields a line of $\mathbf{K}$ with only four non-zero elements.

We define the diagonal weight matrix $\mathbf{W}$ by its elements $w_i^i = 1/(dq_i dq_i)$. The solution of the least-squares method leads to a very simple construction:

$$^\mathbf{t}\mathbf{KWK}|m\rangle = {}^\mathbf{t}\mathbf{KW}|q\rangle \,. \qquad (3)$$

The NORMAL matrix $\mathbf{A} = {}^\mathbf{t}\mathbf{KWK}$ is a square matrix of order M, positive-definite, symmetric and regular and hence invertible [35]. Thus the vector $|\overline{m}\rangle$ for the adjusted masses is:

$$|\overline{m}\rangle = \mathbf{A^{-1}}\ {}^\mathbf{t}\mathbf{KW}|q\rangle \qquad \text{or} \qquad |\overline{m}\rangle = \mathbf{R}|q\rangle \,. \qquad (4)$$

The rectangular (M,Q) matrix $\mathbf{R}$ is called the RESPONSE matrix.

The diagonal elements of $\mathbf{A^{-1}}$ are the squared errors on the adjusted masses, and the non-diagonal ones $(a^{-1})_\mu^\nu$ are the coefficients for the correlations between masses m_μ and m_ν. Values for correlation coefficients for the most precise nuclides are given in Table B of Part II (p. 030003-3). Following the advice of B.N. Taylor, we now give on the website of the AMDC [22] the full list of correlation coefficients, allowing any user to perform exact calculation of any combination of masses.

One of the most powerful tools in the least-squares calculation described above is the flow-of-information matrix, discovered in 1984 by one of us [36]. This matrix allows to trace back the contribution of each individual piece of data to each of the parameters (here the atomic masses). The AME uses this method since 1993.

The flow-of-information matrix $\mathbf{F}$ is defined as follows: $\mathbf{K}$, the matrix of coefficients, is a rectangular (Q,M) matrix. The transpose of the response matrix $^\mathbf{t}\mathbf{R}$ is also a (Q,M) rectangular one. The (i,μ) element of $\mathbf{F}$

is defined as the product of the corresponding elements of ${}^{\mathbf{t}}\mathbf{R}$ and of $\mathbf{K}$. In Ref. [36], it is demonstrated that such an element represents the *"influence"* of datum i on parameter (mass) m_μ. A column of $\mathbf{F}$ thus represents all the contributions brought by all data to a given mass m_μ, and a line of $\mathbf{F}$ represents all the influences given by a single piece of data. The sum of influences along a line is the *"significance"* of that datum. It has also been proven [36] that the influences and significances have all the expected properties, namely that the sum of all the influences on a given mass (along a column) is unity, that the significance of a datum is always less than unity and that it always decreases when new data are added. The significance defined in this way is exactly the quantity obtained by squaring the ratio of the uncertainty on the adjusted value over that of the input one, which was the recipe used before the discovery of the $\mathbf{F}$ matrix to calculate the relative importance of data.

A simple interpretation of influences and significances can be obtained in calculating, from the adjusted masses and Eq. 1, the adjusted data:

$$|\overline{q}\rangle = \mathbf{KR}|q\rangle. \tag{5}$$

The i^{th} diagonal element of $\mathbf{KR}$ represents then the contribution of datum i to the determination of $\overline{q_i}$ (same datum): this quantity is exactly what is called above the *significance* of datum i. This i^{th} diagonal element of $\mathbf{KR}$ is the sum of the products of line i of $\mathbf{K}$ and column i of $\mathbf{R}$. The individual terms in this sum are precisely the *influences* defined above.

The flow-of-information matrix $\mathbf{F}$, provides thus insight on how the information from datum i flows into each of the masses m_μ.

The flow-of-information matrix cannot be given in full in a printed table. It can be observed along lines, displaying for each datum, the nuclides influenced by this datum and the values of these *influences*. It can be observed also along columns to display for each primary mass all contributing data with their *influence* on that mass.

The first display is partly given in the table of input data (Table I) in column 'Signf.' for the *significance* of primary data and 'Main infl.' for the largest *influence*. Since in the large majority of cases only two nuclides are concerned in each piece of data, the second largest *influence* could easily be deduced. It is therefore not felt necessary to give a table of all *influences* for each primary datum.

The second display is given in Part II, Table II (p. 030003-3) for the up to three most important data with their *influence* in the determination of each primary mass.

5.2 Consistency of data

The system of equations being largely over-determined ($Q >> M$) offers the evaluator several interesting possibilities to examine and judge the data. One might for example examine all data for which the adjusted values deviate significantly from the input ones. This helps to locate erroneous pieces of information. One could also examine a group of data in one experiment and check if the uncertainties assigned to them in the experimental paper were not underestimated.

If the precisions dq_i assigned to the data q_i were indeed all accurate, the normalized deviations v_i between adjusted $\overline{q}_i$ (Eq. 5) and input q_i data, $v_i = (\overline{q}_i - q_i)/dq_i$, would be distributed as a Gaussian function of standard deviation $\sigma = 1$, and would make χ^2:

$$\chi^2 = \sum_{i=1}^{Q} \left(\frac{\overline{q}_i - q_i}{dq_i} \right)^2 \qquad \text{or} \qquad \chi^2 = \sum_{i=1}^{Q} v_i^2 \tag{6}$$

equal to $Q-M$, the number of degrees of freedom, with a standard deviation of $\sqrt{2(Q-M)}$.

One can define as above the NORMALIZED CHI, χ_n (or 'consistency factor' or 'Birge ratio'): $\chi_n = \sqrt{\chi^2/(Q-M)}$ for which the expected value is $1 \pm 1/\sqrt{2(Q-M)}$.

Another quantity of interest for the evaluator is the PARTIAL CONSISTENCY FACTOR, χ_n^p, defined for a (homogeneous) group of p data as:

$$\chi_n^p = \sqrt{\frac{Q}{Q-M} \; \frac{1}{p} \; \sum_{i=1}^{p} v_i^2}\,. \tag{7}$$

Of course the definition is such that χ_n^p reduces to χ_n if the sum is taken over all the input data. One can consider for example the two main classes of data: the reaction and decay energy measurements and the mass-spectrometric data (see Section 5.5). One can also consider groups of data related to a given laboratory and with a given method of measurement and examine the χ_n^p of each of them. There are presently 278 groups of data in Table I (among which 185 have at least one measurement used in determining the masses), identified in column 'Lab'. A high value of χ_n^p might be a warning on the validity of the considered group of data within the reported uncertainties. We used such analyses in order to be able to locate questionable groups of data. In bad cases they are treated in such a way that, in the final adjustment, no really serious conflicts occur. Remarks in Table I report where such corrections have been made.

5.3 Separating secondary data

In Section 3, while examining the diagrams of connections (Fig. 1), we noticed that, whereas the masses of *secondary* nuclides can be determined uniquely from the chain of secondary connections going down to a *primary* nuclide, only the latter see the complex entanglement that necessitated the use of the least-squares method.

In terms of equations and parameters, we consider that if, in a collection of equations to be treated with the least-squares method, a parameter occurs in only one equation, removing this equation and this parameter will not affect the result of the fit for all other data. Thus, we can redefine more precisely what was called *secondary* in Section 3: the parameter above is a *secondary* parameter (or mass) and its related equation is a *secondary* equation. After the reduced set has been solved, then the *secondary* equation can be used to determine the final value and uncertainty for that particular *secondary* parameter. The equations and parameters remaining after taking out all secondaries are called *primary*.

Therefore, only the system of *primary* data is overdetermined, and thus will be improved in the adjustment, so that each *primary* nuclide will benefit from all the available information. *Secondary* data will remain unchanged; they do not contribute to χ^2.

The diagrams in Fig. 1 show, that many *secondary* data exist. Thus, taking them out simplifies considerably the system. More importantly, if a better value is found for a *secondary* datum, the mass of the *secondary* nuclide can easily be improved (one has only to be careful since the replacement can change other *secondary* masses down the chain, see Fig. 1). The procedure is more complicated for new *primary* data.

We define DEGREES for *secondary* nuclides and *secondary* data. They reflect their distances along the chains connecting them to the network of primaries. The first secondary nuclide connected to a primary one will be a nuclide of degree 2; and the connecting datum will be a datum of degree 2 as well. Degree 1 is for primary nuclides and data. Degrees for secondary nuclides and data range from 2 to 18. It is the heaviest nuclide ^{295}Ei that has the highest degree number 18. Its mass is determined through a long α chain, albeit many of them are just estimates. In Table I, the degree of data is indicated in column 'Dg'. In the table of atomic masses (Part II, Table I, p. 030003-6), each *secondary* nuclide is marked with a label in column 'Orig.' indicating from which other nuclide its mass value is determined.

To summarize, separating secondary nuclides and secondary data from primaries allow to significantly reduce the size of the system that will be treated by the least-squares method described above. After treatment of the primary data alone, the adjusted masses for primary nuclides can be easily combined with the secondary data to yield masses of secondary nuclides.

In the next Section we will show methods for reducing further this system, but without loss of any information. Methods that reduce the system of primaries for the benefit of the secondaries not only decrease computational time (which nowadays is not so important), but allows an easier insight into the relations between data and masses, since no correlation is involved.

Remark: the word *primary* used for these nuclides and for the data connecting them does not mean that they are more important than the others, but only that they are subject to the least-squares treatment above. The labels *primary* and *secondary* are not intrinsic properties of data or nuclides. They may change from primary to secondary or vice versa when other information becomes available.

5.4 Compacting the set of data

5.4.1 Pre-averaging

Two or more measurements of the same physical quantities can be replaced without loss of information by their average value and precision, reducing thus the system of equations to be treated. By extending this procedure, we consider *parallel* data: reaction data occur that give essentially values for the mass-difference between the same two nuclides, except in rare cases where the precision is comparable to that in the masses of the reaction particles. Example: ^{14}C(^{7}Li,^{7}Be)^{14}B and ^{14}C(^{14}C,^{14}N)^{14}B; or ^{22}Ne(t,^{3}He)^{22}F and ^{22}Ne(^{7}Li,^{7}Be)^{22}F.

Such data are represented together, in the main least-squares fit calculations, by one of them carrying their average value. If the Q data to be pre-averaged are strongly conflicting, i.e. if the consistency factor (or Birge ratio) $\chi_n = \sqrt{\chi^2/(Q-1)}$ resulting in the calculation of the pre-average is greater than 2.5, the (internal) precision σ_i in the average is multiplied by the Birge ratio ($\sigma_e = \sigma_i \times \chi_n$). There are no cases where $\chi_n > 2.5$, see Table D (there were 2 cases in AME2012, and 6 in AME2003). The quantity σ_e is often called the 'external error'. However, this treatment is not used in the rare cases where the precisions of the input values differ too much, since the assigned uncertainties lose any significance. If such a case occurs, considering policies from the Particle Data Group [37] and some statistical-treatment methods reviewed by Rajput and MacMahon [38], we adopt an arithmetic average and the dispersion of values as an uncertainty, which is equivalent to assigning to each of these conflicting data the same uncertainty.

In the present evaluation, we have replaced 2977 data by 1186 averages. As can be seen from Fig. 3, as much as 23% of which have values of χ_n (Birge ratio) beyond unity, 1.6% beyond two and none beyond 3, giving an overall very satisfactory distribution for our treatment.

As a matter of fact, in a complex system like the one here, many values of χ_n beyond 1 or 2 are expected to exist, and if the uncertainties were multiplied by χ_n in all these cases, the χ^2-test on the total adjustment would have been invalidated.

Table D. Worst pre-averagings. n is the number of data in the pre-average.

Item	n	χ_n	σ_e	Item	n	χ_n	σ_e
^{186}W(n,γ)^{187}W	2	2.44	0.11	^{177}Pt(α)^{173}Os	2	2.06	6.06
^{144}Ce(β^-)^{144}Pr	2	2.44	2.18	^{244}Cf(α)^{240}Cm	2	2.03	3.97
^{220}Fr(α)^{216}At	2	2.34	4.66	^{15}N(p,n)^{15}O	2	2.03	1.28
^{75}As(n,γ)^{76}As	2	2.32	0.17	^{58}Fe(t,p)^{60}Fe	4	2.03	7.38
^{110}In(β^+)^{110}Cd	3	2.29	28.4	^{204}Tl(β^-)^{204}Pb	2	2.03	0.39
^{146}Ba(β^-)^{146}La	2	2.24	107.4	^{278}Mt(α)^{274}Bh	3	1.98	43.6
^{40}Cl(β^-)^{40}Ar	2	2.21	76.1	^{167}Os(α)^{163}W	4	1.98	3.50
^{219}U(α)^{215}Th	2	2.18	38.5	^{106}Ag(ε)^{106}Pd	2	1.98	6.63
^{153}Gd(n,γ)^{154}Gd	2	2.16	0.39	^{78}Se(n,γ)^{79}Se	3	1.96	0.28
^{36}S(^{11}B,^{13}N)^{34}Si	3	2.14	32.4	^{46}Ca(n,γ)^{47}Ca	2	1.94	0.56
^{113}Cs(p)^{112}Xe	3	2.10	5.03	^{181}Pb(α)^{177}Hg	3	1.93	15.2
^{223}Pa(α)^{219}Ac	2	2.09	10.0	^{145}Sm(ε)^{145}Pm	2	1.92	7.92
^{27}P^i(2p)^{25}Al	2	2.08	74.7	^{234}Th(β^-)^{234}Pa^m	3	1.90	2.10
^{204}Rn–^{208}Pb$_{0.981}$	2	2.06	18.2				

This explains the choice we made here of a rather high threshold ($\chi_n^0=2.5$), compared e.g. to $\chi_n^0=2$ recommended by Woods and Munster [39] or $\chi_n^0=1$ used in a different context by the Particle Data Group [37], for departing from the rule of 'internal error' of the weighted average.

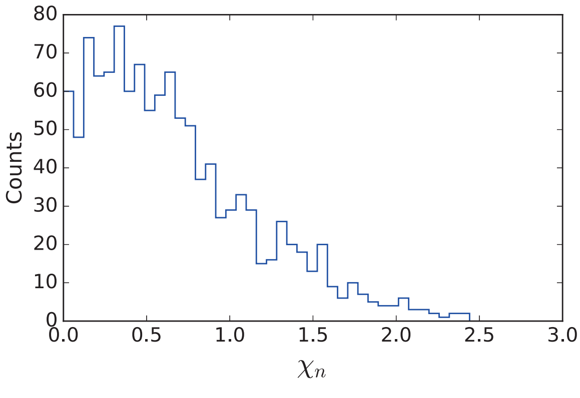

Figure 3. Birge Ratios of all the pre-averaged data.

Besides the computer-automated pre-averaging, we found it convenient, in some β^+-decay cases, to combine results stemming from various capture ratios in an average. These cases are ^{109}Cd(ε)^{109}Ag (average of 3 data), ^{139}Ce(ε)^{139}La (average of 10) and ^{195}Au(ε)^{195}Pt (5 results), and they are detailed in Table I. Four more cases (^{147}Tb, ^{152}Ho, ^{166}Yb and ^{207}Bi) occur in our list, but they carry no weight and are labeled with 'U' in Table I.

5.4.2 Used policies in treating parallel data

In averaging β- (α-) decay energies derived from branches observed in the same experiment, to or from different levels in the decay of a given nuclide, the uncertainty we use for further evaluation is not the one resulting from the weighted average adjustment, but instead we use the smallest experimental one. In this way, we avoid decreasing artificially the part of the uncertainty that is not due to statistics. In some cases, however, when it is obvious that the uncertainty is dominated by weak statistics, we do not follow the above rule (e.g. ^{23}Al^i(p)^{22}Mg of [1997Bl04]).

Some quantities have been reported more than once by the same group. If the results are obtained by the same method in different experiments and are published in regular refereed journals, only the most recent one is used in the calculation, unless explicitly mentioned otherwise. There are two reasons for this policy. The first is that one might expect that the authors, who believe their two results are of the same quality, would have averaged them in their latest publication. The second is that if we accept and average the two results, we would have no control on the part of the uncertainty that is not due to statistics. Our policy is different if the newer result is published in a secondary reference (not refereed abstract, preprint, private communication, conference, thesis or annual report). In such cases, the older result is used in the calculations, except when the newer one is an update of the previous value. In the latter case, the original reference in our list mentions the unreferred paper.

5.4.3 Replacement procedure

Large contributions to χ^2 have been known to be caused by a nuclide G connected to two other ones H and K by reaction links with large uncertainties compared to those deduced from the mass difference between H and K, in cases where the two disagreed. Evidently, contributions to χ^2 of such local discrepancies suggest an unrealistically high value of the overall consistency parameter. This is avoided by a replacement procedure: one of the two links is replaced by an equivalent value for the other. The pre-averaging procedure gives the most reasonable mass value for G and do not cause undesirably large contributions to χ^2.

5.4.4 Insignificant data

Another feature to increase the meaning of the final χ^2 is to not use, in the least-squares procedure, data with weights at least a factor 10 smaller than other data, or combinations of *all* other data giving the same result. Such data were labeled with 'U' in the list of input data; comparison with the output values allows to check our judgment. Earlier, data were labeled 'U' if their weight was 10 times smaller than that of a *simple* combination of other data. This concept has been extended, since Ame1993, to data that weigh 10 times less than the combination of *all* other accepted data. Until the Ame2003 evaluation, our policy was not to print data labeled 'U' if they already appeared in one of our previous tables, reducing thus the size of the table of data to be printed. This policy has been changed since Ame2012, and we try as much as possible to give all relevant data, also including insignificant ones. The reason for this is that conflicts might appear amongst recent results, and access to older ones might shed some light on our judgement, when evaluating the new data.

5.5 Used policies – treatment of undependable data

The important interdependence of most data, as illustrated by the connection diagrams (Figs. 1a–1j), allows local and general consistency tests. These can indicate that something may be wrong with the input values. We follow the policy of checking all significant data that differ by more than two (sometimes 1.5) standard deviations from the adjusted values. Fairly often, examination of the experimental results shows that a correction is necessary. Possible reasons could be that a particular decay has been assigned to a wrong final level or that a reported decay energy belongs to an isomer, rather than to a ground state, or even that the mass number assigned to a decay was incorrect. In such cases, the values are corrected and remarks are added below the corresponding A-group of data in Table I, in order to explain the reasons for the corrections.

It also happens that a careful examination of a particular paper would lead to serious doubts about the validity of the results within the reported precision, but could not permit making a specific correction. Doubts can also be expressed by the authors themselves. The results are given in Table I and compared with the adjusted values. They are labeled 'F', and not used in the final adjustment, but always followed by a comment to explain the reason for this label. The reader may observe that in several cases the difference between the experimental and adjusted values is small compared to the experimental uncertainty: this does not disprove the correctness of the label 'F' assignment.

It happens quite often that two (or more) pieces of data are discrepant, leading to important contribution to the χ^2. A detailed examination of the papers may not allow correction or rejection, indicating that at least the results in one of them could not be trusted within the given uncertainties. Then, based on past experience, we use in the calculations the value that seems to be the most reliable, while the other is labeled 'B', if published in a regular refereed journal, or 'C' otherwise.

Data with labels 'F', 'B' or 'C' are not used in the calculations. We do not assign such labels if, as a result, no experimental value published in a regular refereed journal could be given for one or more resulting masses. When necessary, the policy defined for 'irregular masses' with 'D'-label assignment may apply (see Section 4.2).

In some cases, detailed analysis of strongly conflicting data could not lead to reasons to assume that one of them is more dependable than the others or could not lead to a rejection of a particular data entry. Also, bad agreement with other data is not the only reason to doubt the correctness of the reported data. As in previous Ame, and as explained above (see Section 4), we made use of the property of regularity of the surface of masses in making a choice, as well as in further checks on the other data.

We do not accept experimental results if information on other quantities (e.g. half-lives), derived in the same experiment and for the same nuclide, were in strong contradiction with well established values.

5.6 The Ame computer program

Our computer program in four phases has to perform the following tasks: **i)** decode and check the data file; **ii)** build up a representation of the connections between masses, allowing thus to separate primary masses and data from secondary ones, to pre-average same and parallel data, and thus to reduce drastically the size of the system of equations to be solved (see Section 5.3 and 5.4), without any loss of information; **iii)** perform the least-squares matrix calculations (see above); and **iv)** deduce the atomic masses (Part II, Table I), the nuclear reaction and separation energies (Part II, Table III), the adjusted values for the input data (Table I), the *influences* of data on the primary nuclides (Table I), the *influences* received by each primary nuclide (Part II, Table II), and display information on the inversion errors, the correlations coefficients (Part II, Table B), the values of the χ^2s, the distribution of the v_i (see below), among others.

5.7 Results of the calculation

In this evaluation, we have 13035 experimental data of which 5663 are labeled 'U' (see above), 844 are labeled 'O' (old result from same group) and 853 are not accepted and labeled 'B', 'C', 'D' or 'F' (respectively 502, 157, 33 and 161 items). In the calculation we have thus 5675 valid input data, compressed to 3884 in the pre-averaging procedure. Separating secondary data, leaves a system of 2023 primary data, representing 1094 primary reactions and decays, and 929 primary mass-spectrometric measurements. To these are added 835 data estimated from TMS trends (see Section 4), p. 030002-9), some of which are essential for linking unconnected experimental data to the network of experimentally known masses (see Figs. 1a–1j).

In the atomic mass table (Part II, Table I) there is a total of 3923 masses (including ^{12}C) of which 3435 are ground state masses (2497 experimental masses and 938 estimated ones), and 488 are excited isomers (369 experimental and 119 estimated). Among the 2497 experimental ground state masses, 111 nuclides have a precision better than 0.1 keV, 378 better than 1 keV and 1477 better than 10 keV (respectively 87, 315 and 1438 in AME2012). There are 153 nuclides known with uncertainties larger than 100 keV (123 in AME2012). Separating secondary masses in the ensemble of 3923, leaves 1207 primary masses (^{12}C not included).

Thus, we have to solve a system of 2023 equations with 1207 parameters. Theoretically, the expectation value for χ^2 should be 816±20 (and the theoretical $\chi_n = 1 \pm 0.025$).

The total χ^2 of the adjustment is actually 825 ($\chi_n = 1.005$), thus showing that the ensemble of evaluated data was of excellent quality, and that the adopted criteria of selection and rejection were adequate. In the past this was not always the case and in AME2003 we could observe that on average the uncertainties in the input values were underestimated by 23%. The distribution of the v_i's (the individual contributions to χ^2, as defined in Eq. 6, and given in Table I) is also acceptable. If we consider all the 11511 data that are used in the adjustment plus the 'obsolete' ones (label 'O') and the unweighed ones (label 'U'), the distribution of v_i's yields 20% of the cases beyond unity, 3.3% beyond two, and no items beyond 3.

Considering separately the two main classes of data, the partial consistency factors χ_n^p are respectively 1.021 and 0.987 for energy measurements and for mass-spectrometric data, showing that both types of selective input data are of excellent quality.

As in our previous works [2, 40, 41], we have estimated the average accuracy for 185 groups of data used in the evaluation that were related to a given laboratory and a specific method of measurement, by calculating their partial consistency factors χ_n^p (see Section 5.2). As much as 98 groups have χ_n^p larger than unity, and 2 groups larger than 2.

6 Discussion of the input data

In most cases, values given by authors in the original publication are accepted, but there are also exceptions. One example is the performed recalibration due to change in the definition of volt, as discussed in Section 2. For somewhat less simple cases, a remark is added in Table I at the end of the concerned A-group. A curious example of combinations of data that cannot be accepted without change follows from the measurements of the Edinburgh-Argonne group [1997Da07]. They reported a series of α-decay energies, where the ancestors were isomers between which the excitation energy was accurately known from the difference of their proton-decay energies. These authors gave values for the excitation energies between isomeric daughter pairs with considerably smaller uncertainties than those derived from the uncertainties quoted for the measured α-decay energies. The reason is that the decay energies of two parallel α-decay chains are correlated; this means that the uncertainties in their differences are relatively small. Unfortunately, the presented data do not allow an exact calculation of both the masses and the isomeric excitation energies. This would have required that, in addition to the two E_α values of an isomeric pair, the uncertainty of the α-energy difference should also have been given. Instead, entering all their Q_p and E_1 (isomeric excitation energies) values in our adjustment would yield outputs with too small uncertainties, while accepting any partial collection makes some uncertainties too large. Therefore, in this case we do enter a selection of the input values, which are slightly changed, but chosen in such a way that our adjusted Q_α and E_1 values and corresponding uncertainties differ as little as possible from those given by the authors. A further complication could occur if some of the Q_α values are also measured by other groups. But until now, we found no serious deviations in such cases.

A change in uncertainties, not values, is caused by the fact that, in several cases, we do not necessarily accept the reported α-energy values as belonging to transitions between ground states. This also causes uncertainties in the derived proton-decay energies to deviate from those reported by the authors (e.g. in the α-decay chain of ^{170}Au), see also Section 7.9.

6.1 Improvements along the backbone

Since AME2012, all new mass-spectrometric data constituting the backbone were obtained from precision measurements of cyclotron frequencies of ions in Penning traps. Like to the classical measurements, where ratios of voltages or resistances were used, we found that the Penning trap results can be converted to a linear combination of masses of electrically neutral atoms (in μu), without any loss of accuracy. A special mention is needed for the MIT-FSU group [2005Ra34] which reports their original results as linear equations, including corrections for electron and molecular binding energies. Other groups give their results as ratio of cyclotron frequencies (see also next paragraph), which we convert to linear equations as described in Appendix C, (p. 030002-43) and finally we add corrections for electron and molecular binding energies. In such cases, we added a remark to the equation used in the input data table (Table I), to describe the original data and our treatment. Some authors publish their results directly as masses, but this is not a recommended practice for high-precision mass measurements.

6.1.1 Calculation of molecular binding energies for very precise mass measurements

The most precise mass-spectrometric measurements use Penning trap spectrometers, which measure the cyclotron frequency of a reference ion and an ion of interest in a uniform magnetic field B. Not only the electronic binding energy (single or multiple ionization), but also the molecular binding energy (dissociation energy) can be involved in the measured frequency ratios, as described for example in Ref. [1995Di08]. For most molecules used in the experiments, the binding energy represents typically a correction of a few parts in 10^{10} and its uncertainty only limits the accuracy of the neutral atomic mass to a few parts in 10^{12}, for example in Ref. [2004Ra33]. For measurements with precisions not better than 10^{-9}(100 eV/100 u), the molecule binding energy could be neglected without loss of accuracy. In cases where the precision is better than 10^{-10}(10 eV/100 u), e.g. at MIT [1995Di08] and FSU [2015My03], it is necessary to take into account the molecular binding energy.

6.2 Mass spectrometry away from β-stability

The reader interested in the history of mass-spectrometric measurements, the resolving powers, resolutions and the discoveries they rendered possible in nuclear physics and cosmology, can refer to the publication by one of us (G.A.) [1].

6.2.1 Penning trap spectrometers

Nowadays, seven Penning traps are being operated at the major accelerator facilities around the world: ISOLTRAP-Cern, CPT-Argonne, JYFLTRAP-Jyväskylä, LEBIT-East-Lansing, SHIPTRAP-Darmstadt, TITAN-Vancouver, and TRIGA-TRAP-Mainz. They measure the atomic masses for nuclides farther from the valley of β-stability, using the cyclotron frequencies of charged ions captured in the trap. Such a frequency is always compared to that of a (well) known reference nuclide in order to determine the ratio of two masses, which is converted, without loss of accuracy, to a linear relation between the two masses (see also Section 6.1 above and Appendix C, p. 030002-43). Experimental methods that utilize measurements of cyclotron frequency have an advantage compared to volt or magnetic field measurements in a sense that the observable needed in the former, namely the frequency, is the physical quantity that can be measured with the highest precision. In fact, very high resolving power (10^6) and accuracies (up to 10^{-8}) are routinely achieved for nuclides located quite far from the line of β-stability. Such high resolving power made it possible in 1991 [42], for the first time in the history of mass spectrometry, to resolve nuclear isomers from their ground state (^{84}Rb^m) and to determine their excitation energies. Another beautiful demonstration of complementarity between mass spectrometry and nuclear spectroscopy was given in [2004Va07] for ^{70}Cu, ^{70}Cu^m and ^{70}Cu^n, where in the same work the masses of the three isomers were determined directly by mass spectrometry, while the excitation energies were measured by $\beta\gamma$ spectroscopy. Typically, the precision can reach 100 eV or better (60 eV for the difference between ^{6}He and ^{7}Li at TITAN-Vancouver [2012Br03]). Even the most exotic nuclides, such as ^{11}Li (8.75 ms) or ^{74}Rb (64.78 ms), were measured with precisions of 600 eV and 4 keV with the TITAN-Vancouver [2008Sm03] and ISOLTRAP-Cern [2007Ke09] facilities, respectively.

In earlier evaluations, we found it necessary to multiply uncertainties from some groups of mass-spectrometric data [43] with discrete factors (F =1.5, 2.5 or 4.0) following the partial consistency factors χ^p_n we found for these groups (see Section 5.2). Such a treatment is not necessary for most of the Penning trap results, which almost all have F =1.

6.2.2 Double-focussing mass spectrometry

Classical double-focussing mass spectrometry was performed on-line at ISOLDE-CERN to measure masses of nuclides far away from the valley of stability. In these experiments, a relationship between three masses was established. These mass-triplet measurements, in which undetectable systematic effects could build-up in large deviations when the procedure is iterated [1986Au02], could be recalibrated with the help of the Penning trap measurements. Recalibration was automatically obtained in the evaluation, since each mass-triplet was originally converted to a linear mass relation among the three nuclides, allowing both easy application of least-squares procedures, and automatic recalibration. In the present adjustment of data, most of the 181 original data, performed in the 80's, are now outweighed, except for the most exotic (and thus the most interesting) ones. There are still five of them that contribute to the present adjustment, essentially for some very exotic nuclides: ^{91}Rb for 12% of the determination of its mass, ^{95}Rb (49%), ^{144}Cs (20%). In Table I, the relevant equations are normalized to make the coefficient of the middle isotope unity, so that they read e.g.

$$^{97}\mathrm{Rb}-(0.490\times{}^{99}\mathrm{Rb}+0.511\times{}^{95}\mathrm{Rb})=350\pm60\ \mathrm{keV},$$

$$^{145}\mathrm{Cs}-(0.392\times{}^{148}\mathrm{Cs}+0.608\times{}^{143}\mathrm{Cs})=-370\pm90\ \mathrm{keV},$$

(the ^{148}Cs symbol represents the mass excess of nuclide ^{148}Cs in keV). The other two coefficients are three-digit approximations of

$$\frac{A_2}{A_3-A_1}\times\frac{A_2-A_1}{A_3}\quad\text{and}\quad\frac{A_2}{A_3-A_1}\times\frac{A_3-A_2}{A_1}.$$

We took A instead of M in order to arrive at coefficients that do not change if the M-values change slightly. The difference is, however, unimportant.

6.2.3 Radio-frequency mass spectrometry

The Orsay Smith-type mass-spectrometer Mistral, which was also connected to Isolde, had performed quite precise measurements of very short-lived light nuclides, before the Penning traps could cover all the possibilities that were offered by a transmission mass spectrometer. There are eight of the measurements performed with Mistral that are still used in this evaluation for the determination of the masses of ^{26}Ne, ^{26,27,28,29}Na and ^{29}Mg.

6.2.4 Classical time-of-flight

Mass measurements by the time-of-flight mass-spectrometry technique, firstly at Speg (Ganil) and Tofi (Los Alamos), later at Michigan State University (Msu), also apply to very short-lived nuclides, due to instant measurements, but the precisions are much lower than those obtained with Mistral. Masses of almost undecelerated fragment products, coming from thin targets bombarded with heavy ions [44] or high energy protons [45], are determined from a combination of magnetic deflection and time-of-flight measurements. Nuclides in an extended region in A/Z and Z are analyzed simultaneously. Each individual ion, even if very short-lived ($1\,\mu s$), is identified and has its mass measured. In this way, mass values with precisions of (3×10^{-6} to 5×10^{-5}) can be obtained for a large number of neutron-rich nuclides of light elements, up to $A=70$. One difficulty in such experiments is that the obtained value can apply to an isomeric mixture where all isomers with half-lives of the order of, or longer than the time of flight (about 1 μs) may contribute. The limited resolving power, around 10^4, and cross-contaminations can cause significant shifts in masses. The most critical part in these experiments is the calibration, since it is frequently from an empirically determined function, which, in several cases, had to be extrapolated rather far from the calibrating masses. It is possible that, in the future, a few mass-measurements far from stability may provide better calibration points, thus allowing a re-analysis of the concerned data. Such recalibrations require analysis of the raw data and cannot be done by the evaluators. With new data available from other methods, which allow detailed comparisons to be made, we observed strong discrepancies for these groups, and had to increase the associated partial consistency factor to $F=1.5$.

6.2.5 Cyclotron time-of-flight

Cyclotrons offer very long time-of-flight basis, yielding high resolving power for ions living longer than 50μs. The accelerator radio-frequency is taken as reference to ensure a precise time determination, but this method implies that the number of turns that an ion has to make inside the cyclotron, should be known exactly. This was achieved successfully at Sara-Grenoble in the mass measurement of ^{80}Y. Experiments performed at Ganil with the Css2 cyclotron, could not determine the exact number of turns. In the first experiment around ^{100}Sn [1996Ch32], a careful simulation was done instead. In the second experiment on ^{68}Se, ^{76}Sr, ^{80}Sr and ^{80}Y [2001La31], a mean value of the number of turns was experimentally determined for the most abundant species only, which mainly involved the calibrants. Penning traps measurements at the Cpt-Argonne, Jyfltrap-Jyväskylä and Isoltrap revealed that this method suffered from serious systematic errors. Later, improved measurements at Ganil with the Css2 cyclotron [2008Go23] were in better agreement with the Penning trap data.

6.2.6 Multi-Reflection Time-of-Flight Mass Spectrometer

A new type of instrument, called Multi-Reflection Time-of-Flight mass spectrometer (Mr-Tof), has seen the light recently at major nuclear physics facilities. Three Mr-Tof's, operated at Isolde-Cern, Ribf-Riken and at the Gsi facility, begin to produce interesting results, which are included in the present evaluation.

Several other MR-TOF's are under construction at other facilities such as TRIUMF, Argonne and SPIRAL2. The MR-TOF mass measurement is based on time-of-flight. Like storage rings, it aims at extending the flight path by reflecting ions back and forth in a static electric field. With this method, a relative mass precision of 10^{-7} is routinely achieved in typically 10 milliseconds. Remarkable results have been achieved recently at ISOLTRAP using the MR-TOF: it was possible to reach the most exotic nuclei in the light mass region, ^{52,53,54}Ca [2013Wi06] and ^{52,53}K [2015Ro10], as well as in the heavy mass region, ^{131}Cd [2015At03]. A precision of 10 keV has been obtain for the less exotic nuclide (^{52}Ca), and a precision of 110 keV for the most exotic one (^{53}K) with half-life of 30 ms.

For mass determination with MR-TOF, the general relation between mass-to-charge ratio (m/q) and time-of-flight t is [2013Wi06]:

$$t=\alpha\sqrt{m/q}+\beta\,, \tag{8}$$

where α and β are constants related to the experimental set-up and are the same for the ion of interest and for the reference ions.

At RIKEN and GSI, the β parameter can be determined independently, thus only one reference nuclide is needed for mass calibration. In this way, the ratio of time-of-flight between the ion of interest and the reference ion is used to extract the linear equation, as it is the case for Penning trap measurement (see Appendix C p. 030002-43). Results from RIKEN ([2013It01], [2016Sc.A]) and GSI ([2015Di03]) are presented in this way in the present evaluation.

However, at ISOLDE-CERN, two reference masses are used to determine the mass of interest, and the so-called C_{tof} method is used. When using this method, we express the linear equation in term of absolute mass.

At first, the two constants (α, β) are extracted from the two reference equations:

$$t_1=\alpha\sqrt{(m/q)_1}+\beta$$
$$t_2=\alpha\sqrt{(m/q)_2}+\beta\,,$$

where $(m/q)_1$ and $(m/q)_2$ are the mass-to-charge ratios of reference 1 and reference 2, while t_1 and t_2 are their time-of-flights. We thus obtain:

$$\alpha=\frac{t_1-t_2}{\sqrt{(m/q)_1}-\sqrt{(m/q)_2}}$$
$$\beta=t_1-\frac{t_1-t_2}{\sqrt{(m/q)_1}-\sqrt{(m/q)_2}}\sqrt{(m/q)_1}\ .$$

To extract the mass of interest, α and β are replaced in Eq. (8) and the mass can be written:

$$m/q=C_{tof}\Delta_{ref}+\frac{1}{2}\Sigma_{ref}\,, \tag{9}$$

where C_{tof}, Δ_{ref} and Σ_{ref} are defined by:

$$C_{tof}=\frac{2t-t_1-t_2}{2(t_1-t_2)}\ ,$$
$$\Delta_{ref}=\sqrt{(m/q)_1}-\sqrt{(m/q)_2}\ ,$$
$$\Sigma_{ref}=\sqrt{(m/q)_1}+\sqrt{(m/q)_2}\ .$$

The mass uncertainty is calculated from the uncertainty σ_c of coefficient C_{tof} and the reference mass uncertainties σ_1 and σ_2:

$$\sigma^2=(m/q)\Big\{(C_{tof}-\frac{1}{2})^2\frac{\sigma_1^2}{(m/q)_1}+(C_{tof}+\frac{1}{2})^2\frac{\sigma_2^2}{(m/q)_2}+ 4(\sqrt{(m/q)_2}-\sqrt{(m/q)_2})^2\sigma_c^2\Big\}.$$

6.2.7 *Storage-ring time of flight*

Similarly, a long flight path can be obtained in a storage ring, which is operated in the mode of isochronous mass spectrometry (IMS). The first set-up of this type was operated at GSI-ESR at Darmstadt. The precision of the measurements could be as good as 90 keV even for nuclides quite far from stability. Recently, [2016Kn03] reanalyzed some data from two earlier experiments and reported some new masses at GSI-ESR. For some of the newly reported nuclides, only two events were recorded. The results show the potential of the IMS method. However the systematic uncertainty is rather large and eight results from that work appear in Table C. The Cooler Storage Ring for experiment (CSRe) at the IMP-LANZHOU is the second spectrometer for IMS mass measurements. Precision better than 10 keV has been achieved. The isomer of ^{52}Co has been resolved from the ground state, demonstrating the excellent resolving power [2016Xu10].

6.2.8 *Cooled beam cyclotron frequency*

Storage rings could also be used with cooled beams to measure the cyclotron frequency as has been demonstrated since 1997 at the GSI-ESR storage ring, with precisions sometimes as good as 12 keV. Many of the measured nuclides belong to known α-decay chains. Thus, the available information on masses for proton-rich nuclides is considerably extended.

It must be mentioned that in the first group of mass values as given by GSI authors [2000Ra23], several data could not be accepted without changes. The reason was that in the determination of the mass values they had to combine α-decay energies between two or more of the occurring nuclides. Evidently, these energies could not be included without corrections in our calculations, where they would be again combined with these Q_α values. Remarks are added to the data in Table I in order to warn for such cases. Fortunately, this group of data is only of historical interest since they were superseded by more recent high-precision results [2005Li24] using the same instruments. A wealth of high-quality data were published recently using this technique, see e.g. [2012Ch19] and references therein.

6.2.9 Isomeric mixtures

As stated above, many mass-spectrometric results yield an average mass value M_{exp} for a mixture of isomers. Here, we use a special treatment for the possible mixture of isomers (see Appendix B p. 030002-39) and information about these changes are duly explicited in remarks accompanying these data.

The mass M_0 of ground state can be calculated if both the excitation energy E_1 of the upper isomer and the relative production rates of the isomers are known. But often this is not the case. If E_1 is known but not the production ratio, one must assume equal probabilities for all possible relative intensities. In the case of one excited isomer, the estimated mass for M_0 becomes $M_{exp}-E_1/2$, and the part of the error due to this uncertainty is $0.29E_1$ (see Appendix B, Section B.4, p. 030002-42). This policy was defined and tested first for the GSI-ESR cooled beam cyclotron frequency data and was discussed with the authors of the measurements. In 15 cases, more than two excited isomers contribute to the measured line.

A further complication arises if E_1 is not known. In such a case, we have to make the best possible estimate for E_1. As always this estimated value is flagged with '#' This, in addition to questions related to α-decay chains involving isomers, was a reason for us to consider the matter of isomers with even more attention. Part of the results of our estimates are incorporated in the NUBASE evaluation. In estimating the E_1 values, we first look at experimental data possibly giving lower limits: e.g. if it is known that one of two isomers decays to the other; or if γ rays of known energy occur in such decays. If not, we try to interpolate between E_1 values for neighboring nuclides that can be expected to have the same spin and configuration assignments (for odd A: isotones if Z is even, or isotopes if Z is odd). If such a comparison does not yield useful results, indications from theory were sometimes accepted, including upper limits for transition energies following from the measured half-lives. Values estimated this way were provided with somewhat generous errors, dutifully taken into account in deriving final results.

In several of these measurements, an isomer can only contribute if its lifetime is relatively long (hundreds of milliseconds or longer). However, half-life values given in NUBASE are those for neutral atoms. For bare nuclides, where all electrons are fully stripped from the atom, the lifetimes of such isomers can be considerably longer, since the decay by conversion electrons is switched off. The reported mass measurements [2005Li24] of the 580 ms $^{151}Er^m$ isomer at E_1=2586.0 keV excitation energy and and the 103 ms $^{117}Te^m$ isomer at E_1=296.1 keV are two examples.

Considering the isomeric mixtures and combining experimental data from decay spectroscopy and from mass spectrometry can provide valuable information for the atomic masses. This can be demonstrated in the following example. Masses of the nuclides along the α-decay chain ^{206}Ac-^{202}Fr-^{198}At-^{194}Bi-^{190}Tl were deemed unknown in AME2012, while they were considered to be known in AME2003. For these nuclides, two long-lived states exist with high and low spin, respectively, and two α-decay chains are established in parallel. The excitation energies of the isomeric states are unknown. In AME2003, their masses were determined by storage ring mass spectrometry [2003Li.A], [2005Li24], where the mixture of two states were assumed and the corrections implemented. Later the mass of ^{190}Tl in its high-spin state was measured with unambiguous assignment of the state from decay spectroscopy. The result was included in AME2012 as private communication [2012Bo.A] (published later as [2014Bo26]). This state was assumed to be the excited isomer, but the excitation energy was unknown. The excitation energy of ^{190}Tl was estimated from TNN to be 90#(50#) keV in AME2012, and then the masses of these five nuclides in their ground state were deemed unknown. By using resonance ionization laser ion source technique, a specific state can be selected, and it can be identified through decay spectroscopy. In this way, the ground state mass of ^{198}At was unambiguously measured by ISOLTRAP [2013St25]. The excitation energy of $^{190}Tl^m$ was determined to be 89(12) keV for the first time, which agrees with the estimated value. In AME2016, the masses of all five nuclides connected via α decays are now being experimentally known.

6.3 Masses of unbound nuclides

Presently, many nuclides beyond the driplines can be accessed in the light mass region. They can decay via direct proton or neutron emission. The half-lives of these unbound nuclides are too short for them to acquire their outer electrons (which takes around 10^{-14} s), and to form atoms. However, we still convert their masses to "atomic masses" so we can treat them consistently with other nuclides. It is experimentally challenging to study these unbound nuclides far from stability: only very few events can be observed. Frequently, theoretical calculations are required to extract their properties from the experimental data.

On the proton rich side, resonant states could be formed due to the Coulomb barrier. There are different approaches to study these states: transfer reaction with missing mass spectrum, proton scattering, and complete kinematic measurement with invariance mass spectrum. For a broad resonant state, the definition of the resonance energy and width is not unique. For example, ^{15}F was studied in resonant elastic scattering using a thick CH_4 gas target in inverse kinematics with a ^{14}O beam [2004Go15]. The proton-decay energy of ^{15}F was obtained to be $1.29^{+0.08}_{-0.06}$ MeV from the energy at which the magnitude of the internal wave function is a maximum, or $1.45^{+0.16}_{-0.10}$ MeV where the elastic scattering cross section is maximum, corresponding to a phase shift of $\delta = \pi/2$. Since the latter value is consistent with those obtained in transfer reaction studies, it is adopted in our evaluation.

Some single-proton resonant states can be accessed and studied in two-proton decay experiments. For example, the 1p-decay energies of 1560(130) and 2850(40) keV for the ground and first excited states in ^{15}F [2004Le12] are well reproduced in the angular-correlation studies of two-proton decays of ^{16}Ne [2008Mu13].

On the neutron-rich side of the nuclear chart, the mass of unbound nuclides can be determined by means of the missing-mass method using transfer reactions (e.g. [2015Ma54]), or with the invariant-mass method using radioactive-ion beams (e.g. [2012Ko43]). Recently, various such beams and improved detection techniques have been impressively developed, which allows new masses of unbound nuclides to be determined.

In the case of neutron-induced reaction, only the centrifugal barrier plays a role in the formation of a given resonant state. Since no barrier exists at all for a s-wave neutron, the observation of asymmetric peak near the threshold is a general feature of spectra obtained in invariant-mass experiments (e.g. [2010Jo06]). This state is usually referred to as a virtual state, which has no definite lifetime and thus differs significantly from a real resonance state. The virtual state can be characterized by the s-wave neutron-nucleus scattering length; its eigen energy is approximately $\hbar^2/2\mu {a_s}^2$, where μ is the reduced mass and a_s is the scattering length.

6.4 Isobaric Analog states (IAS)

The concept of isospin was introduced by Heisenberg [46] and developed by Wigner [47] to describe the charge independence of nuclear forces. This concept is widely used in particle and nuclear physics. Within the isospin formalism, a nucleus composed of Z protons and N neutrons has a fixed isospin projection of $T_z = (N-Z)/2$, while all states in the nucleus can have different total isospins $T \geq |T_z|$. In other words, states of a given T can occur in a set of isobaric nuclei with $T_z = T, T-1, ..., -T$. These states with the same T and J^π are called Isobaric Analog States (IAS). A set of IASs with fixed A and T are believed to have very similar nuclear structure properties and to be energetically degenerate in the framework of isospin symmetry. Their relative masses can be used to explore the charge symmetry and charge independence of the nuclear interaction via the Isobaric Mass Multiplet Equation (IMME) [48], and with calculations of the Coulomb Displacement Energy (CDE) (see for example [32], and references therein).

As in AME2012, IASs that are determined via external relations were evaluated. In some cases, one IAS can be involved in a local network thus influencing other masses. Such an IAS was included in the present evaluation, although its excitation energy may be determined mainly through an internal relation. An example is ^{48}Mn^i, which is connected to ^{47}Cr through proton decay, thus building a loop when its internal transition is included.

6.5 Proton and α decays

In some cases, proton-decay energies can be estimated from proton-decay half-lives. Estimates for the following nuclides can thus be obtained as:

Nuclide	$T_{1/2}$	S_p (keV)	Adopted S_p
^{64}As	40±30 ms	> -100	$-100\# \pm 200\#$
^{68}Br	<1.5 μs	< -500	$-500\# \pm 250\#$
^{73}Rb	<30 ns	< -570	$-570\# \pm 200\#$
^{81}Nb	<44 ns	< -600	$-710\# \pm 500\#$

These limits were used as a guide to obtain estimates for the masses of those nuclides.

These results are important for two main reasons. Firstly, knowledge of proton separation energies just beyond the proton drip line is quite valuable in estimating the mass values for nuclides for which no experimental data are available. Secondly, there are several cases where proton-decay energies from both members of an isomeric pair were measured, so one can determine the excitation energy of a particular isomer. In addition, the lifetime of a proton-emitting nuclide is sensitive to the orbital angular momentum value l carried by the proton and this can be used in turn to obtain reliable information about the spins and parities of the parent and daughter states. This feature is even more valuable, when α decays of both members are observed. Combination of long α-decay chains with proton decays offers a view of extended regions of the chart in the neighborhood of the proton drip-line. These studies showed that several decays that were earlier assigned to ground states actually belong to excited isomers. Also, these measurements are found to yield good values for the excitation energies of the isomers among the descendants. We usually followed the judgment of the authors, including their recommendations about the final levels fed in those α decays.

Often in α-decay studies of odd-$N(Z)$ and odd-odd nuclides, the level fed directly by the α particle is not known. A comprehensive investigation that we performed some time ago suggested that, in most cases, when the decay does not go directly to the ground state, the final level is relatively close to the ground state. In such cases, we adopted the policy of accepting the measured E_α as feeding the ground state, but assigning a special label to indicate that a close-lying excited level may also be fed. This label, which is not given in Table I, will indicate to our computer program that the uncertainty, after possible pre-averaging of data of the same kind (also given in Table I), is to be increased to 50 keV.

The existence of proton-decay branches, as mentioned above, provided sufficient arguments to omit the mentioned label in several cases. One has also to be careful with the use of this label if mass-spectrometric results with a precision of about 50 keV or better are known for the parent and daughter nuclides. Comparison with theoretical models may also suggest dropping the mentioned above label; or conversely to not accept a reported α-decay energy.

In some cases, TMS estimates and theoretical predictions of α-decay energies indicate that the excitation energy E_1 of the final level may be much higher. Then, an estimate for the excited level energy (provided with a generous error) is added as an input value.

In regions where the Nilsson model for deformed nuclides applies, it is expected that the most intense α transition connects parent and daughter levels that have the same quantum numbers and configurations. In such a case, adding an estimate for E_1 is attractive. Frequently, the energy difference between the excited and ground states can be estimated by comparisons with the energy differences between the corresponding Nilsson levels in nearby nuclides.

For nuclei with A>190, as well as for proton-rich nuclei far from the line of stability, α decay is the main decay mode providing information about atomic masses. Most measurements involve position-sensitive silicon detectors, which require careful energy calibration. Such calibrations usually use the recommended E_α values evaluated by Rytz [1991Ry01]. The recent development in mass spectrometry allowed independent mass measurements in this region of the nuclear chart using Penning Traps. Such measurements have already been carried out for several No and Lr nuclides [2010Mi.A] and their results were already included in AME2012.

6.5.1 Particle energy vs. decay energy

Unfortunately, some authors misuse the meaning of particle and decay energies. Energy values are referred to by some authors as the particle energy E, while others quote it as decay energy Q. Actually, the decay energy is the sum of kinetic energies of the emitted particle and the recoiling daughter nuclide. In general, the α particle carries about 97-98% of its Q value and the recoiling nuclide accounts for about 2-3%. In the literature one can find too many cases of confusion, especially in proton-decay experiments where Q_p and E_p are numerically closer to each other. Sometimes, the confusion could be resolved through a meticulous inspection of the paper and a discussion with the authors. However, ambiguities still remain in many cases.

6.5.2 Recalibration of alpha- and proton-decay energies in implantation experiments

In experiments where the α-emitting nuclei are implanted in a silicon detector, both the α particle and the recoiling daughter nuclide deposit energies in the detector. Often authors make the simple assumption that only the α-particle energy is measured in the detector. While in similar cases of proton decays, it is often considered that both the proton and the heavy recoil are detected at the same time. Neither of these statements is correct: α particles and protons with energies of a few MeV have almost 100% detection efficiency, which is not the case for the heavy recoiling nuclides, where only part of the recoiling energy contributes to the signal.

This effect has been discussed in Ref. [2012Ho12], where approximately 28% of the recoil energy contributes to the signal. In that experiment, the recoil energy of the 11.65 MeV α-particle line of ^{212}Po^m, which was used for calibration, is 224 keV, whereas the recoil energy of a superheavy nucleus with mass number 292 is only 162 keV for the same α energy. Thus the difference of the recoil energies which contribute to the signals is 17 keV, which is larger than the 10 keV energy uncertainty. For this reason, the partial recoil energy of the daughter nuclide has been taken into account in the energy calibration [2012Ho12].

However, not all the experimentalists notice this effect and we need to make our own corrections of the published results. We have developed a procedure [49] to calculate the detection efficiency for heavy nuclides in Si detectors based on Lindhard's integral theory [50], which has been experimentally proven to be reliable [51, 52].

The correction has been done for some of the experimental results included in the present tables. After discussions with the authors of the original publication, the α-decay energy of ^{255}Lr^m Ref. [2008Ha31] has been corrected and the difference turns out to be 7(10) keV. The corrected value is used in the current evaluation with a remark given to the relevant data in Table I. Another example is from Ref. [2014De41], where the proton-decay of ^{69}Br was measured by using β-delayed protons from ^{20}Mg and ^{23}Si for the energy calibration. The authors assumed (erroneously) that the recoil energy would be fully recorded at the same time. From our calculations the detection efficiency for the recoil nuclide (^{68}Se) is about 30% and its neighboring nuclides show similar behavior. Applying the correction, the β-delayed proton-decay energy of ^{69}Kr changed from 2939 keV to 2916 keV. The difference is 23 keV, comparable with the 22 keV uncertainty. The same correction procedure was also applied to the ground-state proton-decay energy of ^{69}Br in the same work [2014De41], which changed its proton-decay energy from 641 keV to 631 keV, with uncertainty of 42 keV.

The correction should, in principle, be applied to all implantation α- and proton-decay experiments of some precision if the recoil effect was not taken into account. This work is not yet complete in the present version of the Ame.

Some authors derive a value which they call Q_α from the measured α-particle energy by not only correcting for the recoil energy, but also for screening by atomic electrons (see Appendix A p. 030002-38). In our calculations, the latter corrections have been removed.

Finally, some measured α-particle energies are affected by the coincidence summing between the α particle that feeds an excited level of the daughter nuclide and the conversion electrons that follow the decay of this level. This is sometimes apparent from the reported α spectra, since the width of the observed line is larger than that of other ones. In some cases, spurious α peaks can be observed. When deriving the corresponding Q_α values, appropriate (small) corrections are made for the escaping X-rays. Those are mentioned in a remark added to such a case.

6.6 Decay energies from capture ratios and relative positron feedings

For allowed transitions, the ratio of electron capture in different shells is proportional to the ratio of the squares of the energies of the emitted neutrinos, with a proportionality constant being dependent on Z [53]. For (non-unique) first forbidden transitions, the ratio is similar, but with a few exceptions. The neutrino energy is determined as the difference of the transition energy Q and the electron binding energy in the pertinent shell. Especially if the transition energy is not too much larger than the binding energy in, say, the K shell, it can then be determined rather well from a measurement of the ratio of capture in the K and L shells.

The non-linear character of the relation between Q and the capture ratio introduces two problems. In the first place, a symmetrical error for the ratio is generally transformed in an asymmetrical one for the transition energy. Since our least-squares fit program cannot handle them, we have symmetrized the probability distribution by considering the first and second momenta of the real probability distribution (see Nubase2016, Appendix A, p. 030001-16). The other problem is related to averaging of several values that are reported for the same ratio. Since Ame1993, our policy is to average the capture ratios, and calculate the decay energy from that average. An example is ^{139}Ce(ε)^{139}La (see p. 030002-211), where 10 results were averaged and the individual values given in the associated remarks. In this procedure we used the best values [53] of the proportionality constant. We also recalculated the older decay energies using the new value for this constant.

The ratio of positron emission and electron capture in the transition to the same final level also depends on the transition energy. It is well known for allowed and not much delayed first forbidden transitions. Thus, the transition energy can be derived from the measured positron intensity to a given level, rather than from the positron spectrum end-point (e.g. ^{109}Cd(ε)^{109}Ag, p. 030002-170). In the case of positron decay, one must remember that it can only occur when the transition energy exceeds $2m_ec^2 = 1022$ keV. However, in many cases the level fed by positrons is also fed by γ-rays coming from higher levels that are fed by electron capture. Determination of the intensity of this *side* feeding is often difficult. Cases exist where such feeding occurs by a large number of weak γ-rays that can be easily overlooked (the *pandemonium* effect [54]). Then, the reported decay energy may be much lower than the real value. In judging the validity of experimental data, we kept this possibility under consideration.

Total Absorption Spectrometry (TAS) has been applied to overcome the *pandemonium* effect [54]. In some cases the ratio of positron emission and electron capture is measured using TAS, e.g. ^{103}Sn [2005Ka34]. For this case we adopted the value reported by the authors.

6.7 Q_β far from β-stability

Presently, the mass surface for nuclides far away from the valley of β-stability is observed to be located much higher than was previously believed. This is largely due to the underestimation of the Q_β decay energies, which were measured in the past using the end-point energy method. See the discussion in Ame2012, p. 1317.

The deduced higher values of atomic masses for exotic nuclides in the present work will have important consequences for nuclear astrophysics and nuclear energy applications, as discussed in Ref. [55].

To conclude, for nuclei very far from the valley of stability, Q_β results from end-point measurements should be treated with caution. In such cases, data available from Penning traps and/or storage rings facilities should always be given priority.

6.8 Superheavy nuclides

The search for superheavy elements (She) and elucidation of their properties is one of the prominent areas of modern nuclear physics research. In the last several years, the nuclear chart was extended impressively in the heaviest mass region up to the element with atomic number $Z = 118$. However, the mass surface built with the available data is still rough (see Part II, Fig. 9 and also Fig. 26, p. 030003-243 and 030003-260).

Names and symbols At the completion of AME2016, SHE up to $Z = 118$ were officially named by The Commission on Nomenclature of Inorganic Chemistry of the International Union of Pure and Applied Chemistry (IUPAC) [56]:

113	Nihonium	(Nh),
115	Moscovium	(Mc),
117	Tennessine	(Ts), and
118	Oganesson	(Og).

We were not able to include the new names in AME and NUBASE, but instead we used the provisional symbols Ed, Ef, Eh, and Ei for elements 113, 115, 117, and 118, respectively.

Experimental methods Since α decay is the dominant decay mode in the region of superheavy nuclides, knowledge of masses of SHE is most often obtained from the measured α-decay energies within a chain that reaches a nuclide with known mass. Position and time-correlated α-decay and Spontaneous Fission (SF) spectroscopy measurements of SHE continue to provide precious information about their properties. However, it often happens that α chains end up with a nuclide decaying only by spontaneous fission, offering no link to known masses. For example, the SF decay of ^{266}Sg does not allow to determine the mass of the doubly magic nuclide ^{270}Hs. In order to support the discovery of new elements, an indirect method can be applied, where different nuclear reactions are used to produce the daughter nuclide. This was the case in the discovery of the new elements ^{293}Eh(Ts) and ^{289}Ef(Mc), see Ref. [57] and references therein. However, the new analysis of all available data in Ref. [2016Fo16] provided evidence against the proposed cross-reaction link [57] between the α-decay chains associated with those two nuclides. New studies would be needed to resolve the discrepancies.

A very important development in this mass region was the first direct mass measurements [2010Dw01] of several isotopes of No ($Z = 102$) and Lr ($Z = 103$) by the SHIPTRAP facility at GSI. Those results provided anchor points for atomic masses in this remote region of the nuclear chart. In general, the newly measured masses agree reasonably well with those deduced from known Q_α values of long α chains, thus giving confidence not only about the reliability of masses for SHE reported in [2010Dw01], but also the treatment and policies used in our work. In AME2016 we included new results from such direct mass measurements for the lighter ^{241,243}Am, ^{244}Pu and ^{249}Cf nuclides [2014Ei01]. However, we have to mention here the disagreement in the ^{249}Cf – ^{241}Am mass difference between the Penning trap data and the value deduced using the decay Q_α values, as discussed in Section 7.10 (p. 030002-36).

Alpha decay of superheavy nuclides For even-even nuclides, the strongest (favored) decays connect the parent and daughter ground states. They are directly related to the Q_α values. As a result, masses determined this way are quite reliable. Unfortunately, some of the nuclides are prone to spontaneous fission decay, thus limiting the number of reliable cases.

For many odd-A nuclides, especially for odd-odd ones, the assignments are frequently complicated. In the region of deformed nuclides, α decays preferentially connect levels with the same J^π and configurations, and as a consequence the daughter nuclei are often produced in excited states with unknown excitation energies E_1. Thus, in order to find the corresponding mass difference, we have to estimate these E_1 values. For somewhat lighter nuclides, one may estimate them from known differences in excitation energies for levels with the same Nilsson assignments in neighboring nuclides. But such information is lacking in the SHE region under consideration. Instead, one might consider using values obtained theoretically [58]. We have not done so. However, we have used such theoretical values as a guide, choosing values in such a way that diagrams of α energies and the mass surface looked smooth. Helpful for this purpose were the experimental α-decay energies for $Z = 112$, 114 and 116, especially for the even-even nuclides among them. This is especially true near sub-shell closures, since the favored alpha decay occurs between states that have the same quantum numbers and configurations.

The presence of excited, long-lived isomers can also lead to severe complications. While many dedicated α–γ coincidence studies have been performed for nuclides in the light actinide region, such spectroscopy needs to be extended to the heavier nuclides. In the last several years new results were published in the $Z = 102 - 104$ region, which resolved some of the ambiguities. However, high quality data are still in demand and such studies would be very beneficial to future mass determination of SHE.

A weak α-decay branch was observed in the decay of ^{262}Sg [2010Ac.A], which allowed experimental determination of the mass of $^{270}_{108}$Ds, the heaviest nuclide that has an experimental mass value in AME2016. The new data allowed to establish unambiguously the existence of a significantly deformed sub-shell gap at $N = 162$ and $Z = 108$. This gap appears to be much larger than the one at $N=152$ and $Z=100$.

Our policy in this high-A region, where the α-decay energies often spread too much, is to adopt the highest α-decay group as gs-gs transition. The reason is that, even if this group is formed due to α-electron summing, it is still the closest one to the real gs-gs Q value.

An interesting case is the determination of the mass of $^{265}_{106}$Sg. This mass was considered as experimentally known in the AME2003 mass table (and was then the heaviest nuclide with known mass), derived from the highest α-decay group $E_\alpha = 8940 \pm 30\,\mathrm{keV}$ of [1998Tu01] and adopted as gs-gs transition. With more events [2012Ha05], the status of ^{265}Sg has been changed and the former α-decay group assigned to the neighboring isotope ^{266}Sg was reassigned to the ^{265}Sg^m state. In the present evaluation we use the strongest group, which may be the unhindered transition, assuming this transition goes to one excited state in the daughter nuclide ^{261}Rf with unknown energy. This energy is estimated from the trends in the neighboring nuclides (TNN). So, the mass of ^{265}Sg is now estimated rather than experimental as in AME2003, although the mass value doesn't change much.

With exception of the nuclide $^{278}_{113}$Ed(Nh), nuclides with atomic number from 113 to 118 are produced by the "hot fusion" method, decaying by α emission to fissile nuclides whose masses are unknown experimentally, thus forming a floating island with none of the nuclides having known mass.

7 Special cases

Special cases have been discussed in the AME series to highlight the issues raised in the evaluation and to call for more efforts to solve them. Some of the special cases discussed in AME2012 have been solved so we removed them from the current list. Meanwhile some new cases have been added.

7.1 ^{3}H–^{3}He atomic mass difference

The β-decay energy of ^{3}H(β^-)^{3}He, which can be deduced from the difference between the ^{3}H and ^{3}He atomic masses, is very important for neutrino-mass experiments that analyze the shape of the tritium β-decay spectrum near its end-point energy. Because of the significance in the determination of the neutrino mass, the Q_β of ^{3}H has been measured by many groups using different methods. About thirty years ago, one of us (G.A.) and colleagues evaluated all of the significant experimental results available at that time on the ^{3}H–^{3}He mass difference [1985Au07]. In that evaluation, the methods fell into three categories: mass doublet measurements, tritium β-decay measurements in magnetic spectrometers and in implanted detectors. It was found that the data within each group are consistent with each other, but there were notable discrepancies among the groups.

In the last three decades, Penning trap mass spectrometers have been developed intensively and now dominate mass measurements with the highest precision. Before AME2012, the β-decay measurements always played the most important role in determining the Q_β of ^{3}H. In AME2012, the Penning trap results contributed almost as much as the β-decay measurements in this case, thanks to the high-precision results from the SMILETRAP group [2006Na49]. These results were in strong conflict with earlier results from the UW(University of Washington) Penning trap (Seattle group) [1993Va04]. The latter reported that the masses of ^{3}He and ^{3}H were determined with uncertainties of 1 nu and 1.5 nu, respectively. Thus the Q_β of ^{3}H was deduced with a precision of 1.7 eV by this method. The results from [1993Va04] were used in the AME1993 with the originally published values. Later, some serious systematic errors in this measurements were discovered. After discussion with the authors, the result for ^{3}H was temporarily discarded. The value for ^{3}He was corrected by 3 nu, i.e. 3 sigma away from the original value, and used in AME2003 and AME2012. The results from [2006Na49] supports the correction.

Recently, the ^{3}H and ^{3}He atomic masses were measured by the Florida State University (FSU) group with precisions of 0.19 nu, as reported in [2015My03]. Because the identical procedures and the same reference ion were used in the mass measurements for these two nuclides, it was concluded that all of the important systematic uncertainties should be cancel. The resulting uncertainty of 0.07 eV is thus much smaller than that for the individual masses.

However, the Seattle group analyzed the results collected in earlier experiments and published the ^{3}He mass with an uncertainty of 0.043 nu [2015Za13]. This result still disagrees by 3.3 times the sum of their final uncertainty with the FSU result [2015My03]. In the Seattle experiment, carbon ions were used as reference, whose mass is quite different from the measured nuclide. Thus, their result might be vulnerable to undiscovered systematic errors so is provisionally not used in the present evaluation. In the FSU measurement, the HD$^+$ ion was used as the reference, which has similar mass with the measured nuclide. The ^{3}H–^{3}He mass difference is usually more robust than the absolute mass values, since both nuclides are exposed to the same experimental conditions. This robustness was proven in the work [1993Va04], where although the absolute mass value for ^{3}He has been corrected by 3 nu, the mass difference in the original value agrees with the adopted values in series of AME evaluations.

In AME2016, the results from [2015My03] are used to determine the masses of ^{3}H and ^{3}He. Due to the high precision, all of the other results lost their significance. The recommended values for the Q_β decay energy of ^{3}H from AME1983 to AME2016 are:

AME evaluation	Q_β (eV)	Uncertainty (eV)
AME1983	18594	8
AME1993	18591	1
AME2003	18591.3	1.1
AME2012	18590.6	0.8
AME2016	18592.01	0.07

It should be noted that in AME1983, the definition of the *maintained* Volt differed from later evaluations, as explained in Section 2. But its impact on the Q-value is just 0.15 eV, much smaller than the quoted uncertainty. Because of its importance, the precise determination of the ^{3}H–^{3}He mass difference will continue to attract interest. The former Seattle trap is now operational at the Max-Plank Institute in Heidelberg and will be dedicated to such measurements in the future [2016Ho.A].

7.2 ^{9}He and ^{10}He

The knockout reaction on ^{11}Be has been used to produce ^{9}He [2001Ch31] and its lowest state has been assigned $l = 0$. An upper limit of the s-wave scattering length a_s=−10 fm has been obtained, corresponding to an energy for the virtual state below 0.2 MeV. In [2007Go24], the spectrum of ^{9}He was studied by means of the ^{2}H(^{8}He,p)^{9}He reaction. The lowest resonant state of ^{9}He was found at 2.0±0.2 MeV with a width of 2 MeV and has been identified as a $1/2^-$ state. For the virtual $1/2^+$ state, a lower limit $a_s > -20$ fm has been obtained, which is consistent with the result in [2001Ch31]. This assignment has been questioned in [2010Jo06], where ^{9}He was studied by using knockout reaction from ^{11}Li. The ^{8}He+n relative-energy spectrum is dominated by a strong peak-like structure at low energy, which may be interpreted within the effective-range approximation as the result of an s-wave interaction with a neutron scattering length $a_s = -3.17 \pm 0.66$ fm, thus conflicting with [2001Ch31]. It is argued that the *s*-state might not be the g.s. of ^{9}He.

This argument is supported by the structure of ^{10}He, which should be similar to the structure of ^{9}He. If a virtual state in ^{9}He [2001Ch31] really existed, a narrow near-threshold 0^+ state in ^{10}He with a $[s1/2]^2$ structure would exist in addition to the $[p1/2]^2$ state [59, 60], in contradiction to the available experimental data on ^{10}He.

Based on these experimental results, we adopt the $1/2^-$ as the ground state of ^{9}He. In earlier work [1987Se05], [1988Bo20], and [1991Bo.B], transfer reactions were used, yielding values of E_r (resonance energy) of this state around 1.1 MeV. More recently, [1999Bo26] and [2010Jo06] determined $E_r \sim 1.3$ MeV. In [2007Go24], the $1/2^-$ state of ^{9}He was found at $E_r = 2.0 \pm 0.2$ MeV with a width ~ 2 MeV in this work, significantly higher than in the other reports. The energy resolution in this experiment was 0.8 MeV (FWHM), which is quite large compared to the energy difference of ∼1.1 MeV between the $1/2^-$ and $3/2^-$ states [1988Bo20], [1999Bo26], [2010Jo06]. Therefore, we suspect this state to be a mixture due to the poor energy resolution in this experiment.

The case related to ^{10}He was discussed in AME2012. At that time four experimental results were known concerning the mass of ^{10}He, and two new results were published since. The six experimental results are:

Reference	Q_{2n}(in keV)	Method of production
1994Os04	1070 ± 70	^{10}Be(^{14}C,^{14}O)^{10}He
1994Ko16	1200 ±300	C(^{11}Li,^{10}He)
2010Jo06	1420 ±100	^{1}H(^{11}Li,^{10}He)
2012Si07	2100 ±200	^{3}H(^{8}He,p)^{10}He
2012Ko43	1600 ±250	C(^{14}Be,^{10}He)
2015Ma54	1400 ±300	^{11}Li(d,^{3}He)^{10}He

The mass of ^{10}He from [1994Os04] is significantly lower than the others, with poor statistic compared to the high background. The values obtained in previous invariant-mass measurements [1994Ko16, 2010Jo06] agree with each other, both using ^{11}Li to produce ^{10}He. In [2012Si07] the value is higher than the others, while the authors stated that "the results reported in Refs. [1994Ko16] and [2010Jo06] do not contradict the g.s. energy of ^{10}He obtained in the present work", based on the calculations of Ref. [60]. They argued that due to the strong initial state effect, the observable g.s. peak position in [1994Ko16] and [2010Jo06] is shifted towards lower energy because of the abnormal size of ^{11}Li, which exhibits one of the most extended known neutron halos. Based on the ^{9}He spectrum from [2007Go24], the ^{10}He g.s. with structure $[p1/2]^2$ is predicted to have a $2.0-2.3$ MeV two-neutron separation energy. However, the result of ^{9}He from [2007Go24] is not adopted, as discussed earlier. The model has problems in interpreting all of the experimental data, indicating the states may have a more complex structure. In the AME2012 evaluation, we adopted the result from [2010Jo06] provisionally and called for more experiments to clarify this case.

Two experimental results were published after AME2012. In [2012Ko43], a group from MSU has studied ^{10}He using the fragmentation of ^{14}Be. In [2015Ma54], the missing mass spectrum of ^{10}He was measured at RIKEN using the ^{11}Li(d,^{3}He) reaction at 50A MeV. Their results support the choice in AME2012. The discrepancy with the result in [2012Si07] could not be explained simply by the exotic structure of ^{11}Li, which was the argument used in [2012Si07], since in the later experiments different reaction channels are explored.

The discrepancy among the results for the mass of ^{10}He has attracted wide attention. To reconcile this case it has been proposed recently that all the experiments were measuring two overlapping 0^+ states that were populated with different ratios in different experiments. Thus the lowest state reported up to now was adopted as the ground state in [61]. However, there are too many assumptions in this argument. Four experimental results published up to now are consistent with each other. We use the two most precise ones among them ([2010Jo06] and [2012Ko43]) to determine the mass of ^{10}He. Meanwhile, we call for more experiments to further clarify this case.

7.3 The mass of ^{32}Si

In Ame2012, we discussed in details the difficulties we met in the determination of the mass of ^{32}Si. We then decided not to use the (n,γ) data. No new experimental result relevant to this case appeared since then. In the PTB (Physikalisch-Technische Bundesanstalt) experiment [2001Pa52], the nuclide ^{32}Si is produced by neutron capture on ^{31}Si, which is radioactive and it is also produced in neutron capture reaction. It seems reasonable to question whether the measurement of the γ rays from ^{32}Si could involve a substantial background. In the present evaluation, we keep using the Penning trap values, as we did in Ame2012.

7.4 The Q-value for ^{99}Rh(β^+)^{99}Ru

The Q-value for ^{99}Rh(β^+)^{99}Ru was adjusted to be 2043(7) and 2044(7) keV in Ame2003 and Ame2012, respectively. In both evaluations, $Q_{\beta+}$ was mainly determined from the two β-decay results in Ref. [1952Sc11] and [1959To25]. A higher Q-value of 2170(30) keV was reported in the later work [1974An23], but was not used in Ame due to its large uncertainty. However, it was found that the Q-value should be larger than 2059.34 keV because this state was populated in beta-decay experiments. In [1959To25], the authors reported that the highest end-point energy of the β^+ spectrum was 1030 keV and no γ ray was observed in coincidence. While [1974An23] reported that the highest energy component of the β^+ spectrum was largely connected with the transition to the 89.76 keV level, and the authors suggested that in [1959To25] the β^+ spectrum should also be associated with that γ transition. If we accept this explanation, then the deduced $Q_{\beta+}$ would be in strong conflict with the result from [1952Sc11], where the β^+ spectrum was measured from the excited isomer, whose excitation energy has been well established from the γ-ray spectroscopy.

Both ^{99}Rh and ^{99}Ru are primary nuclides (cf. Section 5.3) in our evaluation. The mass of ^{99}Ru is mainly determined by (n,γ) reaction to ^{100}Ru, which in turn is determined from Penning trap measurement. The uncertainty of the adjusted ^{99}Rh mass is 6.7 keV. The mass of ^{99}Rh can also be determined through the $Q_{\beta+}$ value of ^{99}Pd, which in turn is measured with a Penning trap with an uncertainty of 5.4 keV. Consequently, even if we don't use any of the experimental results from the beta-spectrum measurements of ^{99}Rh, we can still determine the Q-value of ^{99}Rh(β^+)^{99}Ru to be 2032(21) keV. If we increase the Q-value of ^{99}Rh(β^+)^{99}Ru, then strong tension will be built around this region.

Confronting all of the difficulties, in this evaluation we follow the same treatment used in Ame2012. Meanwhile, direct mass measurements of ^{99}Rh with high accuracy are needed, in order to solve this issue.

7.5 The mass of ^{100}Sn

The determination of the mass of ^{100}Sn was the subject of a detailed discussion in Ame2003 and again in Ame2012. This result is particularly interesting due to the doubly magic character of ^{100}Sn which is, moreover, the heaviest known nuclide with $N = Z$. No new results have been reported since then for ^{100}Sn. We therefore still recommend using the $Q_{\beta+}$ value from Gsi [2012Hi07], which is also the most precise, for the determination of its mass, and are in demand of more experimental results.

7.6 The ^{102}Pd double-electron capture energy

In the Ame2012 evaluation, we described the discrepancies we found between data coming from combinations of the very precise (n,γ) reactions with β^+, β^- and ε decay energies versus direct Penning trap data [2011Go23]. Having found no reason to distrust any of the measurements involved then, and having on one side one result obtained with a very reliable method, on the other side derived from a combination of several quite trustable measurements, we finally decided at that time to provisionally not use the new Penning trap result and called for more measurements in order to clarify this issue.

Recently, we were aware of the experimental results for ^{102}Pd and ^{103}Pd from the Esr mass measurements through a private communication [2014Ya.A]. Their results support the Shiptrap datum, although with relatively large uncertainties. We therefore decided to discard two pieces of data: ^{102}Rh(β^-)^{102}Pd and ^{103}Pd(ε)^{103}Rh, and to use the Shiptrap result. The local consistency is then restored.

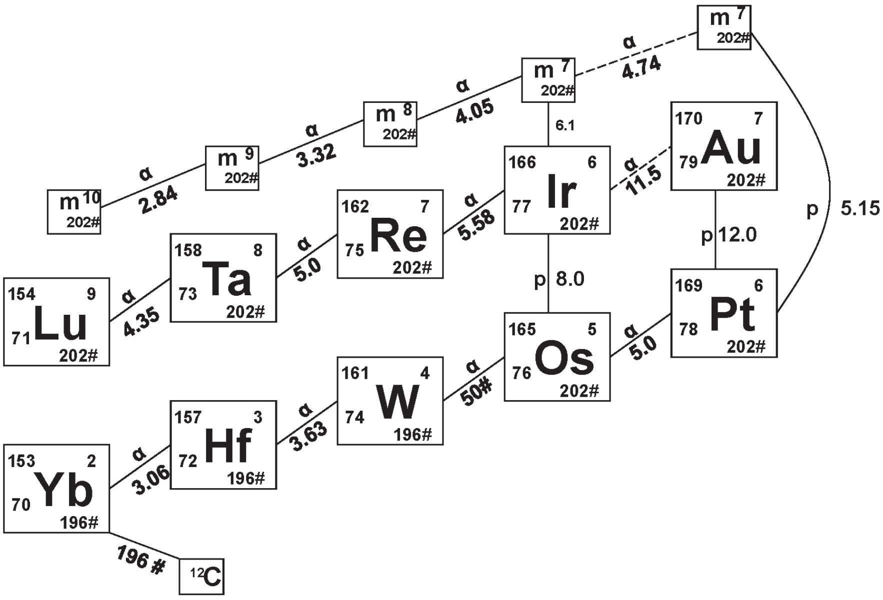

Figure 4. Loops created by three alpha-decay chains interconnected by proton decays and one IT. Each square box represents an individual nuclide. Its mass precision (keV) is given in the lower right corner, its degree in the upper right corner. Along each connection between two nuclides is the type of relation and its precision. 'm' stands for the excited isomer of the nuclide below it.

7.7 The mass of ^{105}Sb

The matter of the determination of the mass of ^{105}Sb was discussed at length in AME2012. No new data were published since then. Therefore, the Q_α measurement in [2007Ma35] is again provisionally adopted in the present evaluation, and determines the mass of ^{105}Sb. We still appeal for direct proton-decay studies of ^{105}Sb in order to clarify this case.

7.8 The ^{163}Ta(α)^{159}Lu(α)^{155}Tm decay chain

This α-decay chain was discussed in the previous AME2003 and AME2012 publications.

To summarize, by combining all available information, and by discarding only one piece of data, we were able to build up a scenario for the double (ground states and excited isomers) ^{147}Tb-^{179}Tl decay chain. However, most of the adopted values for excitation energies, and also for the ^{167}Re ground state are still labeled with the '#' flag, due to the estimated excitation energy of ^{179}Tl^m. Experimental determination of any of the excitation energy in ^{159}Lu, ^{163}Ta, ^{167}Re, ^{171}Ir, ^{175}Au, or ^{179}Tl will allow to access all other ones. Future measurements would be beneficial not only in order to firmly establish these excitation energies, but even more importantly, to provide also useful parent-daughter correlations on α decays that feed the ^{159}Lu ground state and decays out of the excited isomer.

7.9 The ^{170}Au(α) and ^{169}Pt(α) decay chains

It has been previously mentioned that some proton-rich nuclides can decay by both α and proton emission. In some cases, a loop of interconnected nuclides can be formed. Two long α-decay chains illustrate this case:

^{170}Au - ^{166}Ir - ^{162}Re - ^{158}Ta - ^{154}Lu and
^{169}Pt - ^{165}Os - ^{161}W - ^{157}Hf - ^{153}Yb.

These two chains are connected by ^{170}Au(p)^{169}Pt and ^{166}Ir(p)^{165}Os, thus forming a loop as shown in Fig. 4.

However, all the masses shown in Fig. 4 are unknown. If the mass of at least one nuclide is measured in the future, then all of the masses along the above two decay chains will be determined. The specific difficulty here, is that if all of the experimental information is used in the evaluation, then a closed loop would be formed, and all nuclides involved would become primaries. The consequence is that two estimated (non-experimental) data would then automatically become primary data (the ones with the "#" flag in Fig. 5).

To avoid this undesirable side-effect, the ^{170}Au(α)^{166}Ir value is not used in the mass adjustment, despite its good precision. A local evaluation is carried out in this region, involving all the corresponding nuclides, using least-squares method. The input and adjusted values are listed in Table E, as well as the adjusted values listed in Table I.

Table E. Input data and adjusted values from a Least-Squares Method (LSM) adjustment around ^{170}Au.

Item	Output AME	Input LSM	Adjusted LSM
^{166}Ir(p)^{165}Os	1152(8)	1152(8)	1154(6)
^{166}Ir^{m}(IT)^{166}Ir	171.5(6.1)	171.5(6.1)	172(6)
^{169}Pt(α)^{165}Os	6857.6(5.1)	6857.6(5.1)	6856(5)
^{170}Au(p)^{169}Pt	1471.7(12.0)	1471.7(12.0)	1470(9)
^{170}Au^{m}(p)^{169}Pt	1751.4(5.1)	1751.4(5.1)	1751(5)
^{170}Au(α)^{166}Ir	7177(15)	7170(12)	7172(9)
^{170}Au^{m}(α)^{166}Ir^{m}	7285(12)	7278.5(9.0)	7280(7)

7.10 A mass difference between ^{249}Cf and ^{241}Am

Recent results from TRIGA-TRAP for ^{241}Am, ^{243}Am, ^{244}Pu and ^{249}Cf [2014Ei01] yield a mass difference between ^{249}Cf and ^{241}Am: Δ_{TT}=M(^{249}Cf)$-$$M$(^{241}Am)=16781.2(2.2) keV. This difference can also be independently obtained from combining the Q_α values of ^{249}Cf and ^{245}Cm, with the Q_β value of ^{241}Am: $\Delta_Q=Q_\alpha(^{249}\mathrm{Cf})+Q_\alpha(^{245}\mathrm{Cm})+Q_\beta(^{241}\mathrm{Pu}) + 2\times M(^{4}\mathrm{He})$, where M(^{4}He) is the mass of ^{4}He atom. Using the recommended Q_α values in AME2012, one obtains $\Delta_{2012}=16789.7(1.2)$ keV, which is 8.5(2.5) keV larger (more than 3σ) than the value deduced from the TRIGA-TRAP data [2014Ei01] alone. It should be pointed out that the Q_α(^{249}Cf) and Q_α(^{245}Cm) values in AME2012 were heavily weighed by the results of Baranov *et al.* [1971Bb10], [1975Ba65]. Both ^{249}Cf and ^{245}Cm are odd-mass nuclides and their α spectra are complex, involving a number of strong α lines to excited states in the daughter ^{245}Cm and ^{241}Pu nuclides. We note also a number of inconsistencies in the α-decay energies reported in Refs. [1971Bb10] and [1975Ba65]. For example, in the case of the ^{245}Cm α decay we obtain $Q_\alpha(^{245}\mathrm{Cm}) = 5621.2(0.5)$ keV from the ground-state to ground-state α-decay energy $E_\alpha=5529.2(0.5)$ keV [1975Ba65], while from the favored α-decay energy of $E_\alpha=5362.0(1.2)$ keV [1975Ba65] to the excited 175.04 keV level, one gets $Q_\alpha(^{245}\mathrm{Cm}) = 5626.2(1.2)$ keV, differing by as much as 5.0 keV.

Recently, precise α-decay energy measurements were carried out at ANL for ^{249}Cf [2015Ah03] and ^{245}Cm [2016Ko.A] using mass-separated sources that were calibrated using the absolute measured E_α values of ^{244}Cm, ^{248}Cm and ^{250}Cf, as recommended by Rytz [1991Ry01]. As a result, the AME2016 adjusted Q_α(^{249}Cf)=6293.3(0.5) keV and Q_α(^{245}Cm)=5624.5(0.5) keV yield Δ_{2016} = 16788.4(0.7) keV, which is still 7.2(2.3) keV larger than the mass-difference from the TRIGA-TRAP data [2014Ei01]. Nonetheless, all of the relevant data are used in the mass adjustment in AME2016, while strong tensions have been built in this region, especially for ^{249}Cf. Future precise mass measurements in this region are necessary in order to understand the discrepancy observed between Penning Trap and α-decay spectroscopy data.

7.11 Comparison with the Q_{EC} evaluation of J.C. Hardy and I.S. Towner

Studies of $0^+ \to 0^+$ super-allowed β-decay transitions between isospin analog states can be used to test the validity of the conserved vector current hypothesis that postulates the existence of a universal $\mathcal{F}t$ value for all such decays. This universal value can be used to determine the V_{ud} element of the Cabibbo-Kobayashi-Maskawa (CKM) matrix, which can in turn be used to test its unitarity.

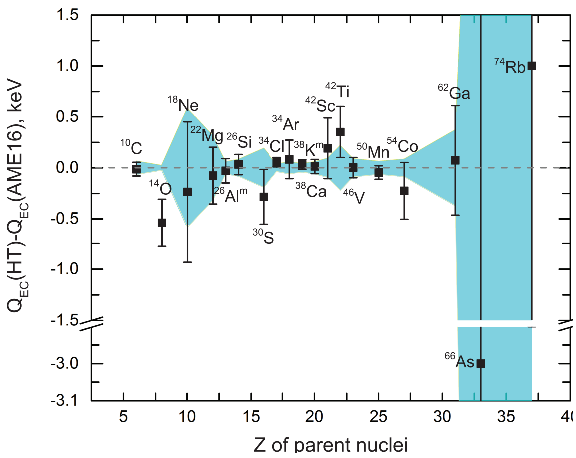

Figure 5. Q_{EC} difference between the two evaluations. The error bars represent the uncertainties from Ref. [62], while the shaded areas display the uncertainties from AME2016.

The evaluation of super-allowed β-decay properties, such as their transition energies, Q_{EC}, and half-lives, $T_{1/2}$, has been carried out since a long time by Hardy and Towner and regularly updated. Recently, experimental data for 20 super-allowed β-decay transitions have been evaluated and published [62]. Their evaluation is independent of AME. Although they aim at different goals and use slightly different criteria of evaluation, both are deemed valid and reliable, as can be seen from the comparison of their results for Q_{EC} and for half-lives.

In the first paper of this volume, we presented a comparison (cf. 41-030001-8) between the $T_{1/2}$ values recommended in NUBASE2016 and those given by Hardy and Towner [62]. Below, we report on such a comparison for the Q_{EC} values.

The Q_{EC} values for all ground-state to ground-state transitions are listed in the atomic mass table (Part II, Table I, p. 030003-6 of this issue). The values for transitions involving excited isomeric states are not included in that table, but they can be easily determined with the information provided in NUBASE2016 and AME2016. When calculating the Q_{EC} values from the AME mass tables, the covariances of the mother-daughter mass values must be considered, in order to obtain the correct uncertainties. The importance of the correlation is proven by the examples of the Q_{EC} values of ^{42}Ti and ^{26}Al, where the uncertainties of their Q_{EC} are smaller than the individual masses. Figure 5 shows the differences between the Q_{EC} values determined in AME2016 and Ref. [62] for 19 super-allowed β-decay transitions (the one that is missing in the figure is ^{70}Br, and it will be discussed below). Most of the Q_{EC} data are consistent and the absolute differences are in most cases below 0.1 keV. In general, the observed differences can be attributed to two main sources, namely the selection of different input data and the implementation of distinct evaluation policies in AME2016 and in Ref. [62].

As mentioned in Section 5.4.4 (*Insignificant data*, p. 030002-22), data with weights that are a factor of 10 smaller than the other results will not be used in AME and these are labeled with the letter 'U' in the AME2016 evaluation. There is no such a threshold defined in the Hardy and Towner's evaluation [62] and, as a consequence, all experimental data are used, unless rejected for other reasons. For example, the discrepancy for ^{18}Ne is due to the different masses used in the two evaluations for the daughter ^{18}F nuclide. There are five experimental results concerning this mass, as reported in [1964Bo13], [1964Ho28], [1967Pr04], [1973Se03] and [1975Ro05], with uncertainties of 0.73, 2.2, 2.8, 3.0 and 0.60 keV, respectively. All of them were used in the Hardy and Towner's evaluation, while only the two most precise ones were used in AME2016.

The policies for data averaging used in the two evaluations are similar to the one employed by the Particle Data Group [37], where a parameter χ_n is used to check for the consistency of data. If χ_n is larger than a threshold value of χ_n^0, all uncertainties in this data set will be multiplied with a scale factor, assuming that all experimental errors were underestimated by the same factor. In AME, χ_n^0 is set to be 2.5, as explained in Section 5.4.1 ($Pre-averaging$, p. 030002-20) while a value of $\chi_n^0 = 1$ has been adopted by Hardy and Towner [62].

The masses of the long-lived isomer ^{70m}Br and its β-decay daughter ^{70}Se were measured using Penning-trap spectrometry [2009Sa12]. By adopting the evaluated excitation energy from ENSDF, the Q_{EC} value of ^{70}Br can be determined. However, this value was found to deviate significantly from the systematic behavior of the Q_{EC} values in the region and it was rejected in Ref. [62]. Furthermore, Hardy and Towner concluded that "It is likely in this case that the trap actually measured an isomeric state in ^{70}Br rather its ground state." In AME2016, the result of Ref. [2009Sa12] was used following the interpretation in the original paper as in AME2012. Additional experimental data are needed to shed more light on this case.

Differences in the selection of the input data also contribute to the observed deviations between the Q_{EC} values recommended in the AME2016 and the Hardy and Towner [62] evaluations. For example, some of the experimental results that were used in AME2016 were published after the work of Ref. [62] was completed and therefore they were not included in the latter. One example is the recent result for ^{14}O from Ref. [2015Va08]. Another one is the case of ^{30}S, where the level energy of the daughter nuclide that was used in Ref. [62] is outdated, while we implemented an updated value from ENSDF that is listed in the NUBASE2016 table (p. 030001-27 of this issue).

In AME, all experimental information related to atomic masses are collected. Fig. 6 displays connections related to the ^{42}Ti $\rightarrow$ ^{42}Sc and ^{42}Sc $\rightarrow$ ^{42}Ca super-allowed transitions. In Ref. [62], only results from Penning-trap mass measurements [2009Ku19] were considered and, as a consequence, the excitation energy of ^{42}Sc^m was determined as 617.12±0.39 keV. In AME2016, we have used the more precise value of 616.28±0.06 keV that was obtained from γ-ray spectroscopy measurements [1989Ki11] and recommended in the latest ENSDF evaluation. Thus, the adoption of different internal transition energies for ^{42}Sc^m can explain the variance in the Q_{EC} values of the ^{42}Ti $\rightarrow$ ^{42}Sc and ^{42}Sc $\rightarrow$ ^{42}Ca super-allowed β decay transitions in the two evaluations. The same situation occurs in the ^{26}Si $-$ ^{26}Al^m $-$ ^{26}Al $-$ ^{26}Mg connections.

Another peculiar case involves the ^{74}Rb nuclide. In AME2016, one input datum is the Q_{EC} value of ^{74}Rb from [2003Pi08]. However, only the intensities of the decay branches were directly measured in this work. The $Q_{\rm EC}$ value was deduced from the measured half-life, branching ratios and the average $\overline{\mathcal{F}t}$ value obtained from the analysis of other super-allowed transitions. Therefore, the recommended $Q_{\rm EC}$ value is based on the assumption that $\mathcal{F}t$ is universal and constant for all super-allowed β decays. This result was used in AME since AME2003 and the original values reported in Ref. [2003Pi08] would be recalculated when new experimental results for the input data were available. We believe, however, that while the deduced $Q_{\rm EC}$ value in this way is valuable for mass determination, it should not be considered in Ref. [62], where the primary aim is to recommend a single $\overline{\mathcal{F}t}$ value.

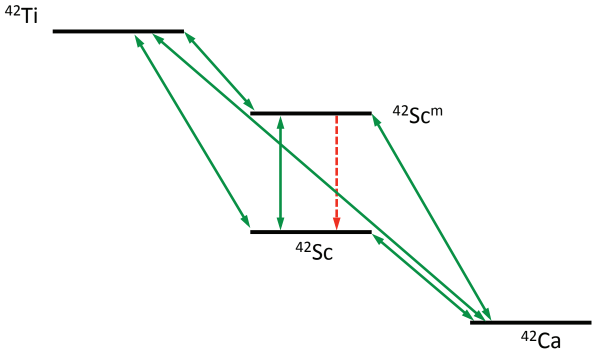

Figure 6. Schematic diagram of connections involving two super-allowed transitions ^{42}Ti $\rightarrow$ ^{42}Sc and ^{42}Sc $\rightarrow$ ^{42}Ca. The double-headed arrows represent connections from Penning-Trap mass measurements while the single-headed arrow for the γ transition measurement.

8 General information and acknowledgments

The full content of the present issue is accessible on-line at the AMDC website [22]. In addition, several graphs representing the mass surface, beyond the main ones given in Part II, are available on the AMDC website.

Tables of masses (Part II, Table I) and nuclear reaction and separation energies (Part II, Table III) are available in ASCII format to simplify their input to computer programs by the end users. The headers of these files give information on the formats. The first file, named **mass.mas16**, contains the table of masses. The next two files correspond to the table of reaction and separation energies, in two parts of 6 entries each, as in Part II, Table III: **rct1.mas16** for S_{2n}, S_{2p}, Q_α, $Q_{2\beta}$, $Q_{\varepsilon p}$ and $Q_{\beta n}$ (odd pages in this issue); and **rct2.mas16** for S_n, S_p, $Q_{4\beta}$, $Q_{d,\alpha}$, $Q_{p,\alpha}$ and $Q_{n,\alpha}$ (facing even pages). As explained in Section 4.2, p. 030002-15, since AME1995, we no longer produce special tables.

We wish to thank our many colleagues who provided answers to our questions regarding specific experimental data, as well as those who sent us preprints of their work prior to publication. Continuing interest, discussions, suggestions and encouragements from D. Lunney, A. Lopez-Martens, Yuhu Zhang and Furong Xu are highly appreciated.

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Appendix A The meaning of decay energies

Conventionally, the α-decay energy, Q_α, is defined as the difference in the atomic masses of the mother and daughter nuclides:

$$Q_\alpha = M_{\rm mother} - M_{\rm daughter} - M_{^4\rm He}\,. \qquad (10)$$

This value equals the sum of the observed energy of the α particle and that of the recoiling nuclide (with only a minor correction for the fact that the cortège of atomic electrons in the latter may be in an excited state). Unfortunately, some authors in the literature quote Q_α as a value 'corrected for screening', which essentially means that they take for the values M in the above equation the masses of bare nuclides.

A similar bad habit has been observed for some published proton-decay energies. We very strongly object to this custom; at the very least, the symbol Q should not be used for the difference in nuclear masses.

High precision α-decay energies

The most precise α-decay energies are those measured absolutely using magnetic spectrographs, as summarized in Ref. [1991Ry01] and references therein. All α-energy standards are determined using this method. The relation between the α-particle energy E_α and the decay energy, Q_α is:

$$Q_\alpha = (M - m_\alpha) - \sqrt{(M-m_\alpha)^2 - 2\times M\times E_\alpha} + 78.6\ \text{eV}\,. \qquad (11)$$

where M is the mass of the parent nuclide, m_α is the mass of the doubly ionized α particle and 78.6 eV is the binding energy energy of two electrons in helium. This formula had been discussed in Ame1977 and has been used since then. Unfortunately, the electron binding energy of helium was not taken into account up to now in Ame, which caused a significant deviation for the most precise α-energy values that have uncertainty of tens of eV. This error is corrected in the present mass table.

Appendix B Mixtures of isomers or of isobars in mass spectrometry

In cases where two or more unresolved lines may combine into a single one in an observed spectrum, while one cannot decide which ones are present and in which proportion, a special procedure has to be used.

The first goal is to determine what is the most probable value M_{exp} that will be observed in the measurement, and what is the uncertainty σ of this prediction. We assume that all the lines may contribute and that all contributions have equal probabilities. The measured mass reflects the mixing. We call M_0 the mass of the lowest line, and $M_1, M_2, M_3, \ldots$ the masses of the other lines. For a given composition of the mixture, the resulting mass m is given by

$$m=(1-\sum_{i=1}^{n}x_i)M_0+\sum_{i=1}^{n}x_iM_i\,, \qquad \text{with} \begin{cases} 0\leq x_i\leq 1 \\ \sum_{i=1}^{n}x_i\leq 1 \end{cases} \tag{12}$$

in which the relative unknown contributions $x_1, x_2, x_3, \ldots$ have each a uniform distribution of probability within the allowed range.

If $P(m)$ is the normalized probability of measuring the value m, then :

$$\overline{M} = \int P(m)\,m\,dm \tag{13}$$

$$\text{and} \quad \sigma^2 = \int P(m)\,(m-\overline{M})^2\,dm\,. \tag{14}$$

It is thus assumed that the experimentally measured mass will be $M_{exp}=\overline{M}$, and that σ, which reflects the uncertainty on the composition of the mixture, will have to be quadratically added to the experimental uncertainties.

The difficult point is to derive the function $P(m)$.

B.1 Case of 2 spectral lines

In the case of two lines, one simply gets

$$m=(1-x_1)M_0+x_1M_1 \quad \text{with} \quad 0\leq x_1\leq 1\,. \tag{15}$$

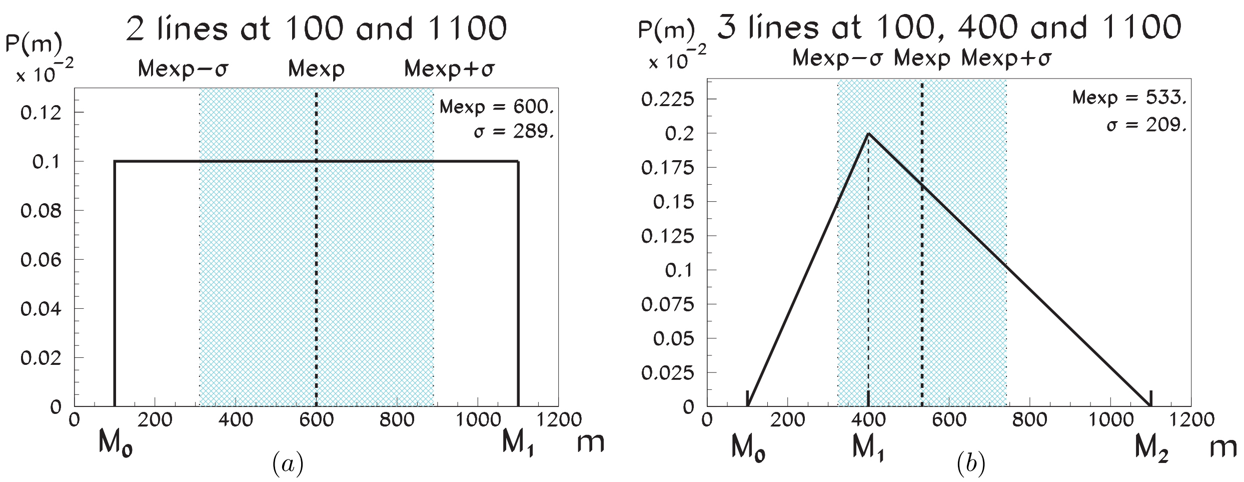
The relation between m and x_1 is biunivocal so that

$$P(m)=\begin{cases} 1/(M_1-M_0) & \text{if } M_0\leq m\leq M_1, \\ 0 & \text{elsewhere} \end{cases} \tag{16}$$

i.e. a rectangular distribution (see Fig. 7*a*), and one obtains:

$$M_{exp} = \frac{1}{2}(M_0+M_1)\,, \tag{17}$$

$$\sigma = \frac{\sqrt{3}}{6}(M_1-M_0)=0.290\ (M_1-M_0)\,.$$



(*a*) (*b*)

Figure 7. Examples of probabilities to measure m according to an exact calculation in cases of the mixture of two (*a*) and three (*b*) spectral lines.

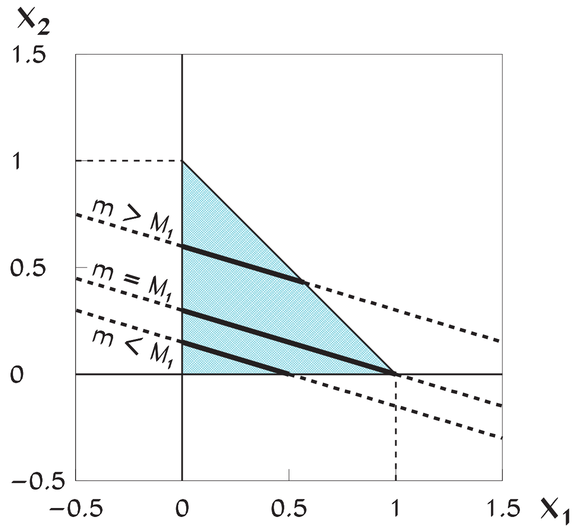


Figure 8. Graphic representation of relations 18 and 19. The length of the segments (full thick lines) inside the triangle are proportional to the probability $P(m)$. Three cases are shown corresponding respectively to $m < M_1$, $m = M_1$, and to $m > M_1$. The maximum of probability is obtained when $m = M_1$.

B.2 Case of 3 spectral lines

In the case of three spectral lines, we derive from Eq. 12:

$$m = (1 - x_1 - x_2)M_0 + x_1M_1 + x_2M_2\,, \tag{18}$$

$$\text{with} \begin{cases} 0 \le x_1 \le 1 \\ 0 \le x_2 \le 1 \\ 0 \le x_1 + x_2 \le 1\,. \end{cases} \tag{19}$$

The relations (18) and (19) may be represented on a x_2 vs x_1 plot (Fig. 8). The conditions (19) define a triangular authorized domain in which the density of probability is uniform. The relation (18) is represented by a straight line. The part of this line contained inside the triangle defines a segment which represents the values of x_1 and x_2 satisfying all relations (19). Since the density of probability is constant along this segment, the probability $P(m)$ is proportional to its length. After normalization, one gets (Fig. 7*b*):

$$P(m) = \frac{2k}{M_2 - M_0}\,, \tag{20}$$

$$\text{with} \begin{cases} k = (m - M_0)/(M_1 - M_0) & \text{if } M_0 \le m \le M_1 \\ k = (M_2 - m)/(M_2 - M_1) & \text{if } M_1 \le m \le M_2 \end{cases} \tag{21}$$

and finally:

$$M_{exp} = \frac{1}{3}(M_0 + M_1 + M_2) \tag{22}$$

$$\sigma = \frac{\sqrt{2}}{6}\sqrt{M_0^2 + M_1^2 + M_2^2 - M_0M_1 - M_1M_2 - M_2M_0}\,.$$

B.3 Case of more than 3 spectral lines

For more than 3 lines, one may easily infer $M_{exp} = \sum_{i=0}^{n} M_i/(n+1)$, but the determination of σ requires the knowledge of $P(m)$. As the exact calculation of $P(m)$ becomes rather difficult, it is more simple to do simulations.

However, care must be taken that the values of the x_i's are explored with an exact equality of chance to occur. For each set of x_i's, m is calculated, and the histogram $N_j(m_j)$ of its distribution is built (Fig. 9). Calling *nbin* the number of bins of the histogram, one gets :

$$P(m_j) = \frac{N_j}{\sum_{j=1}^{nbin} N_j}\,, \tag{23}$$

and

$$M_{exp} = \sum_{j=1}^{nbin} P(m_j)m_j\,,$$

$$\sigma^2 = \sum_{j=1}^{nbin} P(m_j)(m_j - M_{exp})^2\,.$$

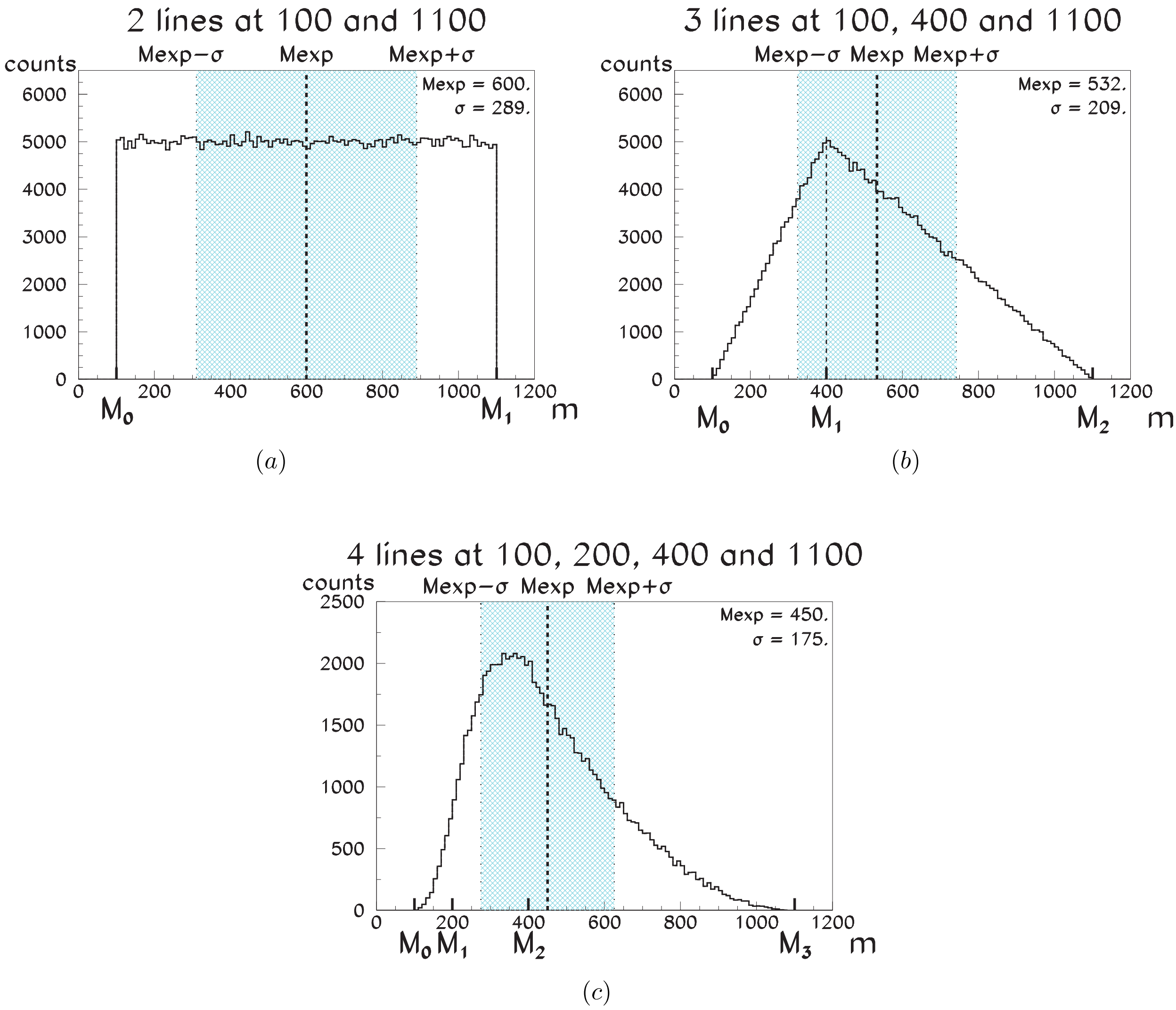


Figure 9. Examples of Monte-Carlo simulations of the probabilities to measure m in cases of two (a), three (b) and four (c) spectral lines.

A first possibility is to explore the x_i's step-by-step: x_1 varies from 0 to 1, and for each x_1 value, x_2 varies from 0 to $(1-x_1)$, and for each x_2 value, x_3 varies from 0 to $(1-x_1-x_2)$, ... using the same step value for all.

A second possibility is to choose x_1, x_2, x_3, ... randomly in the range [0,1] in an independent way, and to keep only the sets of values which satisfy the relation $\sum_{i=1}^{n} x_i \leq 1$. An example of a Fortran program based on the CERN library is given below for the cases of two, three and four lines. The results are presented in Fig. 9.

Both methods give results in excellent agreement with each other, and as well with the exact calculation in the cases of two lines (see Fig. 7a and 9a) and three lines (see Fig. 7b and 9b).

The Fortran program used to produce the histograms in Fig. 9.

```
      program isomers
c------------------------------------------------------------------
c-   October 15, 2003               C.Thibault
c-   Purpose and Methods : MC simulation for isomers (2-4 levels)
c-   Returned value      : mass distribution histograms
c------------------------------------------------------------------
      parameter (nwpawc=10000)
```

```
      common/pawc/hmemor(nwpawc)
      parameter (ndim=500000)
      dimension xm(3,ndim)
      data e0,e1,e31,e41,e42/100.,1100.,400.,200.,400./
      call hlimit(nwpawc)
c histograms 2, 3, 4 levels
      call hbook1(200,'',120,0.,1200.,0.)
      call hbook1(300,'',120,0.,1200.,0.)
      call hbook1(400,'',120,0.,1200.,0.)
      call hmaxim(200,6500.)
      call hmaxim(300,6500.)
      call hmaxim(400,2500.)
      w=1.
c random numbers [0,1]
      ntot=3*ndim
      iseq=1
      call ranecq(iseed1,iseed2,iseq,' ')
      call ranecu(xm,ntot,iseq)
      do i=1,ndim
c 2 levels :
         t=1-xm(1,i)
         e = t*e0 + xm(1,i)*e1
         call hfill(200,e,0.,w)
c 3 levels :
         if ((xm(1,i)+xm(2,i)).le.1.) then
           t=1.-xm(1,i)-xm(2,i)
           e= t*e0 + xm(1,i)*e31 + xm(2,i)*e1
           call hfill(300,e,0.,w)
         end if
c 4 levels
         if ((xm(1,i)+xm(2,i)+xm(3,i)).le.1.) then
           t=1.-xm(1,i)-xm(2,i)-xm(3,i)
           e = t*e0 + xm(1,i)*e41 + xm(2,i)*e42 + xm(3,i)*e1
           call hfill(400,e,0.,w)
         end if
      end do
      call hrput(0,'isomers.histo','N')
      end
```

B.4 Example of application for one, two or three excited isomers

We consider the case of a mixture implying isomeric states. We want to determine the ground state mass $M_0 \pm \sigma_0$ from the measured mass $M_{exp} \pm \sigma_{exp}$ and the knowledge of the excitation energies $E_1 \pm \sigma_1$, $E_2 \pm \sigma_2$, ...

With the above notation, we have

$M_1 = M_0 + E_1$,

$M_2 = M_0 + E_2$, ...

For a single excited isomer, Eq. 17 can be written:

$$M_0 = M_{exp} - \frac{1}{2}E_1 ,$$

$$\sigma^2 = \frac{1}{12}E_1^2 \qquad \text{or} \qquad \sigma = 0.29\,E_1 ,$$

$$\sigma_0^2 = \sigma_{exp}^2 + (\frac{1}{2}\sigma_1)^2 + \sigma^2 .$$

For two excited isomers, Equ. (22) lead to :

$$M_0 = M_{exp} - \frac{1}{3}(E_1 + E_2) ,$$

$$\sigma^2 = \frac{1}{18}(E_1^2 + E_2^2 - E_1E_2)$$

$$\text{or} \qquad \sigma = 0.236\sqrt{E_1^2 + E_2^2 - E_1E_2} ,$$

$$\sigma_0^2 = \sigma_{exp}^2 + (\frac{1}{3}\sigma_1)^2 + (\frac{1}{3}\sigma_2)^2 + \sigma^2 .$$

If the levels are regularly spaced, *i.e.* $E_2=2E_1$,

$$\sigma=\frac{\sqrt{6}}{12}E_2=0.204\,E_2\,,$$

while for a value of E_1 very near 0 or E_2,

$$\sigma=\frac{\sqrt{2}}{6}E_2=0.236\,E_2\,.$$

For three excited isomers , the example shown in Fig. 9*c* leads to:

$$\begin{aligned}M_0 &= M_{exp}-\frac{1}{4}(E_1+E_2+E_3)=450\,,\\ \sigma &= 175\,,\\ \sigma_0^2 &= \sigma_{exp}^2+(\frac{1}{4}\sigma_1)^2+(\frac{1}{4}\sigma_2)^2+(\frac{1}{4}\sigma_3)^2+\sigma^2\,.\end{aligned}$$

Appendix C Converting frequency ratios to linear equations

In the following, quantities with the subscript r describe the characteristics of the reference ion in the Penning Trap. Equivalent quantities, with no subscript, describe characteristics of the ion being measured.

In Ref. [2], linear equations deduced from frequency ratios are only valid for atoms. When molecules are involved, an extra term about the molecular binding energy should be included. In this case, Eq. 21 in Ref. [2] should be rewritten as:

$$R=\frac{f_r}{f}=\frac{\mathcal{M}-D-m_e\;q+B}{\mathcal{M}_r-D_r-m_e\;q_r+B_r}\;\frac{q_r}{q}\,, \tag{24}$$

where q is the charged state of the given ion, D is the molecular binding energy (dissociation energy), B is the electron binding energy, m_e is the mass of the electron and $\mathcal{M}$ the total atomic mass. All masses and energies are in atomic mass units (u) and so, u=1. This expression can be written in terms of the mass excess M and atomic mass number A:

$$A{+}M{-}D{-}m_eq{+}B=R\frac{q}{q_r}(A_r{+}M_r{-}D_r{-}m_eq_r{+}B_r) \tag{25}$$

or, alternatively:

$$\begin{aligned}M-R\frac{q}{q_r}M_r=m_eq(1-R) \quad &+ \quad A_r(\frac{q}{q_r}R-\frac{A}{A_r})\\ &+ \quad R\frac{q}{q_r}(B_r-Dr)-(B-D).\end{aligned}$$

The general aim is to establish some quantity y and its associated precision dy. We define C to be a truncated, three-digit decimal approximation of the ratio A to A_r, and then we can write:

$$y \;=\; M-C\;M_r \tag{26}$$

and so

$$y \;=\; y_1+y_2+y_3+y_4\,, \tag{27}$$

where

$$y_1 \;=\; M_r\left(R\;\frac{q}{q_r}-C\right), \tag{28}$$

$$y_2 \;=\; m_e\;q(1-R)\,, \tag{29}$$

$$y_3 \;=\; A_r\left(\frac{q}{q_r}\;R-\frac{A}{A_r}\right), \tag{30}$$

and

$$y_4 \;=\; R\frac{q}{q_r}(B_r-D_r)-(B-D)\,. \tag{31}$$

To fix relative orders of magnitude, M_r is generally smaller than 0.1 u, $R-C$ is a few 10^{-4}, $(1-R)$ is usually smaller than unity (and typically 0.2 for a 20% mass change), $R-\frac{A}{A_r}$ varies from 1 to $100{\times}10^{-6}$, (B_r-D_r) is generally smaller than 0.1 μu, and A_r is typically 100 u for atomic mass A = 100. The four terms y_1, y_2, y_3, and y_4 take values of the order of 10 μu, 100 μu, 10 to 10000 μu, and 0.1 μu, respectively.

The associated precision dy is written:

$$dy \;=\; dy_1+dy_2+dy_3+dy_4\,, \tag{32}$$

where

$$dy_1 \;=\; \frac{q}{q_r}\;M_r\;dR+\left(R\;\frac{q}{q_r}-C\right)\;dM_r\simeq dR\times10^5\;\mu\mathrm{u}\,, \tag{33}$$

$$dy_2 \;=\; m_e\;q\;dR\simeq dR\times10^3\;\mu\mathrm{u}\,, \tag{34}$$

$$dy_3 \;=\; \frac{q}{q_r}\;A_r\;dR\simeq dR\times10^8\;\mu\mathrm{u}\,, \tag{35}$$

and

$$\begin{aligned}dy_4 \;=\; &\frac{q}{q_r}\;(B_r-D_r)\;dR+R\;\frac{q}{q_r}(dB_r-dD_r)\\ &-(dB-dD)\simeq dR\times10^{-1}\;\mu\mathrm{u}\,.\end{aligned} \tag{36}$$

Consequently, only the 3rd term contributes significantly to the precision of the measurement, and so we write: $dy \;=\; dy_3$

If the two frequencies are measured with a typical precision of 10^{-7} for ions at $A=100$, then the precision on the frequency ratio R is 1.4×10^{-7} and the precision on the mass is approximatively 14 μu.

Next we will illustrate how to calculate the molecular binding energy for the most precise Penning Trap experiment.

C.1 Bond Dissociation Energy

The bond dissociation energy D is a quantity which signifies the strength of a chemical bond. The bond dissociation energy for a bond A–B, which is broken through reaction:

$$\mathrm{AB} \to \mathrm{A} + \mathrm{B}$$

is defined as the standard enthalpy change at a specified temperature Ref. [63]:

$$D^o(\mathrm{AB}) = \Delta H f_0^o(\mathrm{A}) + \Delta H f_0^o(\mathrm{B}) - \Delta H f_0^o(\mathrm{AB}), \quad (37)$$

where $\Delta H f_0^o$ is the standard heat of formation and its value is available for a large number of atoms and compounds on NIST Chemistry Webbook [64]. All D^o values refer to the gaseous state at temperature either 0 K or 298 K. When data on the standard heat of formation is absent at 0 K, $D^o(\mathrm{AB})$ will be converted to $D^o_{298}(\mathrm{AB})$ by the approximation:

$$D^o_{298}(\mathrm{AB}) \approx D^o(\mathrm{AB}) + 3.72 \text{ kJ/mol}. \quad (38)$$

Unlike diatomic molecules which involve only one bond, polyatomic molecules have several bonds and their D's are the sum of all the single bonds. For example, if one wants to know the dissociation energy of CH_4, one needs to calculate the dissociation energy of the four bonds CH3–H, CH2–H, CH–H, and C–H, respectively:

$$\begin{aligned}
D^o(\mathrm{CH_3-H}) &= \Delta H f_0^o(\mathrm{CH_3}) + \Delta H f_0^o(\mathrm{H}) - \Delta H f_0^o(\mathrm{CH_4}), \\
D^o(\mathrm{CH_2-H}) &= \Delta H f_0^o(\mathrm{CH_2}) + \Delta H f_0^o(\mathrm{H}) - \Delta H f_0^o(\mathrm{CH_3}), \\
D^o(\mathrm{CH-H}) &= \Delta H f_0^o(\mathrm{CH}) + \Delta H f_0^o(\mathrm{H}) - \Delta H f_0^o(\mathrm{CH_2}), \\
D^o(\mathrm{C-H}) &= \Delta H f_0^o(\mathrm{C}) + \Delta H f_0^o(\mathrm{H}) - \Delta H f_0^o(\mathrm{CH}).
\end{aligned} \quad (39)$$

Summing over all four bonds above, we can obtain:

$$\begin{aligned}
D^o(\mathrm{CH_4}) &= D(\mathrm{CH_3-H}) + D(\mathrm{CH_2-H}) \\
&\quad + D(\mathrm{CH-H}) + D(\mathrm{C-H}) \\
&= \Delta H f_0^o(\mathrm{C}) + 4 \times \Delta H f_0^o(\mathrm{H}) - \Delta H f_0^o(\mathrm{CH_4}).
\end{aligned}$$

The dissociation energy can be generalized for a polyatomic molecule which has the form $\mathrm{A_n B_k C_i}$:

$$\begin{aligned}
D^o(\mathrm{A_n B_k C_i}) &= n\Delta H f_0^o(\mathrm{A}) + k\Delta H f_0^o(\mathrm{B}) + i\Delta H f_0^o(\mathrm{C}) \\
&\quad - \Delta H f_0^o(\mathrm{A_n B_k C_i}).
\end{aligned} \quad (40)$$

The ionization energies for molecules are available on NIST Atomic Spectra Database [65]. We now illustrate this treatment through two examples.

C.1.1 $^{13}C_2H_2^+$ and $^{14}N_2^+$ mass doublet

In the work of [2004Ra33], a cyclotron frequency ratio R = 0.999421460888(7) of relative precision 7×10^{-12} has been obtained for ions $^{13}C_2H_2^+$ and $^{14}N_2^+$. We first calculate $D^o(C_2H_2)$ by applying Eq. 40:

$$\begin{aligned}
D^o(\mathrm{C_2H_2}) &= 2\times\Delta H f_0^o(\mathrm{C}) + 2\times\Delta H f_0^o(\mathrm{H}) - \Delta H f_0^o(\mathrm{C_2H_2}) \\
&= 2\times716.68 + 2\times218.998 - 227.40 \\
&= 1641.956 \text{ kJ/mol} \\
&= 17.018 \text{ eV}.
\end{aligned}$$

$D^o(N_2)$ = 944.9 kJ/mol = 9.793 eV is obtained from Ref. [66], since $\Delta H f_0^o(N_2)$ is not on the list of [64]. Combining the ionization energy $B(C_2H_2)$ = 11.4 eV and $B(N_2)$ = 15.6 eV, we obtain the mass difference:

$$^{13}\mathrm{C} + \mathrm{H} - {}^{14}\mathrm{N} = 8105.862995(98)\ \mu\mathrm{u}.$$

In the original paper [2004Ra33], this equation is given as:

$$^{13}\mathrm{C} + \mathrm{H} - {}^{14}\mathrm{N} = 8105.86288(10)\ \mu\mathrm{u},$$

which differs by 12(10) nu from our calculation. The difference is because we used the updated molecular binding energy from Ref. [64, 66]. In this case, the molecular binding energy is 170 times larger than the uncertainty, and even the updates of the molecular energies have significant impact on the deduced values.

C.1.2 Atomic Masses of Tritium and Helium-3

By measuring the cyclotron frequency ratios of $^3He^+$ and T^+ to HD^+, using HD^+ as a mass reference, atomic masses for ^{3}He and T were obtained Ref. [2015My03]. The essential part here is to calculate the molecule binding energy $D^o(\mathrm{HD})$. Instead of applying Eq. 37 to calculate the molecule binding energy of HD, we used the most recent datum $D^o(\mathrm{HD})$ = 36406.78366 cm^{-1} = 4.5137 eV from [67].

Combining the ionization energies of $B(\mathrm{HD})$=15.4445 eV, $B(^3\mathrm{He})$=24.5874 eV and $B(\mathrm{T})$ = 13.5984 eV, the mass differences and their uncertainties can be derived:

$$^3\mathrm{He} - \mathrm{H} - \mathrm{D} = -5897.487710(144)\ \mu\mathrm{u}$$

and

$$\mathrm{T} - \mathrm{H} - \mathrm{D} = -5877.528366(144)\ \mu\mathrm{u}.$$

The correction of the molecule binding energy $D^o(\mathrm{HD})$ = 4.5 eV is 30 times larger than the ~ 0.14 eV uncertainty. We have created a file called "ionization", which includes all the information that is needed to calculate the linear equation.

C.2 Program for frequency conversion

Primary data from Penning Trap measurement are typically given in the form of an experimental frequency ratio. An example is given here for a series of nuclides with respect to a various reference nuclides and various charge states. Below is the Fortran frequency conversion program, followed by sample input files and the corresponding output file, all available on the AMDC website [22].

The frequency conversion program

```
c                             PTrap17j    G.Audi  WJ.Huang     v 27 jan 2017
c
c  Conversion of Frequency Ratios to Linear Equations
c  including electron and molecular binding energies
c
      real*8 xzero,mel,mref,smref,mrefk,rap,srap,coef
      real*8 prov,membre,sigmem,m118,sm118,meb,eref,e118,y4
      integer*4 q118,qref,znum,val,nbion,i,qel
      character txref*4,tx118*4,rev*2,ael*4
      character txiref*4,txi118*4
      character*30 filea,fileb,filec
      dimension znum(450),ael(450),qel(450),meb(450)
c
c         mel : electron mass in micro-u
c         mref,smref,m118,sm118 : Masses and uncert. for reference (ref) and mesured (118)
c
      filea='ptkl.equat                    '                  ! output file
      fileb='ptkl.freq                     '                  ! input file
      filec='ionization.data               '                  ! electron+mol. file
      open(unit=1,file=filea,form='formatted',status='new')
      open(unit=3,file=fileb,form='formatted',status='old')
      open(unit=10,file=filec,form='formatted',status='old')
      mel   = 548.57990907d0                                  ! mass of electron in micro-u
      xzero = 9.314940038d-1                                  ! conversion factor micro-u to keV

      do i=1,450                                              ! read electron+mol. file
        read(10,*,iostat=val) znum(i),ael(i),qel(i),meb(i)
        meb(i) = (meb(i)*1.d-3)/xzero                         ! in micro-u
        if(val.lt.0) then
          nbion = i - 1                                       ! nbion: number of lines in elec+mol file
          exit
        end if
      end do
      close(10)

   12 read(3,1001,err=99) iaref,txref,qref,mref,rev,smref      ! read ref.name, mass(micro-u) and charge
 1001 format(i4,a4,i4,f19.8,a2,f13.8)
      mrefk = mref  * xzero                                   ! ref. mass in keV
c
   15 read(3,1001,end=90,err=99) ia118,tx118,q118,rap,rev,srap ! read frequency ratio
      if(tx118.eq.'NEW ') go to 12                            ! reset reference
      if(rev.eq.'  ') then                                    ! if reversed freq. ratio: rev=-1
        rap  = rap  / 1.d+6
        srap = srap / 1.d+6
      else
        rap  = 1.d+6 / rap
        srap = rap*rap * srap/1.d+6
      endif
      coef = 1000.*ia118/iaref
      coef = anint(coef) / 1000.                              ! calculate 3-digit coefficient
c
      prov = (ia118*1.d+0)/iaref - rap*q118/qref              ! start calculating the equation value
      membre = mref*(rap*q118/qref-coef) + mel*q118*(1-rap)
     *         - iaref*1.d+6*prov                             ! value (in micro-u) for the equation
      sigmem = srap * iaref * 1.d+6 * q118/qref               ! its uncertainty
c
c       Correct for electron and molecular binding energies
c
      eref = 0.
      e118 = 0.
      do i=1,nbion                                            ! loop over the nbion lines in elec+mol file
         txiref=txref
         if(txiref(3:3).eq.'m' .or. txiref(3:3).eq.'n' .or. txiref(3:3).eq.'x') then
           txiref(3:4)=txiref(4:4)//' '                       ! isomers m n or x : treated as gs
           if(txiref(2:2).eq.'x') txiref(2:3)=txiref(3:3)//' '
         endif
```

```
         txi118=tx118
         if(txi118(3:3).eq.'m' .or. txi118(3:3).eq.'n' .or. txi118(3:3).eq.'x') then
           txi118(3:4)=txi118(4:4)//' '
           if(txi118(2:2).eq.'x') txi118(2:3)=txi118(3:3)//' '
         endif
         if(trim(txiref)==trim(ael(i)).and.qref==qel(i)) eref = meb(i)
         if(trim(txi118)==trim(ael(i)).and.q118==qel(i)) e118 = meb(i)
      end do

      if(eref.ne.0. .and. e118.ne.0.) then
        y4 = eref*rap*q118/qref - e118                         ! calculate electronic and molecular correction
      else
        y4 = 0.
        write (1,*) "WARNING : el.+mol. binding en. not found"
      end if
      membre = membre + y4
c
      write (1,1020) ia118,tx118,iaref,txref,coef,membre,sigmem
 1020 format(5x,i6,a4,'-',i4,a4,'*',f6.3,' =', f15.5,' (',f9.5,')')
      m118  = membre + coef*mref
      sm118 = sqrt(sigmem**2 + (coef*smref)**2)
      write (1,1030) ia118,tx118,m118,sm118
 1030 format(13x,i4,a4,' =',f15.6,' +/-',f11.6,' micro-u')
      m118  = m118  * xzero
      sm118 = sm118 * xzero
      write (1,1032) m118,sm118
 1032 format(13x,8x,' =',f15.6,' +/-',f11.6,' keV',/)
c
      go to 15
c
   90 write (1,1990)
 1990 format(1H0,'Normal End of Freq.Ratios to Equations Conversion')
      stop
   99 write(1,1999)
 1999 format(1H0,'Error in File Reading')
      stop
      end
```

A typical frequency ratio input file

```
   6Li    +1     15122.885     ..   0.029       1st line : reference nuclide (in micro-u)
   4He    +1    665392.8420         0.0077      following lines : frequency ratios
   7Li    +1   1166409.2053         0.0131      NEW : new set with new ref. follows
   8Li    +1   1333749.8620         0.0180
    NEW                        ..               column 1 : nuclidic name
   7Li    +1     16003.42560        0.00455     column 2 : ionic charge
  10Be    +1    700635.628     -1   0.009       column 3 : mass excess for ref. (micro-u)
  11Be    +1    636546.859     -1   0.036               or frequency ratio *10^6
    NEW                        ..               column 5 : -1 for inverse ratio
  39K     +4    -36293.410     ..   0.085       column 4 : uncertainty
  44K     +4    886306.8169    -1   0.0444
    NEW                        ..
  85Rb    +9    -88210.26200   ..   0.00535
  74Rb    +8    979689.6094         0.0858
  76Rb    +8   1006067.4141         0.0223
    NEW                        ..
  85Rb   +13    -88210.26200   ..   0.00535
  99Sr   +15   1009776.3077         0.0451
    NEW                        ..
   3HD    +1     21926.81033   ..   0.00015
   3He    +1    998048.085153       0.000048
   3H     +1    998054.687288       0.000048
```

The ionization input file

```
1    H     +1    13.598434005136
```

```
1    HD    +1    10.9305
2    He    +1    24.587387936
3    Li    +1     5.391714761
4    Be    +1     9.322699
19   K     +4   142.6857635
37   Rb    +8   505.689068
37   Rb    +9   656.319068
37   Rb    +13 2002.533668
38   Sr    +15 2882.468673
```

Corresponding output file

```
          4He  -   6Li  * 0.667 =    -7483.71665 (  0.04620)
               4He   =    2603.247650 +/-   0.050086 micro-u
                     =    2424.909576 +/-   0.046655 keV

          7Li  -   6Li  * 1.167 =    -1644.99050 (  0.07860)
               7Li   =   16003.416291 +/-   0.085576 micro-u
                     =   14907.086316 +/-   0.079714 keV

          8Li  -   6Li  * 1.333 =     2327.42554 (  0.10800)
               8Li   =   22486.231245 +/-   0.114710 micro-u
                     =   20945.789572 +/-   0.106852 keV

         10Be  -   7Li  * 1.429 =    -9334.15799 (  0.12834)
              10Be   =   13534.737197 +/-   0.128503 micro-u
                     =   12607.526542 +/-   0.119700 keV

         11Be  -   7Li  * 1.571 =    -3479.82956 (  0.62193)
              11Be   =   21661.552062 +/-   0.621969 micro-u
                     =   20177.605859 +/-   0.579360 keV

         44K   -  39K   * 1.128 =     2529.22538 (  2.20434)
              44K    =  -38409.741096 +/-   2.206428 micro-u
                     =  -35778.443518 +/-   2.055275 keV

         74Rb  -  85Rb  * 0.871 =    21096.45221 (  6.48267)
              74Rb   =  -55734.685988 +/-   6.482668 micro-u
                     =  -51916.525801 +/-   6.038567 keV

         76Rb  -  85Rb  * 0.894 =    13930.97003 (  1.68489)
              76Rb   =  -64929.004193 +/-   1.684896 micro-u
                     =  -60480.978079 +/-   1.569470 keV

         99Sr  -  85Rb  * 1.165 =    35661.05986 (  4.42327)
              99Sr   =  -67103.895368 +/-   4.423274 micro-u
                     =  -62506.876167 +/-   4.120253 keV

          3He  -   3HD  * 1.000 =    -5897.48771 (  0.00014)
               3He   =   16029.322619 +/-   0.000208 micro-u
                     =   14931.217905 +/-   0.000194 keV

          3H   -   3HD  * 1.000 =    -5877.52837 (  0.00014)
               3H    =   16049.281964 +/-   0.000208 micro-u
                     =   14949.809914 +/-   0.000194 keV

0Normal End of Freq.Ratios to Equations Conversion
```

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Table I. Input data compared with adjusted values

EXPLANATION OF TABLE

The ordering is in groups according to highest occurring relevant mass number.

Item	K^m, Cs^m, Cs^n, In^p, Tl^q: higher isomers, see NUBASE.	In nuclear reactions: ε = electron capture,	In mass-doublet equation: H $={}^{1}$H, N $={}^{14}$N, D $={}^{2}$H, O $={}^{16}$O, C $={}^{12}$C, u = absolute mass-doublet.	In mass-triplet equation: Rb^x, Rb^y: different mixtures of isomers or contaminants.

Input value — Mass doublet: value and its standard precision in μu.
Triplet: value and its standard precision in keV.
Reaction: value and its standard precision in keV.
The value is the combination of mass excesses $\Delta(M-A)$ given under 'item'. It is the author's experimental result and the author's stated uncertainty, except in a few cases for which comments are given and for some α-reactions: if the α-decay does not clearly feed the ground state, then the precision is increased to 50 keV. If more than one group report such energies, an average is calculated first (mentioned in the Table) and the 50 keV is added to the averaged precision in the adjustment (see Section 6.3).

Adjusted value — Output of calculation. For secondary data ($Dg = 2$–20) the adjusted value is the same as the input value and is not repeated. Also, the adjusted value is only given once for a group of results for the same reaction or doublet. Values and precisions were rounded off, but not to more than tens of keV.

- \# Value and precision derived not from purely experimental data, but at least partly from trends of the mass surface (TMS).
- $*$ No mass value has been calculated for one of the masses involved.

v_i — Normalized deviation between input and adjusted value, given as their difference divided by the input precision (see Section 5.2).

Dg

- 1 Primary data (see Section 3).
- 2–13 Secondary data of different degrees.
- B Well-documented data, or data from regular reviewed journals, which disagree with other well-documented values.
- C Data from incomplete reports, at variance with other data.
- o Data included in or superseded by later work of same group.
- D Data not checked by another method and at large variance with TMS, replaced by an estimated value (see Section 4, p. 030002-15).
- F Study of paper raises doubts about validity of data within the reported precision.
- R Item replaced for computational reasons by an equivalent one giving same result.
- U Data with much less weight than that of a combination of other data.
- – Data that will be averaged.

Signf. — *Significance* ($\times100$) of primary data only (see Section 5.1); the significance of secondary data is always 100%.

Main infl. — Largest *influence* ($\times100$) and nucleus to which the data contributes the most (see Section 5.1).

Lab — Identifies the group which measured the corresponding item. Example of Lab key: MA8 Penning Trap data of Mainz-Isolde group. The numbers refer to different experimental conditions.

F — Multiplying factor for mass spectrometric data (see Section 6.1). The standard precision given in the 'Input value' column has been multiplied by this factor before being used in the least-squares adjustment.

Reference	Reference keys: (in order to reduce the width of the Table, the two digits for the centuries are omitted; at the end of this volume however, the full reference key-number is given: 2003Ba49 and not 03Ba49).	
	12Na15	Results derived from regular journal. These keys are copied from Nuclear Data Sheets. Where not yet available, the style 12Re.1 has been used.
	12Zh.A	Result from abstract, preprint, private communication, conference, thesis or annual report.
	Ens169	References to energies of excited states, when of interest, are mentioned in remarks in the Qfile. Their reference-keys refer to the "Evaluated Nuclear Structure Data Files" (ENSDF) (the electronic version of the Nuclear Data Sheets NDS), the reference-keys are indicated Ens169 in which '16' indicates the year (here 2016) and '9' the month (Oct, Nov, Dec indicated a b c) of the released ENSDF file.
	Nub169	When the excited energy is derived or estimated in NUBASE2016, it is indicated with 'Nubase' (see previous item).
	Averag	Average of data from the following lines.
	AHW	(or FGK, GAU, HWJ, MMC, WGM) : comment written by one of the evaluators.
	*	A remark on the corresponding item is given below the block of data corresponding to the same (highest) A.
	Y	recalibrations of 65Ry01 for charged particle recalibrations, and recalculated triplets for isomeric mixtures.
	Z	recalibrations of 91Ry01 for α particles, 90Wa22 for γ in (n,γ) and (p,γ) reactions and 91Wa.A for protons and γ in (p,γ) reactions (see Section 2).

Remarks. For data indicated with a star in the reference column, remarks have been added. They are collected in groups at the end of each block of data in which the highest occurring relevant mass number is the same. They give:

i) Information explaining how the values in column 'Input value' have been derived for papers not mentioning e.g. the mass differences as derived from measured ratios of voltages or frequencies, or the reaction energies, or values for transitions to excited states in the final nuclei (for which better values of the excitation energies are now known).

ii) Reasons for changing values (e.g. recalibrations) or precisions as given by the authors or for rejecting them (i.e. for labelling them B, C or F).

iii) Value suggested by TMS and recommended in this evaluation as the best estimate (see Section 4, p. 030002-9).

iv) Separate values for capture ratios (see Section 6.4).

Special notation in remarks:

E_{β^-}, Q_{β^-}	β^- endpoint energy, β^- decay energy
E_{β^+}, Q_{β^+}	β^+ endpoint energy, β^+ decay energy
E_p, Q_p	proton energy in the laboratory, proton decay energy
a_s	scattering length
T	threshold for given reaction
ε	electron capture; $\beta^+ = \varepsilon + e^+$ (see NUBASE2016, p. 030001-20)
p^+, pK, pL	fraction β^+, ε(K) or ε(L) in transition to mentioned states
L/K , L/M	ε(L)/ε(K), ε(L)/ε(M)
IBE	internal bremsstrahlung endpoint
M-A , D_M	mass excess (in keV), mass difference (in μu)
TMS	Trends from Mass Surface
',Z' (after uncertainty)	recalibrated (see above, under 'Reference')

Table I. Comparison of input data and adjusted values (Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
π^+	140081.18	0.35	140081.2	0.4	0.0	1	100	100 π^+			06PaDG	*
$\pi^+(2\beta^+)\pi^-$	1021.998	0.001	1021.9980	0.0010	0.0	1	100	100 π^-			88CoTa	
$*\pi^+$	By convention! This is M=139570.18(0.35) keV + m(e$^-$)										GAu	**
$H_{12}-C$	93902.7	0.4	93900.3869	0.0011	−2.3	U			M17	2.5	66Be10	
	93900.66	0.48			−0.2	U			A2	2.5	70St25	
	93900.32	0.12			0.4	U			B07	1.5	71Sm01	
	93900.391	0.012			−0.3	U			WA1	1.0	95Va38	
	93900.3804	0.0084			0.8	U			MI1	1.0	95Di08	
	93900.3865	0.0017			0.2	1	44	44 ^{1}H	WA1	1.0	01Va33	
	93900.3860	0.0042			0.2	U			ST2	1.0	02Be64	
$n(\beta^-)^1H$	782	13	782.3465	0.0005	0.0	U					51Ro50	
D_6-C	84610.56	0.12	84610.6687	0.0007	0.4	U			A2	2.5	70St25	
	84610.62	0.09			0.4	U			B07	1.5	71Sm01	
	84611.60	0.34			−1.1	U			J5	2.5	72Ka57	*
	84611.47	0.40			−0.8	U			J6	2.5	76Ka50	
	84610.644	0.005			4.9	C			WA1	1.0	92Va.A	
	84610.584	0.078			0.4	U			OH1	2.5	93Ma.A	
	84610.662	0.007			1.0	o			WA1	1.0	93Va.C	
	84610.6616	0.0067			1.1	o			WA1	1.0	95Va38	
	84610.6710	0.0054			−0.4	–			MI1	1.0	95Di08	
	84610.6656	0.0036			0.9	–			MI1	1.0	95Di08	
	84610.66897	0.00086			−0.3	–			WA1	1.0	06Va22	
	84610.66834	0.00024			1.4	F			WA1	1.0	15Za13	*
ave.	84610.6688	0.0008			−0.2	1	78	78 ^{2}H			average	
H_2-D	1547.77	0.28	1548.28637	0.00020	0.7	U			C1	2.5	64Mo.A	
	1548.22	0.05			0.5	o			M19	2.5	67Jo18	
	1548.08	0.08			1.0	o			J2	2.5	69Na21	
	1548.286	0.004			0.1	o			B07	1.5	71Sm01	
	1548.222	0.063			0.4	o			J5	2.5	72Ka57	
	1548.176	0.133			0.3	o			J5	2.5	72Ka57	
	1548.298	0.008			−1.0	U			B08	1.5	75Sm02	
	1548.301	0.005			−2.0	U			B08	1.5	75Sm02	
	1548.190	0.023			1.7	U			J6	2.5	76Ka50	
	1548.28	0.05			0.1	U			M25	2.5	78Ha14	
	1548.302	0.012			−0.5	U			OH1	2.5	93Go37	
	1548.2836	0.0018			1.5	U			MI1	1.0	95Di08	
	1548.28649	0.00035			−0.3	1	32	24 ^{1}H	ST2	1.0	08So20	
$^1H(n,\gamma)^2H$	2224.564	0.017	2224.5660	0.0004	0.1	U			BNL		80Gr02	
	2224.5	0.12			0.5	U			MMn		80Is02	
	2224.561	0.009			0.6	U			Utr		82Va13	Z
	2224.549	0.009			1.9	U					82Vy10	Z
	2224.560	0.009			0.7	U					83Ad05	Z
	2224.5756	0.008			−1.2	U			NBS		86Gr01	*
	2224.5727	0.0500			−0.1	U			PTc		97Ro26	*
	2224.5660	0.0004			0.0	o			NBS		99Ke05	*
	2224.58	0.05			−0.3	U			Bdn		06Fi.A	*
	2224.56600	0.00044			0.0	1	100	100 1 n	NBS		06De21	*
$*D_6-C$	For all 72Ka57 doublets, see also reference										72Og03	**
$*D_6-C$	F : the other result from same paper is not trusted within error bar										GAu	**
$*^1H(n,\gamma)^2H$	Original 2224.5890(0.0022) revised in reference; error increased by evaluator										90Wa22	**
$*^1H(n,\gamma)^2H$	Original error 0.0005 increased for calibration										GAu	**
$*^1H(n,\gamma)^2H$	More precisely, H+n−D=2388170.07(0.42) nu corrected to 2388169.95(0.42) nu										99Ke05	**
$*^1H(n,\gamma)^2H$	All errors in reference increased by 20 ppm for calibration										06Fi.A	**
$*^1H(n,\gamma)^2H$	Original 2224.56610(0.00044) recalibrated with 2010 Codata (see text)										WgM129	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
$^3H_4-C$	64197.0690	0.0062	64197.1279	0.0009	9.5	B			WA1	1.0	93Va04	*
	64197.1136	0.0116			1.2	o			ST2	1.0	02Bf02	
	64197.1148	0.0100			1.3	U			ST2	1.0	06Na49	
$^3He_4-C$	64117.2399	0.0039	64117.2906	0.0009	13.0	B			WA1	1.0	93Va04	
	64117.252	0.030			1.3	U			WA1	1.0	93Va04	*
	64117.294	0.011			−0.3	o			ST2	1.0	01Fr18	
	64117.2868	0.0100			0.4	o			ST2	1.0	06Na49	*
	64117.28668	0.00017			22.9	B			WA1	1.0	15Za13	
$H_3-{}^3He$	7445.858	0.012	7445.77408	0.00024	−2.8	U			MZ1	2.5	91Ha31	*
$D_2-H\,{}^3H$	4329.257	0.003	4329.24200	0.00025	−3.3	B			B08	1.5	75Sm02	
$^3H-H\,D$	−5877.2	0.7	−5877.52837	0.00016	−0.2	U			C1	2.5	64Mo.A	
	−5877.52837	0.00014			0.0	o			FS1	1.0	15My03	*
$^3He-H\,D$	−5896.84	0.42	−5897.48771	0.00014	−0.6	U			C1	2.5	64Mo.A	
	−5897.512	0.005			3.2	B			B08	1.5	75Sm02	
	−5897.495	0.006			0.8	U			B09	1.5	81Sm02	
	−5897.48771	0.00014			0.0	1	100	100 ^3He	FS1	1.0	15My03	
$^3H-{}^3He$	19.83	0.18	19.95934	0.00007	0.3	U			C1	2.5	64Mo.A	
	19.951	0.004			0.8	o				2.5	84Ni16	*
	19.967	0.003			−1.0	o				2.5	84Li24	
	19.967	0.002			−1.5	U				2.5	85Li02	
	19.948	0.003			1.5	U				2.5	85Ta.A	
	19.9570	0.0013			1.8	U			ST2	1.0	06Na49	
	19.95934	0.00007			0.0	1	100	100 ^3H	FS1	1.0	15My03	
$^2H(n,\gamma)^3H$	6257.6	0.3	6257.2290	0.0005	−1.2	U					69Pr06	
	6256.96	0.25			1.1	U			ILn		79Br25	Z
$^2H(d,p)^3H$	4029	12	4032.66296	0.00024	0.3	U			CIT		49To23	Y
	4034	6			−0.2	U			MIT		64Sp12	
	4033.7	1.7			−0.6	U			NDm		67Od01	
$^2H(d,n)^3He$	3260	9	3268.9084	0.0005	1.0	U			CIT		49To23	Y
	3269	11			0.0	U			Wis		56Do41	Y
$^3H(\beta^-)^3He$	18.645	0.016	18.59201	0.00007	−3.3	B					72Be11	*
	18.619	0.040			−0.7	U					73Pi01	*
	18.607	0.013			−1.2	o					76Tr07	
	18.614	0.013			−1.7	U					81Lu07	*
	18.562	0.020			1.5	U					83De47	*
	18.590	0.008			0.3	U					85Si07	*
	18.604	0.006			−2.0	o					85Bo34	
	18.603	0.010			−1.1	o					86Fr09	*
	18.600	0.004			−2.0	U					87Bo07	
	18.598	0.015			−0.4	o					87Bu.A	
	18.603	0.004			−2.7	B					88Ka32	
	18.589	0.003			1.0	o					89St05	
	18.595	0.006			−0.5	o					91Bu12	
	18.592	0.003			0.0	U					91Ka41	*
	18.591	0.002			0.5	U					91Ro07	*
	18.595	0.006			−0.5	U					92Bu13	*
	18.589	0.003			1.0	o					92Ot.A	
	18.593	0.003			−0.3	U					92Ho09	*
	18.591	0.003			0.3	U					93We03	
	18.597	0.014			−0.4	U					95Hi14	
	18.5895	0.0025			1.0	U					95St26	
$^3H(p,n)^3He$	−764.08	0.15	−763.7545	0.0005	2.1	o			Zur		61Ry05	
	−764.39	0.37			1.7	U			NRL		64Bo10	
	−763.82	0.08			0.8	U			Zur		64Sa12	

$*{}^3H_4-C$	Item preliminarily disregarded	AHW	**
$*{}^3He_4-C$	Original changed after discussion with authors	AHW	**
$*{}^3He_4-C$	Use instead the most precise difference between ^3H and ^3He (see below)	GAu	**
$*H_3-{}^3He$	From $^3He^+/H_2^+$ =1.496441095(6) +3eV ionization	AHW	**
$*{}^3H-H\,D$	We use already the ^3He and $^3H-{}^3He$ results; only two data are independent	GAu	**
$*{}^3H-{}^3He$	Atom mass difference=ion mass difference 18.573 + 0.011 keV	AHW	**
*	required correction cannot be estimated	85Au07	**
$*{}^3H(\beta^-)^3He$	For corrections to 72Be11 see reference	82Di01	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
$*^{3}$H(β^-)^{3}He	For corrections to 73Pi01 and 81Lu07 see reference										85Au07	**
$*^{3}$H(β^-)^{3}He	Error for 83De47 increased, see reference										85Au07	**
$*^{3}$H(β^-)^{3}He	Original value 18580(7) corrected in reference										89Re04	**
$*^{3}$H(β^-)^{3}He	As calculated from their data in reference										89Re04	**
$*^{3}$H(β^-)^{3}He	E_{β^-}=18.5721(0.0030), SFS and recoil as in reference										88Ka32	**
$*^{3}$H(β^-)^{3}He	E_{β^-}=18.5705(0.0020), SFS and recoil as in reference										89St05	**
$*^{3}$H(β^-)^{3}He	E_{β^-}=18.556(0.006), corrections as in reference										91Bu12	**
$*^{3}$H(β^-)^{3}He	E_{β^-}=18.5733(0.0002+syst), SFS and recoil as in reference										88Ka32	**
^{4}He$_3-$C	7809.706	0.009	7809.76239	0.00019	6.3	B			WA1	1.0	92Va.A	
	7809.7493	0.0030			4.4	B			WA1	1.0	95Va38	
	7809.7704	0.0039			−2.1	U			ST2	1.0	01Fr18	
	7809.7620	0.0003			1.3	o			WA1	1.0	01Va.A	
	7809.7467	0.0066			1.0	U			MZ2	2.5	01Br27	
	7809.76246	0.00019			−0.4	o			WA1	1.0	04Va14	
	7809.76239	0.00019			0.0	1	100	100 ^{4}He	WA1	1.0	06Va22	
^{4}He$-$H$_4$	−28696.8747	0.0026	−28696.8748	0.0004	−0.1	o			ST2	1.0	06Na49	
	−28696.8750	0.0026			0.1	U			ST2	1.0	06Na13	
D$_2-^{4}$He	25600.315	0.014	25600.30210	0.00025	−0.6	U			B08	1.5	75Sm02	
	25600.331	0.005			−2.3	U			MZ1	2.5	90Ge12	*
	25600.328	0.005			−2.1	U			MZ1	2.5	92Ke06	*
	25600.308	0.005			−0.3	U			BL1	4.0	01He36	
H ^{3}H$-^{4}$He	21271.075	0.012	21271.0601	0.0003	−0.8	U			B08	1.5	75Sm02	
^{4}H(γ,n)^{3}H	5200	1700	1600	100	−2.1	U					62Ar05	
	2900	500			−2.6	U					69Mi10	*
	8000	3000			−2.1	U					79Me13	*
	2700	600			−1.8	U					81Se11	
	2600	200			−5.0	B					85Fr01	*
	3500	500			−3.8	B					86Be35	*
	2600	400			−2.5	U					86Mi14	*
	3000	200			−7.0	B					87Go25	*
	3800	300			−7.3	B					90Am04	*
	3100	300			−5.0	B					91Bl05	*
	2300	300			−2.3	U					95Al31	*
	2670	310			−3.5	B					03Me11	
	1600	100				3					09Gu17	*
^{3}He(d,p)^{4}He	18380	10	18353.05346	0.00027	−2.7	U			Mex		64Ma.B	
	18382	15			−1.9	U			Mex		64Ma.B	
	18350.1	3.9			0.8	U			NDm		67Od01	
^{4}Li(p)^{3}He	3300	300	3100	210	−0.7	2					87Br.B	
$*$D$_2-^{4}$He	Error has to be confirmed										GAu	**
$*^{4}$H(γ,n)^{3}H	From ^{7}Li(π^-,t)^{4}H reaction										69Mi10	**
$*^{4}$H(γ,n)^{3}H	From ^{7}Li(π^-,t)^{4}H reaction										AHW	**
$*^{4}$H(γ,n)^{3}H	From ^{7}Li(^{3}He,^{3}He ^{3}He)^{4}H reaction										85Fr01	**
$*^{4}$H(γ,n)^{3}H	From ^{9}Be(^{11}B,^{16}O)^{4}H reaction										86Be35	**
$*^{4}$H(γ,n)^{3}H	From ^{7}Li(n,α)^{4}H reaction										86Mi14	**
$*^{4}$H(γ,n)^{3}H	From ^{9}Be(π^-,dt)^{4}H, same data in reference										91Go19	**
$*^{4}$H(γ,n)^{3}H	From ^{7}Li(π^-,t)^{4}H										90Am04	**
$*^{4}$H(γ,n)^{3}H	From ^{2}D(t,n)^{4}H										91Bl05	**
$*^{4}$H(γ,n)^{3}H	From ^{6}Li(^{6}Li,^{8}B)										95Al31	**
$*^{4}$H(γ,n)^{3}H	Fit with 3 resonances 1.6(0.1), 3.4(0.1), 6.0(0.1) MeV										09Gu17	**
^{5}H(γ,2n)^{3}H	1800	800	1800	90	0.0	U					68Yo06	
	11000	1500			−6.1	F					81Se.A	*
	7400	700			−8.0	F					87Go25	*
	5200	400			−8.5	F					95Al31	*
	1700	300			0.3	U					01Ko52	*
	1800	100			0.0	3					03Go11	*
	1800	200			0.0	3					04St18	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{4}He(n,γ)^{5}He	−890	50	−735	20	3.1	B					66La04	*
	−735	20				3					09Ak03	
^{4}He(p,γ)^{5}Li	−1965	50				3					65Ma32	*
*^{5}H(γ,2n)^{3}H	From ^{6}Li(π^-,p)^{5}H. F : private communication by author										AHW	**
*^{5}H(γ,2n)^{3}H	From ^{9}Be(π^-,pt)^{5}H, same data in reference										91Go19	**
*^{5}H(γ,2n)^{3}H	F : probably higher state										01Ko52	**
*^{5}H(γ,2n)^{3}H	From ^{7}Li(^{6}Li,^{8}B)										95Al31	**
*^{5}H(γ,2n)^{3}H	F : probably higher state										01Ko52	**
*^{5}H(γ,2n)^{3}H	From p(^{6}He,^{2}He)										01Ko52	**
*^{5}H(γ,2n)^{3}H	From t(t,p)										03Go11	**
*^{4}He(n,γ)^{5}He	Average of many reactions leading to ^{5}He										AHW	**
*^{4}He(p,γ)^{5}Li	Average of many reactions leading to ^{5}Li										AHW	**
^{6}Li$_2$−C	30246.152	0.119	30245.775	0.003	−0.8	F			BL1	4.0	98He.B	*
	30245.575	0.034			1.5	U			BL1	4.0	01He36	
	30245.7748	0.0031			0.0	1	100	100 ^{6}Li	FS1	1.0	10Mo30	
^{6}Li−H$_6$	−31827.302	0.040	−31827.3060	0.0016	−0.1	U			ST2	1.0	06Na13	
^{6}Li−D$_3$	−27182.500	0.040	−27182.4469	0.0016	0.3	U			BL1	4.0	01He36	
^{4}He−^{6}Li$_{.667}$	−7483.694	0.046	−7483.7117	0.0010	−0.4	U			TT1	1.0	09Br10	
^{6}He−^{7}Li$_{.857}$	5170.947	0.057	5170.95	0.06	0.0	1	100	100 ^{6}He	TT1	1.0	12Br03	
^{6}H(γ,3n)^{3}H	2700	400	2710	250	0.0	3					84Al08	*
	2600	500			0.2	3					86Be35	*
	2800	500			−0.2	3					92Al.A	*
	2850	900			−0.2	3					08Ca22	*
^{6}Li(n,α)^{3}H	4794	6	4783.4705	0.0015	−1.8	U			Win		67De15	
^{6}Li(p,α)^{3}He	4017	12	4019.7160	0.0015	0.2	U			CIT		49To16	Y
	4021	5			−0.3	U			Wis		51Wi26	Y
	4023	2			−1.6	U			Bir		53Co02	Y
	4025	6			−0.9	o			MIT		64Sp12	
	4018.2	1.1			1.4	U			MIT		81Ro02	
^{6}Li(d,α)^{4}He	22396	12	22372.7695	0.0015	−1.9	U			Bir		53Co02	Y
	22376	14			−0.2	U			Ric		53Ph28	Y
	22403	12			−2.5	U			Mex		64Ma.B	
^{6}Li(p,t)^{4}Li	−18700	300	−18900	210	−0.7	R			Brk		65Ce02	
^{6}He(β^-)^{6}Li	3509.8	3.8	3505.22	0.05	−1.2	U					63Jo04	
^{6}Li(p,n)^{6}Be	−5074	13	−5071	5	0.3	2			CIT		67Ho01	
^{6}Li(^{3}He,t)^{6}Be	−4306	6	−4307	5	−0.1	2			CIT		66Wh01	
*^{6}Li$_2$−C	F : leak during the measurement										98He.B	**
*^{6}H(γ,3n)^{3}H	From ^{7}Li(^{7}Li,^{8}B)^{6}H										84Al08	**
*^{6}H(γ,3n)^{3}H	From ^{9}Be(^{11}B,^{14}O)^{6}H										86Be35	**
*	^{6}H not observed in ^{6}Li(π^-,π^+)										87Se.A	**
*^{6}H(γ,3n)^{3}H	From ^{7}Li(^{7}Li,^{8}B)^{6}H										92Al.A	**
*^{6}H(γ,3n)^{3}H	Symmetrized from 2910(+850–950) keV										08Ca22	**
^{7}Li−H$_7$	−38771.7889	0.0045	−38771.789	0.004	0.0	1	100	100 ^{7}Li	ST2	1.0	06Na13	*
^{7}B−u	29712	27				2			1.0	1.0	11Ch32	*
^{7}Li−^{6}Li$_{1.167}$	−1644.991	0.079	−1644.974	0.005	0.2	o			TT1	1.0	09Br10	
^{6}Li−^{7}Li$_{.857}$	1407.954	0.013	1407.942	0.004	−0.9	U			TT1	1.0	09Br.A	
^{3}He(α,γ)^{7}Be	1586.3	0.6	1587.13	0.07	1.4	U					82Kr05	
^{7}Li(p,α)^{4}He	17364	11	17346.245	0.004	−1.6	U			CIT		51Wh05	Y
	17352	9			−0.6	U			Bir		53Co02	Y
	17345	13			0.1	U			Ric		53Fa18	Y
	17373	6			−4.5	C			Mex		64Ma.B	
	17357	14			−0.8	U			MIT		64Sp12	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.		Lab	F	Reference	
^{7}H(γ,2n)^{5}H	−1100	340	100#	1000#	3.5	F						08Ca22	*
^{7}He(γ,n)^{6}He	450	20	410	8	−2.0	3				MSU		01Ch31	
	430	20			−1.0	3						02Me07	
	360	50			1.0	U						06Sk03	
	400	10			1.0	3						08De29	
	388	20			1.1	3						09Ak03	
	380	28			1.1	U						16Re14	
^{7}Li(t,α)^{6}He	9788	30	9839.90	0.05	1.7	U				ChR		54Al35	Y
^{7}Li(d,^{3}He)^{6}He−^{19}F()^{18}O	−1981.09	0.42	−1980.36	0.05	1.7	U				MSU		78Ro01	*
^{6}Li(n,γ)^{7}Li	7250.0	0.5	7251.091	0.005	2.2	U				Utr		68Sp01	
	7250.3	0.9			0.9	U						72Op01	
	7250.98	0.09			1.2	U				Ptn		85Ko47	*
	7249.94	0.15			7.7	C				Bdn		06Fi.A	
^{6}Li(d,p)^{7}Li	5028	2	5026.525	0.004	−0.7	U				Bir		53Co02	Y
	5035	5			−1.7	U				Mex		61Ja23	
	5024	7			0.4	U				MIT		64Sp12	
^{6}Li(t,d)^{7}Li	986	7	993.862	0.004	1.1	U				ChR		54Al35	
^{7}Li(^{3}He,α)^{6}Li	13322	10	13326.529	0.004	0.5	U				Mex		64Ma.B	
^{6}Li(n,γ)^{7}Li^{i}	−3947	50	−4000	30	−1.0	1	39	39	^{7}Li^{i}			69Pr04	*
^{6}Li(^{3}He,d)^{7}Be	136	3	113.38	0.07	−7.5	C				Mex		64Ma.B	
^{7}Li(t,^{3}He)^{7}He	−11184	30	−11147	8	1.2	U				LAl		69St02	
^{7}Be(ε)^{7}Li	866	7	861.89	0.07	−0.6	U						72Pe05	
^{7}Li(p,n)^{7}Be	−1644.04	0.22	−1644.24	0.07	−0.9	U				Zur		61Ry05	Z
	−1643.68	0.26			−2.2	U				Wis		63Ga09	Y
	−1644.30	0.10			0.6	–				Mar		70Ro07	*
	−1644.18	0.10			−0.6	–				Auc		85Wh03	*
ave.	−1644.24	0.07			0.0	1	100	100	^{7}Be			average	
^{7}Li(π^{+},π^{-})^{7}B	−11870	100	−11747	25	1.2	U						81Se.A	
^{7}Be^{i}(IT)^{7}Be	11000	50	10980	30	−0.4	3						67Ha08	
	10970	40			0.3	3						67Mc14	
*^{7}Li−H$_{7}$	D_M=7016003.4256(45)–7×1007825.03207(10) using Ame2003											06Na13	**
*^{7}B−u	Represents ^{7}B → 3p + ^{4}He, yielding $M-A$=27677(25) keV											GAu	**
*^{7}H(γ,2n)^{5}H	From ^{7}H(γ,4n)^{3}H = 704(323), and ^{5}H(γ,2n)^{3}H = 1800(100) keV											08Ca22	**
*^{7}H(γ,2n)^{5}H	F : not confirmed in later work of reference with higher statistics											10Ni10	**
*^{7}Li(d,^{3}He)^{6}He−^{19}F()^{18}O	$Q-Q$ =0.98(0.41) to 2^{+} level at 1982.07(0.09) keV in ^{18}O											Ens967	**
*^{6}Li(n,γ)^{7}Li	Original 7251.02 recalibrated using ^{35}Cl(n,γ) of reference											82Kr12	**
*^{6}Li(n,γ)^{7}Li	Typo 7250.02 in Ame1986 recalib. 7249.97 in Ame1993, 7249.98 Ame2003											GAu	**
*^{6}Li(n,γ)^{7}Li^{i}	IT=11200(50); Q rebuilt with Ame1965											MMC128	**
*^{7}Li(p,n)^{7}Be	T=1880.64(0.09,Z); error in Q increased											AHW	**
*^{7}Li(p,n)^{7}Be	T=1880.43(0.02,Z); error in Q increased											AHW	**
^{8}Li−u	22488.2	4.0	22486.25	0.05	−0.5	U				RI1	1.0	13It01	
^{8}C−u	37606	32	37643	20	1.2	1	37	37	^{8}C	1.0	1.0	11Ch32	*
^{8}He−^{6}Li$_{1.333}$	13776.88	0.72	13775.58	0.10	−1.8	o				TT1	1.0	08Ry03	
	13775.50	0.19			0.4	1	25	25	^{8}He	TT1	1.0	08Br.D	
^{8}Li−^{6}Li$_{1.333}$	2327.426	0.034	2327.44	0.05	0.4	o				TT1	1.0	08Sm.A	
	2327.42	0.11			0.2	o				TT1	1.0	08Sm03	
	2327.42	0.11			0.2	1	21	21	^{8}Li	TT1	1.0	09Br10	
^{8}He−^{7}Li$_{1.143}$	15642.49	0.11	15642.46	0.10	−0.3	1	75	75	^{8}He	TT1	1.0	12Br03	
^{4}He(^{18}O,^{14}O)^{8}He	−37967	25	−37975.36	0.09	−0.3	U				MIT		75Ja10	
^{4}He(^{26}Mg,^{22}Mg)^{8}He	−44962	30	−44999.4	0.3	−1.2	U				Brk		74Ce05	
^{4}He(^{64}Ni,^{60}Ni)^{8}He	−31818	15	−31810.6	0.4	0.5	U				Pri		75Ko18	
	−31796	8			−1.8	U				Tex		77Tr07	
^{8}Be(α)^{4}He	91.88	0.05	91.84	0.04	−0.8	3				Zur		68Be02	*
	91.80	0.05			0.8	3						92Wu09	*
	92.2	0.4			−0.9	U						16Re14	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{6}Li(t,p)^{8}Li		790	11	801.91	0.05	1.1	U			ChR		54Al35	
^{6}Li(^{3}He,p)^{8}Be		16824	12	16787.46	0.04	−3.0	C			Mex		64Ma.B	
^{6}Li(d,γ)^{8}Be^{j}		−5216.5	3.0	−5213.4	2.0	1.0	1	43	43 ^{8}Be^{j}			76No07	*
^{6}Li(^{3}He,n)^{8}B		−1974.8	1.0	−1974.8	1.0	0.0	1	100	100 ^{8}B	Nvl		58Du78	Y
^{7}Li(n,γ)^{8}Li		2032.78	0.15	2032.62	0.05	−1.1	–					74Ju.A	*
		2032.77	0.18			−0.8	–			ORn		91Ly01	Z
		2032.57	0.06			0.8	–			Bdn		06Fi.A	
^{7}Li(d,p)^{8}Li		−192	1	−191.95	0.05	0.1	U			Wis		51Wi26	Y
		−188	7			−0.6	U			MIT		64Sp12	
^{7}Li(n,γ)^{8}Li	ave.	2032.61	0.05	2032.62	0.05	0.1	1	79	79 ^{8}Li			average	
^{7}Li(^{3}He,d)^{8}Be		11795	13	11760.93	0.04	−2.6	U			Mex		64Ma.B	
*^{8}C−u	Represents ^{8}C $\rightarrow$ 4p + ^{4}He, yielding $M-A$=35030(30) keV											GAu	**
*^{8}Be(α)^{4}He	For atomic binding energy correction see reference											67St30	**
*^{6}Li(d,γ)^{8}Be^{j}	E_d=6962.8(3.0) keV											76No07	**
*^{7}Li(n,γ)^{8}Li	PrvCom to reference											74Aj01	**
^{9}Li−^{6}Li$_{1.500}$		4105.867	0.092	4105.86	0.20	−0.1	o			TT1	1.0	08Sm.A	
		4105.86	0.20				2			TT1	1.0	08Sm03	
^{9}Be−^{7}Li$_{1.286}$		−8397.39	0.10	−8397.35	0.08	0.4	1	67	67 ^{9}Be	TT1	1.0	09Ri03	
^{9}Be(p,α)^{6}Li		2117	7	2125.63	0.08	1.2	U			CIT		49To16	Y
		2130	10			−0.4	U			Chi		51Ca37	Y
		2125	4			0.2	U			Wis		51Wi26	Y
		2126	2			−0.2	U			Bir		53Co02	Y
		2144	6			−3.1	B			MIT		64Sp12	
		2125.4	1.8			0.1	U			NDm		67Od01	
^{6}Li(α,p)^{9}Be		−2125.6	1.2	−2125.63	0.08	0.0	U			NDm		65Br28	
^{6}Li(α,n)^{9}B		−3974	12	−3976.0	0.9	−0.2	U			Tal		63Me08	
^{7}Li(t,p)^{9}Li		−2397	20	−2386.96	0.19	0.5	U					64Mi04	
		−2385.7	3.0			−0.4	U			MSU		75Ka18	
^{9}Be(d,α)^{7}Li		7162	10	7152.15	0.08	−1.0	U			CIT		51Wh05	Y
		7153	3			−0.3	U			Bir		53Co02	Y
		7162	4			−2.5	U			Mex		64Ma.B	
		7157	8			−0.6	U			MIT		64Sp12	
^{7}Li(^{3}He,p)^{9}Be		11215	15	11200.90	0.08	−0.9	U			Mex		64Ma.B	
^{9}Be(p,^{3}He)^{7}Li^{i}		−22499	50	−22450	30	1.0	o			Brk		65De08	
		−22479	40			0.8	1	61	61 ^{7}Li^{i}	Brk		67Mc14	
^{7}Be(^{3}He,n)^{9}C		−6287	5	−6282.1	2.1	1.0	3			CIT		67Ba.A	Z
		−6275.2	3.5			−2.0	3			CIT		71Mo01	Z
^{9}He(γ,n)^{8}He		100	60	1250	50	19.2	B			MSU		01Ch31	*
		1270	100			−0.2	–			Ber		99Bo26	
		2000	200			−3.7	B					07Go24	
		1330	80			−0.9	–					10Jo06	*
	ave.	1310	60			−0.8	1	56	56 ^{9}He			average	
^{9}Be(γ,n)^{8}Be		−1665	1	−1664.54	0.08	0.5	U			Wis		50Mo56	Y
^{9}Be(p,d)^{8}Be		557	3	560.03	0.08	1.0	U			CIT		49To16	Y
		558	5			0.4	U			Chi		51Ca37	Y
		557.5	1.			2.5	U			Wis		51Wi26	Y
		560	2			0.0	U			Bir		53Co02	Y
		562	4			−0.5	U			MIT		64Sp12	
		559.0	1.1			0.9	U			Zur		66Re02	
		559.6	0.6			0.7	U			NDm		67Od01	Z
^{9}Be(d,t)^{8}Be		4602	13	4592.69	0.08	−0.7	U			MIT		64Sp12	
		4591.7	3.1			0.3	U			NDm		67Od01	
^{9}Be(^{3}He,α)^{8}Be		18931	13	18913.08	0.08	−1.4	U			Mex		64Ma.B	
^{9}Be(π^{-},π^{+})^{9}He		−30472	100	−30610	50	−1.4	–					87Se05	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.		Lab	F	Reference	
^{9}Be(^{13}C,^{13}O)^{9}He		−50200	600	−49580	50	1.0	o				Ber		88Bo20	
		−49470	80			−1.3	o				Ber		91Bo.B	
^{9}Be(^{14}C,^{14}O)^{9}He		−34580	100	−34580	50	0.0	–				Ber		95Bo.B	
^{9}Be(π^-,π^+)^{9}He	ave.	−30540	70	−30610	50	−0.9	1	44	44	^{9}He			average	
^{9}Be(p,n)^{9}B		−1850.4	1.0				2				Wis		50Ri59	Z
		−1852	3	−1850.4	0.9	0.5	U				Ric		55Ma84	Z
∗^{9}He(γ,n)^{8}He		From scattering length a_s =–10 fm; questioned in reference											10Jo06	∗∗
∗^{9}He(γ,n)^{8}He		Scattering length a_s =–3.17(66) fm											10Jo06	∗∗
^{10}B ^{37}Cl−C ^{35}Cl		9987.21	0.56	9986.75	0.07	−0.3	U				H38	2.5	84El05	
^{10}Be−^{7}Li$_{1.429}$		−9334.16	0.13	−9334.22	0.09	−0.4	1	44	44	^{10}Be	TT1	1.0	09Ri03	
^{10}B−u		12936.862	0.016	12936.862	0.016	0.0	1	100	100	^{10}B	MS1	1.0	16Gu02	
^{10}C−^{10}B		3916.413	0.090	3916.36	0.07	−0.6	1	67	67	^{10}C	JY1	1.0	11Er02	
^{7}Li(t,γ)^{10}Be^{i}		−3929.8	21.0				2						73Ab10	
^{10}B(n,α)^{7}Li		2801	4	2789.906	0.016	−2.8	U						67De15	
^{7}Li(α,n)^{10}B		−2787	4	−2789.906	0.016	−0.7	U				Ric		57Bi84	Y
^{10}B(p,α)^{7}Be		1147	5	1145.67	0.07	−0.3	U				CIT		49Ch35	Y
		1146	6			−0.1	U				CIT		51Br10	Y
		1146	2			−0.2	U				Wis		52Cr30	Y
		1153	4			−1.8	U				MIT		64Sp12	
^{10}B(^{3}He,^{6}He)^{7}B		−18550	100	−18287	25	2.6	U				Brk		67Mc14	
^{10}He(γ,2n)^{8}He		1200	300	1440	90	0.8	U						94Ko16	
		1420	100			0.2	2						10Jo06	
		2100	200			−3.3	B						12Si07	
		1600	250			−0.6	2						12Ko43	
		1400	300			0.1	U						15Ma54	
^{10}Be(p,^{3}He)^{8}Li^{i}		−26802.3	5.4				2				MSU		75Ro01	∗
^{10}Be(p,t)^{8}Be^{j}		−27487.0	2.6	−27489.3	2.0	−0.9	1	57	57	^{8}Be^{j}	MSU		75Ro01	∗
^{10}B(d,α)^{8}Be		17829	10	17819.74	0.04	−0.9	U				Bir		54El10	Y
		17830	6			−1.7	U				Mex		64Ma.B	
		17818.6	4.1			0.3	U				NDm		67Od01	
^{10}B(p,^{3}He)^{8}Be		−535.5	2.5	−533.31	0.04	0.9	U				Wis		52Cr30	Y
^{10}Li(γ,n)^{9}Li		150	150	26	13	−0.8	U						90Am05	∗
		25	15			0.1	3						95Zi03	∗
		30	24			−0.1	3						08Ak03	∗
^{10}Li^{m}(γ,n)^{9}Li		240	60	220	40	−0.3	3						97Bo10	∗
		210	50			0.2	3						97Zi04	∗
^{9}Be(^{9}Be,^{8}B)^{10}Li^{n}		−33770	260	−33750	40	0.1	U				Brk		75Wi26	∗
^{9}Be(^{13}C,^{12}N)^{10}Li^{n}		−36370	50	−36390	40	−0.4	2				Ber		93Bo03	∗
^{10}Be(d,^{3}He)^{9}Li		−14142.8	2.5	−14142.91	0.20	0.0	U				MSU		75Ka18	
^{9}Be(n,γ)^{10}Be		6812.33	0.06	6812.28	0.05	−0.8	–				MMn		86Ke14	Z
		6812.10	0.14			1.3	–				Bdn		06Fi.A	
^{9}Be(d,p)^{10}Be		4583	8	4587.72	0.05	0.6	U				Ric		51Kl55	Y
		4595	4			−1.8	U				Mex		64Ma.B	
		4590	8			−0.3	U				MIT		64Sp12	
^{9}Be(n,γ)^{10}Be	ave.	6812.29	0.06	6812.28	0.05	−0.2	1	88	56	^{10}Be			average	
^{9}Be(^{3}He,d)^{10}B		1123	5	1093.34	0.08	−5.9	C				Mex		64Ma.B	
^{10}B(d,t)^{9}B		−2189	10	−2180.0	0.9	0.9	U				MIT		64Sp12	
^{10}B(^{3}He,α)^{9}B		12130	15	12140.4	0.9	0.7	U				Ric		60Sp08	
		12171	15			−2.0	U				Mex		64Ma.B	
^{10}Be(^{14}C,^{14}O)^{10}He		−41190	70	−41580	90	−5.5	B				Ber		94Os04	
^{10}Be(β^-)^{10}B		560	5	556.88	0.08	−0.6	U						50Hu27	
		555	5			0.4	U						52Fe16	
^{10}C(β^+)^{10}B		3604	16	3648.06	0.07	2.8	U						63Ba52	
^{10}B(p,n)^{10}C		−4433.7	1.5	−4430.41	0.07	2.2	U				Har		75Fr.A	
		−4430.17	0.34			−0.7	o				Auc		84Ba12	∗
		−4430.17	0.09			−2.7	o				Auc		89Ba28	∗
		−4430.30	0.12			−0.9	1	33	33	^{10}C	Auc		98Ba83	∗

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{10}B(^{3}He,t)^{10}C	−3667	10	−3666.65	0.07	0.0	U			Brk		68Br23	
^{10}B(^{14}N,^{14}B)^{10}N	−47550	400				2					02Le16	
*^{10}Be(p,^{3}He)^{8}Li^i	Original value –26804.1(5.4) recalibrated										AHW	**
*^{10}Be(p,t)^{8}Be^j	Original –27487.6(2.6) recalibrated										GAu	**
*^{10}Li(γ,n)^{9}Li	From ^{11}B(π^-,p)^{10}Li										GAu	**
*^{10}Li(γ,n)^{9}Li	Resonance less than 50 above the one neutron threshold, but										95Zi03	**
*	could also be final state interaction; then ^{10}Li would be 200 higher										97Bo10	**
*^{10}Li(γ,n)^{9}Li	Deduced from s-state scattering length a_s =–22.4(4.8) fm										08Ak03	**
*^{10}Li^m(γ,n)^{9}Li	From ^{10}Be(^{12}C,^{12}N)^{10}Li^m (1^+ level)										GAu	**
*^{10}Li^m(γ,n)^{9}Li	Theoretical work: 1^+ level above 1^- ground state										02Ga12	**
*^{9}Be(^{9}Be,^{8}B)^{10}Li^n	Q =–34060(250) to 2^+ level 290(80) above 1^+ level										93Bo03	**
*	revised with Breit−Wigner line shape. Probably 2^+ level										97Bo10	**
*^{9}Be(^{13}C,^{12}N)^{10}Li^n	Revised with Breit−Wigner line shape (probably 2^+ level)										97Bo10	**
*^{10}B(p,n)^{10}C	T=4876.90(0.37); withdrawn by author										89Ba28	**
*^{10}B(p,n)^{10}C	T=4876.88(0.10,Z); original T=4876.95(0.10) keV										MMC126	**
*^{10}B(p,n)^{10}C	Average of two datasets; withdrawn by author										98Ba83	**
*^{10}B(p,n)^{10}C	T=4877.03(0.13); this is the second 89Ba28 dataset, recalibrated by author										98Ba83	**
^{11}B ^{37}Cl−^{13}C ^{35}Cl	2998.15	1.30	3000.22	0.07	0.6	U			H38	2.5	84El05	
^{11}Li−^{6}Li$_{1.833}$	16003.5	1.2	16003.3	0.7	−0.1	o			TT1	1.0	08Sm.A	
	16003.33	0.66				2			TT1	1.0	08Sm03	
^{11}Be−^{6}Li$_{1.833}$	−6059.27	0.28	−6059.17	0.26	0.4	1	83	83 ^{11}Be	TT1	1.0	08Br.C	
^{11}Be−^{7}Li$_{1.571}$	−3479.83	0.62	−3480.32	0.26	−0.8	1	17	17 ^{11}Be	TT1	1.0	09Ri03	
^{11}C−^{14}N$_{.786}$	9016.430	0.064	9016.43	0.06	0.0	1	100	100 ^{11}C	MS1	1.0	16Gu02	
^{11}Li−u	43780	130	43723.6	0.7	−0.3	U			TO2	1.5	88Wo09	
	43805	28			−2.9	U			P40	1.0	03Ba.A	
	43715.4	5.0			1.6	o			P40	1.0	04Ba.A	
	43714.5	5.1			1.8	U			P40	1.0	09Ga24	
^{11}Be−u	21654.0	3.6	21661.08	0.26	2.0	o			P40	1.0	04Ba.A	
	21653.5	3.5			2.2	U			P40	1.0	09Ga24	
	21658.5	3.8			0.7	U			P40	1.0	09Ga24	*
^{11}B−u	9305.167	0.013	9305.167	0.013	0.0	1	100	100 ^{11}B	MS1	1.0	16Gu02	
^{9}Li−^{11}Li$_{.491}$ ^{6}Li$_{.600}$	−3949	175	−3494.8	0.4	1.0	U			P12	2.5	75Th08	
^{9}Li−^{11}Li$_{.409}$ ^{7}Li$_{.643}$	−1250	86	−1288.2	0.3	−0.3	U			P11	1.5	75Th08	*
	−1223	195			−0.3	U			P13	1.0	75Th08	
^{9}Li−^{11}Li$_{.273}$ ^{8}Li$_{.750}$	−1928	31	−1873.26	0.25	0.7	U			P12	2.5	75Th08	
	−1923	31			1.6	U			P13	1.0	75Th08	
^{7}Li(α,γ)^{11}B^i	−3885.6	20.0	−3896	9	−0.5	1	21	21 ^{11}B^i			66Cu02	*
^{11}B(p,α)^{8}Be	8583	15	8590.09	0.04	0.5	U			CIT		51Li26	Y
	8589	4			0.3	U			Bir		53Co02	Y
	8597	6			−1.2	U			Mex		61Ja23	
	8575	11			1.4	U			MIT		64Sp12	
^{11}B(^{3}He,^{6}He)^{8}B^i	−27539	8				2			MSU		75Ro01	*
^{11}Be^i(γ,d)^{9}Li	3245	20				3					97Te07	*
^{9}Be(t,p)^{11}Be	−1164	15	−1167.87	0.25	−0.3	U			Ald		62Pu01	
^{11}B^j(2p)^{9}Li	2700	80				3					12Ch40	
^{11}B(d,α)^{9}Be	8029	4	8030.06	0.08	0.3	U			Bir		54El10	Y
	8035	9			−0.5	U			Mex		64Ma.B	
	8024	7			0.9	U			MIT		64Sp12	
	8029.7	2.8			0.1	U			NDm		67Od01	
^{9}Be(^{3}He,p)^{11}B	10344	13	10322.99	0.08	−1.6	U			Mex		64Ma.B	
	10322.1	2.3			0.4	U			NDm		67Od01	
^{11}B(p,^{3}He)^{9}Be^i	−24713.3	1.7				2			MSU		74Ka15	*
^{9}Be(^{3}He,p)^{11}B^i	−2240	12	−2237	9	0.2	–					63Gr.A	*
	−2240.6	20.			0.2	–			MSU		82Zw02	*
ave.	−2240	10			0.3	1	79	79 ^{11}B^i			average	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{11}B(p,t)^{9}B^{i}	−26064.1	2.3				2			MSU		74Ka15	∗
^{9}Be(^{3}He,n)^{11}C^{i}	−4612	50	−4600	40	0.2	1	50	50 ^{11}C^{i}			71Wa21	∗
^{10}Be(d,p)^{11}Be	−1721	7	−1722.93	0.25	−0.3	U			CIT		70Go11	
^{11}B(^{7}Li,^{8}B)^{10}Li	−32431	80	−32399	13	0.4	U			MSU		94Yo01	∗
^{11}B(^{7}Li,^{8}B)^{10}Li^{n}	−32908	62	−32870	40	0.5	R			MSU		94Yo01	
^{10}Be(p,γ)^{11}B^{i}	−1322	30	−1332	9	−0.3	U					70Go04	∗
^{10}B(n,γ)^{11}B	11454.1	0.2	11454.219	0.019	0.6	U			Ptn		86Ko19	Z
	11454.15	0.27			0.3	U			Bdn		06Fi.A	
^{10}B(d,p)^{11}B	9227	5	9229.653	0.019	0.5	U			Bir		54El10	Y
	9234	6			−0.7	U			Mex		64Ma.B	
	9244	11			−1.3	U			MIT		64Sp12	
	9232.9	2.			−1.6	U			NDm		66Br18	
^{11}B(^{3}He,α)^{10}B	9101	20	9123.400	0.019	1.1	U			Man		60Ta12	
^{10}B(^{3}He,d)^{11}C	3174	15	3196.71	0.06	1.5	U			Man		60Fo01	
	3226	10			−2.9	C			Mex		64Ma.B	
^{11}N(p)^{10}C	1973	180	1320	50	−3.7	B			MSU		74Be20	∗
	1300	40			0.4	o			Lis		96Ax01	
	1450	400			−0.3	U			MSU		98Az01	∗
	1630	50			−6.3	B			Spe		00Ol01	∗
	1350	120			−0.3	2			Lis		00Ma62	∗
	1310	50			0.1	2			INS		03Gu06	
	1540	20			−11.2	B					06Ca05	
^{11}B(π^{-},π^{+})^{11}Li	−33120	50	−33082.5	0.6	0.7	U					91Ko.B	
^{11}B(^{14}C,^{14}O)^{11}Li	−37120	35	−37048.4	0.6	2.0	U			MSU		93Yo07	
^{11}B^{i}(IT)^{11}B	12510	50	12560	9	1.0	U					71Wa21	∗
^{11}C(β^{+})^{11}B	1982.8	2.6	1981.69	0.06	−0.4	U					75Be28	
^{11}B(p,n)^{11}C	−2759.7	3.	−2764.04	0.06	−1.4	U			Wis		50Ri59	Z
	−2763.2	1.4			−0.6	U			Ric		61Be13	Z
^{11}B(^{3}He,t)^{11}C	−2002.1	1.2	−2000.28	0.06	1.5	U			Str		65Go05	Z
^{11}B(^{3}He,t)^{11}C^{i}	−14151	50	−14160	40	−0.2	1	50	50 ^{11}C^{i}			71Wa21	∗

∗^{11}Be−u	Result from the "cooling" experiment	09Ga24	∗∗
∗^{9}Li−^{11}Li$_{.409}$ ^{7}Li$_{.643}$	Symmetric double-doublet 6−9 8−11 included	GAu	∗∗
∗^{7}Li(α,γ)^{11}B^{i}	IT=12550(30); Q rebuilt with Ame1964	GAu	∗∗
∗^{11}B(^{3}He,^{6}He)^{8}B^{i}	IT=10619(9); rebuilt Q =–27538.9(8.2) keV	GAu	∗∗
∗	IT=10614(20) keV by a different method	14Br15	∗∗
∗^{11}Be^{i}(γ,d)^{9}Li	Q(d)=Q(p+n)+2224.5660(0.0004) Q(p+n)=1020(20) keV	MMC162	∗∗
∗^{11}B(p,^{3}He)^{9}Be^{i}	IT=14392.2(1.8); rebuilt Q =–24715.2(1.7); recalibrated +1.87 keV	MMC121	∗∗
∗^{9}Be(^{3}He,p)^{11}B^{i}	IT=12565(12); Q rebuilt with Ame1961	MMC121	∗∗
∗^{9}Be(^{3}He,p)^{11}B^{i}	IT=12563(20), Q rebuilt with Ame1977	MMC121	∗∗
∗^{11}B(p,t)^{9}B^{i}	IT=14655.4(2.5); rebuilt Q =–26064.3; recalibrated +0.16 keV	MMC121	∗∗
∗^{9}Be(^{3}He,n)^{11}C^{i}	IT=12170(40); Q rebuilt; possibly not pure T=3/2	MMC121	∗∗
∗^{11}B(^{7}Li,^{8}B)^{10}Li	Original (>–32471) re-evaluated	GAu	∗∗
∗	existence of this level not completely certain	94Yo01	∗∗
∗^{10}Be(p,γ)^{11}B^{i}	IT=12550(30); Q rebuilt with Ame1964	MMC121	∗∗
∗^{11}N(p)^{10}C	From ^{14}N(^{3}He,^{6}He)^{11}N Q =–25010(100) to 250(150) level	90Aj01	∗∗
∗^{11}N(p)^{10}C	From ^{9}Be(^{12}N,^{10}Be)^{11}N	98Az01	∗∗
∗^{11}N(p)^{10}C	From ^{10}B(^{14}N,^{13}B)^{11}N	00Ol01	∗∗
∗^{11}N(p)^{10}C	From scattering ^{10}C on H; precisely, 1270(+180–50) keV	00Ma62	∗∗
∗^{11}B^{i}(IT)^{11}B	From ^{11}B(^{3}He,^{3}He')	AHW	∗∗
∗^{11}B(^{3}He,t)^{11}C^{i}	IT=12150(50); Q rebuilt; possibly not pure T=3/2	MMC121	∗∗

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference
^{12}Be−u	26911.3	14.2	26922.1	2.0	0.8	U			P40	1.0	09Ga24
^{12}Be−C	26922.4	2.3			−0.1	1	79	79 ^{12}Be	TT1	1.0	10Et01
C$_{14}$−^{12}C$_{12}$	1.2	4.9	0.00000	0.00013	−0.2	U			TG1	1.5	09Ke.A
C$_{14}$−^{12}C$_{15}$	2.1	2.7			−0.5	U			TG1	1.5	11Ke03

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
$C_{15}-{}^{12}C_{14}$		−4.0	4.7			0.6	U			TG1	1.5	11Ke03	
		−0.5	6.2			0.1	U			TG1	1.5	11Ke03	
$C_{15}-{}^{12}C_{16}$		−1.6	2.1			0.5	U			TG1	1.5	10Ke09	
		4.7	4.2			−0.7	U			TG1	1.5	11Ke03	
		3.7	4.1			−0.6	U			TG1	1.5	11Ke03	
$C_{16}-{}^{12}C_{12}$		−0.3	6.1			0.0	U			TG1	1.5	09Ke.A	
		2.6	5.0			−0.3	U			TG1	1.5	09Ke.A	
$C_{16}-{}^{12}C_{15}$		−1.3	3.9			0.2	U			TG1	1.5	11Ke03	
		−0.7	1.3			0.4	U			TG1	1.5	12Sm07	
$C_{21}-{}^{12}C_{22}$		1.6	1.3			−0.8	U			TG1	1.5	14Ei01	
$C_{23}-{}^{12}C_{22}$		1.2	1.7			−0.5	U			TG1	1.5	14Ei01	
$C_{23}-{}^{12}C_{21}$		2.2	1.8			−0.8	U			TG1	1.5	14Ei01	
^{7}Li(^{7}Li,2p)^{12}Be		−9710	100	−9841.5	1.9	−1.3	U			LAl		71Ho26	
^{12}C(α,^{8}He)^{8}C		−64520	200	−64249	18	1.4	U					74Ro17	
		−64278	26			1.1	–			Tex		76Tr01	
	ave.	−64270	23			0.9	1	63	63 ^{8}C			average	
^{9}Be(^{7}Li,α)^{12}B^{i}		−2308.4	50.	−2258	19	1.0	1	14	14 ^{12}B^{i}	Phi		75Aj03	*
^{12}C(^{3}He,^{6}He)^{9}C		−31578	8	−31571.8	2.1	0.8	U			MSU		71Tr03	
		−31575.6	3.2			1.2	R			MSU		79Ka.A	
^{10}Be(t,p)^{12}Be		−4809	15	−4809.4	1.9	0.0	U			Brk		78Al29	
		−4808.3	4.2			−0.3	1	21	21 ^{12}Be	Phi		94Fo08	
^{10}B(t,p)^{12}B		6346	6	6342.1	1.3	−0.7	U			Man		60Ja17	
^{10}B(α,d)^{12}C		1340.3	0.8	1339.803	0.015	−0.6	U			Wis		56Do41	Z
		1340.6	1.5			−0.5	U			NDm		65Br28	
^{12}C(d,α)^{10}B		−1340.1	1.2	−1339.803	0.015	0.2	U			NDm		65Br28	
^{10}B(^{3}He,p)^{12}C		19694.5	3.6	19692.857	0.015	−0.5	U			NDm		67Od01	
		19692.86	0.44			0.0	U			Mun		83Ch08	*
^{10}B(^{3}He,p)^{12}C^{i}		4585	6	4585	3	−0.1	1	31	31 ^{12}C^{i}			62Br10	
^{10}B(^{3}He,n)^{12}N		1570	25	1572.4	1.0	0.1	U			CIT		64Fi02	
		1561	9			1.3	U			CIT		64Ka08	
		1568	20			0.2	U			LAl		66Za01	
		1574	7			−0.2	U			Har		68Ad03	
^{12}N^{i}(2p)^{10}B		2905	29				2					12Ja11	*
^{12}O(2p)^{10}C		1770	20	1638	24	−6.6	B					95Kr03	
		1638	24				2					12Ja11	
^{12}Li(γ,n)^{11}Li		120	15	210	30	6.0	B					08Ak03	*
		210	30				3					13Ko03	
^{11}B(d,p)^{12}B		1141	4	1145.1	1.3	1.0	1	11	11 ^{12}B	Mex		61Ja23	
		1137	5			1.6	U			MIT		64Sp12	
^{11}B(^{3}He,d)^{12}C		10436	17	10463.203	0.012	1.6	U			Man		60Fo01	
		10469.7	5.7			−1.1	U			NDm		67Od01	
^{11}B(d,n)^{12}C^{i}		−1376.2	4.0	−1376	3	0.0	1	69	69 ^{12}C^{i}			55Ma76	*
^{12}N(β^{+})^{12}C		17406	15	17338.1	1.0	−4.5	B					63Gl04	
^{12}C(p,n)^{12}N		−18119.9	4.4	−18120.4	1.0	−0.1	U			Yal		69Ov01	Z
^{12}C(π^{+},π^{-})^{12}O		−31037	48	−30893	24	3.0	B					80Bu15	
		−31014	24			5.1	B					92Iv.A	

*^{9}Be(^{7}Li,α)^{12}B^{i}	IT=12770(50) using Q_{gs}=10461.6(1.6)keV	75Aj03	**
*	energy and resolution arguments for T=1, not an IAS	08Ch28	**
*^{10}B(^{3}He,p)^{12}C	Original Q =15305.45(0.3) revised by authors to 15253.95(31) keV	83Vo.A	**
*	to 2^{+} level at 4438.91(0.31) keV	Ens006	**
*^{12}N^{i}(2p)^{10}B	Q_{2p}=1165(29) to ^{10}B^{i} at 1740.05(0.04)	Nub16b	**
*^{12}Li(γ,n)^{11}Li	E_{res} derived in reference from scattering length a_s =–13.7(1.6) fm	10Ha04	**
*^{11}B(d,n)^{12}C^{i}	E_{res}=1627(4) Q =–1376(4); recalibrated Q =–1376.16(4.00) keV	MMC121	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
C H$-^{13}$C		4500	36	4470.19703	0.00027	−0.6	U			R08	1.5	69De19	
		4470.185	0.008			1.0	U			B08	1.5	75Sm02	
		4470.10	0.05			0.8	U			M25	2.5	78Ha14	
C D$-^{13}$C H		2921.923	0.008	2921.91066	0.00025	−1.0	U			B08	1.5	75Sm02	
		2921.87	0.05			0.3	U			M25	2.5	78Ha14	
		2921.9086	0.0012			1.7	U			MI1	1.0	95Di08	
		2921.9074	0.0015			2.2	U			MI1	1.0	95Di08	
^{13}C−u		3354.8404	0.0041	3354.83521	0.00023	−1.3	U			WA1	1.0	95Va38	
^{9}Be(α,γ)^{13}C^{i}		−4458.4	2.0	−4460.4	1.1	−1.0	2					73Ad02	
		−4461.4	1.4			0.7	2					78Hi06	
^{10}B(α,p)^{13}C		4068	12	4061.546	0.015	−0.5	U			MIT		64Sp12	
		4063.4	2.4			−0.8	U			NDm		67Od01	
^{13}Li(γ,2n)^{11}Li		1470	310	110	70	−4.4	B					08Ak03	∗
		1470	350			−3.9	B					10Jo07	∗
		110	70				3					13Ko03	∗
^{11}B(t,p)^{13}B		−233	4	−233.4	1.0	−0.1	U			Man		60Mu07	
		−233.4	1.0				2			Str		83An15	
^{13}C(d,α)^{11}B		5169	6	5168.108	0.012	−0.1	U			CIT		51Li29	Y
		5166	5			0.4	U			Ric		53Ph28	Y
		5165	10			0.3	U			MIT		64Sp12	
		5166.6	2.5			0.6	U			NDm		70Br23	
^{11}B(^{3}He,p)^{13}C		13221	10	13184.946	0.012	−3.6	C			Mex		64Ma.B	
		13185.4	4.0			−0.1	U			NDm		67Od01	
^{11}B(^{3}He,n)^{13}N		10183	11	10182.13	0.27	−0.1	U					71Hs03	
^{13}Be(γ,n)^{12}Be		100	70	510	10	5.9	B					01Th01	∗
		60	10			45.0	B					08Ch07	∗
		510	10				2					10Ko17	
		400	30			3.7	B					14Ra07	
^{12}C(n,γ)^{13}C		4946.47	0.17	4946.3083	0.0005	−1.0	U					67Pr10	
		4946.03	0.15			1.9	U			Utr		68Sp01	
		4946.51	0.31			−0.7	U			ILn		79Br25	Z
		4946.321	0.024			−0.5	U					80Wa24	∗
		4946.337	0.031			−0.9	U			Utr		81Va.B	∗
		4946.31	0.10			0.0	U			Bdn		06Fi.A	
^{12}C(d,p)^{13}C		2727	6	2721.74226	0.00023	−0.9	o			Ric		51Kl55	Y
		2722	4			−0.1	U			Ric		53Fa18	Y
		2720	2			0.9	U			Bir		54El10	Y
		2725	5			−0.7	U			Mex		61Ja23	
		2722	4			−0.1	U			MIT		64Sp12	
		2722.3	0.6			−0.9	o			NDm		67Od01	
		2721.9	0.8			−0.2	U			NDm		74Jo14	
		2721.80	0.50			−0.1	U			Rez		90Pi05	∗
^{13}C(p,d)^{12}C		−2722	7	−2721.74226	0.00023	0.0	o			MIT		64Sp12	
^{13}C(d,t)^{12}C		1311	3	1310.92070	0.00029	0.0	U			CIT		51Li29	Y
		1311	6			0.0	U			Mex		64Ma.B	
		1311	6			0.0	U			MIT		64Sp12	
		1310.9	0.7			0.0	U			NDm		67Od01	
^{12}C(p,γ)^{13}N		1943.24	0.32	1943.49	0.27	0.8	–					77Fr20	Z
		1944.1	0.5			−1.2	–					77He26	Z
^{12}C(d,n)^{13}N		−280.5	3.	−281.08	0.27	−0.2	U			Ric		49Bo67	Y
^{12}C(p,γ)^{13}N	ave.	1943.49	0.27	1943.49	0.27	0.0	1	100	100 ^{13}N			average	
^{12}C(p,γ)^{13}N^{i}		−13121.62	0.18				2					73Hu07	
^{13}C(^{14}C,^{14}O)^{13}Be^{p}		−37020	50				2			Ber		92Os04	
^{13}N(β^{+})^{13}C		2222.3	3.8	2220.47	0.27	−0.5	U					54Ki23	
^{13}C(p,n)^{13}N		−3002.3	1.0	−3002.82	0.27	−0.5	o			Ric		61Be13	Z
		−3004.1	1.5			0.9	U			NRL		64Bo10	Z
		−3002.4	1.0			−0.4	U			Ric		66Bo20	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{13}O(β^+)^{13}N	17500	200	17770	10	1.3	U					65Mc09	
*^{13}Li(γ,2n)^{11}Li	Corresponds to excited state										13Ko03	**
*^{13}Li(γ,2n)^{11}Li	Symmetrized from 120(+60–80)										GAu	**
*^{13}Be(γ,n)^{12}Be	From scattering length a_s <–10 fm; questioned in reference										10Ko17	**
*^{13}Be(γ,n)^{12}Be	From scattering length a_s =–20 fm; questioned in reference										10Ko17	**
*	a_s =–3.4(0.6) fm in 10Ko17; a_s =–3.2(+.9–1.1) fm in 07Si24										07Si24	**
*^{12}C(n,γ)^{13}C	$Q(\gamma)$=1261.844(0.006,Z) to 3684.477(0.023,Z) level										81Va.B	**
*^{12}C(n,γ)^{13}C	$Q(\gamma)$=1261.844(0.006,Z) to 3684.493(0.030,Z) level										81Va.B	**
*^{12}C(d,p)^{13}C	Estimated systematic error 0.5 added to statistical error 0.038 keV										AHW	**
^{14}Be−u	42660	150	42890	140	1.0	2			TO2	1.5	88Wo09	
C D_2−^{14}C H_2	9311.498	0.006	9311.503	0.004	0.6	1	20	20 ^{14}C	B08	1.5	75Sm02	
C H_2−N	12576.22	0.10	12576.06002	0.00026	−0.6	U			J2	2.5	69Na21	
	12576.086	0.009			−1.9	U			B07	1.5	71Sm01	
	12576.0598	0.0008			0.3	U			MI1	1.0	95Di08	
C D−N	11027.815	0.018	11027.77365	0.00024	−1.5	o			B07	1.5	71Sm01	
	11027.773	0.007			0.1	U			B08	1.5	75Sm02	
C H_4−N D	14124.17	0.14	14124.3464	0.0004	0.5	U			J6	2.5	76Ka50	
C D_2−N H_2	9479.68	0.13	9479.4873	0.0003	−0.6	U			J6	2.5	76Ka50	
^{14}N−u	3074.014	0.019	3074.00446	0.00021	−0.2	U			OH1	2.5	93Ma.A	
	3074.0056	0.0018			−0.6	U			WA1	1.0	95Va38	
^{13}C H−^{14}N	8105.86299	0.00010	8105.86299	0.00010	0.0	1	97	79 ^{13}C	MI3	1.0	04Ra33	*
^{14}C H_2−N D	1716.269	0.003	1716.270	0.004	0.3	1	80	80 ^{14}C	B08	1.5	75Sm02	
^{14}O−^{14}N	5522.702	0.027	5522.702	0.027	0.0	1	100	100 ^{14}O	MS1	1.0	15Va08	
^{14}N(^{3}He,^{9}Li)^{8}C	−42214	50	−42225	18	−0.2	R			MSU		76Ro04	
^{11}B(α,p)^{14}C	789	17	783.759	0.013	−0.3	U			MIT		64Sp12	
^{14}B^i(γ,d)^{12}Be	2515	20				2					01Ta23	*
^{14}C(^{18}O,^{20}Ne)^{12}Be	−15770	50	−15798.8	1.9	−0.6	U			ChR		74Ba15	
^{14}C(d,α)^{12}B	361.8	1.4	361.3	1.3	−0.4	1	89	89 ^{12}B	Wis		56Do41	Z
^{14}C(p,^{3}He)^{12}B^i	−30702.73	19.96	−30711	19	−0.4	1	86	86 ^{12}B^i			71Ne.A	*
^{14}C(p,t)^{12}C^j	−32235.9	2.4				2			MSU		78Ro08	*
^{14}N(d,α)^{12}C	13579	6	13574.22287	0.00024	−0.8	U			Mex		64Ma.B	
	13588	6			−2.3	U			MIT		64Sp12	
^{12}C(^{3}He,p)^{14}N	4779.0	1.4	4778.83059	0.00026	−0.1	U			CIT		62Ba26	Y
	4806	9			−3.0	C			Mex		64Ma.B	
	4776.3	1.5			1.7	U			NDm		67Od01	
^{14}N(p,t)^{12}N	−22135.5	1.0	−22135.5	1.0	0.0	1	100	100 ^{12}N	MSU		75No.A	
^{12}C(^{3}He,n)^{14}O	−1146.86	0.72	−1147.880	0.025	−1.4	U			Nvl		61Bu04	*
	−1148.61	0.56			1.3	U			CIT		62Ba26	*
	−1149.01	0.48			2.4	U			Mar		70Ro07	*
^{14}C(^{7}Li,^{8}B)^{13}Be	−39990	500	−38654	10	2.7	U			Dbn		83Al20	
^{14}C(^{11}B,^{12}N)^{13}Be	−39600	90	−39310	10	3.2	B			Dbn		98Be28	
^{13}C(n,γ)^{14}C	8177	2	8176.433	0.004	−0.3	U					67Th05	
	8176.61	0.24			−0.7	U			Bdn		06Fi.A	
^{13}C(d,p)^{14}C	5946	4	5951.867	0.004	1.5	U			CIT		51Li29	Y
	5952	10			0.0	U			Nob		54Ah47	Y
	5951	10			0.1	U			Mex		64Ma.B	
	5951	8			0.1	U			MIT		64Sp12	
	5951.85	0.54			0.0	U			Rez		90Pi05	*
^{13}C(p,γ)^{14}N	7551.0	0.8	7550.56277	0.00009	−0.5	U					56Ma87	Z
	7551.1	0.5			−1.1	U					63Bo07	*
^{13}C(^{3}He,d)^{14}N	2048	14	2057.08833	0.00016	0.6	U			MIT		64Sp12	
^{14}N(^{3}He,α)^{13}N	10015	10	10024.24	0.27	0.9	U			Ric		59Yo25	
^{14}F(p)^{13}O	1560	40				3					10Go16	
^{14}C(π^-,π^+)^{14}Be	−38100	170	−37960	130	0.8	R					84Gi09	*

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{14}C(^{14}C,^{14}O)^{14}Be^p	−43440	60				2			Ber		95Bo10	
^{14}C(^{7}Li,^{7}Be)^{14}B	−21499	30	−21506	21	−0.2	–			ChR		73Ba34	
^{14}C(^{14}C,^{14}N)^{14}B	−20494	30	−20487	21	0.2	–			Ors		81Na.A	
^{14}C(^{7}Li,^{7}Be)^{14}B	ave. −21506	21	−21506	21	0.0	1	100	100 ^{14}B			average	
^{14}C(β^-)^{14}N	155.2	0.5	156.476	0.004	2.6	U					54Ki23	
	155.74	0.08			9.2	F					91Su09	∗
	155.95	0.22			2.4	U					95Wi20	
	156.27	0.14			1.5	U					00Ku25	
^{14}C(p,n)^{14}N	−626.15	0.3	−625.870	0.004	0.9	U			Wis		56Sa06	
	−625.88	0.09			0.1	U			Zur		73Hi.A	
^{14}N(p,n)^{14}O	−5930.7	2.8	−5926.710	0.025	1.4	U			Ric		65Ku02	
	−5927.6	1.5			0.6	U			Har		73Cl12	
	−5925.6	0.4			−2.8	F			Auc		77Wh01	∗
	−5925.41	0.08			−16.3	F			Auc		81Wh03	∗
	−5925.41	0.11			−11.8	F			Auc		98Ba83	∗
	−5926.68	0.17			−0.2	U			Auc		03To03	
^{14}N(^{3}He,t)^{14}O	−5161.3	0.8	−5162.956	0.025	−2.1	F			Mun		77Vo02	∗
∗^{13}C H−^{14}N	Original 8105.86288(10) μu recalculated for molecular and ionization										HWJ153	∗∗
∗^{14}B^i(γ,d)^{12}Be	Q(d)=Q(p+n)+2224.5660(0.0004) Q(p+n)=290(20) keV										MMC162	∗∗
∗^{14}C(p,^{3}He)^{12}B^i	IT=12710(20); Q rebuilt with Ame1964										MMC129	∗∗
∗	energy and resolution arguments for T=1, not an IAS										08Ch28	∗∗
∗^{14}C(p,t)^{12}C^j	IT=27595.0(2.4); Q rebuilt										MMC121	∗∗
∗^{12}C(^{3}He,n)^{14}O	Originals T=1436.2(0.9,Bu) 1437.5(0.7,Ba) 1437.9(0.6,Ro) respectively, recalibrated										MMC126	∗∗
∗^{13}C(d,p)^{14}C	Estimated systematic error 0.5 added to statistical error 0.20										AHW	∗∗
∗^{13}C(p,γ)^{14}N	E_p=1747.06(0.53) to 2$^+$ level at 9172.25 keV										Ens01a	∗∗
∗^{14}C(π^-,π^+)^{14}Be	Original error 160 increased with 60 calibration uncertainty										GAu	∗∗
∗^{14}C(β^-)^{14}N	F : find 17 keV neutrino. See also reference										91No07	∗∗
∗^{14}N(p,n)^{14}O	F : withdrawn by author										81Wh03	∗∗
∗^{14}N(p,n)^{14}O	Authors recalibrated 77Wh01 for atomic effects										81Wh03	∗∗
∗^{14}N(p,n)^{14}O	F : withdrawn by author										98Ba83	∗∗
∗^{14}N(p,n)^{14}O	Original T=6353.08(0.07) recalibrated to T=6352.99(0.12) by author										98Ba83	∗∗
∗^{14}N(p,n)^{14}O	F : withdrawn by author										03To03	∗∗
∗^{14}N(^{3}He,t)^{14}O	F : rejected in reference of same group										09Fa15	∗∗
C D H−^{15}N	21817.9119	0.0008	21817.9114	0.0006	−0.6	1	61	61 ^{15}N	MI1	1.0	95Di08	
C H_3−^{15}N	23366.1979	0.0017	23366.1978	0.0006	−0.1	1	14	13 ^{15}N	MI1	1.0	95Di08	
^{15}F−u	17477	86	17785	15	1.4	F				2.5	01Ze.A	∗
^{14}N D−^{15}N H	9242.29	0.11	9241.8514	0.0007	−1.6	U			C5	2.5	71Ke01	
	9241.780	0.008			5.9	B			B08	1.5	75Sm02	
^{15}N(p,α)^{12}C	4966	6	4965.4937	0.0006	−0.1	U			CIT		51Li26	Y
	4962	4			0.9	U			Bir		53Co02	Y
	4954	8			1.4	U			Mex		64Ma.B	
	4965	7			0.1	U			MIT		64Sp12	
^{12}C(α,n)^{15}O	−8503	12	−8502.0	0.5	0.1	U			Tal		63Ne05	
^{15}N(d,α)^{13}C	7675	9	7687.2360	0.0007	1.4	U			Mex		64Ma.B	
	7689	6			−0.3	U			MIT		64Sp12	
^{15}Ne(2p)^{13}O	2522	66				3					14Wa09	
^{15}Be(γ,n)^{14}Be	1800	100				3					13Sn02	
^{14}C(d,p)^{15}C	−1006.5	0.8				2			Wis		56Do41	Y
^{14}C(p,γ)^{15}N^i	−1407.8	3.5				2					59Fe99	∗
^{14}N(n,γ)^{15}N	10833.2	0.6	10833.2951	0.0008	0.2	U					68Gr14	
	10833.1	0.7			0.3	U					74Sp04	
	10833.5	0.05			−4.1	B			MMn		80Is02	
	10833.314	0.012			−1.6	U					97Ju02	
	10833.2339	0.0500			1.2	U			PTc		97Ro26	∗
	10833.32	0.22			−0.1	U			Bdn		06Fi.A	
	10833.3	0.5			0.0	U					06Be33	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{14}N(d,p)^{15}N	8629	11	8608.7292	0.0006	−1.8	U			CIT		52Mi54	Y
	8614	6			−0.9	U			Mex		64Ma.B	
	8623	3			−4.8	B			MIT		64Sp12	
	8608.83	0.50			−0.2	U			Rez		90Pi05	*
^{14}N(p,γ)^{15}O	7297.1	0.9	7296.8	0.5	−0.4	1	30	30 ^{15}O	CIT		72Ne05	
^{14}N(^{3}He,d)^{15}O	1803	10	1803.3	0.5	0.0	U			Ric		59Yo25	Y
	1802	15			0.1	U			Man		60Fo01	
^{15}F(p)^{14}O	1410	150	1270	14	−0.9	o					03Le26	
	1510	110			−2.2	U					03Pe23	
	1490	130			−1.7	U					04Go15	*
	1560	130			−2.2	U					04Le12	
	1230	50			0.8	U					05Gu25	
	1270	14				3					16De15	
^{15}C(β^-)^{15}N	9810	30	9771.7	0.8	−1.3	U					59Al06	
^{15}O(β^+)^{15}N	2745	5	2754.2	0.5	1.8	U					57Ki22	
^{15}N(p,n)^{15}O	−3541.7	0.9	−3536.5	0.5	5.8	B					58Jo28	Y
	−3535.1	1.0			−1.4	–			CIT		72Je02	Z
	−3537.6	0.8			1.4	–					72Sh08	Z
ave.	−3536.6	0.6			0.2	1	70	70 ^{15}O			average	
*^{15}F−u	F : results distrusted (see also ^{18}Na and ^{19}Mg)										GAu	**
*^{14}C(p,γ)^{15}N^{i}	From a parametrized fit										MMC122	**
*^{14}N(n,γ)^{15}N	Original error 0.0005 increased for calibration										GAu	**
*^{14}N(d,p)^{15}N	Estimated systematic error 0.5 added to statistical error 0.061 keV										AHW	**
*^{15}F(p)^{14}O	Symmetrized from 1450(+160–100) keV										04Go15	**
C H$_2$ D−O	34837.406	0.033	34837.22300	0.00028	−3.7	B			B07	1.5	71Sm01	
	34837.202	0.020			0.7	U			B08	1.5	75Sm02	
C D$_2$−O	33289.129	0.033	33288.93663	0.00029	−3.9	B			B07	1.5	71Sm01	
	33289.061	0.038			−2.2	U			B07	1.5	71Sm01	
	33288.940	0.019			−0.1	U			B08	1.5	75Sm02	
C$_4$−O$_3$	15256.131	0.018	15256.1412	0.0005	0.6	o			WA1	1.0	92Va.A	
	15256.086	0.081			0.3	U			OH1	2.5	93Ma.A	
	15256.121	0.009			2.2	o			WA1	1.0	95Va38	
	15256.1425	0.0008			−1.6	o			WA1	1.0	01Va33	
	15256.1415	0.0005			−0.6	o			WA1	1.0	03Va.A	
	15256.14129	0.00054			−0.2	1	93	93 ^{16}O	WA1	1.0	06Va22	
C H$_4$−O	36387.55	0.8	36385.5094	0.0004	−1.0	U			J1	2.5	68Ma45	
	36386.01	0.24			−0.8	U			J2	2.5	69Na21	
	36385.644	0.036			−2.5	U			B07	1.5	71Sm01	
	36385.5062	0.0013			2.4	U			MI1	1.0	95Di08	
	36385.5073	0.0019			1.1	U			MI1	1.0	95Di08	
	36385.5060	0.0022			1.5	U			MI1	1.0	95Di08	
^{16}O−u	−5085.362	0.027	−5085.38040	0.00017	−0.3	U			OH1	2.5	93Ma.A	
	−5085.3798	0.0011			−0.2	U				2.5	16Ho.A	
^{14}C H$_2$−O	23977.413	0.014	23977.433	0.004	1.0	U			B08	1.5	75Sm02	
N D−O	22261.160	0.013	22261.16298	0.00024	0.2	U			B08	1.5	75Sm02	
N$_2$−C O	11233.57	0.20	11233.3893	0.0004	−0.4	U			J2	2.5	69Na21	
	11233.543	0.025			−4.1	B			B07	1.5	71Sm01	
	11233.43	0.21			−0.1	U			J6	2.5	76Ka50	
	11259	27			−0.4	U			CR1	2.5	89Sh10	
	11233.3909	0.0022			−0.7	U			MI1	1.0	95Di08	
	11233.38932	0.00042			0.0	1	82	81 ^{14}N	MI1	1.0	04Th17	
^{16}O(α,^{8}He)^{12}O	−66020	120	−65836	24	1.5	U			Brk		78Ke06	
^{16}O(p,α)^{13}N	−5211	10	−5218.43	0.27	−0.7	U			MIT		64Sp12	
^{16}O(^{3}He,^{6}He)^{13}O	−30516	14	−30513	10	0.2	2			Brk		70Me11	*
	−30511	13			−0.2	2			MSU		71Tr03	*

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.		Lab	F	Reference	
^{16}Be(γ,2n)^{14}Be	1350	100				3						12Sp02	
^{14}C(^{14}C,^{12}N)^{16}B	−48380	60	−48411	25	−0.5	o				Ber		95Bo10	
	−48378	60			−0.5	1	17	17	^{16}B	Ber		00Ka21	
^{14}C(t,p)^{16}C	−3015	8	−3013	4	0.2	2				MSU		77Fo09	
	−3013	4			−0.1	2				LAl		78Se04	
^{14}C(^{3}He,p)^{16}N	4983	4	4978.2	2.3	−1.2	R				BNL		66Ga08	
^{14}C(^{3}He,p)^{16}N^i	−4951	7				2						68He03	*
^{14}N(t,p)^{16}N	4853	10	4840.3	2.3	−1.3	U				Ald		66He10	
^{14}C(^{3}He,n)^{16}O^j	−8100	8	−8104	4	−0.5	1	23	23	^{16}O^j			70Ad01	*
^{16}O(d,α)^{14}N	3110.	3.5	3110.38807	0.00024	0.1	U				Wis		52Cr30	Y
	3119	5			−1.7	U				Ric		53Fa18	Y
	3110	6			0.1	U				Mex		64Ma.B	
	3113	6			−0.4	U				MIT		64Sp12	
^{14}N(^{3}He,p)^{16}O^i	2444	6	2447	4	0.5	1	54	54	^{16}O^i			64Br08	*
^{14}N(d,γ)^{16}O^j	−1986.3	4.4	−1985	4	0.3	1	77	77	^{16}O^j			72Ne10	
^{14}N(^{3}He,n)^{16}F	−963	40	−957	8	0.2	U				LAl		65Za01	
	−970	15			0.9	R				Har		68Ad03	
^{16}Ne(2p)^{14}O	1350	80	1401	20	0.6	U						08Mu13	
^{16}B(γ,n)^{15}B	85	15	83	15	−0.1	1	95	83	^{16}B			09Le02	
^{15}N(d,p)^{16}N	286	12	264.3	2.3	−1.8	U				CIT		55Pa50	Y
	269	10			−0.5	U				Pit		57Wa01	Y
	259	6			0.9	2				Mex		64Ma.B	
	267	8			−0.3	2				MIT		64Sp12	
	270	10			−0.6	U				Pen		66He10	
^{15}N(p,γ)^{16}O^i	−665.3	6.6	−669	4	−0.5	1	46	46	^{16}O^i			57Ha99	
^{16}O(^{3}He,α)^{15}O	4920	10	4913.7	0.5	−0.6	U				Ald		59Hi68	Y
	4907	7			1.0	U				Ric		59Yo25	Y
^{16}N(β^-)^{16}O	10400	20	10420.9	2.3	1.0	U						59Al06	
^{16}O(^{3}He,t)^{16}F	−15430	10	−15436	8	−0.6	2				KVI		80Ja.A	
^{16}O(π^+,π^-)^{16}Ne	−27766	45	−27702	20	1.4	2						80Bu15	
*^{16}O(^{3}He,^{6}He)^{13}O	$M-A$ increased by 7 for more recent calibrator M−A(^{9}C)=28913(2)											AHW	**
*^{16}O(^{3}He,^{6}He)^{13}O	Recalibrated using their ^{12}C(^{3}He,^{6}He) result											AHW	**
*^{14}C(^{3}He,p)^{16}N^i	IT=9928(7), Q rebuilt with Ame1965											MMC121	**
*^{14}C(^{3}He,n)^{16}O^j	IT=22717(8), Q rebuilt with Ame1964											MMC121	**
*^{14}N(^{3}He,p)^{16}O^i	IT=12798(6), Q rebuilt											MMC121	**
^{17}O$_2$−^{28}Si D$_3$	−20968.3557	0.0014	−20968.3560	0.0013	−0.2	1	84	82	^{17}O	FS1	1.0	10Mo29	
^{17}B−u	45970	860	46930	220	0.7	U				GA1	1.5	87Gi05	
	46830	180			0.4	2				TO2	1.5	88Wo09	
	47127	250			−0.5	2				GA3	1.5	91Or01	
^{17}Ne−^{22}Ne$_{.773}$	24373.27	0.38	24373.3	0.4	0.0	1	100	100	^{17}Ne	MA8	1.0	08Ge07	
^{17}Na−u	37760	430				2					2.5	S-u148	
^{17}O−^{16}O H	−3607.8961	0.0016	−3607.8952	0.0007	0.6	1	19	18	^{17}O	FS1	1.0	10Mo29	
^{17}O(n,α)^{14}C	1817.2	3.5	1817.745	0.004	0.2	U						01Wa50	
^{14}C(α,n)^{17}O	−1819.07	2.0	−1817.745	0.004	0.7	U				Wis		56Sa06	Y
^{17}O(p,α)^{14}N	1200	17	1191.8748	0.0007	−0.5	U				MIT		64Sp12	
^{17}O(d,α)^{15}N	9818	12	9800.6040	0.0009	−1.4	U				Nob		54Pa39	Y
^{16}O(n,γ)^{17}O	4143.24	0.23	4143.0793	0.0008	−0.7	U						77Mc05	Z
	4143.06	0.13			0.1	U				Bdn		06Fi.A	
^{16}O(d,p)^{17}O	1915	8	1918.5133	0.0006	0.4	U				Ric		51Kl55	Y
	1918	4			0.1	U				MIT		57Br82	
	1918	3			0.2	U				Mex		61Ja23	
	1920	3			−0.5	U				MIT		64Sp12	
	1918.74	0.5			−0.5	U				Rez		90Pi05	*
^{16}O(n,γ)^{17}O^i	−6935.70	0.17				2						81Hi01	*
^{16}O(p,γ)^{17}F	600.35	0.28	600.27	0.25	−0.3	–				CIT		75Ro05	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.		Lab	F	Reference	
^{16}O(d,n)^{17}F		−1626	4	−1624.30	0.25	0.4	U				Ric		51Bo49	Y
		−1624.6	0.5			0.6	–				Nvl		60Bo21	Z
^{16}O(p,γ)^{17}F	ave.	600.27	0.25	600.27	0.25	0.0	1	100	100	^{17}F			average	
^{16}O(p,γ)^{17}F^i		−10592.8	1.9				2						76Hi09	
^{16}O(^{3}He,2n)^{17}Ne		−22420	190	−22448.9	0.4	−0.2	U				BNL		67Es02	
^{17}F(β^+)^{17}O		2770	6	2760.47	0.25	−1.6	U						54Wo23	
∗^{16}O(d,p)^{17}O	Estimated systematic error 0.5 added to statistical error 0.062 keV												AHW	∗∗
∗^{16}O(n,γ)^{17}O^i	Original Q =–6934.41(0.17) does not match original T=7373.31(0.18)												MMC129	∗∗
C D$_3$−^{18}O		43145.72216	0.00088	43145.7215	0.0007	−0.7	–				FS1	1.0	09Re15	∗
		43145.72116	0.00136			0.3	–				FS1	1.0	09Re15	∗
	ave.	43145.7219	0.0007			−0.5	1	87	84	^{18}O			average	
C$_3$−^{18}O$_2$		1680.7695	0.0038	1680.7743	0.0015	1.3	1	16	16	^{18}O	FS1	1.0	09Re15	
^{18}F−u		943	85	937.3	0.5	0.0	U					2.5	92Ge08	
^{18}Na−u		25969	54	26880	100	6.7	F					2.5	01Ze.A	∗
		26882	183			0.0	1	30	30	^{18}Na	1.0	1.0	04Ze05	∗
^{18}Ne−^{22}Ne$_{.818}$		12755.68	0.39	12755.7	0.4	0.0	1	100	100	^{18}Ne	MA8	1.0	04Bl20	
^{14}C(^{7}Li,^{3}He)^{18}N		−10170	60	−10117	19	0.9	U				Str		80Kr.A	
^{18}O(^{48}Ca,^{51}V)^{15}B		−21760	50	−21762	21	0.0	–				Hei		78Bh02	
		−21768	25			0.2	–				Can		83Ho08	
	ave.	−21766	22			0.2	1	88	88	^{15}B			average	
^{18}O(p,α)^{15}N		3954	9	3979.8007	0.0009	2.9	U				Nob		54Mi60	Y
		3964	10			1.6	U				Mex		64Ma.B	
^{18}O(d,α)^{16}N		4235	7	4244.1	2.3	1.3	R				CIT		55Pa50	Z
		4219	20			1.3	U				Mex		64Ma.B	
		4249	15			−0.3	U				Phi		66He10	
		4244	4			0.0	R				MIT		67Sp09	Z
^{16}O(^{3}He,p)^{18}F		2033	5	2032.1	0.5	−0.2	U				Ric		59Yo25	
		2055	5			−4.6	C				Mex		64Ma.B	
^{16}O(^{3}He,n)^{18}Ne		−3205	13	−3194.7	0.4	0.8	U				Nvl		61Du02	Y
		−3198	6			0.5	U				Ald		61To03	Y
		−3194.0	1.5			−0.5	U						94Ma14	
^{18}B(γ,n)^{17}B		5	5				3						10Sp02	∗
^{18}O(^{48}Ca,^{49}Ti)^{17}C		−17465	35	−17476	17	−0.3	2				Hei		77No08	
		−17479	20			0.2	2				Can		82Fi10	
^{18}O(^{207}Pb,^{208}Po)^{17}C		−26870	220	−26797	17	0.3	U				ChR		79Ba31	
^{18}O(t,α)^{17}N		3872	15				2				LAl		60Ja13	
^{17}O(n,γ)^{18}O		8043.5	1.0	8045.3693	0.0010	1.9	U				Bdn		06Fi.A	
^{17}O(d,p)^{18}O		5820	10	5820.8033	0.0009	0.1	U				Nob		54Ah37	Y
		5820	10			0.1	U				Man		65Mo16	
^{17}O(p,γ)^{18}F		5603	3	5607.1	0.5	1.4	U				Str		73Se03	
		5606.2	0.6			1.5	1	60	60	^{18}F	CIT		75Ro05	Z
^{18}Na(p)^{17}Ne		1270	170	1250	90	−0.1	–						04Ze05	
		1230	150			0.1	–						12Mu05	
	ave.	1250	110			0.0	1	70	70	^{18}Na			average	
^{18}O(π^-,π^+)^{18}C		−26712	150	−26720	30	−0.1	U						78Se07	
^{18}O(^{48}Ca,^{48}Ti)^{18}C		−21434	30				2				Can		82Fi10	
		−21331	300	−21430	30	−0.3	U				Ors		82Na04	
^{18}N(β^-)^{18}O		13860	400	13896	19	0.1	U						64Ch19	
^{18}O(d,2p)^{18}N		−15270	100	−15338	19	−0.7	U				Brk		78De.A	
^{18}O(t,^{3}He)^{18}N		−13917	60	−13877	19	0.7	U				LAl		69St07	∗
^{18}O(^{7}Li,^{7}Be)^{18}N		−14761	20	−14758	19	0.2	2				Can		83Pu01	
^{18}O(^{14}C,^{14}N)^{18}N		−13720	50	−13740	19	−0.4	2				Ors		80Na14	
^{18}F(β^+)^{18}O		1657	2	1655.9	0.5	−0.5	U						64Ho28	
^{18}O(p,n)^{18}F		−2451	4	−2438.3	0.5	3.2	B				Wis		50Ri59	Y
		−2436.97	0.73			−1.8	1	40	40	^{18}F	Nvl		64Bo13	Z
		−2440.2	2.8			0.7	U						67Pr04	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{18}Ne(β^+)^{18}F	4438	9	4444.5	0.6	0.7	U					63Fr10	
$*$C D$_3-^{18}$O	Respectively CD$_3^+$/^{18}O$^+$, C$_2$D$_6^+$/^{18}O^{2+} considered independent										GAu	$**$
$*^{18}$Na$-$u	F : results distrusted (see also ^{15}F and ^{19}Mg)										GAu	$**$
$*^{18}$Na$-$u	Other interpretation : D_M=25969(172) μu, $M-A$=24190(160) keV										04Ze05	$**$
$*^{18}$B(γ,n)^{17}B	Decay energy <10 keV, derived from scattering length a_s <–50 fm										10Sp02	$**$
$*^{18}$O(t,^{3}He)^{18}N	From Q =14038(30), reinterpreted as mainly to (2$^-$) level at 114.90 keV										Ens967	$**$
^{28}Si H$_3-$C ^{19}F	1998.4687	0.0022	1998.4688	0.0010	0.1	1	22	15 ^{19}F	FS1	1.0	09Re15	
^{19}B$-$u	64166	376				2			GA8	1.5	12Ga45	
^{19}C$-$u	34680	260	34800	110	0.3	o			TO1	1.5	86Vi09	
	35370	450			-0.8	U			GA1	1.5	87Gi05	
	35180	130			-2.0	o			TO2	1.5	88Wo09	
	35506	253			-1.9	U			GA3	1.5	91Or01	
C D$_4-$H ^{19}F	50178.88	0.05	50178.9173	0.0009	0.5	U			B08	1.5	75Sm02	
^{19}Mg$-$u	35470	270	34170	50	-1.9	F				2.5	01Ze.A	$*$
^{13}C D$_3-^{19}$F	47257.00669	0.00091	47257.0067	0.0008	0.0	1	87	85 ^{19}F	FS1	1.0	09Re15	
^{19}Ne$-^{22}$Ne$_{.864}$	9323.92	0.33	9324.17	0.17	0.8	2			MA8	1.0	04Bl20	
	9324.26	0.20			-0.5	2			MA8	1.0	08Ge07	
^{19}F(p,α)^{16}O	8115	10	8113.6122	0.0009	-0.1	U			CIT		50Ch53	Y
	8115	10			-0.1	U			CIT		57Yo04	Y
	8122	9			-0.9	U			MIT		64Sp12	
^{17}O(t,p)^{19}O	3524	7	3519.2	2.6	-0.7	R			Man		65Mo19	
^{19}F(d,α)^{17}O	10060	12	10032.1254	0.0010	-2.3	U			MIT		64Sp12	
^{19}Mg(2p)^{17}Ne	750	50				2					07Mu15	
^{18}C(n,γ)^{19}C	530	120	580	90	0.4	3					99Na27	$*$
	650	150			-0.5	3					01Ma08	$*$
^{18}O(^{18}O,^{17}F)^{19}N	-19374	50	-19374	16	0.0	2			Ors		81Na.A	
	-19334	35			-1.1	2			Can		89Ca25	
^{18}O(^{48}Ca,^{47}Sc)^{19}N	-16540	20	-16527	17	0.6	2			Can		83Ho08	
^{18}O(^{208}Pb,^{207}Bi)^{19}N	-18440	150	-18333	17	0.7	U			ChR		79Ba31	
^{18}O(d,p)^{19}O	1727	8	1731.1	2.6	0.5	o			Nob		54Mi89	Y
	1732	8			-0.1	2			CIT		54Th30	
	1731	5			0.0	2			Nob		57Ah19	Y
	1733	6			-0.3	2			Mex		64Ma.B	
	1727	5			0.8	2			MIT		64Sp12	Z
	1734	10			-0.3	U			Man		65Mo16	
^{19}F(^{3}He,α)^{18}F	10166	15	10145.7	0.5	-1.4	U			Ald		59Hi67	Y
^{19}Na(p)^{18}Ne	160	110	323	11	1.5	U					04Ze05	
	328	22			-0.2	1	23	23 ^{19}Na			10Mu12	
^{19}O(β^-)^{19}F	4800	12	4820.3	2.6	1.7	U					59Al06	
^{19}Ne(β^+)^{19}F	3262	10	3239.49	0.16	-2.3	U					60Wa04	
^{19}F(p,n)^{19}Ne	-4021.3	4.7	-4021.84	0.16	-0.1	U			Ric		55Ma84	
	-4019.6	1.4			-1.6	U			Ric		61Be13	Z
	-4021.1	1.0			-0.7	U			Zur		61Ry04	Z
	-4020.7	0.8			-1.4	U					66Ma60	
	-4019.6	0.7			-3.2	B					69Ov01	Z
^{19}F(^{3}He,t)^{19}Ne^i	-10759	9				2					98Ut02	$*$
$*^{19}$Mg$-$u	F : results distrusted (see also ^{15}F and ^{18}Na)										GAu	$**$
$*^{18}$C(n,γ)^{19}C	From Coulomb dissociation cross sections and angular distribution										99Na27	$**$
$*^{18}$C(n,γ)^{19}C	From momentum distribution following one neutron removal										01Ma08	$**$
$*^{19}$F(^{3}He,t)^{19}Ne^i	rebuilt from E_x =7500(9); with references from Ame1995; recalibrated +1keV										MMC141	$**$
^{20}C$-$u	39940	1210	40260	250	0.2	U			GA1	1.5	87Gi05	
	40360	240			-0.3	2			TO2	1.5	88Wo09	
	40165	491			0.1	2			GA3	1.5	91Or01	
	40420	550			-0.2	2			GA5	1.5	99Sa.A	
	40108	290			0.4	2			GA8	1.5	12Ga45	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.		Lab	F	Reference	
^{20}N−u	23230	280	23370	80	0.3	U				TO1	1.5	86Vi09	
	23210	150			0.7	2				GA1	1.5	87Gi05	
	23380	130			−0.1	2				TO2	1.5	88Wo09	
	23397	69			−0.3	2				GA3	1.5	91Or01	
C D$_4$−^{20}Ne	63966.9329	0.0026	63966.9363	0.0017	1.3	1	41	40	^{20}Ne	MI1	1.0	95Di08	
^{20}Ne−u	−7559.309	0.090	−7559.8238	0.0017	−2.3	U				OH1	2.5	93Ma.A	
	−7559.814	0.014			−0.7	U				ST2	1.0	02Bf02	
O D$_2$−^{20}Ne	30677.497	0.067	30677.9996	0.0017	3.0	B				OH1	2.5	93Go38	
^{20}Mg−^{23}Na$_{.870}$	27663.8	2.0				2				TT1	1.0	14Ga20	
^{20}Ne−^{22}Ne$_{.909}$	270.89	0.43	271.111	0.017	0.5	U				MA8	1.0	04Bl20	
	271.16	0.20			−0.2	U				MA8	1.0	08Ge07	
^{20}Ne(^{3}He,^{8}Li)^{15}F	−29960	200	−29623	14	1.7	U				MSU		78Be26	
	−29730	180			0.6	U				Brk		78Ke06	
^{20}Ne^i(α)^{16}O	5548.8	6.3	5542.6	2.0	−1.0	U						73To08	
^{20}Ne(α,^{8}He)^{16}Ne	−60150	80	−60213	20	−0.8	U				Brk		78Ke06	
	−60197	23			−0.7	R				Tex		83Wo01	
^{20}Ne(^{3}He,^{6}He)^{17}Ne	−26188	50	−26203.3	0.4	−0.3	U				Brk		70Me11	*
	−26158	32			−1.4	F						98Gu10	*
^{18}O(^{48}Ca,^{46}Sc)^{20}N	−25873	60	−25010	80	14.3	B				Can		89Or03	*
^{18}O(t,p)^{20}O	3086	15	3081.9	0.9	−0.3	U				LAl		60Ja13	
	3076	10			0.6	U				Ald		62Hi06	
	3082.4	1.9			−0.3	2				Str		82An12	
	3081.7	1.0			0.2	2				Str		85An17	
^{18}O(^{3}He,p)^{20}F	6875.2	1.5	6876.895	0.030	1.1	U				NDm		70Ro06	
^{18}O(^{3}He,p)^{20}F^i	356.0	3.0				2						76Mi01	*
^{20}Ne(d,α)^{18}F	2795	9	2795.8	0.5	0.1	U				Nob		54Mi61	Y
	2766	20			1.5	U				Mex		64Ma.B	
	2790	10			0.6	U						75Bo59	
^{19}F(n,γ)^{20}F	6601.1	0.3	6601.336	0.030	0.8	U				Utr		68Sp01	
	6601.29	0.14			0.3	2				ILn		83Hu12	Z
	6601.32	0.05			0.3	2				MMn		87Ke09	Z
	6601.35	0.04			−0.3	2				ORn		96Ra04	
	6601.34	0.13			0.0	2				Bdn		06Fi.A	
^{19}F(d,p)^{20}F	4377	7	4376.770	0.030	0.0	U				MIT		64Sp12	
	4377.7	0.9			−1.0	U				NDm		70Ro06	
^{19}F(p,γ)^{20}Ne^j	−3889.4	2.7				2						67Bl19	
^{20}Ne(^{3}He,α)^{19}Ne	3750	13	3712.32	0.16	−2.9	U				MIT		64Sp12	
^{20}Na^i(p)^{19}Ne	4381	50	4308.0	1.2	−1.5	U				Brk		79Mo02	
	4332	16			−1.5	U				MSU		92Go10	
	4326	30			−0.6	U				Lis		95Pi03	
^{20}F(β^-)^{20}Ne	7053	13	7024.467	0.030	−2.2	U						54Wo23	*
	7050	15			−1.7	U						59Al06	*
	7032	6			−1.3	U						76Ge08	*
	7026.9	1.8			−1.4	U						87Va20	*
	7019.8	1.7			2.7	U						89He11	*
^{20}Ne^i(IT)^{20}Ne	10274	3	10272.5	2.0	−0.5	2						76In06	
	10271.2	2.7			0.5	2						77Fi08	
^{20}Na(β^+)^{20}Ne	13906	40	13892.5	1.1	−0.3	U						67Su05	
^{20}Ne(p,n)^{20}Na	−14672.1	7.	−14674.9	1.1	−0.4	U						71Wi07	Z
^{20}Ne(^{3}He,t)^{20}Na−^{36}Ar()^{36}K	−1078.06	1.06	−1078.1	1.1	0.0	1	100	100	^{20}Na	Mun		10Wr01	
^{20}Na^i(IT)^{20}Na	6498.4	0.5				2						15Gl03	

*^{20}Ne(^{3}He,^{6}He)^{17}Ne	Original $M-A$=16479(50) but revised calibrator M(^{9}C)=28910.2(2.1)	AHW	**
*^{20}Ne(^{3}He,^{6}He)^{17}Ne	F : calibrated with ^{24}Mg(^{3}He,^{6}He) from reference for excitation energies	92Ku02	**
*	no details given. No correction possible	GAu	**
*^{18}O(^{48}Ca,^{46}Sc)^{20}N	Probably to excited levels in ^{20}N and ^{46}Sc	GAu	**
*^{18}O(^{3}He,p)^{20}F^i	IT=6519.4(3.0), Q rebuilt with Ame1971	MMC122	**
*^{20}F(β^-)^{20}Ne	E_{β^-}=5419(13) 5416(15) 5398(6) 5392.3(1.8) 5386.1(1.7) respectively,	GAu	**
*	to 2$^+$ level at 1633.674 keV	Ens992	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{21}N−u		26580	200	27090	140	1.7	U			TO1	1.5	86Vi09	
		27060	190			0.1	2			GA1	1.5	87Gi05	
		26930	210			0.5	2			TO2	1.5	88Wo09	
		27162	131			−0.4	2			GA3	1.5	91Or01	
^{21}Na−^{39}K$_{.538}$		17180.51	0.29	17180.61	0.11	0.4	o			MA8	1.0	04Mu26	
		17180.51	0.29			0.2	U			Ma8	1.5	08Mu05	*
H$_3$ ^{18}O−^{21}Ne		28787.76	0.25	28788.02	0.04	1.1	U			CP1	1.0	04Sa53	*
^{21}Na−^{23}Na$_{.913}$		6995.25	0.32	6995.35	0.11	0.3	o			MA8	1.0	04Mu26	
		6995.25	0.32			0.2	U			Ma8	1.5	08Mu05	
^{21}Mg−^{23}Na$_{.913}$		21046.41	0.81				2			TT1	1.0	14Ga20	
^{21}Ne−^{22}Ne$_{.955}$		2073.82	0.40	2073.91	0.05	0.2	U			MA8	1.0	04Bl20	
		2074.04	0.26			−0.5	U			MA8	1.0	08Ge07	
^{21}Na−^{21}Ne		3808.017	0.097	3808.02	0.10	0.0	1	100	100 ^{21}Na	MS1	1.0	15Ei01	
^{21}Na−^{20}Na		−9732	50	−9699.7	1.2	0.3	U			CR1	2.5	89Sh10	
^{18}O(^{18}O,^{15}O)^{21}O		−12574	70	−12483	12	1.3	U			Ors		78Na02	
		−12499	20			0.8	2			Can		89Ca25	
^{18}O(^{64}Ni,^{61}Ni)^{21}O		−11713	15	−11722	12	−0.6	2			Dar		85Wo01	
^{18}O(^{208}Pb,^{205}Pb)^{21}O		−6860	75	−6823	12	0.5	U			ChR		79Ba31	
^{19}F(t,p)^{21}F		6221.0	1.8				2			Str		84An17	
^{19}F(^{3}He,p)^{21}Ne		11911	15	11886.58	0.04	−1.6	U			Ald		59Hi75	Y
^{20}Ne(n,γ)^{21}Ne		6760.8	1.5	6761.16	0.04	0.2	U					70Se14	
		6761.16	0.04			0.1	–			MMn		86Pr05	Z
		6761.19	0.14			−0.2	–			Bdn		06Fi.A	
^{20}Ne(d,p)^{21}Ne		4531	9	4536.60	0.04	0.6	U			Nob		55Ah41	Y
		4532	6			0.8	U			Mex		64Ma.B	
		4534	7			0.4	U			MIT		64Sp12	
^{20}Ne(n,γ)^{21}Ne	ave.	6761.16	0.04	6761.16	0.04	0.0	1	100	100 ^{21}Ne			average	
^{20}Ne(p,γ)^{21}Na		2431.2	0.7	2431.67	0.10	0.7	U					69Bl03	Z
^{20}Ne(p,γ)^{21}Na^i		−6547.9	14.3	−6543	4	0.3	U					81Fe05	
^{21}Na^i(p)^{20}Ne		6543	4				2					73Se08	*
^{21}O(β^-)^{21}F		8150	175	8110	12	−0.2	U					81Al07	
^{21}Na(β^+)^{21}Ne		3522	30	3547.14	0.09	0.8	U					52Sc15	
		3532	20			0.8	U					60Wa04	
*^{21}Na−^{39}K$_{.538}$	CF=1.5 for prelim. results; not trusted within given uncertainties											GAu	**
*H$_3$ ^{18}O−^{21}Ne	D_M=28787.78(0.25) corrected –0.02 keV for molecular and ionization											04Sa53	**
*^{21}Na^i(p)^{20}Ne	Q_p=6548(4), 4904(4) to ground state and 2$^+$ level at 1633.674 keV											Ens992	**
^{22}C−u		57585	408	57550	250	−0.1	U			GA8	1.5	12Ga45	
^{22}N−u		32990	790	34100	220	0.9	U			GA1	1.5	87Gi05	
		34340	250			−0.6	2			TO2	1.5	88Wo09	
		34683	389			−1.0	2			GA3	1.5	91Or01	
		34240	320			−0.3	2			GA5	1.5	99Sa.A	
		33398	279			1.7	2			GA8	1.5	12Ga45	
^{22}O−u		9842	81	9970	60	1.0	R			GA3	1.5	91Or01	
^{22}Ne−u		−8614.885	0.019	−8614.890	0.019	−0.3	1	99	99 ^{22}Ne	ST2	1.0	02Bf02	
^{22}Na−^{39}K$_{.564}$		14907.33	0.30	14906.96	0.18	−1.2	o			MA8	1.0	04Mu26	
		14907.33	0.30			−0.8	1	17	17 ^{22}Na	Ma8	1.5	08Mu05	
^{22}Mg−^{39}K$_{.564}$		20040.33	0.35	20040.2	0.3	−0.4	o			MA8	1.0	04Mu26	
		20040.33	0.35			−0.3	1	41	41 ^{22}Mg	Ma8	1.5	08Mu05	
O H−^{22}Ne$_{.773}$		9398.87	0.19	9398.962	0.015	0.5	U			MA8	1.0	08Ge07	
^{22}Na−^{24}Mg$_{.917}$		8153.64	0.31	8154.18	0.18	1.7	o			MA8	1.0	04Mu26	
		8153.64	0.31			1.2	1	16	16 ^{22}Na	Ma8	1.5	08Mu05	
^{22}Na−^{23}Na$_{.957}$		4228.11	0.29	4228.22	0.18	0.4	o			MA8	1.0	04Mu26	
		4228.11	0.29			0.2	1	18	18 ^{22}Na	Ma8	1.5	08Mu05	
^{22}Na−^{22}Ne		3052.75	0.33	3052.31	0.18	−1.3	1	31	31 ^{22}Na	CP1	1.0	04Sa53	*

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{22}Mg$-^{22}$Ne	8185.79	0.73	8185.5	0.3	−0.3	1	21	21 ^{22}Mg	CP1	1.0	04Sa53	*
^{22}Mg$-^{22}$Na	5132.99	0.34	5133.2	0.3	0.7	o			MA8	1.0	04Mu26	
	5132.99	0.34			0.5	1	46	38 ^{22}Mg	Ma8	1.5	08Mu05	
^{22}Ne$-^{20}$Ne	−1056.415	0.290	−1055.066	0.019	1.9	U			OH1	2.5	93Go38	
^{18}O(^{18}O,^{14}O)^{22}O	−19060	100	−18860	60	2.0	2			Can		76Hi10	
^{18}O(^{208}Pb,^{204}Pb)^{22}O	−6710	180	−6700	60	0.0	2			ChR		79Ba31	
^{22}Mg^i(α)^{18}Ne	5885	40	5902	6	0.4	U			Bor		97Bl03	*
	5904	8			−0.3	1	60	60 ^{22}Mg^i	Bor		06Ac04	*
^{19}F(α,p)^{22}Ne	1674	11	1673.219	0.018	−0.1	U			MIT		64Sp12	
^{19}F(α,n)^{22}Na	−1958	10	−1952.33	0.17	0.6	U			Duk		60Wi07	Y
^{22}C(γ,2n)^{20}C	−200	120	−35	20	1.4	o					11Ya25	*
	−110	60			1.2	U					12Fo04	*
	−35	20				3					13Mo12	*
^{20}Ne(^{3}He,n)^{22}Mg	197	25	217.9	0.3	0.8	U			Har		68Ad03	
	209	11			0.8	U			CIT		70Mc06	
^{22}Mg^i(2p)^{20}Ne	6098	13	6108	6	0.8	1	23	23 ^{22}Mg^i			06Ac04	*
^{22}Ne(t,α)^{21}F	4545	10	4547.8	1.8	0.3	U			LAl		61Si03	Y
^{21}Ne(n,γ)^{22}Ne	10364.4	0.3	10364.26	0.04	−0.5	U			MMn		86Pr05	Z
	10363.9	0.5			0.7	U			Bdn		06Fi.A	
^{21}Ne(d,p)^{22}Ne	8152	11	8139.69	0.04	−1.1	U			CIT		52Mi54	Y
^{21}Ne(p,γ)^{22}Na	6739.0	0.7	6738.71	0.18	−0.4	U					70An06	*
^{22}Mg^i(p)^{21}Na	8547	15	8540	6	−0.5	1	17	17 ^{22}Mg^i	Brk		82Ca16	*
^{22}F(β^-)^{22}Ne	11000	150	10818	12	−1.2	U					73Gu05	
	10950	120			−1.1	U			ANB		74Da02	
^{22}Ne(t,^{3}He)^{22}F	−10788	33	−10799	12	−0.3	2					69St07	*
	−10794	18			−0.3	2			Dar		88Cl04	*
^{22}Ne(^{7}Li,^{7}Be)^{22}F	−11691	20	−11680	12	0.6	2			Can		89Or04	*
^{22}Na(β^+)^{22}Ne	2842.2	0.5	2843.21	0.17	2.0	1	12	12 ^{22}Na			68Be35	*
	2840.4	1.5			1.9	U					68We02	*
	2841.5	1.0			1.7	U					72Gi17	*
*^{22}Na$-^{22}$Ne	D_M=3052.79(0.33) μu, $M-A$=–5181.06(0.31) keV; corrected –0.04 keV for										04Sa53	**
*	ion-ion interaction										04Sa53	**
*^{22}Mg$-^{22}$Ne	D_M=8185.84(0.73) μu, $M-A$=–399.65(0.68) keV; corrected –0.05 keV for										04Sa53	**
*	ion-ion interaction										04Sa53	**
*^{22}Mg^i(α)^{18}Ne	E_α=3270(40) to 2$^+$ level at 1887.3 keV										Ens967	**
*^{22}Mg^i(α)^{18}Ne	Q_α=4017(8) to 2$^+$ level at 1887.3 keV										Ens967	**
*^{22}C(γ,2n)^{20}C	From upper limit S_{2n}<400										GAu	**
*^{22}C(γ,2n)^{20}C	From upper limit S_{2n}<220										GAu	**
*^{22}C(γ,2n)^{20}C	The two items are estimates derived from the experimental result of reference										10Ta04	**
*^{22}C(γ,2n)^{20}C	From upper limit S_{2n}<70										GAu	**
*^{22}Mg^i(2p)^{20}Ne	Original Q_{2p}=4464(8) to 1633.674(0.015) level										06Ac04	**
*^{22}Mg^i(2p)^{20}Ne	Estimated systematic 10 keV uncertainty added										16Ma.A	**
*^{21}Ne(p,γ)^{22}Na	T=701.8(0.5) to 1$^+$ level at 7408.6(0.5) keV										Ens157	**
*^{21}Ne(p,γ)^{22}Na	Reanalysis using E(exc) for lower levels of reference										90En08	**
*^{22}Mg^i(p)^{21}Na	E_p=8149(21), 7839(15) to 3/2$^+$ ground state, 5/2$^+$ level at 331.90 keV										Ens04c	**
*^{22}Ne(t,^{3}He)^{22}F	Original value –10834(30) re-calculated from Q to										GAu	**
*	(2$^+$) level at 709.1, 1$^+$ at 1627.1 and 1$^+$ at 2571.7 keV										Ens157	**
*^{22}Ne(t,^{3}He)^{22}F	Original value –10836(12) re-calculated										GAu	**
*^{22}Ne(^{7}Li,^{7}Be)^{22}F	Q =–12400(20) to (2$^+$) level at 709.1 keV										Ens157	**
*^{22}Na(β^+)^{22}Ne	$E_{\beta+}$=545.7(0.5) 543.9(1.5) 545(1) respectively, to 2$^+$ level at 1274.537 keV										Ens157	**
^{23}N$-$u	37110	2000	39420	450	0.8	o			GA5	1.5	99Sa.A	
	39378	923			0.0	U			GA7	1.5	07Ju03	
	39421	301				2			GA8	1.5	12Ga45	
^{23}O$-$u	15700	320	15700	130	0.0	o			TO1	1.5	86Vi09	
	15860	320			−0.3	o			GA1	1.5	87Gi05	
	15700	150			0.0	2			TO2	1.5	88Wo09	
	15621	186			0.3	o			GA3	1.5	91Or01	
	15695	107			0.0	2			GA7	1.5	07Ju03	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.		Lab	F	Reference	
^{23}F−u		3530	210	3530	40	0.0	U				TO1	1.5	86Vi09	
		3553	43			−0.4	–				GT1	1.5	04Ma.A	
		3503	48			0.5	–				LZ1	1.0	15Xu14	
	ave.	3520	40			0.2	1	86	86	^{23}F			average	
^{23}Na−u		−10230.721	0.0037	−10230.7180	0.0019	0.8	–				MI2	1.0	99Br47	
		−10230.716	0.0048			−0.4	–				MI2	1.0	99Br47	
		−10230.7172	0.0026			−0.3	–				FS1	1.0	10Mo30	
	ave.	−10230.7181	0.0019			0.0	1	100	100	^{23}Na			average	
^{23}Ne−^{22}Ne$_{1.045}$		3469.59	0.37	3469.46	0.11	−0.3	U				MA8	1.0	04Bl20	
^{23}Mg−^{23}Na		4354.80	0.83	4354.66	0.17	−0.2	U				JY1	1.0	09Sa38	
		4354.66	0.17				2				TT1	1.0	14Sc09	
^{23}Al−^{23}Na		17475.07	0.37				2				JY1	1.0	09Sa38	
^{23}Na(p,α)^{20}Ne		2377	3	2376.1331	0.0024	−0.3	U				Wis		53Do04	Y
		2373	8			0.4	U				MIT		64Sp12	
^{23}Na(d,α)^{21}Ne		6911	9	6912.73	0.04	0.2	U				Mex		64Ma.B	
		6909	10			0.4	U				MIT		64Sp12	
^{22}Ne(^{18}O,^{17}F)^{23}F		−14080	90	−14040	30	0.4	1	14	14	^{23}F	Can		89Or04	
^{22}Ne(n,γ)^{23}Ne		5200.2	2.0	5200.65	0.10	0.2	U						70Se14	
		5200.65	0.12			0.0	2				MMn		86Pr05	Z
		5200.64	0.20			0.0	2				Bdn		06Fi.A	
^{22}Ne(d,p)^{23}Ne		2967	8	2976.08	0.10	1.1	U				Nob		54Ah20	Y
		2971	9			0.6	o				MIT		60Fr04	
		2974	6			0.3	U				Mex		64Ma.B	
		2968	7			1.2	U				MIT		64Sp12	
^{22}Ne(p,γ)^{23}Na		8794.0	1.5	8794.105	0.018	0.1	U						71Pi08	Z
		8794.26	0.17			−0.9	U						89Ba42	Z
^{22}Ne(p,γ)^{23}Na^{j}		−10796.3	2.0				2						85Ev01	*
^{23}Al^{i}(p)^{22}Mg		11644	57				2				Bor		97Bl04	*
^{23}F(β^-)^{23}Ne		8510	170	8440	30	−0.4	U						74Go17	
^{23}Ne(β^-)^{23}Na		4383	8	4375.80	0.10	−0.9	U						63Ca06	
^{23}Mg(β^+)^{23}Na		4121	12	4056.34	0.16	−5.4	B						63Fr10	
^{23}Na(p,n)^{23}Mg		−4832	10	−4838.69	0.16	−0.7	U				Oak		55Ki28	Z
		−4836.5	6.			−0.4	U				Ric		58Bi41	Y
		−4848.0	7.			1.3	U				ChR		58Go77	Y
		−4835.8	2.5			−1.2	U				Har		62Fr09	Z
		−4843.2	5.1			0.9	U				Tkm		63Ok01	Z
*^{22}Ne(p,γ)^{23}Na^{j}	Original E_{res}=–10793.6(2.0) is a typo												16Ma.A	**
*^{23}Al^{i}(p)^{22}Mg	Q_p=11620(100), 10410(70) to ground state and 2^+ level at 1247.02 keV												Ens157	**
*	also Q_{2p}=6180(100), 5860(100) to ground state and 331.90 level in ^{21}Na												97Bl04	**
^{24}O−u		20080	1070	19860	180	−0.1	o				GA1	1.5	87Gi05	
		20000	500			−0.2	U				TO2	1.5	88Wo09	
		20659	442			−1.2	o				GA3	1.5	91Or01	
		20460	340			−1.2	o				GA5	1.5	99Sa.A	
		19861	118				2				GA7	1.5	07Ju03	
^{24}F−u		8070	170	8100	100	0.1	U				TO1	1.5	86Vi09	
		8450	240			−1.0	U				GA1	1.5	87Gi05	
		8135	86			−0.3	2				GA3	1.5	91Or01	
		8030	120			0.4	2				TO4	1.5	91Zh24	
^{24}Mg−H$_{24}$		−202759.080	0.014	−202759.076	0.014	0.3	1	98	98	^{24}Mg	ST2	1.0	03Be02	
^{24}Ne−^{22}Ne$_{1.091}$		3009.49	0.55				2				MA8	1.0	04Bl20	
^{24}Mg−^{23}Na$_{1.043}$		−4287.23	0.32	−4287.664	0.014	−0.9	U				Ma8	1.5	08Mu05	
^{24}Al−^{23}Na$_{1.043}$		10618.18	0.25				2				TT1	1.0	15Ch58	
^{24}Mg(p,^{6}He)^{19}Na		−37213	70	−37166	11	0.7	U				Brk		69Ce01	
^{24}Mg(^{3}He,^{8}Li)^{19}Na		−32876	12	−32878	11	−0.1	1	77	77	^{19}Na	MSU		75Be38	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{24}Mg(α,^{8}He)^{20}Mg	−60900	210	−60596.0	1.9	1.4	U					74Ro17	
	−60677	27			3.0	B			Tex		76Tr03	
^{24}Mg(^{3}He,^{6}He)^{21}Mg	−27488	40	−27498.3	0.8	−0.3	U			Brk		70Me11	
	−27512	18			0.8	U			MSU		71Tr03	
^{22}Ne(t,p)^{24}Ne	5587	10	5587.8	0.5	0.1	U			LAl		61Si03	Z
^{24}Mg(d,α)^{22}Na	1955	12	1958.75	0.17	0.3	U			MIT		64Sp12	
^{24}Mg(p,t)^{22}Mg	−21194	3	−21194.5	0.3	−0.2	U			MSU		74Ha02	
	−21198.3	1.5			2.5	U			MSU		74No07	
	−21193.9	1.0			−0.6	U			Yal		05Pa31	
^{23}Na(n,γ)^{24}Na	6959.50	0.12	6959.365	0.016	−1.1	o			BNn		74Gr37	Z
	6959.42	0.07			−0.8	2			BNn		80Gr12	*
	6959.67	0.14			−2.2	U			ILn		83Hu11	Z
	6959.38	0.08			−0.2	U			Ptn		83Ti02	
	6959.44	0.05			−1.5	2			ORn		04To03	
	6959.59	0.14			−1.6	o			Bdn		06Fi.A	
	6959.352	0.018			0.7	2			Bdn		14Fi01	
^{23}Na(d,p)^{24}Na	4735	7	4734.799	0.016	0.0	U			CIT		52Mi54	Y
	4736	5			−0.2	U			Mex		64Ma.B	
	4736	7			−0.2	U			MIT		64Sp12	
^{23}Na(p,γ)^{24}Mg	11692.95	0.17	11692.687	0.013	−1.5	U			Wis		67Mo17	Z
	11691.2	1.1			1.4	U					72Me09	
	11692.43	0.31			0.8	U					85Uh01	Z
^{24}Mg(p,d)^{23}Mg	−14307.5	1.5	−14306.81	0.16	0.5	U			MSU		74No07	
^{24}Mg(^{3}He,α)^{23}Mg	4051	15	4046.25	0.16	−0.3	U			Man		59Ba13	Y
^{24}Mg(^{7}Li,^{8}He)^{23}Al	−37397	27	−37384.2	0.4	0.5	U					01Ca37	
^{24}Al^{i}(p)^{23}Mg	4086	9	4085	3	−0.1	3			Brk		79Ay01	
	4084.5	3.5			0.1	3			MSU		80Le18	
	4093	20			−0.4	U			Bor		98Cz01	
^{24}Ne(β^-)^{24}Na	2449	50	2466.3	0.5	0.3	U					56Dr11	
^{24}Na(β^-)^{24}Mg	5511.8	2.	5515.669	0.021	1.9	U					61De25	*
	5515.8	2.			−0.1	U					64Le09	*
	5516.8	2.			−0.6	U					65Be24	*
	5511.5	1.0			4.2	B					69Bo48	*
	5511.8	2.			1.9	U					72Gi17	*
	5512.5	1.2			2.6	U					76Ge06	*
^{24}Al(β^+)^{24}Mg	13880	50	13884.70	0.23	0.1	U					68Ar03	
^{24}Mg(p,n)^{24}Al	−14659.0	2.8	−14667.05	0.23	−2.9	B			Yal		69Ov01	Z
^{24}Mg(^{3}He,t)^{24}Al	−13880	60	−13903.30	0.23	−0.4	U			Brk		66Ma18	
^{24}Mg(^{3}He,t)^{24}Al−^{36}Ar()^{36}K	−1071.48	1.05	−1070.2	0.4	1.2	U			Mun		10Wr01	
^{24}Mg(π^+,π^-)^{24}Si	−23594	52	−23657	19	−1.2	2					80Bu15	
*^{23}Na(n,γ)^{24}Na	Original value (,Z) increased by 0.037 for better recoil correction										AHW	**
*^{24}Na(β^-)^{24}Mg	E_{β^-}=1389(2) 1393(2) 1394(2) 1388.7(1.0) 1389(2) 1389.7(1.2) respectively,										GAu	**
*	to 4$^+$ level at 4122.889 keV										Ens07a	**
^{25}F−u	12010	220	12170	100	0.5	o			TO1	1.5	86Vi09	
	12010	290			0.4	o			GA1	1.5	87Gi05	
	12210	150			−0.2	2			TO2	1.5	88Wo09	
	12120	151			0.2	o			GA3	1.5	91Or01	
	11990	130			0.9	2			TO4	1.5	91Zh24	
	12249	97			−0.6	2			GA7	1.5	07Ju03	
^{25}Ne−u	−2293	32	−2190	30	3.4	F			P40	1.0	01Lu20	*
	−2166	41			−0.5	1	58	58 ^{25}Ne	LZ1	1.0	15Xu14	
^{25}Al−^{25}Mg	4591.342	0.048	4591.34	0.05	0.0	1	100	100 ^{25}Al	JY1	1.0	16Ca22	
^{25}Mg(p,α)^{22}Na	−3151	8	−3147.22	0.18	0.5	U			MIT		59Br74	Y
^{23}Na(t,p)^{25}Na	7488.8	1.2				2			Str		84An17	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{25}Mg(d,α)^{23}Na		7026	13	7047.88	0.05	1.7	U			MIT		64Sp12	
		7048	10			0.0	U					67Ha17	
^{25}O(γ,n)^{24}O		776	15	757	8	−1.2	3					08Ho03	*
		740	40			0.4	U					13Ca18	*
		749	10			0.8	3					16Ko11	
^{24}Mg(n,γ)^{25}Mg		7330.5	9.99	7330.53	0.05	0.0	U					69Ha.A	
		7330.5	0.3			0.1	U			MMn		80Is02	Z
		7330.78	0.14			−1.8	U			ILn		82Hu02	Z
		7330.4	0.2			0.7	U			MMn		85Ke.A	
		7330.64	0.08			−1.4	–			MMn		90Pr02	Z
		7330.69	0.05			−3.2	B			ORn		92Wa06	
		7330.53	0.15			0.0	–			Bdn		06Fi.A	
^{24}Mg(d,p)^{25}Mg		5098	12	5105.96	0.05	0.7	U			Har		61Hi11	Y
		5112	12			−0.5	U			Mex		61Ja23	
		5102	7			0.6	U			MIT		64Sp12	
^{24}Mg(n,γ)^{25}Mg	ave.	7330.62	0.07	7330.53	0.05	−1.2	1	45	43 ^{25}Mg			average	
^{24}Mg(p,γ)^{25}Al		2271.6	1.1	2271.38	0.07	−0.2	U					71Ev01	Z
		2271.7	0.7			−0.5	U					72Pi07	Z
		2271.4	0.8			0.0	U					85Uh01	Z
^{24}Mg(^{3}He,d)^{25}Al		−3218.0	4.5	−3222.10	0.07	−0.9	U			NDm		73Br27	
^{24}Mg(p,γ)^{25}Al^i		−5629.3	5.8	−5629.7	1.8	−0.1	U					68Te01	*
^{25}Ne(β^-)^{25}Na		7380	300	7322	29	−0.2	U					73Go11	
^{25}Na(β^-)^{25}Mg		3650	250	3835.0	1.2	0.7	U					54Na18	
		4000	200			−0.8	U					55Ma63	
^{25}Al(β^+)^{25}Mg		4292	30	4276.81	0.04	−0.5	U					60Wa04	
^{25}Mg(p,n)^{25}Al		−5058	6	−5059.15	0.04	−0.2	U			Har		69Fr08	
^{25}Al^i(IT)^{25}Al		7901	2	7901.1	1.8	0.1	1	85	85 ^{25}Al^i			77Ro03	
*^{25}Ne−u	F : rejected by authors: "unreliable double peak"											06Ga04	**
*^{25}O(γ,n)^{24}O	Symmetrized from 770(+20–10)											08Ho03	**
*^{25}O(γ,n)^{24}O	Symmetrized from 725(+54–29)											13Ca18	**
*^{24}Mg(p,γ)^{25}Al^i	IT=7916(6), Q rebuilt with Ame1964, error estimated by evaluator											GAu	**
^{26}F−u		19800	1000	20020	120	0.1	o			TO1	1.5	86Vi09	
		20940	640			−1.0	o			GA1	1.5	87Gi05	
		19820	210			0.6	2			TO2	1.5	88Wo09	
		19544	300			1.1	o			GA3	1.5	91Or01	
		19490	210			1.7	U			TO4	1.5	91Zh24	
		20054	86			−0.3	2			GA7	1.5	07Ju03	
^{26}Ne−u		448	90	516	20	0.5	2			GA3	1.5	91Or01	
		461	33			1.7	o			P40	1.0	01Lu20	
		518	20			−0.1	2			P40	1.0	06Ga04	
^{26}Na−u		−7367	7	−7365	4	0.2	o			P40	1.0	01Lu17	
		−7365	4			−0.1	2			P40	1.0	06Ga04	*
		−7368	11			0.2	2			P40	1.0	06Ga04	
^{26}Mg−H_{26}		−220857.848	0.034	−220857.87	0.03	−0.5	1	89	89 ^{26}Mg	ST2	1.0	03Be02	
^{26}Al−^{23}Na$_{1.130}$		−1547.46	0.24	−1547.43	0.07	0.1	U			MA8	1.0	08Ge08	
^{26}Si−^{23}Na$_{1.13}$		3895.1	2.1	3894.52	0.12	−0.3	U			MS1	1.0	10Kw02	
^{26}Al−^{25}Mg$_{1.040}$		1621.46	0.48	1621.42	0.06	−0.1	U			JY1	1.0	06Er08	
^{26}Al^m−^{25}Mg$_{1.040}$		1867.09	0.53	1866.52	0.06	−1.1	U			JY1	1.0	06Er08	
^{26}Al−^{26}Mg		4299.14	0.17	4298.89	0.07	−1.5	1	16	15 ^{26}Al	JY1	1.0	06Er08	
^{26}Al^m−^{26}Mg		4544.09	0.17	4543.99	0.07	−0.6	1	16	16 ^{26}Al^m	JY1	1.0	06Er08	
^{26}Al^m−^{26}Al		245.09	0.17	245.096	0.014	0.0	U			JY1	1.0	06Er08	
		244.91	0.14			1.3	U			JY1	1.0	09Er02	
		245.114	0.049			−0.4	U			JY1	1.0	09Er07	
^{26}Si−^{26}Al		5441.97	0.14	5441.94	0.09	−0.2	2			JY1	1.0	09Er02	
		5441.92	0.12			0.2	2			JY1	1.0	09Er02	*

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{25}Na$-^{26}$Na$_{.721}$ ^{22}Na$_{.284}$		−2881	33	−2939.6	2.8	−1.8	U			P13	1.0	75Th08	
		−2921	22			−0.8	U			P13	1.0	75Th08	
^{26}Al(n,α)^{23}Na		2966.5	2.5	2966.10	0.07	−0.2	U					01Wa50	
^{23}Na(α,n)^{26}Al		−2968	4	−2966.10	0.07	0.5	U			Duk		60Wi07	Y
^{26}O(γ,2n)^{24}O		90	110	18	5	−0.7	U					12Lu07	*
		18	5				3					16Ko11	
^{24}Mg(t,p)^{26}Mg		9940	12	9941.81	0.03	0.2	U			Har		61Hi11	Y
^{24}Mg(^{3}He,p)^{26}Al		5932	15	5918.83	0.07	−0.9	U			Ald		59Hi66	Y
		5922	8			−0.4	U			Phi		72Be51	
^{24}Mg(^{3}He,n)^{26}Si		85	18	67.35	0.11	−1.0	U			CIT		67Mi02	
		75	30			−0.3	U					67Mc03	
		95	15			−1.8	U			Har		68Ad03	
		65	30			0.1	U			Ber		68Ha09	
^{26}Mg(^{7}Li,^{8}B)^{25}Ne		−22050	100	−22194	29	−1.4	–			Brk		73Wi06	
^{26}Mg(^{13}C,^{14}O)^{25}Ne		−19067	50	−19062	29	0.1	–			Can		85Wo04	
^{26}Mg(^{7}Li,^{8}B)^{25}Ne	ave.	−22170	40	−22194	29	−0.5	1	42	42 ^{25}Ne			average	
^{26}Mg(d,^{3}He)^{25}Na		−8653	10	−8652.2	1.2	0.1	U			MSU		73Be14	
^{26}Mg(t,α)^{25}Na		5664	12	5668.2	1.2	0.3	U			Ald		62Hi01	
^{25}Mg(n,γ)^{26}Mg		11092.9	0.3	11093.08	0.04	0.6	U			MMn		80Is02	
		11091.84	0.44			2.8	U			ILn		82Hu02	Z
		11093.10	0.06			−0.4	1	55	46 ^{25}Mg	MMn		90Pr02	Z
		11093.17	0.06			−1.6	o			ORn		91Ki04	Z
		11093.23	0.05			−3.1	B			ORn		92Wa06	Z
		11093.16	0.22			−0.4	U			Bdn		06Fi.A	
^{25}Mg(d,p)^{26}Mg		8865	12	8868.51	0.04	0.3	U			Ald		61Hi11	Y
		8876	12			−0.6	U			Mex		61Ja23	
		8889	12			−1.7	U			MIT		64Sp12	
^{25}Mg(p,γ)^{26}Al		6305.0	1.2	6306.34	0.06	1.1	U					74De37	
		6304.9	1.1			1.3	U					79El11	
		6306.39	0.11			−0.5	–					85Be17	Z
		6306.38	0.08			−0.5	–			Utr		91Ki04	Z
	ave.	6306.38	0.06			−0.7	1	75	64 ^{26}Al			average	
^{26}Si^i(p)^{25}Al		7563	15	7553	11	−0.6	2			Brk		83Ca06	
		7544	15			0.6	2			Brk		83Ho23	*
^{26}Mg(π^-,π^+)^{26}Ne		−17676	72	−17718	18	−0.6	U					80Na12	
^{26}Na(β^-)^{26}Mg		9210	200	9354	4	0.7	U					73Al13	
^{26}Mg(t,^{3}He)^{26}Na		−9292	20	−9335	4	−2.2	U			LAl		74Fl01	
^{26}Mg(^{7}Li,^{7}Be)^{26}Na		−10182	40	−10216	4	−0.8	U			ChR		72Ba35	*
^{26}Al(β^+)^{26}Mg		3991	8	4004.39	0.06	1.7	U					58Fe16	*
^{26}Mg(p,n)^{26}Al		−4786.7	10.	−4786.74	0.06	0.0	U			Oak		55Ki28	*
		−4787.04	0.48			0.6	U			Utr		69De27	
		−4786.1	1.6			−0.4	U			Har		69Fr08	*
		−4785.66	0.22			−4.9	C			Auc		84Ba.B	*
		−4786.57	0.05			−3.4	C			Auc		92Ba.A	*
		−4786.25	0.12			−4.1	B			Auc		94Br11	*
^{26}Mg(^{3}He,t)^{26}Al		−4023.0	0.6	−4022.98	0.06	0.0	F			Mun		77Vo02	*
^{26}Mg(^{3}He,t)^{26}Al$-^{27}$Al()^{27}Si		808.2	2.0	807.97	0.12	−0.1	U			ChR		74Ha35	
^{26}Mg(^{3}He,t)^{26}Al$-^{14}$N()^{14}O		1139.43	0.13	1139.97	0.07	4.2	B			ChR		87Ko34	*
^{26}Al^m(IT)^{26}Al		228.305	0.013	228.306	0.013	0.0	1	99	84 ^{26}Al^m			Ens164	
^{26}Si(β^+)^{26}Al		5079	13	5069.14	0.08	−0.8	U					63Fr10	
*^{26}Na$-$u	Result from the "Thermo" experiment. Next item from "Rilis"											06Ga04	**
*^{26}Si$-^{26}$Al	D_M=5196.82(0.12) μu for ^{26}Al^m at 228.306(0.013); $M-A$=–7141.05(0.13) keV											Nub16b	**
*^{26}O(γ,2n)^{24}O	Symmetrized from 150(+50–150) keV											12Lu07	**
*^{26}O(γ,2n)^{24}O	less than 40 keV											13Ca18	**
*^{26}Si^i(p)^{25}Al	E_p=3699(15) to 3695.5 level; different from preceeding data											Ens098	**
*^{26}Mg(^{7}Li,^{7}Be)^{26}Na	Q =–10222(30) corrected for contribution of unresolved 82.2 level											Ens164	**
*^{26}Al(β^+)^{26}Mg	E_{β^+}=1160(8) to 2$^+$ level at 1808.74 level											Ens164	**
*^{26}Mg(p,n)^{26}Al	T=5191(10,Z) to ^{26}Al^m at 228.306 keV											Nub16b	**
*^{26}Mg(p,n)^{26}Al	T=5209.3(1.6,Z) to ^{26}Al^m at 228.306 keV											Nub16b	**
*^{26}Mg(p,n)^{26}Al	T=5208.86(0.23) to ^{26}Al^m at 228.306 keV											Nub16b	**
*^{26}Mg(p,n)^{26}Al	T=5209.71(0.05) to ^{26}Al^m at 228.306 keV											Nub16b	**
*^{26}Mg(p,n)^{26}Al	T=5209.46(0.12) to ^{26}Al^m at 228.306 keV											Nub16b	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
$*^{26}$Mg(^{3}He,t)^{26}Al	Q =–4251.3(0.6,Z) to ^{26}Al^m at 228.306 keV										Nub16b	**
$*^{26}$Mg(^{3}He,t)^{26}Al	F : rejected in reference of same group										09Fa15	**
$*^{26}$Mg(^{3}He,t)^{26}Al$-^{14}$N()^{14}O	Q(to 1057.740(0.023) level)-^{14}N()^{14}O=81.69(0.13)										82Al19	**
^{27}F$-$u	27500	700	27320	420	-0.2	U			TO2	1.5	88Wo09	
	26005	770			1.1	U			GA3	1.5	91Or01	
	27100	900			0.2	U			TO4	1.5	91Zh24	
	26900	580			0.5	o			GA5	1.5	99Sa.A	
	26441	204			2.9	B			GA7	1.5	07Ju03	
	27322	279				2			GA8	1.5	12Ga45	
^{27}Ne$-$u	6010	640	7570	100	1.6	F			TO1	1.5	86Vi09	*
	7470	300			0.2	U			GA1	1.5	87Gi05	
	7567	172			0.0	o			GA3	1.5	91Or01	
	7670	130			-0.5	2			TO4	1.5	91Zh24	
	7536	75			0.3	2			GA7	1.5	07Ju03	
^{27}Na$-$u	-5922	11	-5924	4	-0.1	o			P40	1.0	01Lu17	*
	-5922	4			-0.4	o			P40	1.0	06Ga04	*
^{27}Al$-^{23}$Na$_{1.174}$	-6450.79	0.25	-6450.73	0.05	0.2	U			MA8	1.0	08Ge08	
	-6450.754	0.054			0.5	1	89	89 ^{27}Al	TT1	1.0	16Kw.A	
^{27}Na$-^{27}$Al	12538	4				2			P40	1.0	01Lu17	
^{24}Na$-^{27}$Na$_{.356}$ ^{22}Na$_{.655}$	-3006	38	-3059.7	1.3	-0.9	U			P10	1.5	75Th08	
^{26}Na$-^{27}$Na$_{.770}$ ^{22}Na$_{.236}$	-1437	86	-1389	5	0.6	U			P13	1.0	75Th08	
^{26}Na$-^{27}$Na$_{.481}$ ^{25}Na$_{.520}$	676	66	659	4	-0.2	U			P10	1.5	75Th08	
	734	86			-0.6	U			P11	1.5	75Th08	
^{23}Na(α,γ)^{27}Al	10090.0	1.3	10091.92	0.05	1.5	U			Utr		78Ma23	
^{27}Al(p,α)^{24}Mg	1601.7	0.7	1600.76	0.05	-1.3	o			Zur		63Ry04	
	1598.4	1.0			2.4	U			NDm		65Br28	
	1601.3	0.5			-1.1	U			Zur		67St30	Z
	1600.06	0.21			3.3	B			Utr		78Ma23	Z
^{24}Mg(α,p)^{27}Al	-1598.9	1.0	-1600.76	0.05	-1.9	U			NDm		65Br28	
^{25}Mg(t,p)^{27}Mg	9055	11	9054.67	0.06	0.0	U			Tal		61Hi11	Y
^{27}Al(d,α)^{25}Mg	6699	12	6706.73	0.07	0.6	U			Ald		61Hi11	Y
	6691	11			1.4	U			Tal		62Sh01	Y
	6700	10			0.7	U			MIT		64Sp12	
^{27}Al(p,t)^{25}Al^i	-23843.4	4.7	-23842.8	1.8	0.1	1	15	15 ^{25}Al^i	MSU		73Be14	*
^{27}P^i(2p)^{25}Al	6410	45	6350	30	-1.4	2			Lis		91Bo32	
	6270	50			1.5	2					01Ca60	*
^{26}Mg(^{18}O,^{17}F)^{27}Na	-13295	55	-13431	4	-2.5	F			Mun		78Pa12	*
	-13433	60			0.0	U			Can		85Fi08	
^{26}Mg(n,γ)^{27}Mg	6443.35	0.55	6443.39	0.04	0.1	U			ILn		82Hu02	
	6443.56	0.25			-0.7	o			MMn		85Ke.A	
	6443.26	0.08			1.6	2			MMn		90Pr02	Z
	6443.44	0.05			-1.1	2			ORn		92Wa06	Z
	6443.35	0.13			0.3	2			Bdn		06Fi.A	
^{26}Mg(d,p)^{27}Mg	4214	12	4218.82	0.04	0.4	U			Ald		61Hi11	Y
	4215	10			0.4	U			Mex		61Ja23	
	4211	6			1.3	U			MIT		64Sp12	
^{26}Mg(p,γ)^{27}Al	8270.8	0.5	8271.29	0.06	1.0	U			Utr		59An33	*
	8271.2	0.5			0.2	U					63Va24	Z
	8271.3	0.5			0.0	U			Utr		78Ma24	*
^{27}Al(t,α)^{26}Mg	11541	12	11542.58	0.06	0.1	U			Ald		61Hi11	
^{27}Al(^{3}He,α)^{26}Al	7523	15	7519.59	0.08	-0.2	U			Ald		59Hi66	
	7519	15			0.0	U			Man		60Ta12	
^{26}Al(p,γ)^{27}Si	7464.9	0.9	7463.32	0.13	-1.8	U					84Bu09	Z
^{27}Na(β^-)^{27}Mg	8930	150	9069	4	0.9	U					73Al13	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{27}Mg(β^-)^{27}Al	2600	11	2610.25	0.07	0.9	U					54Da22	
^{27}Si(β^+)^{27}Al	4872	20	4812.36	0.10	−3.0	B					60Wa04	
^{27}Al(p,n)^{27}Si	−5573	10	−5594.71	0.10	−2.2	U			Oak		55Ki28	Z
	−5597.5	6.0			0.5	U			Tkm		63Ok01	
	−5593.6	4.3			−0.3	U			Ric		65Ku02	
	−5585.1	2.3			−4.2	B			Ric		66Bo20	Z
	−5592.0	1.0			−2.7	U			Yal		69Ov01	Z
	−5594.1	3.2			−0.2	U			Har		76Fr13	
	−5593.8	0.26			−3.5	F			Auc		77Na24	*
	−5594.27	0.11			−4.0	F			Auc		85Wh03	*
	−5594.72	0.10				2			Auc		94Br37	Z
*^{27}Ne−u	F : contaminated by ^{27}Na										91Zh24	**
*^{27}Na−u	Not independent of ^{27}Na−^{27}Al from isobaric method, do not use										01Lu17	**
*^{27}Al(p,t)^{25}Al^i	IT=7904(5), rebuilt Q =−23847.9(4.7); recalib +4.5keV										GAu	**
*^{27}P^i(2p)^{25}Al	And E_{2p}=5315(60) to 3/2$^+$ level at 944.9 keV										Ens098	**
*^{26}Mg(^{18}O,^{17}F)^{27}Na	F : shape of peak raises doubt on centroid determination										GAu	**
*^{26}Mg(p,γ)^{27}Al	E_p=338.65(0.12) to 8596.8(0.5) level										78Ma24	**
*^{26}Mg(p,γ)^{27}Al	E_p=338.21(0.30) to 8596.8(0.5) level										78Ma24	**
*^{26}Mg(p,γ)^{27}Al	E_p=809.90(0.05,Z) to 9050.7(0.5,Z) level										78Ma24	**
*^{27}Al(p,n)^{27}Si	F : rejected by same group "measurement contains error"										94Br37	**
^{28}Ne−u	11490	430	12130	140	1.0	o			TO1	1.5	86Vi09	
	12270	560			−0.2	o			GA1	1.5	87Gi05	
	11958	238			0.5	o			GA3	1.5	91Or01	
	12160	140			−0.1	2			TO4	1.5	91Zh24	
	12110	118			0.1	2			GA7	1.5	07Ju03	
^{28}Na−u	−1220	190	−1061	11	0.6	o			TO1	1.5	86Vi09	
	−1097	96			0.3	U			GA3	1.5	91Or01	
	−1062	14			0.1	o			P40	1.0	01Lu17	
	−1061	11				2			P40	1.0	06Ga04	
^{28}Si−u	−23073.43	0.30	−23073.4650	0.0005	−0.1	U			ST1	1.0	93Je06	
	−23073.4676	0.0020			1.3	U			MI1	1.0	95Di08	
	−23073.00	0.27			−0.7	U			OH1	2.5	94Go.A	
	−23073.466	0.008			0.1	U			ST2	1.0	02Be64	*
C_2 D_2−^{28}Si	51277.0224	0.0024	51277.0212	0.0006	−0.5	U			MI1	1.0	95Di08	
$^{15}N_2$−^{28}Si H_2	7641.2007	0.0024	7641.1984	0.0013	−1.0	1	29	26 ^{15}N	MI1	1.0	95Di08	
C_2 H_4−^{28}Si	54373.59360	0.00079	54373.5940	0.0006	0.5	1	54	38 ^{28}Si	FS1	1.0	08Re16	
$^{13}C_2$ H_2−^{28}Si	45433.19986	0.00071	45433.1999	0.0005	0.1	1	53	34 ^{28}Si	FS1	1.0	08Re16	
$^{28}Si_2$ ^{16}O−^{35}Cl ^{37}Cl	14013.07	0.70	14012.41	0.07	−0.6	U			H46	1.5	93Nx02	
^{25}Na−^{28}Na$_{.446}$ ^{22}Na$_{.568}$	−5869	75	−5974	5	−0.9	U			P10	1.5	75Th08	*
^{26}Na−^{28}Na$_{.619}$ ^{22}Na$_{.394}$	−4229	613	−4207	7	0.0	U			P11	1.5	75Th08	
	−4205	128			0.0	U			P12	2.5	75Th08	
	−4203	87			−0.1	U			P13	1.0	75Th08	
^{28}Si(p,^{6}He)^{23}Al	−38569	80	−38544.0	0.3	0.3	U			Brk		69Ce01	
^{28}Si(^{3}He,^{8}Li)^{23}Al	−34274	25	−34255.5	0.3	0.7	U			MSU		75Be38	
^{28}Si(α,^{8}He)^{24}Si	−61433	21	−61423	19	0.5	R			Tex		80Tr04	
^{28}Si(p,α)^{25}Al	−7709.3	2.6	−7712.76	0.06	−1.3	U			NDm		73Br27	
^{28}Si(^{3}He,^{6}He)^{25}Si	−27976	50	−27981	10	−0.1	U			Brk		70Me11	
	−27981	10				2			MSU		72Be12	
^{26}Mg(t,p)^{28}Mg	6474	12	6465.1	2.0	−0.7	U			Har		61Hi11	Y
^{26}Mg(^{3}He,p)^{28}Al	8285	5	8278.35	0.08	−1.3	U			Phi		74Be07	
^{28}Si(d,α)^{26}Al	1429	4	1428.16	0.07	−0.2	U			MIT		64Sp12	
^{28}Si(p,t)^{26}Si	−22009	3	−22012.62	0.11	−1.2	U			MSU		74Ha02	
	−22014.1	1.0			1.5	U			Yal		05Pa31	
^{28}F(γ,n)^{27}F	220	50				3			MSU		12Ch02	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{27}Al(n,γ)^{28}Al	7725.02	0.20	7725.10	0.06	0.4	U			BNn		78St25	Z
	7725.07	0.30			0.1	U			ILn		79Br25	Z
	7725.13	0.3			−0.1	U			MMn		80Is02	Z
	7725.02	0.10			0.8	2					81Su.A	Z
	7725.14	0.09			−0.4	2			ILn		82Sc14	Z
	7725.17	0.15			−0.5	2			Bdn		06Fi.A	
^{27}Al(d,p)^{28}Al	5511	5	5500.53	0.06	−2.1	U			Mex		61Ja23	
	5503	10			−0.2	U			MIT		64Sp12	
^{27}Al(p,γ)^{28}Si	11584.89	0.30	11584.90	0.05	0.0	U			Utr		78Ma23	Z
	11585.09	0.14			−1.3	1	11	11 ^{27}Al			28Sir-0	
^{27}Al(^{3}He,d)^{28}Si	6049	18	6091.43	0.05	2.4	U					60Fo01	
^{27}Al(p,γ)^{28}Si^r	−956.15	0.03	−956.139	0.025	0.3	2			Utr		78Ma23	Z
	−956.025	0.020			−5.7	B			Auc		94Br37	Z
	−956.13	0.05			−0.4	2					98Wa.A	Z
^{28}Si(^{3}He,α)^{27}Si	3407	15	3398.01	0.11	−0.6	U			Ald		59Hi68	Y
^{28}Si(^{3}He,α)^{27}Si^i	−3225.5	2.6	−3227.0	2.3	−0.6	1	79	79 ^{27}Si^i			86Sc21	*
^{28}Si(^{7}Li,^{8}He)^{27}P	−37513	40	−37473	26	1.0	R					01Ca37	
^{28}P^i(p)^{27}Si	3835	20				3			Lis		89Po10	
^{28}Mg(β^-)^{28}Al	1791	10	1831.8	2.0	4.1	B					53Ma23	*
	1831.8	2.0				3					54Ol03	*
^{28}Al(β^-)^{28}Si	4644	10	4642.15	0.08	−0.2	U					52Mo22	*
	4657	14			−1.1	U					54Ol03	*
^{28}Si^r(IT)^{28}Si	12541.23	0.14	12541.04	0.05	−1.3	R			Utr		90En02	Z
^{28}P(β^+)^{28}Si	14290	40	14345.1	1.2	1.4	U					68Ar03	*
^{28}Si(p,n)^{28}P	−15118.3	4.1	−15127.4	1.2	−2.2	U			Yal		69Ov01	Z
	−15112.5	5.8			−2.6	U			BNL		71Go18	Z
^{28}Si(^{3}He,t)^{28}P	−14380	60	−14363.6	1.2	0.3	U			Brk		66Ma18	
^{28}Si(^{3}He,t)^{28}P−^{36}Ar()^{36}K	−1530.58	1.10	−1530.6	1.1	0.0	1	100	100 ^{28}P	Mun		10Wr01	
^{28}Si(π^+,π^-)^{28}S	−24544	160				2					82Mo12	*
*^{28}Si−u	Unc. was erroneously 0.0008 in Ame2012, was correct in Ame2003										GAu	**
*^{25}Na−^{28}Na$_{.446}$ ^{22}Na$_{.568}$	Symmetric double-doublet 22−24 26−28 included										GAu	**
*^{28}Si(^{3}He,α)^{27}Si^i	IT=6626(3), Q rebuilt with Ame1977										GAu	**
*^{28}Mg(β^-)^{28}Al	E_{β^-}=418(10) 459(2) respectively, to 1$^+$ level at 1372.917 keV										Ens13a	**
*^{28}Al(β^-)^{28}Si	E_{β^-}=2865(10) 2878(14) respectively, to 2$^+$ level at 1779.030 keV										Ens13a	**
*^{28}P(β^+)^{28}Si	E_{β^+}=11490(40) to 2$^+$ level at 1779.030 keV										Ens13a	**
*^{28}Si(π^+,π^-)^{28}S	Original –24603(160) recalibrated to ^{16}O(π^+,π^-)^{16}Ne Q =–27704(20) keV										GAu	**
^{29}F−u	43103	376				2			GA8	1.5	12Ga45	
^{29}Ne−u	19433	551	19750	160	0.4	o			GA3	1.5	91Or01	
	19300	400			0.8	U			TO4	1.5	91Zh24	
	19400	410			0.6	o			GA5	1.5	00Sa21	
	19753	107				2			GA7	1.5	07Ju03	
^{29}Na−u	2820	230	2877	8	0.2	U			TO1	1.5	86Vi09	
	2838	143			0.2	U			GA3	1.5	91Or01	
	2861	14			1.1	o			P40	1.0	01Lu17	
	2866	13			0.9	1	37	37 ^{29}Na	P40	1.0	06Ga04	
^{29}Na−^{39}K$_{.744}$	29885.9	9.9	29879	8	−0.6	1	63	63 ^{29}Na	TT1	1.0	13Ch49	
^{29}Mg−u	−11375	19	−11383	12	−0.4	2			P40	1.0	06Ga04	*
	−11388	16			0.3	2			P40	1.0	06Ga04	
^{29}Al−O$_{1.812}$	−10328.8	1.0	−10332.1	0.4	−3.3	C			TT1	1.0	12Ch.A	
	−10333.5	1.7			0.8	U			TT1	1.0	16Kw.A	
^{29}P ^{40}Ar−u	−55816.80	0.50	−55816.5	0.4	0.6	1	59	59 ^{29}P	MS1	1.0	15Ei01	
^{29}Al−^{23}Na$_{1.261}$	−6645.90	0.37				2			TT1	1.0	16Ga.1	
^{29}Si−^{28}Si H	−8256.90198	0.00024	−8256.90198	0.00024	0.0	1	100	100 ^{29}Si	MI3	1.0	05Ra34	
^{26}Na−^{29}Na$_{.512}$ ^{22}Na$_{.506}$	−5763	91	−5611	5	1.1	U			P10	1.5	75Th08	
	−6379	293			1.7	U			P11	1.5	75Th08	
	−5252	277			−0.5	U			P12	2.5	75Th08	
	−5576	66			−0.5	U			P13	1.0	75Th08	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{27}Na$-^{29}$Na$_{.466}$ ^{25}Na$_{.540}$		−1708	124	−1713	5	0.0	U			P10	1.5	75Th08	
^{18}O(^{13}C,2p)^{29}Mg		−1456	50	−1633	11	−3.5	B					81Pa17	
^{26}Mg(^{11}B,^{8}B)^{29}Mg		−19720	50	−19866	11	−2.9	U			Brk		74Sc26	
^{26}Mg(^{18}O,^{15}O)^{29}Mg		−9207	55	−9250	11	−0.8	U			Mun		78Pa12	
		−9250	45			0.0	U			Can		85Fi08	
^{26}Mg(α,p)^{29}Al		−2880	40	−2870.8	0.3	0.2	U			Yal		57Gr47	Y
		−2874	10			0.3	U			ANL		68Be13	
^{29}Si(n,α)^{26}Mg		−21	21	−34.135	0.030	−0.6	U			Ham		62An05	
^{27}Al(t,p)^{29}Al		8679.5	1.2	8671.7	0.3	−6.5	B			Str		84An17	
^{29}Si(d,α)^{27}Al		6000	11	6012.59	0.05	1.1	U			MIT		64Sp12	
^{29}Si(p,t)^{27}Si^{i}		−23802	5	−23796.4	2.3	1.1	1	21	21 ^{27}Si^{i}	MSU		77Be13	
^{27}Al(^{3}He,n)^{29}P		6616	30	6615.9	0.4	0.0	U			Oak		72Gr39	
^{28}Si(n,γ)^{29}Si		8473.6	0.3	8473.6012	0.0005	0.0	o			MMn		80Is02	Z
		8473.61	0.04			−0.2	U			MMn		90Is02	Z
		8473.55	0.04			1.3	U			ORn		92Ra19	Z
		8473.5509	0.0500			1.0	o			PTc		97Ro26	*
		8473.54	0.17			0.4	U			Bdn		06Fi.A	
		8473.551	0.030			1.7	U			PTc		01Pa52	*
		8473.5957	0.0050			1.1	U			NBS		06De21	
^{28}Si(d,p)^{29}Si		6252	10	6249.03522	0.00029	−0.3	U			Mex		64Ma.B	
		6252	10			−0.3	U			MIT		64Sp12	
		6249.35	0.5			−0.6	U			Rez		90Pi05	*
^{28}Si(p,γ)^{29}P		2747.1	1.7	2749.0	0.4	1.1	–					73Ba35	Z
		2748.8	0.6			0.4	–					74By01	Z
^{28}Si(d,n)^{29}P		560	30	524.5	0.4	−1.2	U			Ald		60Ma21	
^{28}Si(^{3}He,d)^{29}P		−2733	12	−2744.5	0.4	−1.0	U			Ald		60Hi03	Y
^{28}Si(p,γ)^{29}P	ave.	2748.6	0.6	2749.0	0.4	0.7	1	40	40 ^{29}P			average	
^{28}Si(p,γ)^{29}P^{i}		−5630	10	−5632.8	2.5	−0.3	U			ANL		66Yo01	
		−5631.9	5.0			−0.2	1	24	24 ^{29}P^{i}			68Te01	*
^{29}Cl(p)^{28}S		1800	100				3					15Mu13	
^{29}Mg(β^-)^{29}Al		7624	400	7605	11	0.0	U					73Go34	
^{29}Al(β^-)^{29}Si		3850	100	3687.3	0.3	−1.6	U					54Na14	*
^{29}P(β^+)^{29}Si		4967	20	4942.2	0.4	−1.2	U					55Ro05	
^{29}P^{i}(IT)^{29}P		8382.1	2.8	8381.8	2.4	−0.1	1	76	76 ^{29}P^{i}			72Ba26	
*^{29}Mg−u	Result from the “Plasma” experiment. Next item from “Rilis”											06Ga04	**
*^{28}Si(n,γ)^{29}Si	Original error 0.0005 increased for calibration											GAu	**
*^{28}Si(n,γ)^{29}Si	Original error 0.005 increased for calibration											GAu	**
*^{28}Si(d,p)^{29}Si	Estimated systematic error 0.5 added to statistical error 0.037 keV											AHW	**
*^{28}Si(p,γ)^{29}P^{i}	IT=8376(6), Q rebuilt with Ame1964, error estimated by evaluator											GAu	**
*^{29}Al(β^-)^{29}Si	E_{β^-}=1550(100) to 5/2$^+$ level at 2028.16 and 3/2$^+$ at 2425.97 keV											Ens125	**
^{30}Ne−u		23872	884	24990	270	0.8	o			GA3	1.5	91Or01	
		25660	850			−0.5	o			GA5	1.5	00Sa21	
		24734	301			0.6	–			GA7	1.5	07Ju03	
		25024	301			−0.1	–			GA8	1.5	12Ga45	
	ave.	24880	320			0.4	1	73	73 ^{30}Ne			average	
^{30}Na−u		7620	540	9098	5	1.8	F			TO1	1.5	86Vi09	*
		9200	370			−0.2	U			GA1	1.5	87Gi05	
		9126	218			−0.1	U			GA3	1.5	91Or01	
		9330	130			−1.2	U			TO4	1.5	91Zh24	
		8976	27			4.5	B			P40	1.0	01Lu17	
		8990	25			4.3	B			P40	1.0	06Ga04	
^{30}Na−O$_{1.876}$		18638.9	5.6	18638	5	−0.1	1	82	82 ^{30}Na	TT1	1.0	13Ch49	
^{30}Na$-^{39}$K$_{.769}$		37004	12	37008	5	0.3	1	18	18 ^{30}Na	TT1	1.0	13Ch49	
^{30}Mg−O$_{1.876}$		3.0	3.7				2			TT1	1.0	13Ch49	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{30}Mg−u	−9700	230	−9537	4	0.5	o			TO1	1.5	86Vi09	
	−9597	98			0.4	U			GA3	1.5	91Or01	
	−9490	110			−0.3	U			TO4	1.5	91Zh24	
	−9546	14			0.6	U			P40	1.0	06Ga04	
^{30}Al−^{39}K$_{.769}$	10878.1	3.1				2			TT1	1.0	16Kw.A	
^{30}P−^{30}Si	4543.353	0.066				3			JY1	1.0	16Ca22	
^{30}S−^{30}P	6593.28	0.21				4			JY1	1.0	11So11	
^{26}Na−^{30}Na$_{.433}$ ^{22}Na$_{.591}$	−7454	287	−7468	4	0.0	U			P10	1.5	75Th08	
	−8060	641			0.6	U			P11	1.5	75Th08	
	−7045	225			−0.8	U			P12	2.5	75Th08	
	−7515	117			0.4	U			P13	1.0	75Th08	
^{27}Na−^{30}Na$_{.360}$ ^{25}Na$_{.648}$	−2750	213	−2505	4	0.8	U			P10	1.5	75Th08	
^{26}Mg(^{18}O,^{14}O)^{30}Mg	−16234	55	−16121	3	2.0	U			Mun		78Pa12	*
^{30}Si(n,α)^{27}Mg	−4193	21	−4199.95	0.05	−0.3	U			Ham		62An05	
^{30}Si(p,α)^{27}Al	−2368	10	−2372.04	0.05	−0.4	U			MIT		64Sp12	
^{27}Al(α,p)^{30}Si	2375	8	2372.04	0.05	−0.4	U			Man		59Ba13	Y
^{30}Si(d,α)^{28}Al	3123	10	3128.49	0.08	0.5	U			MIT		64Sp12	
^{28}Si(^{3}He,n)^{30}S	−573	15	−573.64	0.21	0.0	U			CIT		67Mi02	
^{30}Ar(2p)^{28}S	2280	130				3					15Mu13	*
^{29}Si(n,γ)^{30}Si	10609.6	0.3	10609.199	0.022	−1.3	o			MMn		80Is02	Z
	10609.21	0.04			−0.3	2			MMn		90Is02	Z
	10609.24	0.05			−0.8	2			ORn		92Ra19	Z
	10609.1776	0.0500			0.4	o			PTc		97Ro26	*
	10609.178	0.030			0.7	2			PTc		01Pa52	*
	10609.23	0.21			−0.1	U			Bdn		06Fi.A	
^{29}Si(d,p)^{30}Si	8413	10	8384.633	0.022	−2.8	U			Mex		61Ja23	
	8396	13			−0.9	U			MIT		64Sp12	
	8384.92	0.53			−0.5	U			Rez		90Pi05	*
^{29}Si(p,γ)^{30}P	5594.5	0.4	5594.75	0.07	0.6	U					85Re02	
	5594.5	0.5			0.5	U					96Wa33	
^{30}Na(β^-)^{30}Mg	17167	330	17358	6	0.6	U					83De04	*
^{30}Mg(β^-)^{30}Al	6690	240	6981	4	1.2	U					83De04	*
^{30}Al(β^-)^{30}Si	8550	250	8568.1	2.9	0.1	U					61Ro12	*
^{30}Si(t,^{3}He)^{30}Al	−8520	40	−8549.5	2.9	−0.7	U					69Aj03	
	−8545	15			−0.3	U					87Pe06	
^{30}P(β^+)^{30}Si	4262	40	4232.11	0.06	−0.7	U					56Gr07	
	4267	25			−1.4	U					63Fr10	
^{30}Si(p,n)^{30}P	−5012.1	5.	−5014.45	0.06	−0.5	U			Har		75Fr.A	Z
^{30}S(β^+)^{30}P	6118	22	6141.60	0.20	1.1	U					63Fr10	*
*^{30}Na−u	F : contaminated by ^{30}Mg										91Zh24	**
*^{26}Mg(^{18}O,^{14}O)^{30}Mg	Tentative, say authors; four counts only										AHW	**
*^{30}Ar(2p)^{28}S	Symmetrized from 2250(+150–100)										GAu	**
*^{29}Si(n,γ)^{30}Si	Original error 0.0005 increased for calibration										GAu	**
*^{29}Si(n,γ)^{30}Si	Original error 0.005 increased for calibration										GAu	**
*^{29}Si(d,p)^{30}Si	Estimated systematic error 0.5 added to statistical error 0.16 keV										AHW	**
*^{30}Na(β^-)^{30}Mg	Calculated from 3 values used for calibration										GAu	**
*^{30}Mg(β^-)^{30}Al	Calculated from value used for calibration										GAu	**
*^{30}Al(β^-)^{30}Si	E_{β^-}=5050(250) to 2^+ level at 3498.49 keV										Ens109	**
*^{30}S(β^+)^{30}P	E_{β^+}=4422(22) to 0^+ level at 677.01 keV										Ens109	**
^{31}Ne−u	33087	1739	33470	290	0.1	U			GA7	1.5	07Ju03	
	33752	333			−0.6	1	33	33 ^{31}Ne	GA8	1.5	12Ga45	
^{31}Na−u	13440	1000	13147	15	−0.2	o			GA1	1.5	87Gi05	
	13559	327			−0.8	o			GA3	1.5	91Or01	
	13610	210			−1.5	U			TO4	1.5	91Zh24	
	13441	118			−1.7	U			GA7	1.5	07Ju03	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{31}Mg−O$_{1.938}$	6503.7	3.3				2			TT1	1.0	13Ch49	
^{31}Mg−u	−3830	220	−3352	3	1.4	o			TO1	1.5	86Vi09	
	−3520	180			0.6	o			GA1	1.5	87Gi05	
	−3458	149			0.5	U			GA3	1.5	91Or01	
	−3370	120			0.1	U			TO4	1.5	91Zh24	
	−3425	18			4.1	B			P40	1.0	06Ga04	
O$_2$−^{31}P H	8242.20819	0.00086	8242.2083	0.0007	0.2	1	67	61 ^{31}P	FS1	1.0	08Re16	
^{31}Na−^{39}K$_{.795}$	42017	25	42000	15	−0.7	o			TT1	1.0	13Ch49	
	42000	15				2			TT1	1.0	16Ga.1	
^{31}Al−^{39}K$_{.795}$	12803.1	2.4				2			TT1	1.0	16Kw.A	
^{31}P−^{28}Si H$_3$	−26639.6290	0.0056	−26639.6331	0.0007	−0.7	U			FS1	1.0	06Re19	
	−26639.63324	0.00089			0.2	1	64	39 ^{31}P	FS1	1.0	08Re16	
^{31}S−^{31}P	5794.98	0.25	5795.01	0.25	0.1	1	97	97 ^{31}S	JY1	1.0	10Ka30	
^{31}Cl−^{31}P	18686.1	3.7				2			JY1	1.0	16Ka15	
O$_2$−^{31}P	16067.228	0.096	16067.2406	0.0007	0.1	U			MS1	1.0	09Kw02	*
^{26}Na−^{31}Na$_{.373}$ ^{22}Na$_{.657}$	−7457	286	−8024	6	−0.8	U			P12	2.5	75Th08	
^{18}O(^{15}N,2p)^{31}Al	−170	90	−308.6	2.2	−1.5	U					81Pa11	
^{27}Al(α,γ)^{31}P	9667.4	1.3	9668.60	0.05	0.9	U			Utr		78Ma23	
^{31}P(p,α)^{28}Si	1912	5	1916.3084	0.0007	0.9	U			Bar		56Va14	Y
	1919	4			−0.7	U			VUn		64Sm03	
	1911	10			0.5	U			MIT		64Sp12	
	1915.8	0.2			2.5	U			Zur		67St30	
^{28}Si(α,n)^{31}S	−8135	44	−8096.67	0.23	0.9	U			Tal		63Ne05	
^{31}P(d,α)^{29}Si	8166	11	8165.3436	0.0007	−0.1	U			MIT		64Sp12	
^{31}Cl^i(2p)^{29}P	7700	100	7631	3	−0.7	U					90Bo24	*
	7610	60			0.3	U			Lis		91Bo32	
	7643	50			−0.2	U			Lis		92Ba01	*
	7627	15			0.3	o					98Ax02	
	7631	3				2					00Fy01	*
^{30}Ne(n,γ)^{31}Ne	190	130	170	130	−0.2	1	95	67 ^{31}Ne			14Na10	*
^{30}Si(^{18}O,^{17}F)^{31}Al	−12200	25	−12216.8	2.2	−0.7	U					88Wo02	
	−12237	35			0.6	U			Ber		89Bo.A	
^{30}Si(n,γ)^{31}Si	6589.1	0.7	6587.39	0.04	−2.4	U					70Be48	
	6587.5	0.8			−0.1	U					70Sp02	
	6588.4	0.3			−3.4	B					72Dz13	
	6587.32	0.20			0.4	U			MMn		90Is02	Z
	6587.39	0.05			0.1	3			ORn		92Ra19	Z
	6587.3970	0.0500			−0.1	o			PTc		97Ro26	*
	6587.39	0.14			0.0	U			Bdn		06Fi.A	
	6587.397	0.057			−0.1	3			PTc		01Pa52	
^{30}Si(d,p)^{31}Si	4368	7	4362.83	0.04	−0.7	U			MIT		64Sp12	
	4364.18	0.55			−2.5	U			Rez		90Pi05	*
^{30}Si(p,γ)^{31}P	7297.4	1.2	7296.551	0.022	−0.7	U					68Wo01	
^{31}Cl^i(p)^{30}S	12033	10	12026	3	−0.7	o					98Ax02	*
	12033	14			−0.5	U					00Fy01	*
^{31}Mg(β^-)^{31}Al	10150	700	11829	4	2.4	U					83De04	
^{31}Al(β^-)^{31}Si	7940	100	7998.3	2.2	0.6	U					73Go22	
^{31}Si(β^-)^{31}P	1471	8	1491.50	0.04	2.6	U					52Mo12	
	1486	12			0.5	U					52Wa12	
^{31}S(β^+)^{31}P	5412	30	5398.02	0.23	−0.5	U					60Wa04	
^{31}P(p,n)^{31}S	−6212.3	20.	−6180.36	0.23	1.6	o			ChR		58Go77	Y
	−6250	20			3.5	B			ChR		59Br06	Y

*O$_2$−^{31}P	For original doublet ^{31}P−O$_{1.938}$, D_M=–16382.522(0.096) μu	GAu	**
*^{31}Cl^i(2p)^{29}P	Large error in E_{cm} due to sequential decay kinematics	MMC122	**
*^{31}Cl^i(2p)^{29}P	reference also finds 3p emission at 4870	92Ba01	**
*^{31}Cl^i(2p)^{29}P	Q_{2p}=7620(5), 6245(2), 5679(3), 5223(5) keV	00Fy01	**
*	to ground state and levels 3/2$^+$ at 1383.55, 5/2$^+$ at 1953,91, 3/2$^+$ 2422.7 keV	Ens125	**
*^{30}Ne(n,γ)^{31}Ne	Symmetrized from 150(+160–100) keV	14Na10	**
*^{30}Si(n,γ)^{31}Si	Original error 0.0005 increased for calibration	GAu	**
*^{30}Si(d,p)^{31}Si	Estimated systematic error 0.5 added to statistical error 0.23 keV	AHW	**
*^{31}Cl^i(p)^{30}S	Average of 3 branches	AHW	**
*^{31}Cl^i(p)^{30}S	E_p=11654(28), 9493(20), 8347(15), 8092(14) keV	00Fy01	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{32}Na$-$u	19720	636	20010	40	0.3	o			GA3	1.5	91Or01	
	19900	1100			0.1	U			TO4	1.5	91Zh24	
	20980	500			-1.3	o			GA5	1.5	00Sa21	
	20193	129			-0.9	U			GA7	1.5	07Ju03	
^{32}Mg$-$O$_2$	9280.9	3.5				2			TT1	1.0	13Ch49	
^{32}Mg$-$u	-800	260	-890	4	-0.2	o			TO1	1.5	86Vi09	
	-890	270			0.0	U			GA1	1.5	87Gi05	
	-924	214			0.1	U			GA3	1.5	91Or01	
	-820	130			-0.4	U			TO4	1.5	91Zh24	
	-1142	113			2.2	o			P40	1.0	01Lu20	
	-966	38			2.0	U			P40	1.0	06Ga04	*
	-983	22			4.2	B			P40	1.0	06Ga04	
^{32}Al$-$O$_2$	-1744	13	-1745	8	-0.1	o			TT1	1.0	12Ch.A	
	-1744.9	7.7				2			TT1	1.0	16Kw.A	
^{32}Al$-$u	-12160	220	-11916	8	0.7	U			TO1	1.5	86Vi09	
	-11870	200			-0.2	U			GA1	1.5	87Gi05	
	-11877	104			-0.2	U			GA3	1.5	91Or01	
^{32}Si O$_2$$-C_5$ H$_4$	-67319.35	0.32				2			MS1	1.0	09Kw02	*
O$_2$$-$^{32}S	17754.2	1.0	17758.0648	0.0014	1.5	U			J1	2.5	68Ma45	
C$_2$ H$_8$$-$^{32}S	90531.3	1.4	90529.0835	0.0016	-0.6	U			J1	2.5	68Ma45	
^{32}S$-$O$_2$	-17758.0663	0.0020	-17758.0648	0.0014	0.8	1	50	48 ^{32}S	FS1	1.0	05Sh38	
^{32}S$-$C$_2$ D$_4$	-84335.9367	0.0019	-84335.9380	0.0014	-0.7	1	55	52 ^{32}S	FS1	1.0	05Sh38	
^{32}S$-$H C F	-34156.50	0.57	-34157.0207	0.0016	-0.9	U			MS1	1.0	09Kw02	*
^{32}Na$-$^{39}K$_{.821}$	49808	40				2			TT1	1.0	16Ga.1	
^{32}Ar$-$^{39}K$_{.821}$	27434.8	1.9				2			MA8	1.0	03Bl17	
C F$_3$$-$^{32}S O$_2$ H	25483.43	0.34	25484.043	0.003	1.8	U			MS1	1.0	09Kw02	*
C F$_3$$-$^{32}S O$_2$	33310.02	0.59	33309.075	0.003	-1.6	U			MS1	1.0	09Kw02	*
^{26}Na$-$^{32}Na$_{.325}$ ^{22}Na$_{.709}$	-8569	354	-9245	13	-0.8	U			P12	2.5	75Th08	
^{32}S(^{3}He,^{8}Li)^{27}P	-31277	35	-31308	26	-0.9	2			MSU		77Be13	
^{32}S(p,α)^{29}P	-4171	20	-4198.6	0.4	-1.4	U			Tky		64Ej05	
^{32}S(^{3}He,^{6}He)^{29}S	-25520	50				2			MSU		73Be09	
^{30}Si(t,p)^{32}Si	7307	1	7305.56	0.30	-1.4	U			Str		80An.A	
^{32}S(d,α)^{30}P	4892	10	4896.13	0.07	0.4	U			MIT		64Sp12	
^{32}S(p,t)^{30}S	-19614	3	-19617.12	0.21	-1.0	U			MSU		74Ha02	
^{31}Si(n,γ)^{32}Si	9203.2180	0.0500	9200.0	0.3	-65.0	B			PTc		97Ro26	*
	9203.22	0.76			-4.3	B			PTc		01Pa52	
^{31}P(n,γ)^{32}P	7935.73	0.16	7935.65	0.04	-0.5	U			MMn		85Ke11	Z
	7935.65	0.04				2			ILn		89Mi16	Z
	7935.60	0.16			0.3	U			Bdn		06Fi.A	
^{31}P(d,p)^{32}P	5712	8	5711.08	0.04	-0.1	U			MIT		64Sp12	
^{31}P(p,γ)^{32}S	8864.9	0.9	8863.9632	0.0015	-1.0	U					72Co13	
	8862.7	3.			0.4	U					73Ve06	*
	8865.6	1.0			-1.6	U					73Ve08	Z
	8865.1	0.9			-1.3	U					74Vi02	
^{31}P(^{3}He,d)^{32}S	3356	13	3370.4888	0.0015	1.1	U			MIT		68Gr17	
^{32}S(p,d)^{31}S	-12817.8	1.5	-12819.76	0.23	-1.3	U			MSU		73Mo23	
^{32}S(^{3}He,α)^{31}S	5415	15	5533.29	0.23	7.9	B					66Gr26	
	5515	15			1.2	U			MIT		67Sp09	
	5486	20			2.4	U			Ors		67Ro17	
	5538	6			-0.8	U			CIT		70Mo08	
^{32}Cl(p)^{31}S	-1583.5	3.1	-1581.1	0.5	0.8	U					85Bj01	*
	-1581.9	2.1			0.4	U					93Sc16	*
	-1581.3	0.6			0.3	1	79	76 ^{32}Cl			08Ga.A	*
^{32}Na(β^-)^{32}Mg	18300	1400	19470	40	0.8	U					83De04	
^{32}Si(β^-)^{32}P	213	7	227.2	0.3	2.0	U					64Br09	
	221.4	1.2			4.8	B					84Po09	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{32}P(β^-)^{32}S	1707.6	0.7	1710.66	0.04	4.4	B					61Ni02	
	1710.1	0.7			0.8	U					68Fi04	
^{32}Cl(β^+)^{32}S	12720	30	12680.9	0.6	−1.3	U					68Ar03	*
^{32}S(p,n)^{32}Cl	−13470	14	−13463.2	0.6	0.5	U			Yal		69Ov01	Z
	−13470	9			0.8	U			BNL		71Go18	Z
^{32}S(^{3}He,t)^{32}Cl	−12699	15	−12699.5	0.6	0.0	U					89Je07	
^{32}S(^{3}He,t)^{32}Cl−^{36}Ar()^{36}K	133.01	1.10	133.6	0.6	0.6	1	31	24 ^{32}Cl	Mun		10Wr01	
^{32}S(π^+,π^-)^{32}Ar	−22813	50	−22793.2	1.8	0.4	U					80Bu15	
*^{32}Mg−u	Result from the “Plasma” experiment. Next item from “Rilis”										06Ga04	**
*^{32}Si O$_2$−C$_5$ H$_4$	For original doublet ^{32}Si O$_2$ H$_3$−C$_5$ H$_7$										GAu	**
*^{32}S−H C F	For original doublet ^{32}S O$_2$ H−H$_2$ C O$_2$ F										GAu	**
*C F$_3$−^{32}S O$_2$ H	For original doublet ^{32}S O$_2$ H−(C F$_3$)$_{0.942}$, D_M=–25761.27(0.34) μu										GAu	**
*C F$_3$−^{32}S O$_2$	For original doublet ^{32}S O$_2$–(C F$_3$)$_{0.928}$, D_M=–33654.93(0.59) μu										GAu	**
*^{31}Si(n,γ)^{32}Si	Original error 0.0005 increased for calibration										GAu	**
*^{31}P(p,γ)^{32}S	T=3289(3) Q =–3185.3(3.) to ^{32}S^j at 12047.96(0.28) keV										Nub16b	**
*^{32}Cl(p)^{31}S	E_p=3353.5(3.0) Q_p=3462.8(3.1) from ^{32}Cl^i 5046.3(0.3) T=2 level										Nub16b	**
*^{32}Cl(p)^{31}S	E_p=3348.5(2.0) Q_p=3457.6(2.1) from ^{32}Cl^i 5046.3(0.3) T=2 level										Nub16b	**
*	corrected to 3464.4(2.1) keV										02Py02	**
*^{32}Cl(p)^{31}S	Q_p=3465.0(0.4) from ^{32}Cl^i 5046.3(0.3) T=2 level										Nub16b	**
*	this Q_p is quoted in reference as “A.Garcia et al. (in preparation)”										08Bh08	**
*^{32}Cl(β^+)^{32}S	E_{β^+}=9470(30) to 2$^+$ level at 2230.57 keV										Ens119	**
^{33}Na−u	27386	1601	25530	480	−0.8	o			GA3	1.5	91Or01	
	26370	1160			−0.5	o			GA5	1.5	00Sa21	
	25142	376			0.7	o			GA7	1.5	07Ju03	
	25529	322				2			GA8	1.5	12Ga45	
^{33}Mg−O$_{2.062}$	15813.3	3.1				2			TT1	1.0	13Ch49	
^{33}Mg−u	5460	900	5327	3	−0.1	o			GA1	1.5	87Gi05	
	5203	318			0.3	U			GA3	1.5	91Or01	
	5710	180			−1.4	U			TO4	1.5	91Zh24	
	5311	24			0.7	U			P40	1.0	06Ga04	
^{33}Al−u	−9490	250	−9122	8	1.0	o			TO1	1.5	86Vi09	
	−9250	160			0.5	o			GA1	1.5	87Gi05	
	−9167	142			0.2	U			GA3	1.5	91Or01	
	−9020	120			−0.6	U			TO4	1.5	91Zh24	
	−9125	64			0.0	o			GT1	1.5	04Ma.A	
	−8957	100			−0.7	o			GT2	2.5	08Kn.A	
	−8915	128			−0.6	U			GT2	2.5	08Su19	
	−9209	62			1.4	U			LZ1	1.0	15Xu14	
^{33}Si O$_2$−^{13}C C$_4$ H$_4$	−66848.76	0.75				2			MS1	1.0	09Kw02	*
^{33}Cl−u	−22536.9	7.5	−22548.0	0.4	−1.5	U			LZ1	1.0	11Tu09	
^{33}Al−^{39}K$_{.846}$	21582.0	7.5				2			TT1	1.0	16Kw.A	
^{33}Ar−^{39}K$_{.846}$	20629.86	0.43				2			MA8	1.0	03Bl17	
^{33}Ar−^{36}Ar$_{.917}$	19689.2	4.5	19686.7	0.4	−0.6	U			MA6	1.0	01He29	
^{33}S−^{32}S H	−8437.29682	0.00030	−8437.2968	0.0003	0.0	1	100	100 ^{33}S	MI3	1.0	05Ra34	
^{30}Si(α,p)^{33}P	−2965	10	−2959.7	1.1	0.5	U			ANL		68Be13	
^{33}S(n,α)^{30}Si	3497.6	5.	3493.507	0.022	−0.8	U			ILL		81Wa31	
	3496.9	5.0			−0.7	U					01Wa50	
^{31}P(^{3}He,p)^{33}S	9787	15	9787.5607	0.0015	0.0	U					71Gr04	
^{32}S(n,γ)^{33}S	8641.5	0.3	8641.6379	0.0006	0.5	o			MMn		80Is02	Z
	8641.82	0.10			−1.8	U			ORn		83Ra04	Z
	8641.60	0.03			1.3	U			MMn		85Ke08	Z
	8641.81	0.17			−1.0	U			Bdn		06Fi.A	
	8641.6398	0.0033			−0.6	U			NBS		06De21	
^{32}S(d,p)^{33}S	6420	6	6417.0719	0.0003	−0.5	U			MIT		64Sp12	
^{32}S(p,γ)^{33}Cl	2276.4	0.9	2276.8	0.4	0.4	–					59Ku79	
	2276.8	0.5			−0.1	–					76Al01	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{32}S(d,n)^{33}Cl		62	9	52.2	0.4	−1.1	U					72El03	
^{32}S(^{3}He,d)^{33}Cl		−3218	15	−3216.7	0.4	0.1	U					66Gr26	
		−3217	5			0.1	U			CIT		70Mo08	
^{32}S(p,γ)^{33}Cl	ave.	2276.7	0.4	2276.8	0.4	0.2	1	80	80 ^{33}Cl			average	
^{32}S(p,γ)^{33}Cl^i		−3267.0	1.0	−3271.7	0.5	−4.7	B					70Ab15	
		−3271.4	2.0			−0.1	U					82Wi.A	
		−3271.5	0.8			−0.3	1	37	37 ^{33}Cl^i			02Py01	
^{33}Cl^i(p)^{32}S		3266.8	1.0	3271.7	0.5	4.9	B					87Bo21	
^{33}Si(β^-)^{33}P		5768	50	5823.0	1.3	1.1	U					73Go33	
^{33}P(β^-)^{33}S		249	2	248.5	1.1	−0.2	2					54Ni06	
		248.3	1.3			0.2	2					84Po09	
^{33}Cl(β^+)^{33}S		5532	50	5582.5	0.4	1.0	U					60Wa04	
^{33}Cl^i(IT)^{33}Cl		5548.5	0.4	5548.4	0.4	−0.1	1	83	63 ^{33}Cl^i			06Tr10	
∗^{33}Si O_2−^{13}C C_4 H_4	For original doublet ^{33}Si O_2 H_3−^{13}C C_4 H_7											GAu	∗∗
^{34}Na−u		34010	429				2			GA8	1.5	12Ga45	
^{34}Mg−$O_{2.126}$		19747	31				2			TT1	1.0	13Ch49	
^{34}Mg−u		8855	476	8940	30	0.1	o			GA3	1.5	91Or01	
		9190	350			−0.5	U			TO4	1.5	91Zh24	
		9900	350			−1.8	U			GA5	1.5	00Sa21	
		9190	97			−1.7	U			GA7	1.5	07Ju03	
^{34}Al−u		−3760	430	−3221	3	0.8	o			TO1	1.5	86Vi09	∗
		−3400	250			0.5	o			GA1	1.5	87Gi05	∗
		−3262	218			0.1	o			GA3	1.5	91Or01	∗
		−2940	120			−1.6	U			TO4	1.5	91Zh24	∗
		−3199	97			−0.2	U			GT1	1.5	04Ma.A	∗
		−3328	86			0.8	U			GA7	1.5	07Ju03	∗
^{34}Al−^{39}K$_{.872}$		28438.0	7.8	28427	3	−1.4	o			TT1	1.0	16Kw.A	
		28427.0	3.3				2			TT1	1.0	16Ga.1	
^{34}Ar−^{39}K$_{.872}$		11919.02	0.36	11918.04	0.08	−2.7	U			MA8	1.0	02He23	
^{34}Ar−^{36}Ar$_{.944}$		10907.4	3.8	10907.51	0.09	0.0	U			MA6	1.0	01He29	
^{34}Cl−^{34}S		5895.548	0.058	5895.48	0.04	−1.2	1	49	31 ^{34}Cl	JY1	1.0	09Er07	
^{34}Cl^m−^{34}S		6052.575	0.068	6052.60	0.04	0.4	1	41	31 ^{34}Cl^m	JY1	1.0	09Er07	
^{34}S−^{34}Ar		−12403.19	0.20	−12403.08	0.08	0.5	1	14	13 ^{34}Ar	JY1	1.0	11Er02	
^{34}Cl^m−^{34}Cl		157.05	0.11	157.124	0.029	0.7	U			JY1	1.0	09Er07	
		157.30	0.27			−0.7	U			JY1	1.0	11Er02	
^{34}Ar−^{34}Cl		6507.627	0.092	6507.60	0.07	−0.3	1	54	52 ^{34}Ar	JY1	1.0	11Er02	
^{34}Cl^m−^{34}Ar		−6350.41	0.11	−6350.48	0.07	−0.6	1	39	35 ^{34}Ar	JY1	1.0	11Er02	
C_4 H_3−^{34}P O		54914.59	0.87				2			MS1	1.0	09Kw02	∗
^{30}Si(^{7}Li,^{3}He)^{34}P		100	40	91.6	0.8	−0.2	U					77Pe17	
^{31}P(α,p)^{34}S		629.9	2.9	627.09	0.04	−1.0	U			Har		73Ry01	
^{31}P(α,n)^{34}Cl		−5632	10	−5646.86	0.05	−1.5	U			Tal		70Um01	
		−5641.5	3.7			−1.4	U			Har		73Ry01	
^{34}S(d,α)^{32}P		5096	10	5083.99	0.06	−1.2	U					78Ba30	
^{32}S(^{3}He,n)^{34}Ar		−759	15	−777.34	0.08	−1.2	U			CIT		67Mi02	
^{34}S(^{13}C,^{14}O)^{33}Si		−14243	75	−14300.1	0.7	−0.8	U			Can		86Fi06	
^{33}S(n,γ)^{34}S		11417.12	0.10	11417.15	0.04	0.3	–			ORn		83Ra04	Z
		11417.22	0.23			−0.3	–			Bdn		06Fi.A	
^{33}S(d,p)^{34}S		9202	10	9192.58	0.04	−0.9	U			MIT		64Sp12	
		9195	6			−0.4	U			Utr		71Va21	
^{33}S(n,γ)^{34}S	ave.	11417.14	0.09	11417.15	0.04	0.1	1	24	24 ^{34}S			average	
^{33}S(p,γ)^{34}Cl		5142.42	0.20	5143.20	0.05	3.9	B			Oak		83Ra04	∗
		5142.4	0.3			2.7	U			Utr		83Wa27	Z
		5143.29	0.07			−1.3	1	48	48 ^{34}Cl	Auc		94Li20	
^{34}Si(β^-)^{34}P		4700	300	4592	14	−0.4	U					77Na05	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{34}P(β^-)^{34}S	5383	45	5383.0	0.8	0.0	U			ANB		73Go33	
^{34}S(t,^{3}He)^{34}P	−5368	20	−5364.4	0.8	0.2	U			LAl		77Aj01	
^{34}S(^{7}Li,^{7}Be)^{34}P	−6224	40	−6244.9	0.8	−0.5	U			Can		85Dr06	
^{34}Cl(β^+)^{34}S	5522	30	5491.60	0.04	−1.0	U					56Gr07	
^{34}S(p,n)^{34}Cl	−6252	10	−6273.95	0.04	−2.2	U			Tal		70Um01	
	−6271.9	1.9			−1.1	U			Har		75Fr.A	
	−6274.27	0.56			0.6	U			Auc		77Ba16	
	−6273.11	0.25			−3.4	F			Auc		92Ba.A	*
^{34}S(^{3}He,t)^{34}Cl	−5510.8	0.4	−5510.20	0.04	1.5	F			Mun		77Vo02	*
^{34}S(^{3}He,t)^{34}Cl−^{27}Al()^{27}Si	−678.7	2.3	−679.24	0.10	−0.2	U			ChR		74Ha35	
^{34}Cl^m(IT)^{34}Cl	146.36	0.03	146.360	0.027	0.0	1	84	65 ^{34}Cl^m			Ens126	
*^{34}Al−u	Possible isomeric mixture 26(1) ms, E=550# keV										12Ro25	**
*C$_4$ H$_3$−^{34}P O	For original doublet ^{34}P H$_2$ O−C$_4$ H$_5$										GAu	**
*^{33}S(p,γ)^{34}Cl	E_p=974.76(0.15,Z) to 6088.20(0.10,Z) level										83Ra04	**
*^{34}S(p,n)^{34}Cl	F : disturbed by resonance; at least 0.5 keV uncertain										94Li20	**
*^{34}S(^{3}He,t)^{34}Cl	F : rejected in reference of same group										09Fa15	**
^{35}Mg−u	18669	1721	16790	290	−0.7	o			GA3	1.5	91Or01	
	18830	1070			−1.3	o			GA5	1.5	00Sa21	
	16790	193				2			GA7	1.5	07Ju03	
^{35}Al−u	−340	460	−240	8	0.1	o			GA1	1.5	87Gi05	
	−296	298			0.1	o			GA3	1.5	91Or01	
	80	190			−1.1	U			TO4	1.5	91Zh24	
	−236	75			0.0	U			GA7	1.5	07Ju03	
C$_3$−^{35}Cl H	23320.8	0.3	23322.27	0.04	2.0	U			M17	2.5	66Be10	
	23322.239	0.034			0.7	1	56	56 ^{35}Cl	B07	1.5	71Sm01	
	23321.83	0.63			0.3	U			J5	2.5	72Ka57	
	23322.328	0.325			−0.1	U			J5	2.5	72Ka57	
C$_5$ H$_{10}$−^{35}Cl$_2$	140549.37	2.98	140544.93	0.08	−0.6	U			C2	2.5	65De09	
	140545.01	0.13			−0.4	1	15	15 ^{35}Cl	B07	1.5	71Sm01	
C$_4$ H$_6$ O−^{35}Cl$_2$	104153.75	3.45	104159.42	0.08	0.7	U			C2	2.5	65De09	
C$_2$ D$_6$−^{35}Cl H	107934.90	0.54	107932.94	0.04	−1.5	U			J5	2.5	72Ka57	
	107933.422	0.538			−0.4	U			J5	2.5	72Ka57	
C$_3$ H−D ^{35}Cl	24871.92	0.75	24870.56	0.04	−0.7	U			C2	2.5	65De09	
C$_8$ H$_9$−^{35}Cl$_3$	163867.25	0.90	163867.21	0.11	0.0	U			A2	2.5	70St25	
^{35}Ar−u	−24747.3	4.3	−24742.3	0.7	1.2	U			LZ1	1.0	11Tu09	
^{35}Al−^{39}K$_{.897}$	32315.1	7.9				2			TT1	1.0	16Ga.1	
^{35}K−^{39}K$_{.897}$	20560.69	0.55				2			MA8	1.0	07Ya08	
^{35}Cl(p,α)^{32}S	1862	5	1866.06	0.04	0.8	U			Bar		57Va03	Y
	1865	8			0.1	U			MIT		64Sp12	
^{32}S(α,p)^{35}Cl	−1862	17	−1866.06	0.04	−0.2	U			MIT		64Sp12	
^{32}S(α,n)^{35}Ar	−8751	18	−8614.7	0.7	7.6	B			Tal		63Ne05	
^{35}Cl(d,α)^{33}S	8285	10	8283.13	0.04	−0.2	U			MIT		64Sp12	
^{33}S(^{3}He,n)^{35}Ar	3335	16	3321.3	0.7	−0.9	U					75Da14	
^{35}K^i(2p)^{33}Cl	4311	40				2					85Ay01	
^{34}S(^{18}O,^{17}F)^{35}P	−7796	40	−7808.4	1.9	−0.3	U			Can		88Or01	
^{34}S(n,γ)^{35}S	6986.00	0.10	6985.84	0.04	−1.6	–			ORn		83Ra04	Z
	6985.84	0.05			0.0	–			MMn		85Ke08	Z
	6986.09	0.14			−1.8	U			Bdn		06Fi.A	
^{34}S(d,p)^{35}S	4762	10	4761.27	0.04	−0.1	U			MIT		64Sp12	
	4757	5			0.9	U			Utr		71Va18	
^{34}S(n,γ)^{35}S ave.	6985.87	0.04	6985.84	0.04	−0.8	1	75	46 ^{34}S			average	
^{34}S(p,γ)^{35}Cl	6367.4	1.6	6370.81	0.04	2.1	U					72Hu10	
	6370.7	0.4			0.3	U					76Sp08	Z
	6370.70	0.20			0.6	U			Oak		83Ra04	*

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{35}Cl(γ,n)^{34}Cl	−12660	40	−12644.76	0.05	0.4	U					61Sa11	
^{35}P(β^-)^{35}S	3909	75	3988.4	1.9	1.1	U					72Go31	
^{35}S(β^-)^{35}Cl	167.4	0.2	167.322	0.026	−0.4	U					57Co62	
	166.80	0.15			3.5	B					85Al11	
	167.288	0.100			0.3	U					85Ap01	*
	166.93	0.2			2.0	o					85Ma59	
	167.4	0.1			−0.8	U					85Oh06	*
	166.7	0.2			3.1	B					89Si04	*
	167.56	0.03			−7.9	B					92Ch27	*
	167.35	0.10			−0.3	U					93Ab11	*
	167.23	0.10			0.9	U					93Be21	*
	167.27	0.10			0.5	U					93Mo01	*
	167.334	0.027			−0.5	1	91	71 ^{35}S			00Ho13	
^{35}Cl(n,p)^{35}S	612	4	615.025	0.026	0.8	U			BNL		68Sc01	
^{35}Ar(β^+)^{35}Cl	5980	40	5966.2	0.7	−0.3	U					56Ki29	
	5950	50			0.3	U					60Wa04	
^{35}Cl(p,n)^{35}Ar	−6747.2	1.6	−6748.6	0.7	−0.9	2			Har		75Fr.A	Z
	−6747.9	1.0			−0.7	2			Auc		77Wh03	Z
	−6750.4	1.2			1.5	2			Mtr		78Az01	*
*^{34}S(p,γ)^{35}Cl	E_p=1264.97(0.13,Z) to 7598.91(0.15,Z) level										83Ra04	**
*^{35}S(β^-)^{35}Cl	Original error (0.030) increased to 0.100										AHW	**
*^{35}Cl(p,n)^{35}Ar	Original T=6942.2(2.2) recalibrated 6945.5(1.2)										GAu	**
^{36}Mg−u	24930	1610	21880	740	−1.3	o			GA5	1.5	00Sa21	
	21879	494				2			GA7	1.5	07Ju03	
^{36}Al−u	6187	421	6390	160	0.3	o			GA3	1.5	91Or01	
	6500	400			−0.2	U			TO4	1.5	91Zh24	
	6140	310			0.5	o			GA5	1.5	00Sa21	
	6388	107				2			GA7	1.5	07Ju03	
^{36}Si−u	−13850	640	−13350	80	0.5	U			TO1	1.5	86Vi09	
	−13490	320			0.3	o			GA1	1.5	87Gi05	
	−13578	191			0.8	o			GA3	1.5	91Or01	
	−13110	150			−1.1	2			TO4	1.5	91Zh24	
	−13376	75			0.2	2			GT1	1.5	04Ma.A	
	−13280	118			−0.4	2			GA7	1.5	07Ju03	
	−13484	163			0.8	2			LZ1	1.0	15Xu14	
^{36}Ar−u	−32454.895	0.015	−32454.895	0.029	0.0	o			ST2	1.0	02Bf02	
	−32454.895	0.029			0.0	1	100	100 ^{36}Ar	ST2	1.0	03Fr08	
^{36}K−^{39}K$_{.923}$	14800.99	0.38	14800.9	0.4	−0.2	1	93	93 ^{36}K	MA8	1.0	07Ya08	
^{36}Ar(^{3}He,^{8}Li)^{31}Cl	−29180	50	−29212	3	−0.6	U			MSU		77Be13	
^{36}S(^{48}Ca,^{52}V)^{32}Al	−12651	370	−12346	7	0.8	o			Dar		87Ch.A	
^{36}S(^{48}Ca,^{51}V)^{33}Al	−14150	140	−14188	7	−0.3	U			Dar		86Wo07	
^{36}S(^{14}C,^{17}O)^{33}Si	−6380	20	−6321.1	0.7	2.9	U			Mun		84Ma49	
^{36}S(^{11}B,^{14}N)^{33}Si	−4311	30	−4345.5	0.7	−1.2	U			Can		85Fi03	
^{36}Ar(^{3}He,^{6}He)^{33}Ar	−23512	30	−23508.1	0.4	0.1	U			MSU		74Na07	
^{36}S(^{11}B,^{13}N)^{34}Si	−7327	25	−7385	14	−2.3	2			Can		85Fi03	
^{36}S(^{14}C,^{16}O)^{34}Si	−2989	20	−2950	14	1.9	2			Mun		84Ma49	
^{36}S(^{64}Ni,^{66}Zn)^{34}Si	−8890	41	−8907	14	−0.4	o			Dar		85Wo07	*
	−8903	33			−0.1	2			Dar		86Sm05	*
^{36}S(d,α)^{34}P	4604.4	5.	4595.4	0.8	−1.8	U					82So.A	*
^{36}Ar(p,t)^{34}Ar	−19513	3	−19514.09	0.08	−0.4	U			MSU		74Ha02	
^{36}Ar(p,t)^{34}Ar^i	−27473	50	−27448	5	0.5	U					69Br21	*
	−27448	5				2					72Pa02	*
^{36}S(^{14}C,^{15}O)^{35}Si	−16184	50	−16110	40	1.5	2			Mun		84Ma49	
^{36}S(^{13}C,^{14}O)^{35}Si	−21122	60	−21160	40	−0.6	2			Can		86Fi06	
^{36}S(^{64}Ni,^{65}Zn)^{35}Si	−17250	100	−17460	40	−2.1	2			Dar		86Sm05	*
^{36}S(d,^{3}He)^{35}P	−7607	5	−7601.8	1.9	1.0	2			BNL		84Th08	
	−7601	2			−0.4	2			Hei		85Kh04	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{36}S(^{14}C,^{15}N)^{35}P	−2927	10	−2887.9	1.9	3.9	B			Mun		84Ma49	*
^{36}S(^{6}Li,^{7}Be)^{35}P	−7521	17	−7488.5	1.9	1.9	U			Can		85Dr06	
^{36}S(^{64}Ni,^{65}Cu)^{35}P	−5659	34	−5641.6	2.0	0.5	U			Dar		85Wo.A	
^{35}Cl(n,γ)^{36}Cl	8579.73	0.20	8579.794	0.005	0.3	U			BNn		78St25	Z
	8579.7	0.3			0.3	o			MMn		80Is02	Z
	8579.81	0.20			−0.1	U			MMn		81Ke02	Z
	8579.66	0.10			1.3	U					81Su.A	Z
	8579.61	0.09			2.0	U			ILn		82Kr12	Z
	8579.67	0.17			0.7	U			Bdn		06Fi.A	
	8579.7945	0.0048			0.0	1	100	99 ^{36}Cl	NBS		06De21	
^{35}Cl(d,p)^{36}Cl	6360	8	6355.228	0.005	−0.6	U			MIT		64Sp12	
^{35}Cl(p,γ)^{36}Ar	8506.1	0.5	8506.98	0.04	1.8	U					72Ho40	Z
^{35}Cl(p,γ)^{36}Ar^{j}	−2346.8	1.5	−2345.2	1.2	1.1	2					76Hu01	
	−2342.5	1.9			−1.4	2					76Ma40	
^{36}Ar(d,t)^{35}Ar	−9007	10	−8998.3	0.7	0.9	U			Yal		70Wh04	
^{36}K^{i}(p)^{35}Ar	2592	21	2623.8	2.3	1.5	U			Brk		81Ay01	
	2623.8	2.3				3					95Ga16	
^{36}S(^{7}Li,^{7}Be)^{36}P	−11277	27	−11275	13	0.1	2			Can		85Dr06	
^{36}S(^{14}C,^{14}N)^{36}P	−10256	15	−10257	13	0.0	2			Mun		84Ma49	
^{36}Cl(β^{+})^{36}S	1137	18	1142.13	0.19	0.3	U					68Pi03	
^{36}Cl(ε)^{36}S	1180	15			−2.5	U					64Li10	
	1160	18			−1.0	U					65Be19	
^{36}S(p,n)^{36}Cl	−1924.64	0.31	−1924.47	0.19	0.5	1	37	36 ^{36}S			01Wa50	
^{36}Cl(β^{-})^{36}Ar	708.7	0.6	709.53	0.04	1.4	U					67Sp06	
^{36}Ar(p,n)^{36}K	−13588.3	8.	−13596.8	0.3	−1.1	U			BNL		71Go18	Z
	−13618	23			0.9	U					71Ja09	
^{36}Ar(^{3}He,t)^{36}K	−12930	40	−12833.1	0.3	2.4	U			Duk		70Dz04	
*^{36}S(^{64}Ni,^{66}Zn)^{34}Si	Calibrated with ^{36}S(^{64}Ni,^{62}Ni) $M-A$=–26862(12) now–26861(7)										AHW	**
*^{36}S(d,α)^{34}P	Original error 1.2 judged too small										GAu	**
*^{36}Ar(p,t)^{34}Ar^{i}	IT=7950(50); Q rebuilt, estimated with 72Pa02 Q =–19523 for ground state										MMC12a	**
*^{36}Ar(p,t)^{34}Ar^{i}	IT=7925(5); Q rebuilt with author's Q =–19523 for ground state										MMC128	**
*^{36}S(^{64}Ni,^{65}Zn)^{35}Si	$M-A$=–14482(59) for average of ground state and 54, 114, 207 levels										86Sm05	**
*^{36}S(^{14}C,^{15}N)^{35}P	Original report –2693 is a typo										GAu	**
^{37}Al−u	10310	579	10530	190	0.3	o			GA3	1.5	91Or01	
	10900	450			−0.5	o			GA5	1.5	00Sa21	
	10531	129				2			GA7	1.5	07Ju03	
^{37}Si−u	−7550	1410	−7050	120	0.2	o			GA1	1.5	87Gi05	
	−7310	305			0.6	o			GA3	1.5	91Or01	
	−6930	150			−0.6	2			TO4	1.5	91Zh24	
	−7107	97			0.4	2			GA7	1.5	07Ju03	
^{37}P−u	−20740	430	−20390	40	0.5	U			TO1	1.5	86Vi09	
	−19910	190			−1.7	o			GA1	1.5	87Gi05	
	−20442	200			0.2	U			GA3	1.5	91Or01	
C_3 H−^{37}Cl	41924.73	1.09	41922.45	0.06	−0.8	U			C2	2.5	65De09	
	41922.2	0.2			0.5	U			M17	2.5	66Be10	
	41922.176	0.305			0.4	U			J5	2.5	72Ka57	
C_2 D_8−^{37}Cl H_3	123436.51	0.12	123436.54	0.06	0.2	U			B07	1.5	71Sm01	
C_3 H_6 O_2−^{37}Cl$_2$	104974.24	0.08	104974.26	0.11	0.2	1	85	85 ^{37}Cl	B07	1.5	71Sm01	
C_3 H_5−D_2 ^{37}Cl	45020.96	1.14	45019.02	0.06	−0.7	U			C2	2.5	65De09	
C_8 H_{15}−^{37}Cl$_3$	219665.80	0.90	219667.73	0.17	0.9	U			A2	2.5	70St25	
C_3 H_3−D ^{37}Cl	43473.27	1.33	43470.73	0.06	−0.8	U			C2	2.5	65De09	
^{37}K−u	−26632.5	6.4	−26624.11	0.10	1.3	U			LZ1	1.0	11Tu09	
H_3 O−^{37}Ca$_{.514}$	25638.22	0.35				2			MS1	1.0	07Ri08	*
D_2 ^{35}Cl−H_2 ^{37}Cl	15505.41	0.71	15503.60	0.07	−1.0	U			C2	2.5	65De09	
	15503.80	0.09			−0.9	U			H31	2.5	77So02	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
$C_5\,H_{12}-{}^{35}Cl\,{}^{37}Cl$	159145.17	0.12	159145.11	0.07	−0.3	1	13	9 ^{37}Cl	B07	1.5	71Sm01	
$H_2\,{}^{35}Cl-{}^{37}Cl$	18600.0	0.4	18600.17	0.07	0.2	U			M17	2.5	66Be10	
$D\,{}^{35}Cl-{}^{37}Cl$	17052.95	1.02	17051.89	0.07	−0.4	U			C2	2.5	65De09	
	17051.816	0.185			0.2	U			J5	2.5	72Ka57	
$^{37}K-{}^{39}K_{.949}$	7817.98	0.33	7818.43	0.10	1.4	U			MA8	1.0	07Ya08	
$^{37}Cl(p,\alpha)^{34}S$	3030	6	3034.20	0.07	0.7	U			Bar		57Va03	Y
	3029	8			0.7	U			MIT		64Sp12	
$^{37}Ar(n,\alpha)^{34}S$	4630	7	4630.42	0.21	0.1	U			ILL		78As06	
$^{34}S(\alpha,n)^{37}Ar$	−4625	90	−4630.42	0.21	−0.1	U			Tal		63Ne05	
$^{37}Cl(d,\alpha)^{35}S$	7791	12	7795.47	0.07	0.4	U			MIT		64Sp12	
$^{37}Cl(p,{}^3He)^{35}S^i$	−19713	10				2					75Gu15	
$^{35}Cl({}^3He,p)^{37}Ar$	9582	15	9576.38	0.21	−0.4	U			MIT		67Sp09	
$^{36}Mg(n,\gamma)^{37}Mg$	240	110				3					14Ko14	*
$^{36}S({}^{18}O,{}^{17}F)^{37}P$	−14410	40	−14400	40	0.2	2			Can		88Or.A	*
$^{36}S({}^{48}Ca,{}^{47}Sc)^{37}P$	−11490	120	−11560	40	−0.6	2			Dar		88Fi04	*
$^{36}S(n,\gamma)^{37}S$	4303.52	0.12	4303.60	0.06	0.7	2			ORn		84Ra09	Z
	4303.61	0.09			−0.1	2			Bdn		06Fi.A	
$^{36}S(d,p)^{37}S$	2079.12	0.13	2079.04	0.06	−0.6	2					84Pi03	
$^{36}S({}^{14}C,{}^{13}C)^{37}S$	−3874	7	−3872.83	0.06	0.2	U			Mun		84Ma49	
$^{37}Cl({}^{13}C,{}^{14}O)^{36}P$	−16433	50	−16393	13	0.8	U			Can		88Or01	
$^{36}S(p,\gamma)^{37}Cl$	8386.47	0.23	8386.38	0.19	−0.4	1	65	64 ^{36}S	Utr		84No05	Z
$^{36}S(p,\gamma)^{37}Cl^i$	−1835.5	0.3				2					84No05	
$^{36}Ar(n,\gamma)^{37}Ar$	8791.1	1.0	8787.44	0.21	−3.7	B					68Wi25	Z
	8788.8	1.2			−1.1	U					70Ha56	Z
	8789.9	0.9			−2.7	U			Bdn		06Fi.A	
$^{36}Ar(p,\gamma)^{37}K$	1857.3	1.0	1857.63	0.09	0.3	U					64Ar17	
	1857.63	0.09				2			Utr		88De03	Z
$^{36}Ar(d,n)^{37}K$	−320	100	−366.94	0.09	−0.5	U			Yal		61Ya01	
$^{36}Ar(p,\gamma)^{37}K^i$	−3192.6	0.8				2					88De03	
$^{37}S(\beta^-)^{37}Cl$	4750	40	4865.12	0.20	2.9	U					67Wi14	
$^{37}Cl(t,{}^3He)^{37}S$	−4854	30	−4846.53	0.20	0.2	U			LAl		70Aj01	
$^{37}Ar(\varepsilon)^{37}Cl$	818	15	813.87	0.20	−0.3	U					53An01	
$^{37}Cl(p,n)^{37}Ar$	−1595.5	4.0	−1596.22	0.20	−0.2	U			Wis		50Ri59	Y
	−1595.4	1.0			−0.8	U			MIT		52Sc09	Z
	−1596.9	2.4			0.3	U			Oak		64Jo11	
	−1596.8	1.0			0.6	U			Duk		66Pa18	Z
	−1596.22	0.20				2			PTB		98Bo30	
	−1596.3	1.0			0.1	U					01Wa50	
$^{37}K(\beta^+)^{37}Ar$	6120	70	6147.47	0.23	0.4	U					58Su60	
	6170	70			−0.3	U					60Wa04	
$*H_3\,O-{}^{37}Ca_{.514}$	Error in Table II : $M-A$=13135.7(1.4) corrected to −13136.06(0.64) keV										07Ri08	**
$*{}^{36}Mg(n,\gamma)^{37}Mg$	Symmetrized from 220(+120–90) keV										14Ko14	**
$*{}^{36}S({}^{18}O,{}^{17}F)^{37}P$	And Q =–13650(40), $M-A$=–19750(40) if other peak is ground state one										88Or.A	**
$*{}^{36}S({}^{48}Ca,{}^{47}Sc)^{37}P$	And Q =–11569(80), $M-A$=–18980(80) if other peak due to ^{47}Sc 807.89 level										88Fi04	**
$^{38}Al-u$	15240	1500	17400	400	1.0	o			GA4	1.5	00Sa21	
	17980	920			−0.4	o			GA5	1.5	00Sa21	
	17402	268				2			GA7	1.5	07Ju03	
$^{38}Si-u$	−4510	180	−4480	110	0.1	o			GA4	1.5	00Sa21	
	−4020	290			−1.1	U			TO4	1.5	91Zh24	
	−4100	320			−0.8	o			GA5	1.5	00Sa21	
	−4477	75				2			GA7	1.5	07Ju03	
$^{38}P-u$	−14420	620	−15700	80	−1.4	U			GA1	1.5	87Gi05	
	−15910	140			1.0	2			GA4	1.5	00Sa21	
	−15530	150			−0.7	2			TO4	1.5	91Zh24	
	−16110	310			0.9	U			GA5	1.5	00Sa21	
	−15717	75			0.2	o			GT1	1.5	04Ma.A	
	−15660	100			−0.1	2			GT2	2.5	08Kn.A	
	−15688	97			−0.1	2			LZ1	1.0	15Xu14	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.		Lab	F	Reference	
^{38}Ca−H$_6$ O$_2$		−60460.24	0.30	−60460.21	0.21	0.1	o				MS1	1.0	06Bo11	
		−60460.24	0.30			0.1	1	48	48	^{38}Ca	MS1	1.0	07Ri08	
^{38}Ar−^{39}K$_{.974}$		−1917.88	0.37	−1918.01	0.21	−0.4	1	32	32	^{38}Ar	MA8	1.0	02He23	
^{38}K−^{39}K$_{.974}$		4430.88	0.44	4431.00	0.21	0.3	1	23	23	^{38}K	MA8	1.0	07Ya08	
^{38}Ca ^{19}F−^{39}K$_{1.462}$		27783.80	0.63	27783.51	0.21	−0.5	U				MA8	1.0	07Ge07	
^{38}K−^{38}Ar		6348.974	0.068	6349.01	0.05	0.6	1	50	27	^{38}K	JY1	1.0	09Er07	
^{38}K^m−^{38}Ar		6488.743	0.049	6488.73	0.04	−0.2	1	72	45	^{38}K^m	JY1	1.0	09Er07	
^{38}Ar−^{38}Ca		−13587.18	0.12	−13587.12	0.07	0.5	1	32	17	^{38}Ar	JY1	1.0	11Er02	
^{38}K^m−^{38}K		139.698	0.065	139.72	0.05	0.3	–				JY1	1.0	09Er07	
		139.78	0.14			−0.4	–				JY1	1.0	11Er02	
	ave.	139.71	0.06			0.1	1	60	34	^{38}K^m			average	
^{38}Ca−^{38}K		7238.04	0.10	7238.11	0.07	0.7	1	45	25	^{38}K	JY1	1.0	11Er02	
^{38}K^m−^{38}Ca		−7098.43	0.11	−7098.39	0.07	0.4	1	37	21	^{38}K^m	JY1	1.0	11Er02	
^{24}Mg(^{16}O,2n)^{38}Ca		−12727	30	−12754.71	0.19	−0.9	U						72Zi02	*
^{35}Cl(α,p)^{38}Ar		837.2	2.4	837.24	0.20	0.0	U				Har		75Sq01	
^{35}Cl(α,n)^{38}K		−5862.1	1.5	−5859.17	0.20	2.0	U				Mun		76Sh24	Z
		−5858.7	2.9			−0.2	U				Har		75Sq01	*
^{36}S(t,p)^{38}S		3838	30	3858	7	0.7	U						85Da15	
^{36}S(^{14}C,^{12}C)^{38}S		−781	10	−783	7	−0.2	R				Mun		84Ma49	
^{36}Ar(^{3}He,n)^{38}Ca		−1365	21	−1313.14	0.20	2.5	U				CIT		69Sh04	
^{37}Cl(n,γ)^{38}Cl		6107.84	0.30	6107.88	0.08	0.1	U						73Sp06	Z
		6107.95	0.10			−0.7	2				MMn		81Ke02	Z
		6107.73	0.15			1.0	2				Bdn		06Fi.A	
^{37}Cl(d,p)^{38}Cl		3885	8	3883.32	0.08	−0.2	U				MIT		64Sp12	
		3883.28	0.50			0.1	U				Rez		90Pi05	*
^{37}Cl(p,γ)^{38}Ar		10243.0	1.0	10242.25	0.20	−0.7	U						68En01	Z
^{38}S(β^-)^{38}Cl		2947	20	2937	7	−0.5	3						71En01	
		2936	12			0.1	3						72Vi11	
^{38}Cl(β^-)^{38}Ar		4913	5	4916.72	0.22	0.7	U						68Va06	
^{38}K(β^+)^{38}Ar		5870	30	5914.07	0.04	1.5	U						56Gr07	*
		5790	50			2.5	U						67Va27	*
^{38}Ar(p,n)^{38}K		−6695.5	4.	−6696.41	0.04	−0.2	U				Har		75Sq01	
		−6695.65	0.70			−1.1	U						78Ja06	Z
^{38}Ar(p,n)^{38}K^m		−6826.73	0.12	−6826.56	0.04	1.4	U				Auc		98Ha36	Z
*^{24}Mg(^{16}O,2n)^{38}Ca	E(^{16}O)=24880(30) to 2$^+$ level at 2213.13(0.10) keV												Ens082	**
*^{35}Cl(α,n)^{38}K	Q =–5989.1(2.9,Z) to ^{38}K^m at 130.15(0.04) keV												Nub16b	**
*^{37}Cl(d,p)^{38}Cl	Estimated systematic error 0.5 added to statistical error 0.064 keV												AHW	**
*^{38}K(β^+)^{38}Ar	E_{β^+}=2680(30) 2600(50) respectively, to 2$^+$ level at 2167.64 keV												Ens082	**
^{39}Al−u		22970	1580	22170#	430#	−0.3	o				GA5	1.5	00Sa21	
		21653	676			0.5	D				GA7	1.5	07Ju03	*
^{39}Si−u		1900	540	2490	150	0.7	o				GA4	1.5	00Sa21	
		2210	490			0.4	o				GA5	1.5	00Sa21	
		2491	97				2				GA7	1.5	07Ju03	
^{39}P−u		−13890	140	−13710	120	0.8	2				GA4	1.5	00Sa21	
		−13580	160			−0.6	2				TO4	1.5	91Zh24	
		−13870	280			0.4	2				GA5	1.5	00Sa21	
		−13602	140			−0.5	2				GT1	1.5	04Ma.A	
^{39}K−^{23}Na$_{1.696}$		−18942.88	0.58	−18942.216	0.006	0.8	U				Ma8	1.5	08Mu05	
^{39}Ca−u		−29278.8	6.4	−29289.2	0.6	−1.6	U				LZ1	1.0	11Tu09	
^{39}K−^{36}Ar$_{1.083}$		−1144.65	0.44	−1144.86	0.03	−0.5	U				MA8	1.0	02He23	
		−1144.83	0.40			−0.1	U				MA8	1.0	03Bl17	
^{39}K−^{37}K$_{1.054}$		−8231.29	0.53	−8231.70	0.11	−0.5	U				Ma8	1.5	08Mu05	
^{39}Ca ^{19}F−^{39}K$_{1.487}$		23082.43	0.64	23082.4	0.6	0.0	1	100	100	^{39}Ca	MA8	1.0	08Ge08	
^{39}K−^{40}Ar		1323.3631	0.0043	1323.363	0.004	−0.1	1	100	100	^{39}K	FS1	1.0	10Mo30	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{39}K(p,α)^{36}Ar	1287	7	1288.405	0.027	0.2	U			MIT		64Sp12	
^{37}Cl(t,p)^{39}Cl	5701.9	2.5	5699.5	1.7	−1.0	2			Str		84An03	
^{39}K(p,^{3}He)^{37}Ar^{i}	−15493.4	6.				2			MSU		73Be23	*
^{39}K(p,t)^{37}K^{i}	−21713.1	3.	−21718.1	0.8	−1.7	U			MSU		73Be23	*
^{39}Sc^{i}(2p)^{37}K	4969	120	5170	40	1.7	U			Lis		90De43	*
	4877	40			7.3	B			Brk		92Mo15	*
	5146	40			0.6	o			Bor		01Gi01	*
	5170	40				3			Bor		07Do17	*
^{38}Ar(p,γ)^{39}K	6380.9	1.1	6381.34	0.19	0.4	U					70Ma31	Z
	6382.2	0.8			−1.1	U					84Ha27	Z
^{39}K(p,d)^{38}K	−10851	2	−10853.19	0.20	−1.1	U			MSU		74Wi17	
^{39}K(^{3}He,α)^{38}K	7498	15	7499.87	0.20	0.1	U			Roc		66Bl04	
	7483	10			1.7	U			Roc		72Fe06	
^{39}Cl(β^-)^{39}Ar	3440	20	3442	5	0.1	U					56Pe38	
^{39}Ar(β^-)^{39}K	565	5				2					50Br66	
^{39}Ca(β^+)^{39}K	6512	25	6524.5	0.6	0.5	U					58Ki40	
^{39}K(p,n)^{39}Ca	−7302.5	6.	−7306.8	0.6	−0.7	U			Tal		70Ke08	
	−7314.9	1.8			4.5	B					78Ra15	Z
*^{39}Al−u	Trends from Mass Surface TMS suggest ^{39}Al 480 less bound										GAu	**
*^{39}K(p,^{3}He)^{37}Ar^{i}	$M-A$=–25954(6); rebuilt Q =–15493.8(6.) with Ame1971; recalibration +0.35										MMC123	**
*^{39}K(p,t)^{37}K^{i}	$M-A$=–19753(3); Q rebuilt with Ame1971										MMC123	**
*^{39}Sc^{i}(2p)^{37}K	E_{2p}=3600(120) to 1/2$^+$ level at 1370.85 keV										Ens123	**
*^{39}Sc^{i}(2p)^{37}K	Other possibility ^{39}Sc^{i}(α)^{35}K=3600(120) keV										90De43	**
*^{39}Sc^{i}(2p)^{37}K	E_{2p}=4750(40) p+p at 90 degrees; deduced $Q=E_{2p}$[1 + Mp/M(^{37}K)]										MMC123	**
*^{39}Sc^{i}(2p)^{37}K	E_{2p}=4880(40) + recoil 266 keV; data reanalysed and included in 07Do17										MMC135	**
*^{39}Sc^{i}(2p)^{37}K	IAS identification not sure										MMC135	**
^{40}Si−u	5290	1010	5830	370	0.4	o			GA4	1.5	00Sa21	
	6180	740			−0.3	o			GA5	1.5	00Sa21	
	5829	247				2			GA7	1.5	07Ju03	
^{40}P−u	−8800	200	−8710	160	0.3	o			GA4	1.5	00Sa21	
	−8950	210			0.8	2			TO4	1.5	91Zh24	
	−8200	320			−1.1	o			GA5	1.5	00Sa21	
	−8621	129			−0.5	2			GA7	1.5	07Ju03	
^{40}S−u	−24440	190	−24517	4	−0.3	o			GA4	1.5	00Sa21	
	−24530	250			0.0	U			TO4	1.5	91Zh24	
	−24910	340			0.8	o			GA5	1.5	00Sa21	
	−24627	129			0.6	U			GA7	1.5	07Ju03	
$C_3H_4-^{40}$Ar	68917.0053	0.0035	68917.0052	0.0024	0.0	1	46	46 ^{40}Ar	MI1	1.0	95Di08	
$C_2D_8-^{40}$Ar	150431.1045	0.0040	150431.1011	0.0024	−0.8	1	36	33 ^{40}Ar	MI1	1.0	95Di08	
^{20}Ne$_2-^{40}$Ar	22497.2245	0.0042	22497.228	0.003	1.0	–			MI1	1.0	95Di08	
	22497.2280	0.0060			0.1	–			MI1	1.0	95Di08	
ave.	22497.226	0.003			0.9	1	74	60 ^{20}Ne			average	
^{40}Ar−u	−37616.878	0.040	−37616.8762	0.0024	0.0	U			ST2	1.0	02Bf02	
^{40}Ca−H$_{40}$	−350410.425	0.022	−350410.424	0.022	0.0	1	99	99 ^{40}Ca	ST2	1.0	06Na18	
^{40}S O−^{41}K$_{1.366}$	22541	16	22544	4	0.2	U			MS1	1.0	09Ri12	
^{40}S−^{41}K$_{.976}$	12752.0	9.4	12741	4	−1.2	1	21	21 ^{40}S	MS1	1.0	09Ri12	
^{40}S−^{40}Ar	13096.6	4.8	13099	4	0.6	1	79	79 ^{40}S	MS1	1.0	09Ri12	
^{40}Ca−^{40}Ar	208.2	0.5	207.742	0.022	−0.4	U			J3	2.5	68Fu11	
^{40}Ca(^{3}He,^{8}Li)^{35}K	−29693	20	−29688.1	0.5	0.2	U			MSU		76Be08	
^{40}Ca(α,^{8}He)^{36}Ca	−57580	40				2			Tex		77Tr03	
^{40}Ar(n,α)^{37}S	−2500	50	−2497.08	0.20	0.1	U					55Be78	
	−2490	50			−0.1	U			Ric		64Da11	
^{40}K(n,α)^{37}Cl	3866	7	3872.45	0.08	0.9	U			BNL		68Sc01	
^{40}Ca(p,α)^{37}K	−5179	9	−5182.13	0.10	−0.3	U			CIT		66Mc13	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{40}Ca(^{3}He,^{6}He)^{37}Ca		−24270	50	−24371.2	0.6	−2.0	U			Brk		68Bu02	
		−24368	25			−0.1	U			MSU		73Be23	*
^{40}Ar(p,^{3}He)^{38}Cl^{i}		−21092	24				2			Brk		70Ha10	*
^{40}Ar(p,t)^{38}Ar^{j}		−26765	31				2					70Ha10	*
^{40}Ca(d,α)^{38}K		4655	10	4665.18	0.20	1.0	U			MIT		64Sp12	
^{40}Ca(p,t)^{38}Ca		−20459	25	−20448.72	0.20	0.4	U					66Ha32	
		−20428	11			−1.9	U			MSU		72Pa02	
		−20452	5			0.7	U			MSU		74Se05	
^{40}Ar(^{18}O,^{19}Ne)^{39}S		−14504	200	−14410	50	0.5	U			Can		84Ho.B	
^{40}Ar(^{13}C,^{14}O)^{39}S		−16760	50				2			Can		89Dr03	
^{40}Ar(t,α)^{39}Cl		7256	40	7285.2	1.7	0.7	U			LAl		61Ja07	
^{40}Ar(d,^{3}He)^{39}Cl−^{36}Ar()^{35}Cl		−4024.13	2.42	−4021.7	1.7	1.0	R			Hei		93Ma50	
^{40}Ar(^{3}He,α)^{39}Ar^{i}		1604	19	1627	7	1.2	2					67Gr01	*
		1631.3	8.0			−0.5	2					72Wi07	*
^{39}K(n,γ)^{40}K		7799.50	0.08	7799.62	0.06	1.5	–			ILn		84Vo01	Z
		7799.56	0.16			0.4	–			Bdn		06Fi.A	
^{39}K(d,p)^{40}K		5579	10	5575.05	0.06	−0.4	U			MIT		64Sp12	
^{39}K(n,γ)^{40}K	ave.	7799.51	0.07	7799.62	0.06	1.5	1	61	61 ^{40}K			average	
^{39}K(p,γ)^{40}Ca		8329.5	0.9	8328.165	0.021	−1.5	U					68Do12	
		8329.6	0.9			−1.6	U					68Li12	*
		8328.24	0.09			−0.8	U			Utr		90Ki07	Z
^{39}K(^{3}He,d)^{40}Ca		2845	8	2834.690	0.021	−1.3	U			Oak		67Se10	
^{40}Ca(^{3}He,α)^{39}Ca		4950	20	4942.6	0.6	−0.4	U			Ald		66Hi06	
		4919	15			1.6	U			MIT		71Ra35	
^{40}Ca(^{7}Li,^{8}He)^{39}Sc		−37400	40	−37376	24	0.6	2			MSU		88Mo18	
^{40}Ca(^{14}N,^{15}C)^{39}Sc		−27670	30	−27683	24	−0.4	2			Can		88Wo07	
^{40}Sc^{i}(p)^{39}Ca		3840	120	3830	6	−0.1	o			Lis		90De43	
		3820	30			0.3	U					90Zh.A	*
		3827.7	10.			0.2	2			GSI		97Li25	*
		3830.8	7.			−0.1	2			Lis		98Bh12	
		3841	20			−0.6	U			Bor		07Do17	
^{40}Cl(β^-)^{40}Ar		7320	80	7480	30	2.0	2					89Mi03	
^{40}Ar(^{7}Li,^{7}Be)^{40}Cl		−8375	35	−8340	30	0.9	2					84Fi02	
^{40}K(ε)^{40}Ar		1504	7	1504.40	0.06	0.1	U					67Mc10	*
		1497	8			0.9	U					68Az01	*
^{40}K(n,p)^{40}Ar		2270	5	2286.75	0.06	3.3	B			BNL		68Sc01	
		2286.7	1.0			0.0	U			ILL		81We12	
^{40}Ar(p,n)^{40}K		−2286.3	1.0	−2286.75	0.06	−0.4	U			Duk		66Pa18	Z
		−2286.3	1.0			−0.4	U					01Wa50	
^{40}K(β^-)^{40}Ca		1325	15	1310.89	0.06	−0.9	U					52Fe16	
		1350	20			−2.0	U					59Ke26	
^{40}Sc(β^+)^{40}Ca		14330	40	14323.0	2.8	−0.2	U					68Ar03	*
^{40}Ca(p,n)^{40}Sc		−15105.4	2.9				2			Yal		69Ov01	Z
^{40}Ca(^{3}He,t)^{40}Sc		−14490	60	−14341.6	2.8	2.5	U			Bld		65Ri06	
^{40}Ca(π^+,π^-)^{40}Ti		−24974	160				2					82Mo12	*

*^{40}Ca(^{3}He,^{6}He)^{37}Ca	Average of 2 values with small calibration correction	AHW	**
*^{40}Ar(p,^{3}He)^{38}Cl^{i}	IT=8216(25); rebuilt Q =–21093.65(23.68); recalibrated for ^{10}B +1.5 keV	MMC123	**
*^{40}Ar(p,t)^{38}Ar^{j}	IT=18784(30); Q rebuilt with ^{10}C=15702.5(1.8) from reference	68Br23	**
*^{40}Ar(^{3}He,α)^{39}Ar^{i}	IT=9089(20); Q rebuilt with Ame1961	MMC123	**
*^{40}Ar(^{3}He,α)^{39}Ar^{i}	IT=9075(10); Q rebuilt with Ame1964	MMC123	**
*^{39}K(p,γ)^{40}Ca	E_{res}=1345.4(0.5) to 2$^-$ level at 9641.1(0.8) keV	Ens048	**
*^{40}Sc^{i}(p)^{39}Ca	Uncertainty not given, estimated from graph: stat(9keV), calib(11)	GAu	**
*^{40}Sc^{i}(p)^{39}Ca	E_p=3731(10); also E_p=1330(20) Q_p=1364.4(20) keV to 2468.5 level	Ens062	**
*^{40}Sc^{i}(p)^{39}Ca	IT=4370(10) in original paper	MMC123	**
*^{40}K(ε)^{40}Ar	LMK=0.34(0.08) 0.47(0.16) respectively, to 2$^+$ level at 1460.851, recalculated Q	Ens048	**
*^{40}Sc(β^+)^{40}Ca	E_{β^+}=9580(40) to 3$^-$ level at 3736.69 keV, and other E_{β^+}	Ens048	**
*^{40}Ca(π^+,π^-)^{40}Ti	Recalibrated to ^{16}O(π^+,π^-) Q =–27704(20) keV	GAu	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{41}Si$-$u		14560	1980	13010	600	-0.5	o			GA5	1.5	00Sa21	
		13011	397				2			GA7	1.5	07Ju03	
^{41}P$-$u		-5930	300	-5350	130	1.3	o			GA4	1.5	00Sa21	
		-5200	500			-0.2	U			TO4	1.5	91Zh24	
		-5290	420			-0.1	o			GA5	1.5	00Sa21	
		-5346	86				2			GA7	1.5	07Ju03	
^{41}S$-$u		-20500	150	-20407	4	0.4	U			GA4	1.5	00Sa21	
		-19970	230			-1.3	U			TO4	1.5	91Zh24	
		-20430	330			0.0	U			GA5	1.5	00Sa21	
		-20494	75			0.8	U			GT1	1.5	04Ma.A	
^{41}S$-$C$_2$ H O		-23146.2	4.4				2			MS1	1.0	09Ri12	$*$
^{41}Cl$-$u		-29620	190	-29320	70	1.1	2			TO3	1.5	90Tu01	
		-29500	270			0.5	2			TO4	1.5	91Zh24	
^{41}Sc$-$u		-30741	12	-30748.90	0.09	-0.7	U			LZ1	1.0	11Tu09	
^{41}Ti$-$u		-16200	390	-16850	30	-1.1	U			GT1	1.5	04St05	
		-16852	30				2			LZ1	1.0	12Zh34	$*$
^{41}K$-^{39}$K$_{1.051}$		-30.05	0.32	-30.260	0.006	-0.7	U			MA8	1.0	02He23	
		-29.5	2.4			-0.3	U			MA8	1.0	09Na.A	
^{41}K$-^{40}$Ar H		-8382.9005	0.0061	-8382.898	0.003	0.4	–			FS1	1.0	10Mo30	
^{41}K$-^{40}$Ar		-557.8652	0.0039	-557.866	0.003	-0.2	–			FS1	1.0	10Mo30	
^{41}K$-^{40}$Ar H	ave.	-8382.898	0.003	-8382.898	0.003	0.1	1	100	100 ^{41}K			average	
^{41}K(p,α)^{38}Ar		4002	20	4019.33	0.20	0.9	U			ChR		60Cl02	
		4018	10			0.1	U			MIT		64Sp12	
^{41}K(d,α)^{39}Ar		8397	15	8393	5	-0.2	U			MIT		67Sp09	
^{39}K(^{3}He,p)^{41}Ca		8920	20	8972.95	0.14	2.6	U			MIT		67Sp09	
^{40}Ar(^{18}O,^{17}F)^{41}Cl		-10530	83	-10470	70	0.8	R			Can		84Ho.B	
^{40}Ar(n,γ)^{41}Ar		6098.4	0.7	6098.9	0.3	0.8	2					70Ha56	Z
		6099.1	0.4			-0.4	2			Bdn		06Fi.A	
^{40}Ar(d,p)^{41}Ar		3878	6	3874.4	0.3	-0.6	U			MIT		64Sp12	
^{40}Ar(p,γ)^{41}K		7807.8	0.3	7808.619	0.003	2.7	U					89Sm06	Z
^{40}Ar(^{3}He,d)^{41}K^i		-6034	15				2					75Me10	$*$
^{40}K(n,γ)^{41}K		10095.19	0.10	10095.37	0.06	1.8	–			ILn		84Kr05	Z
		10095.25	0.20			0.6	–			Bdn		06Fi.A	
	ave.	10095.20	0.09			1.9	1	39	39 ^{40}K			average	
^{40}Ca(n,γ)^{41}Ca		8363.0	0.5	8362.82	0.14	-0.4	–					69Ar.A	Z
		8362.5	0.5			0.6	–					70Cr04	Z
		8362.72	0.3			0.3	–			MMn		80Is02	Z
		8362.86	0.17			-0.2	–			Bdn		06Fi.A	
^{40}Ca(d,p)^{41}Ca		6134	4	6138.26	0.14	1.1	U			MIT		68Be36	
^{40}Ca(n,γ)^{41}Ca	ave.	8362.81	0.14	8362.82	0.14	0.1	1	100	100 ^{41}Ca			average	
^{40}Ca(p,γ)^{41}Sc		1085.7	1.4	1085.00	0.08	-0.5	U					73Al11	
		1085.09	0.09			-1.0	1	79	79 ^{41}Sc	Utr		87Zi02	$*$
^{40}Ca(d,n)^{41}Sc		-1145	15	-1139.57	0.08	0.4	U					61Ma08	Y
^{40}Ca(p,γ)^{41}Sc^r		-1796.4	1.5	-1797.33	0.09	-0.6	U					77Ko10	
^{40}Ca(p,γ)^{41}Sc^i		-4851.4	4.9	-4854	3	-0.5	2					76Fo01	
^{41}Sc^i(p)^{40}Ca		4855.6	5.	4854	3	-0.4	2			Jyp		97Ho12	
		4855.6	8.			-0.2	2			Lis		98Bh12	
		4857	16			-0.2	U			Bor		07Do17	
^{41}Cl(β^-)^{41}Ar		5670	150	5760	70	0.6	R					74Gu10	
^{41}Ar(β^-)^{41}K		2492.0	1.1	2492.0	0.3	0.0	U					64Pa03	$*$
^{41}K(p,n)^{41}Ca		-1209.6	1.5	-1204.00	0.14	3.7	B			Oak		64Jo11	Z
		-1203.8	0.5			-0.4	U			Can		70Kn03	Z
^{41}Sc(β^+)^{41}Ca		6630	100	6495.48	0.16	-1.3	U					62Cr04	
^{41}Sc^r(IT)^{41}Sc		2882.6	0.3	2882.32	0.05	-0.9	U					77Ko10	
		2882.39	0.10			-0.7	–			Utr		87Zi02	Z
		2882.26	0.06			1.1	–			Utr		89Ki11	Z
	ave.	2882.29	0.05			0.6	1	93	72 ^{41}Sc^r			average	

$*^{41}$S$-$C$_2$ H O	For original doublet ^{41}S C H$-$C$_3$ H$_2$ O	09Ri12	$**$
$*^{41}$Ti$-$u	Same result in reference	13Ya03	$**$
$*^{40}$Ar(^{3}He,d)^{41}K^i	IT=8349(15); Q rebuilt with Ame1971	MMC123	$**$
$*^{40}$Ca(p,γ)^{41}Sc	E_p=647.25(0.05,Z) to 1716.43(0.08,Z) level	87Zi02	$**$
$*^{41}$Ar(β^-)^{41}K	E_{β^-}=1198.3(1.1) to 7/2$^-$ level at 1293.609 keV	Ens163	$**$

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{42}Si−u	20860	3990	17680#	540#	−0.5	o			GA5	1.5	99Sa.A	
	16275	623			1.5	D			GA7	1.5	07Ju03	∗
^{42}P−u	260	740	1080	340	0.7	o			GA4	1.5	00Sa21	
	1550	630			−0.5	o			GA5	1.5	00Sa21	
	1084	225				2			GA7	1.5	07Ju03	
^{42}S−u	−18940	150	−18935	3	0.0	U			GA4	1.5	00Sa21	
	−18510	350			−0.8	U			TO4	1.5	91Zh24	
	−19390	350			0.9	U			GA5	1.5	00Sa21	
	−18934.9	3.0				2			MS1	1.0	09Ri12	∗
^{42}Cl−u	−27000	190	−26660	60	1.2	U			TO3	1.5	90Tu01	
	−26870	190			0.7	U			TO4	1.5	91Zh24	
	−26658	64				2			LZ1	1.0	15Xu14	
^{42}Ti−u	−26973	25	−26950.98	0.30	0.9	U			LZ1	1.0	16Zh.A	
^{42}Ar−^{36}Ar$_{1.167}$	920.6	6.2				2			MA6	1.0	01He29	
^{42}S−^{41}K$_{1.024}$	20151.8	9.5	20156	3	0.4	U			MS1	1.0	09Ri12	
^{42}Sc−^{42}Ca	6898.74	0.22	6898.69	0.10	−0.2	1	22	19 ^{42}Sc	JY1	1.0	06Er08	
^{42}Sc^m−^{42}Ca	7560.68	0.23	7560.34	0.11	−1.5	1	25	22 ^{42}Sc^m	JY1	1.0	06Er08	
^{42}Ti−^{42}Ca	14431.69	0.71	14431.19	0.26	−0.7	1	13	13 ^{42}Ti	JY1	1.0	09Ku19	
^{42}Sc^m−^{42}Sc	661.97	0.24	661.65	0.06	−1.3	U			JY1	1.0	06Er08	
	662.50	0.42			−2.0	U			JY1	1.0	09Ku19	
^{42}Ti−^{42}Sc	7532.92	0.34	7532.50	0.24	−1.2	1	50	49 ^{42}Ti	JY1	1.0	09Ku19	
^{42}Ti−^{42}Sc^m	6870.19	0.38	6870.85	0.24	1.7	1	40	38 ^{42}Ti	JY1	1.0	09Ku19	
^{28}Si(^{16}O,2n)^{42}Ti	−17250	13	−17267.76	0.28	−1.4	U					72Zi02	
^{42}Ca(p,α)^{39}K	118	7	124.00	0.15	0.9	U			MIT		64Sp12	
^{39}K(α,n)^{42}Sc	−7160	60	−7332.44	0.17	−2.9	U			Yal		61Sm05	
	−7455	30			4.1	B			Tal		65Ne02	
^{40}Ar(t,p)^{42}Ar	7043	40	7044	6	0.0	U			LAl		61Ja07	
^{40}Ca(^{3}He,p)^{42}Sc	4966	20	4917.02	0.17	−2.4	U			MIT		64Sp12	
	4905	5			2.4	U			ANL		74Ha55	
^{40}Ca(^{3}He,n)^{42}Ti	−2865	6	−2881.81	0.28	−2.8	U			CIT		67Mi02	
^{41}K(n,γ)^{42}K	7533.78	0.15	7533.80	0.11	0.1	2			ILn		85Kr06	Z
	7533.82	0.15			−0.1	2			Bdn		06Fi.A	
^{41}K(d,p)^{42}K	5314	12	5309.23	0.11	−0.4	U			MIT		64Sp12	
^{41}K(p,γ)^{42}Ca	10275.5	3.4	10276.67	0.15	0.3	U					71Vi14	
^{41}Ca(n,γ)^{42}Ca	11480.63	0.06	11480.67	0.06	0.7	1	91	90 ^{42}Ca	ORn		89Ki11	Z
^{42}Ca(^{3}He,α)^{41}Ca	9102	15	9096.95	0.06	−0.3	U			MIT		71Ra35	
^{41}Ca(p,γ)^{42}Sc^r−^{40}Ca()^{41}Sc^r	−6.67	0.05	−6.70	0.05	−0.6	1	94	66 ^{42}Sc^r	Utr		89Ki11	∗
^{42}Cl(β^-)^{42}Ar	9760	220	9590	60	−0.8	U					89Mi03	
^{42}K(β^-)^{42}Ca	3519.	3.5	3525.22	0.18	1.8	U					68Va06	
	3524	6			0.2	U					75Ra09	
^{42}Sc(β^+)^{42}Ca	6342	100	6426.09	0.10	0.8	U					61Ja22	
	6486	100			−0.6	U					63Ro10	∗
^{42}Ca(p,n)^{42}Sc	−7213.7	2.3	−7208.44	0.10	2.3	U			Har		75Fr.A	
^{42}Ca(^{3}He,t)^{42}Sc	−6442.3	0.4	−6444.68	0.10	−6.0	F			Mun		77Vo02	∗
^{42}Ca(^{3}He,t)^{42}Sc−^{27}Al()^{27}Si	−1611.7	2.6	−1613.73	0.14	−0.8	U			ChR		74Ha35	
^{42}Ca(^{3}He,t)^{42}Sc−^{26}Mg()^{26}Al	−2417.8	3.5	−2421.70	0.11	−1.1	U			ChR		74Ha35	
	−2421.83	0.23			0.6	1	23	14 ^{42}Sc	ChR		87Ko34	∗
^{42}Sc^m(IT)^{42}Sc	616.28	0.06	616.32	0.06	0.7	1	93	76 ^{42}Sc^m			Ens167	
^{42}Sc^r(IT)^{42}Sc	6076.33	0.08	6076.26	0.07	−0.9	1	84	50 ^{42}Sc	Utr		89Ki11	Z

∗^{42}Si−u	Trends from Mass Surface TMS suggest ^{42}Si 1310 less bound	GAu	∗∗
∗^{42}S−u	For original doublet ^{42}S−(C$_2$ H O)$_{1.024}$, D_M=–21740.2(3.1) μu	09Ri12	∗∗
∗^{41}Ca(p,γ)^{42}Sc^r−^{40}Ca()^{41}Sc^r	Calculated from resonance energy difference = 5.73(0.05) keV	GAu	∗∗
∗^{42}Sc(β^+)^{42}Ca	E_{β^+}=2870(100) from ^{42}Sc^m at 616.28 to 6$^+$ level at 3189.26 keV	Ens167	∗∗
∗^{42}Ca(^{3}He,t)^{42}Sc	F : rejected in reference of same group	09Fa15	∗∗
∗^{42}Ca(^{3}He,t)^{42}Sc−^{26}Mg()^{26}Al	Q =–2193.52(0.23) to ^{26}Al^m at 228.306 keV	Nub16b	∗∗

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{43}P−u		4220	1620	5020	600	0.3	U			GA4	1.5	00Sa21	
		6190	1040			−0.7	o			GA5	1.5	00Sa21	
		5024	397				2			GA7	1.5	07Ju03	
^{43}S−u		−12810	250	−13092	5	−0.8	o			GA4	1.5	00Sa21	
		−13400	900			0.2	U			TO4	1.5	91Zh24	
		−12900	460			−0.3	o			GA5	1.5	00Sa21	
		−12958	107			−0.8	U			GA7	1.5	07Ju03	
		−13087	22			−0.2	2			MS1	1.0	09Ri12	*
		−13092.7	5.5			0.1	2			MS1	1.0	09Ri12	*
		−13022	236			−0.2	U			GA8	1.5	12Ga45	
^{43}Cl−u		−26090	300	−25940	70	0.3	o			GA4	1.5	00Sa21	
		−25740	200			−0.7	o			TO3	1.5	90Tu01	
		−25970	350			0.1	U			TO4	1.5	91Zh24	
		−26010	330			0.1	o			GA5	1.5	00Sa21	
		−25905	86			−0.2	o			GT1	1.5	04Ma.A	
		−25894	140			−0.2	2			GA7	1.5	07Ju03	
		−26361	100			1.7	C			GT2	2.5	08Kn.A	
		−25941	70			0.1	2			LZ1	1.0	15Xu14	
^{43}V−u		−19234	46				2			LZ1	1.0	13Ya03	
^{43}Ar−^{36}Ar$_{1.194}$		4387.2	5.7				2			MA6	1.0	01He29	
^{43}K−^{39}K$_{1.103}$		766.45	0.44				2			MA8	1.0	07Ya08	
^{43}Ca(p,α)^{40}K		−14	8	−9.28	0.23	0.6	U			MIT		64Sp12	
^{40}Ca(α,p)^{43}Sc		−3470	30	−3522.3	1.9	−1.7	U					61Ma03	
^{40}Ca(α,n)^{43}Ti		−11169.9	10.	−11172	7	−0.2	2			Tal		67Al08	
^{41}K(^{3}He,p)^{43}Ca^{i}		2452	30	2497	14	1.5	1	23	23 ^{43}Ca^{i}	MIT		68Do02	
^{43}V^{i}(2p)^{41}Sc		4320	50	4359	15	0.8	U			Lis		92Bo37	
		4503	22			−6.5	B			Bor		01Gi01	*
		4348	16			0.7	1	89	89 ^{43}V^{i}	Bor		07Do17	
^{42}Ca(n,γ)^{43}Ca		7933.1	0.5	7932.89	0.17	−0.4	–					69Ar.A	Z
		7933.1	0.5			−0.4	–			Ptn		69Gr08	Z
		7933.1	0.4			−0.5	–					71Bi.A	
		7932.73	0.23			0.7	–			Bdn		06Fi.A	
^{42}Ca(d,p)^{43}Ca		5716	10	5708.33	0.17	−0.8	U			MIT		64Sp12	
		5707	12			0.1	U			MIT		66Do02	
^{43}Ca(d,t)^{42}Ca		−1672	10	−1675.67	0.17	−0.4	U			Ald		64Bj02	
^{42}Ca(n,γ)^{43}Ca	ave.	7932.89	0.17	7932.89	0.17	0.0	1	99	99 ^{43}Ca			average	
^{42}Ca(p,γ)^{43}Sc		4935	5	4929.8	1.9	−1.0	2					65Br31	
		4929	2			0.4	2					69Wa19	
^{42}Ca(^{3}He,d)^{43}Sc^{i}		−4808	8	−4795	3	1.6	1	17	17 ^{43}Sc^{i}			66Sc17	*
^{43}V^{i}(p)^{42}Ti		8200	45	8111	15	−2.0	1	11	11 ^{43}V^{i}	Bor		01Gi01	*
^{43}K(β^-)^{43}Ca		1817	20	1833.4	0.5	0.8	U					54Li24	*
		1815	10			1.8	U					59Be72	*
^{43}Sc(β^+)^{43}Ca		2200	20	2220.7	1.9	1.0	U					52Ha44	
		2220	10			0.1	U					54Li42	
^{43}Ca(p,n)^{43}Sc		−3005	10	−3003.1	1.9	0.2	U			Har		60Mc12	Y
		−2998	10			−0.5	U					67Mc07	
^{43}Ca(^{3}He,t)^{43}Sc^{i}		−6467	8	−6471	3	−0.5	–					71Al19	*
		−6469	4			−0.5	–					71Be29	*
	ave.	−6469	4			−0.7	1	83	83 ^{43}Sc^{i}			average	

*^{43}S−u	For original doublet ^{43}S−(C$_3$ H$_5$ O)$_{0.754}$, D_M=–38753(22) μu	09Ri12 **
*^{43}S−u	For original doublet ^{43}S C H−(C$_3$ H$_5$ O)$_{0.982}$, D_M=–38694.8(5.5) μu	09Ri12 **
*^{43}V^{i}(2p)^{41}Sc	E_{2p}=4292(22) + recoil=211; data reanalysed and included in 07Do17	MMC135**
*^{42}Ca(^{3}He,d)^{43}Sc^{i}	IT=4238(8); Q rebuilt with Ame1961	MMC123**
*^{43}V^{i}(p)^{42}Ti	Q_p=4590(45) followed by γ's 1938+1554 keV + recoil=118 keV	MMC135**
*^{43}K(β^-)^{43}Ca	E_{β^-}=827(20) 825(10) respectively, to 3/2$^+$ level at 990.257 keV	Ens156 **
*^{43}Ca(^{3}He,t)^{43}Sc^{i}	IT=4226(8); Q rebuilt with Ame1965	MMC123**
*^{43}Ca(^{3}He,t)^{43}Sc^{i}	CDE=7238(4) Q =–6474(4); recalibration +6 keV for ^{42}Ca(p,n)^{42}Sc from Ame1961	MMC123**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{44}P−u		10070	966	11220#	540#	0.8	D			GA7	1.5	07Ju03	*
^{44}S−u		−10510	580	−9881	6	0.7	o			GA4	1.5	00Sa21	
		−8960	620			−1.0	o			GA5	1.5	00Sa21	
		−9769	150			−0.5	U			GA7	1.5	07Ju03	
		−10027	301			0.3	U			GA8	1.5	12Ga45	
^{44}S−C_2 H_4 O		−36095.9	5.6				2			MS1	1.0	09Ri12	*
^{44}Cl−u		−21700	130	−21880	150	−0.9	2			GA4	1.5	00Sa21	
		−21500	500			−0.5	U			TO3	1.5	90Tu01	
		−21450	270			−1.1	U			TO4	1.5	91Zh24	
		−22150	370			0.5	2			GA5	1.5	00Sa21	
		−22115	161			1.0	2			GT1	1.5	04Ma.A	
^{44}Ca−u		−44515.3	10.0	−44518.5	0.3	−0.3	U			MR1	1.0	15Wi.A	
^{44}Sc−u		−40480	410	−40597.1	1.9	−0.2	U			TO6	1.5	98Ba.A	*
^{44}V−u		−25890	130				2			GT1	1.5	04St05	*
^{44}Ar−^{39}K$_{1.128}$		5862.9	1.7				2			MA8	1.0	03Bl17	
^{44}K−^{39}K$_{1.128}$		2526.07	0.45				2			MA8	1.0	07Ya08	
		2529.2	2.2	2526.1	0.5	−1.4	o			TT1	1.0	10La.A	
		2529.1	1.7			−1.8	U			TT1	1.0	12La05	
^{40}Ca(α,γ)^{44}Ti		5127.1	0.7				2					82Di05	
^{44}Ca(p,α)^{41}K		−1058	10	−1045.1	0.3	1.3	U			MIT		64Sp12	
^{41}K(α,n)^{44}Sc		−3420	60	−3390.0	1.8	0.5	U			Yal		61Sm05	
^{44}Ca(d,α)^{42}K		4273	20	4264.2	0.3	−0.4	U					77Pa24	
^{42}Ca(t,p)^{44}Ca		10593	15	10582.27	0.29	−0.7	U			Ald		67Bj06	
^{42}Ca(^{3}He,p)^{44}Sc		6920	20	6911.0	1.7	−0.5	U			Hei		70Sc22	
^{43}Ca(n,γ)^{44}Ca		11130.6	0.5	11131.17	0.23	1.1	–					69Ar.A	Z
		11130.1	0.7			1.5	–					72Wh02	Z
		11131.54	0.29			−1.3	–			Bdn		06Fi.A	
^{43}Ca(d,p)^{44}Ca		8922	14	8906.60	0.23	−1.1	U			MIT		64Sp12	
		8920	10			−1.3	U			Kop		67Bj02	
^{44}Ca(^{3}He,α)^{43}Ca		9452	15	9446.45	0.23	−0.4	U			MIT		71Ra35	
^{43}Ca(n,γ)^{44}Ca	ave.	11131.17	0.24	11131.17	0.23	0.0	1	99	98 ^{44}Ca			average	
^{44}Ca(p,d)^{43}Ca^i		−16880	30	−16901	14	−0.7	–					72Ma23	*
^{44}Ca(d,t)^{43}Ca^i		−12858.7	19.7	−12869	14	−0.5	–					76Do05	*
^{44}Ca(p,d)^{43}Ca^i	ave.	−16888	16	−16901	14	−0.8	1	77	77 ^{43}Ca^i			average	
^{43}Ca(p,γ)^{44}Sc		6694	2	6696.1	1.7	1.1	2					71Po.A	
^{43}Ca(^{3}He,d)^{44}Sc^i		−1583	5	−1575.1	2.5	1.6	1	24	24 ^{44}Sc^i			68Sc15	
^{44}V^i(p)^{43}Ti		950	50	908	11	−0.8	U			Lis		92Bo37	
		908	11				3			Bor		07Do17	
		917	53			−0.2	U					14Po05	
^{44}K(β^-)^{44}Ca		5580	80	5687.2	0.5	1.3	U					70Le05	
^{44}Ca(t,^{3}He)^{44}K		−5660	40	−5668.6	0.5	−0.2	U			LAl		70Aj01	
^{44}Sc(β^+)^{44}Ca		3642	5	3652.7	1.8	2.1	R					50Br52	*
		3650	5			0.5	R					55Bl23	*
^{44}Ca(p,n)^{44}Sc		−4410	15	−4435.0	1.8	−1.7	U			Har		60Mc12	Y
		−4447	10			1.2	U					67Mc07	
^{44}Ca(^{3}He,t)^{44}Sc^i		−6444	4	−6449.0	2.5	−1.3	–					71Be29	*
		−6449	4			0.0	–					72Ma50	*
	ave.	−6446.5	2.8			−0.9	1	76	76 ^{44}Sc^i			average	

*^{44}P−u	Trends from Mass Surface TMS suggest ^{44}P 1070 less bound	GAu	**
*^{44}S−C_2 H_4 O	For original doublet ^{44}S C H−C_3 H_5 O	09Ri12	**
*^{44}Sc−u	$M-A$=–37570(370) keV for mixture gs+p at 271.240 keV	Nub16c	**
*^{44}V−u	$M-A$=–23980(80) keV for mixture gs+m at 270#100 keV	Nub16b	**
*^{44}V−u	Authors have unduely increased the lower error to 380 keV	GAu	**
*^{44}Ca(p,d)^{43}Ca^i	IT=7970(30); Q rebuilt with Ame1965	MMC123	**
*^{44}Ca(d,t)^{43}Ca^i	IT=7980(20); Q rebuilt with Ame1971	MMC123	**
*^{43}Ca(^{3}He,d)^{44}Sc^i	IT=2796(5); Q rebuilt with Ame1965	MMC123	**
*^{44}Sc(β^+)^{44}Ca	E_{β^+}=1463(5) 1471(5) respectively, to 2^+ level at 1157.019 keV	Ens119	**
*^{44}Ca(^{3}He,t)^{44}Sc^i	CDE=7214(4) Q =–6450(4); recalibration +6 keV for ^{42}Ca(p,n)^{42}Sc from Ame1961	MMC123	**
*^{44}Ca(^{3}He,t)^{44}Sc^i	IT=2781(5); Q rebuilt with Ame1971	MMC123	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{45}S−u		−3610	2460	−4280	1110	−0.2	o			GA4	1.5	00Sa21	
		−3330	2880			−0.2	o			GA5	1.5	00Sa21	
		−4283	741				2			GA7	1.5	07Ju03	
^{45}Cl−u		−19690	140	−19610	150	0.4	o			GA4	1.5	00Sa21	
		−20300	700			0.7	U			TO3	1.5	90Tu01	
		−19850	460			0.4	o			GA5	1.5	00Sa21	
		−19710	107			0.7	2			GA7	1.5	07Ju03	
		−19098	236			−1.4	2			GA8	1.5	12Ga45	
^{45}V−u		−34225.7	9.7	−34231.0	0.9	−0.6	U			LZ1	1.0	11Tu09	
^{45}Cr−u		−20390	540	−20950	40	−0.7	U			GT1	1.5	04St05	∗
		−20950	38				2			LZ1	1.0	12Zh34	∗
^{45}Ar−^{39}K$_{1.154}$		9922.45	0.55				2			MA8	1.0	03Bl17	
^{45}K−^{39}K$_{1.154}$		2574.21	0.56				2			MA8	1.0	07Ya08	
^{45}V−^{45}Ti		7647.74	0.23	7647.74	0.23	0.0	1	100	100 ^{45}V	JY1	1.0	14Ka22	
^{45}Sc(p,α)^{42}Ca		2343	8	2339.4	0.7	−0.4	U			MIT		64Sp12	
^{45}Sc(d,α)^{43}Ca		8028	12	8047.7	0.7	1.6	U			MIT		64Sp12	
		8059	12			−0.9	U			Kop		67Ha.A	
^{43}Ca(^{3}He,p)^{45}Sc		10310	20	10305.3	0.7	−0.2	U			Hei		70Sc22	
^{45}Fe(2p)^{43}Cr		1140	40	1154	16	0.3	o					02Gi09	
		1100	100			0.5	U					02Pf02	
		1154	16				3					05Do20	
^{44}Ca(n,γ)^{45}Ca		7414.8	1.0	7414.82	0.17	0.0	U					69Ar.A	Z
		7414.83	0.3			0.0	–			MMn		80Is02	Z
		7414.79	0.21			0.1	–			Bdn		06Fi.A	
^{44}Ca(d,p)^{45}Ca		5184	4	5190.25	0.17	1.6	U			MIT		68Be36	
^{44}Ca(n,γ)^{45}Ca	ave.	7414.80	0.17	7414.82	0.17	0.1	1	99	97 ^{45}Ca			average	
^{44}Ca(p,γ)^{45}Sc		6887.8	1.2	6892.2	0.7	3.7	B					74Sc02	Z
^{45}Sc(^{3}He,α)^{44}Sc		9249	15	9250.4	1.9	0.1	U			MIT		71Ra09	
^{45}Sc(d,t)^{44}Sc^i		−7846	10	−7847.7	2.6	−0.2	U					71Oh01	∗
^{45}V^i(p)^{44}Ti		3190	50	3170	9	−0.4	U					74Ja10	∗
		3170	9				3			Bor		07Do17	∗
^{45}K(β^-)^{45}Ca		4180	200	4196.5	0.6	0.1	U					64Mo18	
^{45}Ca(β^-)^{45}Sc		258	2	259.7	0.7	0.9	1	14	11 ^{45}Sc			65Fr12	
^{45}Ti(β^+)^{45}Sc		2066	5	2062.1	0.5	−0.8	U					66Po04	
^{45}Sc(p,n)^{45}Ti		−2844.2	4.	−2844.4	0.5	−0.1	U			Ric		55Br16	Y
		−2843.6	4.0			−0.2	U			Can		70Kn03	
		−2844.4	0.5			0.0	1	100	100 ^{45}Ti	PTB		85Sc16	Z
^{45}Sc(^{3}He,t)^{45}Ti^i		−6801	4	−6800	3	0.3	1	61	60 ^{45}Ti^i			71Be29	∗
∗^{45}Cr−u		$M-A$=–18940(500) keV for mixture gs+m at 107(1) keV										Nub16b	∗∗
∗^{45}Cr−u		Same result in reference										13Ya03	∗∗
∗^{45}Sc(d,t)^{44}Sc^i		IT=2784(10) combined with Q =–5062; Q rebuilt										MMC123	∗∗
∗^{45}V^i(p)^{44}Ti		Q_p=2060(50) 2087(9) respectively, to 2$^+$ level at 1083.06 keV										Ens119	∗∗
∗^{45}Sc(^{3}He,t)^{45}Ti^i		CDE=7571(4) Q =–6807(4); recalibration +6 keV for ^{42}Ca(p,n)^{42}Sc from Ame1961										MMC123	∗∗
^{46}Cl−u		−16000	860	−14880	220	0.9	o			GA4	1.5	00Sa21	
		−14940	1730			0.0	o			GA5	1.5	00Sa21	
		−14826	172			−0.2	2			GA7	1.5	07Ju03	
		−15040	301			0.4	2			GA8	1.5	12Ga45	
^{46}Ar−u		−32013	107	−31962.6	1.2	0.3	U			GT1	1.5	04Ma.A	
^{46}Sc−u		−44650	230	−44832.5	0.7	−0.5	U			TO6	1.5	98Ba.A	∗
C$_2$ H$_8$ N−^{46}Ti		113071	7	113047.41	0.18	−0.8	U			R09	4.0	72De11	
C ^{13}C H$_5$ O−^{46}Ti		84799	13	84767.76	0.18	−0.6	U			R09	4.0	72De11	
C H$_4$ N O−^{46}Ti		76672	8	76661.90	0.18	−0.3	U			R09	4.0	72De11	
C$_5$ H$_2$−^{46}Ti O		68145	15	68108.59	0.18	−0.6	U			R09	4.0	72De11	
C H$_2$ O$_2$−^{46}Ti		52881	14	52852.45	0.18	−0.5	U			R09	4.0	72De11	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.		Lab	F	Reference	
^{13}C H O_2−^{46}Ti	48423	9	48382.25	0.18	−1.1	U				R09	4.0	72De11	
^{46}Ti−^{22}Ne$_{2.091}$	−29358.74	0.48	−29359.41	0.18	−1.4	1	14	13	^{46}Ti	CP1	1.0	05Sa44	
^{46}V−^{22}Ne$_{2.091}$	−21787.10	0.58	−21788.29	0.22	−2.1	1	14	14	^{46}V	CP1	1.0	05Sa44	
^{46}Cr−u	−31638	15	−31639	12	−0.1	1	67	67	^{46}Cr	LZ1	1.0	16Zh.A	
^{46}Ar−^{39}K$_{1.179}$	10827.5	1.2				2				MA8	1.0	15Mo.A	
^{46}K−^{39}K$_{1.179}$	4771.64	0.78				2				MA8	1.0	07Ya08	
^{46}V−^{46}Ti	7571.67	0.41	7571.12	0.10	−1.4	U				CP1	1.0	05Sa44	
	7571.41	0.33			−0.9	o				JY1	1.0	06Er08	
	7571.10	0.11			0.1	1	83	100	^{46}V	JY1	1.0	11Er02	
^{32}S(^{16}O,2n)^{46}Cr	−17421.6	20.	−17424	11	−0.1	1	33	33	^{46}Cr			72Zi02	
^{46}Ti(p,α)^{43}Sc	−3065	14	−3075.6	1.9	−0.8	U				MIT		64Sp12	*
	−3083	10			0.7	U				Tal		65Pl01	
^{46}Ti(^{3}He,^{6}He)^{43}Ti	−17470	12	−17468	7	0.2	R				MSU		77Mu03	*
^{44}Ca(t,p)^{46}Ca	9339	20	9331.5	2.3	−0.4	U				Kop		67Bj06	
^{44}Ca(^{3}He,p)^{46}Sc	7940	20	7934.8	0.7	−0.3	U				Hei		70Sc22	
^{46}Ti(d,α)^{44}Sc	4400	12	4399.0	1.8	−0.1	U				Kop		67Ha.A	
^{46}Ti(p,t)^{44}Ti	−14235	10	−14240.1	0.7	−0.5	U				Oak		72Ra05	
^{46}Ca(t,α)^{45}K	5998	10	6001.2	2.3	0.3	U				Ald		68Sa09	
^{46}Ca(d,t)^{45}Ca	−4144	10	−4141.3	2.3	0.3	U				Ald		67Bj05	
^{46}Ca(^{3}He,α)^{45}Ca	10194	10	10179.1	2.3	−1.5	U				MIT		71Ra35	
^{45}Sc(n,γ)^{46}Sc	8760.61	0.3	8760.64	0.10	0.1	2				BNn		80Li07	Z
	8760.58	0.14			0.4	2				Utr		82Ti02	Z
	8760.75	0.18			−0.6	2				Bdn		06Fi.A	
^{45}Sc(d,p)^{46}Sc	6541	8	6536.07	0.10	−0.6	U				MIT		64Sp12	
	6543	8			−0.9	U				Kop		67Ha.A	
^{45}Sc(p,γ)^{46}Ti	10344.7	0.7	10344.9	0.7	0.2	1	89	88	^{45}Sc			71Gu.A	
^{46}Ti(p,d)^{45}Ti^{i}	−15682	5	−15684	3	−0.4	1	40	40	^{45}Ti^{i}			78Ko27	
^{46}Cr^{i}(p)^{45}V	4350	50	4269	13	−1.6	U				Lis		92Bo37	
	4269	13				2				Bor		07Do17	*
^{46}Mn^{i}(p)^{45}Cr	3520	100	4840	30	13.2	B				Lis		92Bo37	
	4840	33				3				Bor		07Do17	*
^{46}K(β^-)^{46}Ca	7650	300	7725.4	2.4	0.3	U						66Pa20	
^{46}Ca(^{3}He,t)^{46}Sc^{i}	−6407	4	−6410	3	−0.8	1	72	63	^{46}Sc^{i}			71Be29	*
^{46}Sc(β^-)^{46}Ti	2367	3	2366.6	0.7	−0.1	U						53Yo03	*
	2364	6			0.4	U						56Wo09	*
^{46}Ti(p,n)^{46}V	−7844	9	−7834.80	0.09	1.0	U				Tal		63Ja12	
	−7835.8	1.8			0.6	U				Har		76Sq01	Z
^{46}Ti(^{3}He,t)^{46}V	−7069.0	0.6	−7071.04	0.09	−3.4	F				Mun		77Vo02	*
^{46}Ti(^{3}He,t)^{46}V−^{27}Al()^{27}Si	−2230.8	2.7	−2240.09	0.13	−3.4	B				ChR		74Ha35	
^{46}Ti(^{3}He,t)^{46}V−^{47}Ti()^{47}V	−4121.62	0.19	−4121.70	0.14	−0.4	1	56	39	^{47}V	Mun		09Fa15	*
^{46}Ti(^{3}He,t)^{46}V−^{48}Ti()^{48}V^{i}	−18.57	0.20	−18.58	0.20	0.0	1	100	100	^{48}V^{i}	Mun		09Fa15	
^{46}Ti(^{3}He,t)^{46}V−^{50}Ti()^{50}V^{i}	−31.21	0.25	−31.21	0.25	0.0	1	100	100	^{50}V^{i}	Mun		09Fa.A	
*^{46}Sc−u	$M-A$=–41520(210) keV for mixture gs+n at 142.528 keV											Nub16c	**
*^{46}Ti(p,α)^{43}Sc	Q =–3217 probably to ^{43}Sc^{m} at 151.79 keV											Nub16b	**
*^{46}Ti(^{3}He,^{6}He)^{43}Ti	Averaged with reference ; Q reduced by 3 for recalibration ^{27}Al(^{3}He,^{6}He)											75Mu09	**
*^{46}Cr^{i}(p)^{45}V	Q_p=4254(15) 3494(25) 3003(13) to ground state, (5/2$^+$) level at 797.2, (7/2$^+$) at											MMC128	**
*	1272.2 keV											Ens082	**
*^{46}Mn^{i}(p)^{45}Cr	Q_p=4239(33) to (5/2$^+$) state at 493.6 + 107(1)											11Ho02	**
*^{46}Ca(^{3}He,t)^{46}Sc^{i}	CDE=7177(4) Q =–6413(4); recalibration +6 keV for ^{42}Ca(p,n)^{42}Sc from Ame1961											MMC123	**
*^{46}Sc(β^-)^{46}Ti	E_{β^-}=357(3) to 4$^+$ level at 2009.846 keV											Ens00b	**
*^{46}Sc(β^-)^{46}Ti	E_{β^-}=1475(6) to 2$^+$ level at 889.286 keV											Ens00b	**
*^{46}Ti(^{3}He,t)^{46}V	F : rejected in reference of same group											09Fa15	**
*^{46}Ti(^{3}He,t)^{46}V−^{47}Ti()^{47}V	Q–Q =28.73(0.16) keV to ^{47}V^{i} IAS at 4150.35(0.11) keV											Ens075	**
^{47}Cl−u	−9576	1074	−10500#	430#	−0.6	D				GA7	1.5	07Ju03	*
^{47}Ar−u	−25400	600	−27231.9	1.2	−2.0	U				TO3	1.5	90Tu01	
	−26570	1360			−0.3	U				GA5	1.5	00Sa21	
	−26903	204			−1.1	U				GA8	1.5	12Ga45	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{47}Sc−u		−47630	230	−47597.3	2.1	0.1	U			TO6	1.5	98Ba.A	∗
C ^{35}Cl−^{47}Ti		17085.94	0.82	17094.94	0.13	4.4	B			H32	2.5	79Ko10	
C ^{13}C H_8 N−^{47}Ti		117329	14	117271.34	0.12	−1.0	U			R09	4.0	72De11	
C_2 H_7 O−^{47}Ti		98012	7	97932.09	0.12	−2.9	B			R09	4.0	72De11	
C_5 H_3−^{47}Ti O		76869	10	76802.72	0.12	−1.7	U			R09	4.0	72De11	
C H_3 O_2−^{47}Ti		61608	10	61546.58	0.12	−1.5	U			R09	4.0	72De11	
^{47}Cr−u		−37103.8	8.6	−37104	6	−0.1	1	57	57 ^{47}Cr	LZ1	1.0	11Tu09	
^{47}Mn−u		−24226	34				2			LZ1	1.0	13Ya03	
^{47}Ar−$^{39}K_{1.205}$		16501.8	1.2				2			MA8	1.0	15Mo.A	
^{47}K−$^{39}K_{1.205}$		5398.5	2.7	5395.3	1.5	−1.2	o			TT1	1.0	10La.A	
		5395.3	1.5				2			TT1	1.0	12La05	
^{46}Ti ^{13}C−^{47}Ti C		4218.03	0.94	4223.94	0.14	2.5	U			H32	2.5	79Ko10	
^{47}Ti−^{46}Ti		−929	41	−869.10	0.14	0.4	U			R09	4.0	72De11	
^{47}Ti(d,α)^{45}Sc		6830	12	6845.3	0.7	1.3	U			Kop		67Ha.A	
^{46}Ar(d,p)^{47}Ar		1327	80	1440.2	1.6	1.4	U					06Ga28	
^{46}Ca(n,γ)^{47}Ca		7277.4	0.6	7276.37	0.27	−1.7	–					70Cr04	Z
		7276.1	0.3			0.9	–			Bdn		06Fi.A	
^{46}Ca(d,p)^{47}Ca		5055	8	5051.81	0.27	−0.4	U			Kop		67Ha.A	
		5044	4			2.0	U			MIT		68Be36	
^{46}Ca(n,γ)^{47}Ca	ave.	7276.36	0.27	7276.37	0.27	0.1	1	100	90 ^{46}Ca			average	
^{46}Ti(n,γ)^{47}Ti		8875.1	3.0	8880.88	0.13	1.9	U					69Te01	Z
		8880.5	0.3			1.3	1	20	18 ^{46}Ti	Bdn		06Fi.A	
^{46}Ti(d,p)^{47}Ti		6658	6	6656.32	0.13	−0.3	U			MIT		67Ba32	∗
		6659	8			−0.3	U			Kop		67Ba32	∗
		6654.3	1.7			1.2	U			NDm		76Jo01	
^{46}Ti(d,p)^{47}Ti−^{48}Ti()^{49}Ti		738.15	0.25	738.49	0.14	1.3	1	30	25 ^{46}Ti	Mun		09Fa15	
^{46}Ti(p,γ)^{47}V		5167.80	0.07	5167.79	0.07	−0.2	1	94	61 ^{47}V	Utr		86De13	∗
^{46}Ti(^{3}He,d)^{47}V		−317	15	−325.69	0.07	−0.6	U			MIT		67Do03	
^{47}Mn^{i}(p)^{46}Cr		6867	20	6992	13	6.2	B			Bor		01Gi01	∗
		6992	13				2			Bor		07Do17	∗
^{47}K(β^-)^{47}Ca		6700	300	6632.4	2.6	−0.2	U					64Ku02	∗
^{47}Ca(β^-)^{47}Sc		1984.6	5.	1992.2	1.2	1.5	U					67Hs03	∗
		1992.3	5.			0.0	U					68Fi04	∗
		1991.9	1.2			0.2	1	97	91 ^{47}Ca			87Ju04	
^{47}Sc(β^-)^{47}Ti		600	2	600.8	1.9	0.4	1	93	93 ^{47}Sc			56Gr12	
^{47}V(β^+)^{47}Ti		2912	10	2930.75	0.14	1.9	U					54Da31	
^{47}Ti(p,n)^{47}V		−3706	13	−3713.09	0.14	−0.5	U			Har		60Mc12	Y
∗^{47}Cl−u		Trends from Mass Surface TMS suggest ^{47}Cl 860 more bound										GAu	∗∗
∗^{47}Sc−u		$M-A$=–44320(210) keV for mixture gs+m at 766.83 keV and										Nub16c	∗∗
∗		assuming ratio R=0.07(3), from half-life=272 ns and TOF=1 μs										GAu	∗∗
∗^{46}Ti(d,p)^{47}Ti		All 67Ba32 results decreased 0.2% for recalibration										AHW	∗∗
∗^{46}Ti(p,γ)^{47}V		E_p=985.94(0.05,Z) to 1/2$^+$ level at 6132.60(0.09) keV										Ens075	∗∗
∗^{47}Mn^{i}(p)^{46}Cr		Q_p=5975(25) 4880(20) to 2$^+$ level at 892.16 and (4$^+$) at 1987.1 keV;										Ens102	∗∗
∗		data reanalysed and included in 07Do17										07Do17	∗∗
∗^{47}Mn^{i}(p)^{46}Cr		Q_p=6104(24) 5000(15) to 2$^+$ level at 892.16 and (4$^+$) at 1987.1 keV										Ens102	∗∗
∗		also tentatively Q_p=3973(20) to (3$^-$) at 3196.5 keV, not used										MMC128	∗∗
∗^{47}K(β^-)^{47}Ca		E_{β^-}=4100(300) to 2578.33 3/2$^+$ and 2599.53 1/2$^+$ levels										Ens075	∗∗
∗^{47}Ca(β^-)^{47}Sc		Original values increased by 4(4) for shape factor										87Ju04	∗∗
^{48}Ar−u		−23920	330				2			MT1	1.0	15Me01	
^{48}K−$^{39}K_{1.231}$		10017.7	2.5	10018.5	0.8	0.3	o			TT1	1.0	10La.A	
		10018.50	0.83				2			TT1	1.0	12La05	
^{48}Ca−$^{39}K_{1.231}$		−2799.93	0.22	−2799.78	0.10	0.7	1	22	22 ^{48}Ca	MS1	1.0	12Re17	
^{48}Ca−N ^{18}O O		−44625.15	0.29	−44625.33	0.10	−0.6	1	13	13 ^{48}Ca	TT1	1.0	14Kw04	
^{13}C ^{35}Cl−^{48}Ti		24261.73	0.75	24266.60	0.12	2.6	U			H32	2.5	79Ko10	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
C_5 $H_4-{}^{48}$Ti O	88492	24	88444.58	0.12	−0.5	U			R09	4.0	72De11	
	88494	27			−0.5	U			R09	4.0	72De11	
C_4 H_2 $N-{}^{48}$Ti O	75935	17	75868.52	0.12	−1.0	U			R09	4.0	72De11	
$C_4-{}^{48}$Ti	52109	19	52059.07	0.12	−0.7	U			R09	4.0	72De11	
^{48}Ti $O-{}^{85}Rb_{.753}$	9277.7	1.2	9277.88	0.12	0.2	U			MA8	1.0	12Na15	
^{48}Ti−N ^{18}O O	−49207.30	0.23	−49207.30	0.12	0.0	1	26	26 ^{48}Ti	TT1	1.0	14Kw04	
^{48}Mn−u	−31480	120	−31451	7	0.2	U			GT1	1.5	04St05	
	−31454	10			0.3	1	55	55 ^{48}Mn	LZ1	1.0	16Zh.A	
$^{48}Ca-{}^{40}Ca_{1.200}$	−2586.23	0.23	−2586.13	0.11	0.4	1	21	20 ^{48}Ca	MS1	1.0	12Re17	
$^{48}Ca-{}^{41}K_{1.171}$	−2774.65	0.22	−2774.47	0.10	0.8	1	22	22 ^{48}Ca	MS1	1.0	12Re17	
^{48}Ti $O-{}^{55}Mn_{1.164}$	14972.6	1.2	14973.3	0.4	0.6	1	11	10 ^{55}Mn	MA8	1.0	12Na15	
^{46}Ti ^{37}Cl−^{48}Ti ^{35}Cl	1726.8	1.1	1735.81	0.16	2.0	U			H18	4.0	64Ba03	
	1730.29	0.87			2.5	U			H32	2.5	79Ko10	
^{48}Ti−^{48}Ca	−4582.018	0.086	−4581.97	0.08	0.5	1	88	65 ^{48}Ti	MS1	1.0	13Bu12	
	−4581.86	0.22			−0.5	U			TT1	1.0	14Kw04	
^{48}Ti−^{47}Ti	−3791	48	−3816.82	0.04	−0.1	U			R09	4.0	72De11	
^{48}Ca(^{3}He,^{11}C)^{40}S	−17416	35	−17105	4	8.9	F			Pri		79Ko.B	∗
^{48}Ca(^{3}He,^{8}B)^{43}Cl	−29070	60	−28060	60	16.9	F			MSU		76Ka24	∗
^{48}Ca(α,^{9}Be)^{43}Ar	−21165.5	70.2	−21138	5	0.4	U			Brk		74Je01	
^{48}Ca(^{3}He,^{7}Be)^{44}Ar	−12362	20	−12389.2	1.6	−1.4	U			MSU		76Cr03	∗
^{48}Ca(α,^{7}Be)^{45}Ar	−27840.4	60.2	−27797.9	0.5	0.7	U			Brk		74Je01	
^{48}Ti(p,α)^{45}Sc	−2560	5	−2556.8	0.7	0.6	U			ANL		64Yn03	
	−2545	15			−0.8	U			Tal		65Pl01	
^{48}Ca(^{6}Li,^{8}B)^{46}Ar	−23324.8	70.2	−23286.4	1.5	0.5	U			Brk		74Je01	
^{48}Ca(^{14}C,^{16}O)^{46}Ar	−6739	50	−6694.8	1.1	0.9	U			Mun		80Ma40	
^{48}Ca(d,α)^{46}K	1915	15	1900.1	0.7	−1.0	U			ANL		65Ma07	
^{46}Ca(t,p)^{48}Ca	8752	20	8746.1	2.2	−0.3	U			Ald		67Bj06	
^{48}Ti(d,α)^{46}Sc	3967	12	3979.3	0.7	1.0	U			Kop		67Ha.A	
^{48}Ti(p,^{3}He)^{46}Sc^{i}	−19394	6	−19387	4	1.2	1	37	37 ^{46}Sc^{i}			78Ko27	
^{48}Ti(p,t)^{46}Ti^{i}	−21192	7				2					78Ko27	
^{48}Ti(p,t)^{46}Ti^{j}	−26177	6				2					78Ko27	
^{46}Ti(^{3}He,n)^{48}Cr	5550	18	5554	7	0.2	R			CIT		67Mi02	
^{48}Ni(2p)^{46}Fe	1400	100	1310	40	−0.9	3					05Gi15	∗
	1280	120			0.2	o					11Po09	
	1280	60			0.4	o					12Po03	∗
	1290	40			0.4	3					14Po05	
^{48}Ca(^{14}C,^{15}O)^{47}Ar	−18142	100	−18694.0	1.2	−5.5	B			MSU		85Be50	
^{48}Ca(d,^{3}He)^{47}K	−10304	12	−10308.1	1.4	−0.3	U			ANL		66Ne01	
^{48}Ca(t,α)^{47}K	4006	15	4012.2	1.4	0.4	U			LAl		66Wi11	
	4001	10			1.1	U			Ald		68Sa09	
^{48}Ca(d,t)^{47}Ca	−3699	10	−3694.3	2.2	0.5	U			ANL		66Er02	
^{48}Ca(^{3}He,α)^{47}Ca	10630	12	10626.1	2.2	−0.3	U			ANL		66Er02	
	10642	10			−1.6	U			MIT		71Ra35	
^{47}Ti(n,γ)^{48}Ti	11626.39	0.3	11626.66	0.04	0.9	U			MMn		80Is02	Z
	11626.65	0.04			0.3	1	99	91 ^{47}Ti	Ptn		84Ru06	Z
	11626.66	0.23			0.0	U			Bdn		06Fi.A	
^{47}Ti(d,p)^{48}Ti	9401	8	9402.10	0.04	0.1	U			Kop		67Ba32	
	9403	6			−0.2	U			MIT		67Ba32	
^{47}Ti(^{3}He,d)^{48}V	1337	15	1335.8	1.0	−0.1	U			MIT		68Do06	
^{47}Ti(^{3}He,d)^{48}V^{i}	−1706	20	−1683.03	0.22	1.1	U					68Do06	
^{48}Mn^{i}(p)^{47}Cr	979.6	32.	1014	6	1.1	o			Bor		95Bl05	
	979.6	33.			1.0	o			Bor		96Fa09	∗
	1013	12			0.1	–			Bor		07Do17	∗
	1018	10			−0.4	–					16Or03	
ave.	1016	8			−0.3	1	70	45 ^{48}Mn^{i}			average	
^{48}K(β^{-})^{48}Ca	12000	500	11940.2	0.8	−0.1	U					75Mu08	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{48}Ca(^{7}Li,^{7}Be)^{48}K	−12959	27	−12802.0	0.8	5.8	B			Can		78We14	
^{48}Ca(^{14}C,^{14}N)^{48}K	−11910	50	−11783.7	0.8	2.5	U			Mun		80Ma40	
^{48}Ca(p,n)^{48}Sc	−534	15	−503	5	2.1	U					67Mc07	Z
	−506	7			0.4	1	50	50 ^{48}Sc			68Mc10	
^{48}Sc(β^-)^{48}Ti	3986	7	3989	5	0.4	1	50	50 ^{48}Sc			57Va08	*
^{48}V(β^+)^{48}Ti	4008	5	4015.0	1.0	1.4	U					53Ma64	*
	4013.6	3.			0.5	1	10	10 ^{48}V			67Ko01	*
	4014	7			0.1	U					74Me15	*
^{48}Ti(p,n)^{48}V	−4803	10	−4797.4	1.0	0.6	U			Tal		62Ne08	Y
^{48}Ti(^{3}He,t)^{48}V^{i}	−7048	4	−7052.46	0.22	−1.1	U					71Be29	*
^{48}V^{i}(IT)^{48}V	3018.7	1.0	3018.9	0.9	0.2	1	90	90 ^{48}V			Ens067	
^{48}Mn^{i}(IT)^{48}Mn	3036.7	0.9	3036.7	0.9	0.0	1	100	55 ^{48}Mn^{i}			07Do17	*
*^{48}Ca(^{3}He,^{11}C)^{40}S	F : possible ^{40}Ca contamination; mismatch in cross-sections										GAu	**
*^{48}Ca(^{3}He,^{8}B)^{43}Cl	F : poor spectrum. Authors say: possibly not to ground state										76Ka24	**
*^{48}Ca(^{3}He,^{7}Be)^{44}Ar	$M-A$=–32270(20) Q =–12791(20) for ^{7}Be 429 keV level										GAu	**
*^{48}Ni(2p)^{46}Fe	From only 1 event, Si detector										05Gi15	**
*^{48}Ni(2p)^{46}Fe	From 4 events, gaseous detector										12Po03	**
*^{48}Mn^{i}(p)^{47}Cr	Unexpectedly low intensity 3.6(1.1)%										96Fa09	**
*^{48}Mn^{i}(p)^{47}Cr	Measured intensity 1.8(0.3)%										07Do17	**
*^{48}Sc(β^-)^{48}Ti	E_{β^-}=654(7) to 6$^+$ level at 3333.196 keV										Ens067	**
*^{48}V(β^+)^{48}Ti	E_{β^+}=692(5) 698(3) 698(7) respectively, to 4$^+$ level at 2295.654 keV										Ens067	**
*^{48}Ti(^{3}He,t)^{48}V^{i}	CDE=7818(4) Q =–7054(4); recalibration +6 keV for ^{42}Ca(p,n)^{42}Sc from Ame1961										MMC123	**
*^{48}Mn^{i}(IT)^{48}Mn	γ cascade 2633.5(0.5)+89.9(0.6)+313.3(0.4)										GAu	**
^{49}Ar−u	−19110	1180	−18450#	430#	0.6	D			MT1	1.0	15Me01	*
^{49}K−u	−31981	225	−31789.2	0.9	0.6	U			GT1	1.5	04Ma.A	
^{49}K−^{39}K$_{1.256}$	13794.9	2.8	13795.4	0.9	0.2	o			TT1	1.0	10La.A	
	13795.41	0.86				2			TT1	1.0	12La05	
^{49}Ca−^{39}K$_{1.256}$	1247.1	2.9	1247.53	0.22	0.1	o			TT1	1.0	10La.A	
	1247.1	1.2			0.4	U			TT1	1.0	12La05	
C H$_2$ ^{35}Cl−^{49}Ti	36637	13	36638.13	0.13	0.0	U			R09	4.0	72De11	
C$_4$ H−^{49}Ti	59967	10	59960.40	0.12	−0.2	U			R09	4.0	72De11	
C$_5$ H$_5$−^{49}Ti O	96348	19	96345.91	0.12	0.0	U			R09	4.0	72De11	
C H$_5$ ^{32}S−^{49}Ti	63365	14	63331.71	0.12	−0.6	U			R09	4.0	72De11	
^{49}Mn−u	−40410	12	−40387.4	2.4	1.9	U			LZ1	1.0	11Tu09	
^{49}Fe−u	−26571	26				2			LZ1	1.0	12Zh34	*
^{47}Ti ^{37}Cl−^{49}Ti ^{35}Cl	946.4	1.1	943.02	0.09	−0.8	U			H18	4.0	64Ba03	
	944.46	0.35			−1.7	U			H32	2.5	79Ko10	
^{48}Ti ^{13}C−^{49}Ti C	3432.64	0.80	3431.14	0.03	−0.7	U			H32	2.5	79Ko10	
^{48}Ti H−^{49}Ti	7876	7	7901.34	0.03	0.9	U			R09	4.0	72De11	
	7874	27			0.3	U			R09	4.0	72De11	
^{49}Mn−^{49}Cr	8279.63	0.25	8279.63	0.25	0.0	1	100	100 ^{49}Mn	JY1	1.0	14Ka22	
^{49}Ti−^{48}Ti	−43	36	−76.31	0.03	−0.2	U			R09	4.0	72De11	
^{49}Ti(d,α)^{47}Sc	6476	12	6483.6	1.9	0.6	U			Kop		67Ha.A	
^{48}Ca(n,γ)^{49}Ca	5146.6	0.7	5146.45	0.18	−0.2	2					69Ar.A	Z
	5146.38	0.30			0.2	2					70Cr04	Z
	5146.48	0.23			−0.1	2			Bdn		06Fi.A	
^{48}Ca(d,p)^{49}Ca	2917	7	2921.89	0.18	0.7	U			ANL		66Er02	
	2917	4			1.2	U			MIT		68Be36	
^{48}Ca(p,γ)^{49}Sc	9628.7	3.6	9625.6	2.7	−0.9	–					68Vi01	Z
^{48}Ca(d,n)^{49}Sc	7404	7	7401.0	2.7	−0.4	–					68Gr09	
^{48}Ca(^{3}He,d)^{49}Sc	4150	12	4132.1	2.7	−1.5	U			ANL		66Er02	
^{48}Ca(p,γ)^{49}Sc ave.	9629	3	9625.6	2.7	−1.0	1	71	71 ^{49}Sc			average	
^{48}Ti(n,γ)^{49}Ti	8142.22	0.3	8142.395	0.030	0.6	U			MMn		80Is02	Z
	8142.39	0.03			0.2	1	99	100 ^{49}Ti	Ptn		83Ru08	Z
	8142.35	0.16			0.3	U			Bdn		06Fi.A	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{48}Ti(d,p)^{49}Ti	5907	8	5917.829	0.030	1.4	U			Kop		67Ba32	
	5918	6			0.0	U			MIT		67Ba32	
	5918.6	1.7			−0.5	U			NDm		76Jo01	
^{48}Ti(p,γ)^{49}V	6756.8	1.5	6758.2	0.8	0.9	R					72Ki06	
^{49}Mn^i(p)^{48}Cr	2712.2	50.	2729	16	0.3	U					70Ce02	*
	2730	29			0.0	o			Bor		96Fa09	*
	2729	16				3			Bor		07Do17	*
^{49}K(β^-)^{49}Ca	10970	70	11688.3	0.8	10.3	B					86Mi08	
^{49}Ca(β^-)^{49}Sc	5200	100	5261.5	2.7	0.6	U					56Ma27	
	4970	50			5.8	B					56Ok02	
^{49}Sc(β^-)^{49}Ti	2010	5	2002.5	2.7	−1.5	1	29	29 ^{49}Sc			61Re06	
	1983	7			2.8	B					69Fl02	
^{49}V(ε)^{49}Ti	626	10	601.9	0.8	−2.4	U					56Ha59	
^{49}Ti(p,n)^{49}V	−1383	9	−1384.2	0.8	−0.1	U			Har		60Mc12	Z
	−1383.6	1.0			−0.6	2			Oak		64Jo11	Z
^{49}Ti(^{3}He,t)^{49}V^i	−7052	4				2					71Be29	*
^{49}Cr(β^+)^{49}V	2590	20	2628.9	2.4	1.9	U					53Cr18	*
*^{49}Ar−u	Trends from Mass Surface TMS suggest ^{49}Ar 610 less bound										GAu	**
*^{49}Fe−u	Same result in reference										13Ya03	**
*^{49}Mn^i(p)^{48}Cr	Q_p=1960(50) 1978(29) 1977(16) respectively, to 2$^+$ level at 752.19(0.11) keV										Ens067	**
*^{49}Ti(^{3}He,t)^{49}V^i	CDE=7822(4) Q =−7058(4); recalibration +6 keV for ^{42}Ca(p,n)^{42}Sc from Ame1961										MMC123	**
*^{49}Cr(β^+)^{49}V	E_{β^+}=1540(10) 1390(20) to (7/2$^-$)ground state + (5/2$^-$)90.6392 and 3/2$^-$ at 152.9282										Ens089	**
^{50}K−u	−26100	800	−27620	8	−1.3	U			TO3	1.5	90Tu01	
^{50}K−^{39}K$_{1.282}$	18899	11	18908	8	0.8	o			TT1	1.0	10La.A	
	18908.3	8.3				2			TT1	1.0	12La05	
^{50}Ca−^{39}K$_{1.282}$	4027.0	4.0	4027.5	1.7	0.1	o			TT1	1.0	10La.A	
	4027.5	1.7				2			TT1	1.0	12La05	
^{50}Sc−u	−47940	250	−47824	16	0.3	U			TO6	1.5	98Ba.A	*
C H$_3$ ^{35}Cl−^{50}Ti	47550	23	47541.95	0.13	−0.1	U			R09	4.0	72De11	
C$_4$ H$_2$−^{50}Ti	70860	8	70864.23	0.13	0.1	U			R09	4.0	72De11	
C$_5$ H$_6$−^{50}Ti O	107253	18	107249.73	0.13	0.0	U			R09	4.0	72De11	
C$_3$ ^{13}C H−^{50}Ti	66401	21	66394.03	0.13	−0.1	U			R09	4.0	72De11	
C$_3$ N−^{50}Ti	58279	43	58288.17	0.13	0.1	U			R09	4.0	72De11	
C$_4$ H$_2$−^{50}V	68485	14	68494.2	0.4	0.2	U			R09	4.0	72De11	
C$_3$ N−^{50}V	55903	23	55918.2	0.4	0.2	U			R09	4.0	72De11	
C H$_3$ ^{35}Cl−^{50}V	45158	17	45171.9	0.4	0.2	U			R09	4.0	72De11	
C$_4$ H$_2$−^{50}Cr	69608	8	69608.6	0.5	0.0	U			R09	4.0	72De11	
C$_3$ N−^{50}Cr	57051	7	57032.6	0.5	−0.7	U			R09	4.0	72De11	
C H$_3$ ^{35}Cl−^{50}Cr	46290	14	46286.3	0.5	−0.1	U			R09	4.0	72De11	
^{50}Fe−u	−37012	9				2			LZ1	1.0	16Zh.A	
^{49}Ti ^{13}C−^{50}Ti C	6440.47	0.88	6433.62	0.04	−3.1	B			H32	2.5	79Ko10	
^{50}Mn−^{50}Cr	8195.91	0.10	8195.95	0.07	0.4	1	52	52 ^{50}Mn	JY1	1.0	08Er04	
^{50}Mn^m−^{50}Cr	8437.852	0.065	8437.83	0.06	−0.3	1	81	81 ^{50}Mn^m	JY1	1.0	08Er04	
^{50}Mn^m−^{50}Mn	241.840	0.100	241.88	0.07	0.4	1	55	37 ^{50}Mn	JY1	1.0	08Er04	
^{50}Ti−^{49}Ti	−3075	38	−3078.79	0.04	0.0	U			R09	4.0	72De11	
^{50}Cr(p,^{6}He)^{45}V	−28686	17	−28679.2	1.0	0.4	U			MSU		75Mu09	*
^{50}Ti(p,α)^{47}Sc	−2231	15	−2231.0	1.9	0.0	U			Tal		65Pl01	
^{50}V(p,α)^{47}Ti	572	23	577.4	0.4	0.2	U			MIT		67Sp09	
^{50}Cr(p,α)^{47}V	−3387	10	−3391.4	0.5	−0.4	U			Ald		66Br06	
^{50}Cr(^{3}He,^{6}He)^{47}Cr	−18365	14	−18360	6	0.3	1	19	19 ^{47}Cr	MSU		77Mu03	*
^{48}Ca(t,p)^{50}Ca	3012	15	3025.4	1.6	0.9	U			Ald		66Hi01	
	3020	10			0.5	U			LAl		66Wi11	
^{48}Ca(^{3}He,p)^{50}Sc	7965	15				2			ANL		69Oh01	
^{50}V(d,α)^{48}Ti	9982	15	9979.5	0.4	−0.2	U			MIT		66Do06	
	9988	20			−0.4	U			Kop		67Ha.A	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{50}Cr(d,α)^{48}V	4928	12	4926.4	1.1	−0.1	U			Kop		67Ha.A	
	4923	15			0.2	U			MIT		68Do03	
^{50}Cr(d,α)^{48}V^i	1880	11	1907.6	0.5	2.5	U			MIT		68Do03	*
^{50}Cr(p,t)^{48}Cr	−15100	8	−15101	7	−0.1	2			Oak		71Do18	
	−15100	30			0.0	U			Bld		72Sh27	
^{50}Cr(p,t)^{48}Cr^j	−23861	15				2			MSU		75Mo26	*
^{50}Co^i(2p)^{48}Mn	1972	13				2			Bor		07Do17	
^{50}Ti(t,α)^{49}Sc	7644	25	7654.5	2.7	0.4	U			LAl		66Wi11	
^{49}Ti(n,γ)^{50}Ti	10939.6	0.3	10939.19	0.04	−1.4	U			MMn		80Is02	Z
	10939.19	0.04			0.0	1	100	100 ^{50}Ti	Ptn		84Ru06	Z
	10939.20	0.22			0.0	U			Bdn		06Fi.A	
^{49}Ti(d,p)^{50}Ti	8723	8	8714.62	0.04	−1.0	U			Kop		67Ba32	
	8721	6			−1.1	U			MIT		67Ba32	
^{50}Cr(p,d)^{49}Cr	−10790	30	−10775.8	2.2	0.5	U			Pri		67Wh03	
^{50}Cr(d,t)^{49}Cr	−6743.1	2.2	−6743.1	2.2	0.0	1	100	100 ^{49}Cr	NDm		76Jo01	
^{50}Fe^i(p)^{49}Mn	4389	41	4332	10	−1.4	o			Bor		96Fa09	*
	4332	10				2			Bor		07Do17	*
^{50}K(β^-)^{50}Ca	14050	300	13861	8	−0.6	U					86Mi08	
^{50}Sc(β^-)^{50}Ti	6500	200	6884	15	1.9	U					63Ch03	
	6260	100			6.2	B					69Wa24	
^{50}V(n,p)^{50}Ti	2979	15	2990.0	0.4	0.7	U			ILL		81Wa31	
	2984	10			0.6	U			ILL		94Wa17	
^{50}Ti(p,n)^{50}V	−2991	10	−2990.0	0.4	0.1	U			Har		60Mc12	Y
^{50}Ti(^{3}He,t)^{50}V^i	−7032	4	−7039.83	0.27	−2.0	U					71Be29	*
^{50}Cr(p,n)^{50}Mn	−8416.1	1.9	−8416.82	0.07	−0.4	U			Har		75Fr.A	
^{50}Cr(^{3}He,t)^{50}Mn	−7650.5	0.4	−7653.07	0.07	−6.4	F			Mun		77Vo02	*
^{50}Cr(^{3}He,t)^{50}Mn−^{27}Al()^{27}Si	−2820.0	2.8	−2822.12	0.12	−0.8	U			ChR		74Ha35	
^{50}Cr(^{3}He,t)^{50}Mn−^{42}Ca()^{42}Sc	−1207.6	2.3	−1208.38	0.12	−0.3	U			ChR		74Ha35	
^{50}Cr(^{3}He,t)^{50}Mn−^{54}Fe()^{54}Co	610.09	0.17	610.07	0.10	−0.1	1	35	23 ^{54}Co	ChR		87Ko34	*
*^{50}Sc−u	$M-A$=–44530(220) keV for mixture gs+m at 256.895 keV										Nub16b	**
*^{50}Cr(p,^{6}He)^{45}V	Original Q increase by 1 for recalibration										AHW	**
*^{50}Cr(^{3}He,^{6}He)^{47}Cr	Original Q reduced by 3, see ^{46}Ti(^{3}He,^{6}He)										AHW	**
*^{50}Cr(d,α)^{48}V^i	IT=3043(9); rebuilt from their Q_{gs}=4923(15) keV										MMC124	**
*^{50}Cr(p,t)^{48}Cr^j	Strongest of two fragments given as IT=8760(15); Q rebuilt with Ame1971										75Mo26	**
*^{50}Fe^i(p)^{49}Mn	E_p=2790(41) to 11/2$^{(-)}$ level at 1541.3125 keV										Ens089	**
*^{50}Fe^i(p)^{49}Mn	Q_p=2770(12) 41.1%, 1874(16) 1.0% to 11/2$^{(-)}$ level at 1541.3125, and										Ens089	**
*	13/2$^{(-)}$ at 2481.3 keV										Ens089	**
*^{50}Ti(^{3}He,t)^{50}V^i	CDE=7802(4) Q =–7038(4); recalibration +6 keV for ^{42}Ca(p,n)^{42}Sc from Ame1961										MMC123	**
*^{50}Cr(^{3}He,t)^{50}Mn	F : rejected in reference of same group										09Fa15	**
*^{50}Cr(^{3}He,t)^{50}Mn−^{54}Fe()^{54}Co	$Q-Q$ =40.90(0.16) to 650.99(0.06) level in ^{50}Mn										Ens10c	**
^{51}Ca−^{39}K$_{1.308}$	8467.58	0.56				2			MA8	1.0	13Wi06	
^{51}Ca−u	−38800	350	−39004.3	0.6	−0.4	U			TO3	1.5	90Tu01	
	−38900	400			−0.2	U			TO5	1.5	94Se12	
	−39249	183			0.9	U			GT1	1.5	04Ma.A	
^{51}V−^{39}K$_{1.308}$	−8571.23	0.73	−8571.2	0.4	0.0	–			TT1	1.0	14Ma21	
	−8570.68	0.99			−0.5	–			TT1	1.0	14Ma21	
ave.	−8571.0	0.6			−0.3	1	54	54 ^{51}V			average	
C$_4$ H$_3$−^{51}V	79526	9	79518.2	0.4	−0.2	U			R09	4.0	72De11	
C$_5$ H$_7$−^{51}V O	115921	13	115903.7	0.4	−0.3	U			R09	4.0	72De11	
C$_4$ H$_5$ N−^{51}V O	103334	13	103327.7	0.4	−0.1	U			R09	4.0	72De11	
C$_3$ H N−^{51}V	66943	7	66942.2	0.4	0.0	U			R09	4.0	72De11	
^{51}Cr−^{39}K$_{1.308}$	−7763.66	0.78	−7763.4	0.4	0.3	–			TT1	1.0	14Ma21	
	−7764.0	1.2			0.5	–			TT1	1.0	14Ma21	
ave.	−7763.8	0.7			0.5	1	43	43 ^{51}Cr			average	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{51}Fe$-$u	-43148	12	-43159	10	-0.9	1	64	64 ^{51}Fe	LZ1	1.0	11Tu09	
^{51}Co$-$u	-29353	52				2			LZ1	1.0	14Sh14	
^{51}Ca$-^{58}$Ni$_{.879}$	17823	24	17830.2	0.7	0.3	U			TT1	1.0	12Ga29	
^{47}Ti ^{37}Cl$_2-^{51}$V ^{35}Cl$_2$	1906.	1.8	1900.7	0.5	-0.7	U			H18	4.0	64Ba03	
^{49}Ti ^{37}Cl$-^{51}$V ^{35}Cl	956.7	0.7	957.6	0.5	0.3	U			H18	4.0	64Ba03	
^{51}K$-^{51}$V	31871	14				2			TT1	1.0	12Ga29	
^{51}Cr$-^{51}$V	807.46	0.71	807.78	0.23	0.5	–			TT1	1.0	14Ma21	
	806.3	1.2			1.2	–			TT1	1.0	14Ma21	
ave.	807.2	0.6			1.0	1	14	7 ^{51}V			average	
^{48}Ca(^{14}C,^{11}C)^{51}Ca	-15900	150	-15521.8	0.5	2.5	U			Mun		80Ma40	∗
	-16886	100			13.6	B			MSU		85Be50	
^{48}Ca(^{18}O,^{15}O)^{51}Ca	-12040	120	-11530.7	0.7	4.2	B			Hei		85Br03	∗
	-13900	40			59.2	B			Can		88Ca21	
^{48}Ca(α,p)^{51}Sc	-5860	20				2			ANL		66Er02	
^{51}V(p,α)^{48}Ti	1162	10	1152.9	0.4	-0.9	U			MIT		64Sp12	
^{51}V(d,α)^{49}Ti	7066	12	7070.8	0.4	0.4	U			Kop		67Ha.A	
^{50}Ti(n,γ)^{51}Ti	6372.3	1.2	6372.5	0.5	0.2	2					71Ar39	Z
	6372.6	0.6			-0.2	2			Bdn		06Fi.A	
^{50}Ti(d,p)^{51}Ti	4143	6	4147.9	0.5	0.8	U			MIT		67Ba32	
	4148	8			0.0	U			Kop		67Ba32	
	4147.7	1.2			0.2	2			NDm		76Jo01	
^{50}Ti(p,γ)^{51}V	8063.3	2.0	8061.2	0.4	-1.1	U					70Kl05	Z
	8063.6	2.0			-1.2	U					70Ma36	Z
^{50}Ti(^{3}He,d)^{51}V	2555	15	2567.7	0.4	0.8	U			MIT		67Ob04	
^{50}V(n,γ)^{51}V	11051.18	0.10	11051.15	0.08	-0.3	2			MMn		78Ro03	Z
	11051.05	0.17			0.6	2			ILn		91Mi08	Z
	11051.14	0.22			0.0	2			Bdn		06Fi.A	
^{51}V(γ,n)^{50}V	-11040	60	-11051.15	0.08	-0.2	U			Phi		60Ge01	
^{50}V(d,p)^{51}V	8840	15	8826.58	0.08	-0.9	U			MIT		67De02	
	8828	20			-0.1	U			Kop		67Ha.A	
^{51}V(p,d)^{50}V	-8815	20	-8826.58	0.08	-0.6	U			Oak		65Ba29	
^{50}V(^{3}He,d)^{51}Cr	4031	12	4022.88	0.23	-0.7	U			MIT		69Do01	
^{50}Cr(n,γ)^{51}Cr	9261.71	0.30	9260.64	0.20	-3.6	B			MMn		80Is02	Z
	9260.63	0.20			0.1	1	98	87 ^{50}Cr	Bdn		06Fi.A	
^{50}Cr(d,p)^{51}Cr	7049	8	7036.07	0.20	-1.6	U			Kop		67Ha.A	
	7041	6			-0.8	U			MIT		68Ro09	
^{50}Cr(p,γ)^{51}Mn	5270.8	0.3	5270.78	0.29	-0.1	1	95	81 ^{51}Mn			72Fo25	Z
^{50}Cr(^{3}He,d)^{51}Mn	-206	15	-222.70	0.29	-1.1	U			MIT		67Sp09	
^{50}Cr(p,γ)^{51}Mn^{i}	819	2	820.2	1.5	0.6	2					72Fo25	
^{50}Cr(^{3}He,d)^{51}Mn^{i}	-4652	20	-4673.3	1.5	-1.1	U			MIT		67Ra14	
	-4671.7	2.3			-0.7	2					79Pa14	∗
^{51}Co^{i}(p)^{50}Fe	6513	16				3			Bor		07Do17	∗
^{51}Ti(β^-)^{51}V	2440	30	2471.0	0.6	1.0	U					55Bu01	
	2450	30			0.7	U					55Ma01	
^{51}Cr(ε)^{51}V	756	5	752.45	0.21	-0.7	U					55Bi29	
^{51}V(p,n)^{51}Cr	-1533.5	2.0	-1534.79	0.21	-0.6	U			Nvl		59Go68	Z
	-1533.3	1.8			-0.8	U			Oak		64Jo11	Z
	-1533.7	1.5			-0.7	U			Can		70Kn03	Z
	-1534.93	0.24			0.6	1	78	39 ^{51}V	PTB		89Sc24	Z
^{51}V(^{3}He,t)^{51}Cr^{i}	-7384	5				2					71Be29	
^{51}Mn(β^+)^{51}Cr	3232	20	3207.5	0.3	-1.2	U					66Gl02	
∗^{48}Ca(^{14}C,^{11}C)^{51}Ca	May be a ^{40}Ca contamination. There is a –16900(150) peak										85Be50	∗∗
∗^{48}Ca(^{18}O,^{15}O)^{51}Ca	Proposed 970(90) level reinterpretated as ground state in reference										85Be50	∗∗
∗^{48}Ca(^{18}O,^{15}O)^{51}Ca	Weak $M-A$=–36120(120) level disregarded										AHW	∗∗
∗^{50}Cr(^{3}He,d)^{51}Mn^{i}	IT=4449(3); Q rebuilt with Ame1977										MMC124	∗∗
∗^{51}Co^{i}(p)^{50}Fe	Q_p=4662(16) to (4$^+$) level at 1851.5 keV										Ens10c	∗∗
∗^{51}Co^{i}(p)^{50}Fe	Q_p=6153 was a misprint in Ame2012										XuX16b	∗∗
∗^{51}V(^{3}He,t)^{51}Cr^{i}	CDE=8145(5) Q =–7881(5); recalibration –3 keV for ^{50}Cr(p,n)^{50}Mn from Ame1961										MMC123	∗∗

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{52}K−u	−18398	36				2			MR1	1.0	15Ro10	
^{52}Ca−^{39}K$_{1.333}$	11592.90	0.72				2			MA8	1.0	13Wi06	
^{52}Ca−u	−34900	500	−36786.4	0.7	−2.5	U			TO3	1.5	90Tu01	
	−36792	11			0.5	U			MR1	1.0	13Wi06	
^{52}Sc−u	−43500	230	−43420	90	0.2	2			TO3	1.5	90Tu01	
	−43350	250			−0.2	2			TO5	1.5	94Se12	
	−43110	240			−0.9	2			TO6	1.5	98Ba.A	
	−43438	97			0.2	2			LZ1	1.0	15Xu14	
	−43260	560			−0.3	U			MT1	1.0	15Me08	
^{52}Cr−^{39}K$_{1.333}$	−11116.33	0.48	−11115.8	0.4	1.2	1	58	58 ^{52}Cr	MA8	1.0	17Mo.A	
C$_4$ H$_4$−^{52}Cr	90826	9	90795.1	0.4	−0.9	U			R09	4.0	72De11	
C$_3$ ^{13}C H$_3$−^{52}Cr	86373	18	86324.9	0.4	−0.7	U			R09	4.0	72De11	
C$_3$ H$_2$ N−^{52}Cr	78253	6	78219.1	0.4	−1.4	U			R09	4.0	72De11	
^{52}Co−u	−36888	9				2			LZ1	1.0	16Xu10	
^{52}Co^m−u	−36473	11				2			LZ1	1.0	16Xu10	
^{52}Ca−^{58}Ni$_{.897}$	21220	110	21212.1	0.8	−0.1	U			TT1	1.0	12Ga29	
^{52}Ca−^{52}Cr	22740	82	22708.7	0.8	−0.4	U			TT1	1.0	12Ga29	
^{52}Cr−^{50}Cr	−5566	41	−5536.5	0.6	0.2	U			R09	4.0	72De11	
^{52}Cr(p,α)^{49}V	−2596	10	−2593.3	0.9	0.3	U			Ald		66Br06	
^{50}Ti(t,p)^{52}Ti	5698	10	5699	7	0.1	2			LAl		66Wi11	
	5700	10			−0.1	2			LAl		71Ca19	
^{50}Ti(^{3}He,p)^{52}V	7653	15	7654.4	0.4	0.1	U			Phi		75Ca07	
^{52}Cr(d,α)^{50}V	4517	12	4515.6	0.5	−0.1	U			Kop		67Ha.A	
^{52}Cr(p,^{3}He)^{50}V^i	−18645	6	−18651.1	0.4	−1.0	U					78Ko27	
^{52}Cr(p,t)^{50}Cr^i	−21244	7				2					78Ko27	
^{52}Cr(p,t)^{50}Cr^j	−26041	6				2					78Ko27	
^{51}V(n,γ)^{52}V	7311.2	0.5	7311.24	0.13	0.1	2					84De15	
	7311.18	0.26			0.2	2			ILn		91Mi08	Z
	7311.27	0.15			−0.2	2			Bdn		06Fi.A	
^{51}V(d,p)^{52}V	5098	9	5086.68	0.13	−1.3	U			MIT		64Sp12	
	5086	8			0.1	U			Kop		67Ha.A	
^{51}V(p,γ)^{52}Cr	10500.7	2.8	10504.4	0.5	1.3	U					74Ro44	Z
^{52}Co^i(p)^{51}Fe	1367	60	1487	14	2.0	o			Bor		94Fa06	
	1349	10			13.8	B			Bor		07Do17	
	1352	10			13.5	B					16Or03	
^{52}Ca(β^-)^{52}Sc	5700	200	6180	80	2.4	B					85Hu03	
^{52}Sc(β^-)^{52}Ti	8020	250	9030	80	4.0	B					85Hu03	
^{52}Ti(β^-)^{52}V	1940	200	1974	7	0.2	U					67Mo11	*
^{52}V(β^-)^{52}Cr	3904	30	3975.5	0.5	2.4	U					65Ko09	*
	3854	30			4.0	B					67Va27	*
^{52}Mn(β^+)^{52}Cr	4710.9	4.	4712.0	1.9	0.3	R					58Ko57	*
	4707.9	6.			0.7	R					60Ka20	*
^{52}Cr(p,n)^{52}Mn	−5479	10	−5494.3	1.9	−1.5	U			Ric		66Ri09	
^{52}Cr(^{3}He,t)^{52}Mn^i	−7653	5				2					71Be29	*
^{52}Fe(β^+)^{52}Mn	2372	10	2377	5	0.5	–					56Ar33	*
	2229	130			1.1	U					79Ge02	*
	2510	100			−1.3	U					95Ir01	
ave.	2375	6			0.4	1	65	61 ^{52}Fe			average	
^{52}Co^i(IT)^{52}Co^m	2548	2				3					16Or03	
*^{52}Ti(β^-)^{52}V	E_{β^-}=1800(200) to 1$^+$ level at 141.610 keV										Ens159	**
*^{52}V(β^-)^{52}Cr	E_{β^-}=2470(30) 2420(30) respectively, to 2$^+$ level at 1434.091 keV										Ens159	**
*^{52}Mn(β^+)^{52}Cr	E_{β^+}=575(4) and 572(6) respectively, to 6$^+$ level at 3113.858 keV										Ens159	**
*^{52}Cr(^{3}He,t)^{52}Mn^i	CDE=8414(5) Q =–7650(5); recalibration –3 keV for ^{50}Cr(p,n)^{50}Mn from Ame1961										MMC123	**
*^{52}Fe(β^+)^{52}Mn	E_{β^+}=804(10) to 1$^+$ level at 546.438 keV										Ens159	**
*^{52}Fe(β^+)^{52}Mn	E_{β^+}=5350(130) from ^{52}Fe^m 12$^+$ at 6958.0 to 11$^+$ level at 3837.2 keV										Ens159	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{53}K−u		−13200	120				2			MR1	1.0	15Ro10	
^{53}Ca−u		−31549	47				2			MR1	1.0	13Wi06	
^{53}Sc−u		−41440	260	−41770	100	−0.8	o			TO3	1.5	90Tu01	
		−41830	280			0.1	U			TO5	1.5	94Se12	
		−41100	400			−1.1	U			TO6	1.5	98Ba.A	
		−41694	118			−0.4	2			GT1	1.5	04Ma.A	
		−40910	290			−3.0	B			MT1	1.0	11Es06	
		−41804	123			0.3	2			LZ1	1.0	15Xu14	
		−40980	610			−1.3	U			MT1	1.0	15Me08	
C_4 H_5−^{53}Cr		98529	8	98478.2	0.4	−1.6	U			R09	4.0	72De11	
C_3 H_3 N−^{53}Cr		85958	10	85902.1	0.4	−1.4	U			R09	4.0	72De11	
C_2 ^{13}C H_2 N−^{53}Cr		81507	27	81431.9	0.4	−0.7	U			R09	4.0	72De11	
C_3 H O−^{53}Cr		62152	14	62092.7	0.4	−1.1	U			R09	4.0	72De11	
^{53}Co−u		−45783	18	−45796.8	1.8	−0.8	U			LZ1	1.0	11Tu09	
^{53}Ni−u		−31810	27				2			LZ1	1.0	12Zh34	∗
^{53}Co−^{53}Fe		8897.67	0.49	8897.6	0.5	−0.1	1	94	93 ^{53}Co	JY1	1.0	10Ka26	
^{53}Co^m−^{53}Fe		12305.2	1.3	12305.3	1.0	0.1	1	59	58 ^{53}Co^m	JY1	1.0	10Ka26	
^{53}Co^m−^{53}Co		3407.9	1.5	3407.6	1.0	−0.2	1	46	39 ^{53}Co^m	JY1	1.0	10Ka26	
^{53}Cr−^{52}Cr		115	46	141.97	0.15	0.1	U			R09	4.0	72De11	
^{51}V(t,p)^{53}V		7325	25	7308	3	−0.7	U			Ald		67Hi02	
^{53}Cr(d,α)^{51}V		7635	12	7627.6	0.5	−0.6	U			Kop		67Ha.A	
^{52}Cr(n,γ)^{53}Cr		7939.52	0.3	7939.07	0.14	−1.5	–			MMn		80Is02	Z
		7939.01	0.2			0.3	–			BNn		80Ko01	Z
		7939.10	0.28			−0.1	–			Bdn		06Fi.A	
^{52}Cr(d,p)^{53}Cr		5725	6	5714.51	0.14	−1.7	U			MIT		64Sp12	
		5719	8			−0.6	U			Kop		67Ha.A	
^{52}Cr(n,γ)^{53}Cr	ave.	7939.15	0.14	7939.07	0.14	−0.5	1	95	62 ^{53}Cr			average	
^{52}Cr(p,γ)^{53}Mn		6559.1	1.1	6559.8	0.3	0.7	U					70Ma25	Z
		6559.72	0.36			0.3	1	86	77 ^{53}Mn			79Sw01	Z
^{52}Cr(^{3}He,d)^{53}Mn		1070	15	1066.4	0.3	−0.2	U			MIT		67Ob04	
^{53}Co^m(p)^{52}Fe		1559.7	40.	1556	5	−0.1	o					70Ja22	
		1600.5	30.			−1.5	U					70Ce04	
		1590	30			−1.1	U					72Ce01	
		1590	30			−1.1	U					76Vi02	
		1552.3	8.0			0.5	1	42	39 ^{52}Fe			15Sh16	∗
^{53}Co^i(p)^{52}Fe		2789.5	50.	2707	6	−1.7	U					76Vi02	∗
		2778.5	18.			−4.0	B			Bor		07Do17	∗
^{53}Ti(β^-)^{53}V		5020	100				3			ANB		77Pa01	
^{53}V(β^-)^{53}Cr		3536	50	3436	3	−2.0	U					56Sc.A	∗
^{53}Cr(p,n)^{53}Mn		−1379	8	−1379.2	0.4	0.0	U			MIT		52Lo06	Y
		−1381.1	1.6			1.2	U			Oak		64Jo11	Z
^{53}Cr(^{3}He,t)^{53}Mn^i		−7589	4				2					71Be29	∗
^{53}Fe(β^+)^{53}Mn		3860	100	3742.6	1.7	−1.2	U					59Ju40	
		3820	100			−0.8	U					75Bl01	
^{53}Co^i(IT)^{53}Co		4325	2				2					16Su10	
∗^{53}Ni−u	Same result in reference											13Ya03	∗∗
∗^{53}Co^m(p)^{52}Fe	Original Q =1558(8) corrected for recoil											16Hu.A	∗∗
∗^{53}Co^i(p)^{52}Fe	Q_p=1940(50) 1929(18) respectively, to 2^+ level at 849.45 keV											Ens159	∗∗
∗^{53}V(β^-)^{53}Cr	E_{β^-}=2530(50) to 5/2$^-$ level at 1006.27 keV											Ens09a	∗∗
∗^{53}Cr(^{3}He,t)^{53}Mn^i	CDE=8350(4) Q =–7586(4); recalibration –3 keV for ^{50}Cr(p,n)^{50}Mn from Ame1961											MMC123	∗∗
^{54}Ca−u		−27011	52				2			MR1	1.0	13Wi06	
^{54}Sc−u		−36060	500	−36380	290	−0.4	o			TO3	1.5	90Tu01	∗
		−37060	500			0.9	o			TO5	1.5	94Se12	∗
		−36960	400			1.0	U			TO6	1.5	98Ba.A	∗
		−37059	225			2.0	U			GT1	1.5	04Ma.A	
		−36070	390			−0.8	2			MT1	1.0	11Es06	∗
		−37202	585			1.4	2			LZ1	1.0	15Xu14	∗
		−36230	680			−0.2	2			MT1	1.0	15Me08	
^{54}Ti−u		−48820	230	−48980	90	−0.5	2			TO3	1.5	90Tu01	
		−49130	250			0.4	2			TO5	1.5	94Se12	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{54}Ti−u		−48820	280	−48980	90	−0.4	2			TO6	1.5	98Ba.A	
		−48998	118			0.2	2			LZ1	1.0	15Xu14	
C_4 H_6−^{54}Cr		108018	17	108072.2	0.4	0.8	U			R09	4.0	72De11	
C_3 ^{13}C H_5−^{54}Cr		103569	15	103602.0	0.4	0.5	U			R09	4.0	72De11	
C_3 H_4 N−^{54}Cr		95445	13	95496.1	0.4	1.0	U			R09	4.0	72De11	
C_2 ^{13}C H_3 N−^{54}Cr		90960	24	91025.9	0.4	0.7	U			R09	4.0	72De11	
C_2 N O−^{54}Cr		59057	26	59110.6	0.4	0.5	U			R09	4.0	72De11	
^{13}C ^{37}Cl$_3$−^{54}Fe ^{35}Cl$_2$		23744.46	1.26	23748.9	0.4	1.4	U			H39	2.5	84Ha20	
C_4 H_6−^{54}Fe		107368	11	107341.9	0.4	−0.6	U			R09	4.0	72De11	
C_3 H_4 N−^{54}Fe		94791	8	94765.8	0.4	−0.8	U			R09	4.0	72De11	
C_2 N O−^{54}Fe		58411	8	58380.3	0.4	−1.0	U			R09	4.0	72De11	
C_3 ^{13}C H_5−^{54}Fe		102908	48	102871.7	0.4	−0.2	U			R09	4.0	72De11	
^{54}Ni−u		−42167	5				2			LZ1	1.0	16Zh.A	
^{54}Co−^{54}Fe		8850.94	0.14	8850.89	0.10	−0.4	1	47	47 ^{54}Co	JY1	1.0	08Er04	
^{54}Co^m−^{54}Fe		9062.960	0.092	9062.99	0.08	0.3	1	81	81 ^{54}Co^m	JY1	1.0	08Er04	
^{54}Co^m−^{54}Co		212.18	0.15	212.10	0.10	−0.5	1	49	30 ^{54}Co	JY1	1.0	08Er04	
^{54}Cr−^{53}Cr		−1662	48	−1768.95	0.13	−0.6	U			R09	4.0	72De11	
^{54}Fe(p,^{6}He)^{49}Mn		−28943	24	−28937.0	2.3	0.3	U			MSU		75Mu09	∗
^{54}Fe(α,^{8}He)^{50}Fe		−50950	60	−50963	8	−0.2	U			Tex		77Tr05	
^{54}Cr(p,α)^{51}V		130	30	133.1	0.5	0.1	U			Kop		64Ve02	
^{54}Fe(p,α)^{51}Mn		−3145	9	−3146.6	0.6	−0.2	U			Ald		66Br05	
		−3146.9	1.1			0.3	1	28	19 ^{51}Mn	NDm		74Jo14	
^{54}Fe(p,α)^{51}Mn^i		−7606.6	5.0	−7597.1	1.6	1.9	U					79Ta22	∗
^{54}Fe(^{3}He,^{6}He)^{51}Fe		−18694	15	−18713	9	−1.3	1	36	36 ^{51}Fe	MSU		77Mu03	∗
^{54}Cr(d,α)^{52}V		5225	12	5219.8	0.5	−0.4	U			Kop		67Ha.A	
^{52}Cr(t,p)^{54}Cr		9171	10	9176.36	0.18	0.5	U			LAl		71Ca19	
^{52}Cr(^{3}He,p)^{54}Mn		7785	15	7780.6	1.0	−0.3	U			MIT		69Ly06	
		7788	9			−0.8	U			Phi		72Be07	
^{52}Cr(^{3}He,p)^{54}Mn^i		1633.6	3.9	1634.5	2.8	0.2	1	51	51 ^{54}Mn^i			72Be07	∗
^{52}Cr(^{3}He,n)^{54}Fe^j		−7173	20				2					75Bo14	
^{54}Fe(d,α)^{52}Mn		5169	12	5163.6	1.8	−0.5	U			Kop		67Ha.A	
		5159	15			0.3	U			MIT		67Sp09	
		5163.3	2.2			0.1	–			NDm		76Jo01	
	ave.	5163.8	1.8			−0.1	1	97	97 ^{52}Mn			average	
^{54}Fe(p,t)^{52}Fe		−15584	8	−15585	5	−0.1	R					78Ko27	∗
^{54}Fe(p,t)^{52}Fe^j		−24139	7	−24140	6	−0.1	2					78Ko27	
		−24141.3	11.0			0.1	2					78De18	∗
^{54}Zn(2p)^{52}Ni		1480	20	1480	20	0.0	o					05Gi15	
		1480	20				3					05Bl15	
		1280	210			1.0	U					11As08	
^{54}Cr(d,^{3}He)^{53}V		−6879.2	3.1				2			NDm		79Br.B	
^{53}Cr(n,γ)^{54}Cr		9719.30	0.16	9719.08	0.12	−1.4	–					68Wh03	Z
		9718.3	0.4			2.0	–					72Lo26	Z
		9718.91	0.27			0.6	–			MMn		80Is02	Z
		9718.0	0.2			5.4	B					87Mh.A	
		9719.7	0.5			−1.2	–			SAn		89Ho15	Z
		9720.00	0.20			−4.6	C			Bdn		06Fi.A	
^{53}Cr(d,p)^{54}Cr		7480	12	7494.52	0.12	1.2	U			MIT		64Sp12	
		7514	10			−1.9	U			Kop		67Ha.A	
^{53}Cr(n,γ)^{54}Cr	ave.	9719.14	0.13	9719.08	0.12	−0.5	1	96	58 ^{54}Cr			average	
^{53}Cr(p,γ)^{54}Mn		7559.6	1.0				2					75We10	Z
^{53}Cr(^{3}He,d)^{54}Mn		2080	12	2066.1	1.0	−1.2	U			MIT		69Ly06	
^{54}Fe(d,t)^{53}Fe		−7121.5	2.1	−7121.1	1.6	0.2	–			NDm		74Jo14	
^{54}Fe(^{3}He,α)^{53}Fe		7197	20	7199.3	1.6	0.1	U			MIT		68Tr01	
		7199.6	2.6			−0.1	–			NDm		74Jo14	
^{54}Fe(d,t)^{53}Fe	ave.	−7121.2	1.6	−7121.1	1.6	0.1	1	98	98 ^{53}Fe			average	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{54}Ti(β^-)^{54}V	4280	160	4270	80	−0.1	R					96Do23	
^{54}V(β^-)^{54}Cr	7000	100	7042	15	0.4	U					70Wa14	
^{54}Cr(t,^{3}He)^{54}V	−7023	15				2			LAl		77Fl03	
^{54}Mn(ε)^{54}Cr	1359	8	1377.1	1.0	2.3	U					72Ko47	*
	1379	8			−0.2	U					00Hi08	*
^{54}Cr(p,n)^{54}Mn	−2160	5	−2159.5	1.0	0.1	U			MIT		52Lo06	Z
^{54}Cr(^{3}He,t)^{54}Mn^i	−7541	4	−7541.9	2.8	−0.2	1	49	49 ^{54}Mn^i			71Be29	*
^{54}Co(β^+)^{54}Fe	8023	110	8244.55	0.09	2.0	U					59Su.A	*
	8459	41			−5.2	C					60Mi.A	
^{54}Fe(p,n)^{54}Co	−9031.1	2.5	−9026.89	0.09	1.7	U			Yal		69Ov01	*
	−9023.7	1.8			−1.8	U			Har		74Ho21	Z
^{54}Fe(^{3}He,t)^{54}Co	−8261.2	1.0	−8263.14	0.09	−1.9	F			Mun		77Vo02	*
^{54}Fe(^{3}He,t)^{54}Co−^{27}Al()^{27}Si	−3432.5	3.0	−3432.19	0.13	0.1	U			ChR		74Ha35	
^{54}Fe(^{3}He,t)^{54}Co−^{42}Ca()^{42}Sc	−1817.24	0.18	−1818.45	0.13	−6.7	B			ChR		87Ko34	
*^{54}Sc−u	Original –36000(500) μu or $M-A$=–33500(470) keV										GAu	**
*^{54}Sc−u	Original –37000(500) μu or $M-A$=–34470(470) keV										GAu	**
*^{54}Sc−u	$M-A$=–34370(370) keV for mixture gs+m at 110.5 keV										Nub16b	**
*^{54}Sc−u	$M-A$=–33540(360) keV for mixture gs+m at 110.5 keV										Nub16b	**
*^{54}Sc−u	No isomeric correction needed										HWJ151	**
*^{54}Fe(p,^{6}He)^{49}Mn	Q increased 1 for recalibration										AHW	**
*^{54}Fe(p,α)^{51}Mn^i	IT=4459(5); Q rebuilt with Ame1977										MMC124	**
*^{54}Fe(^{3}He,^{6}He)^{51}Fe	Averaged with reference See ^{46}Ti(^{3}He,^{6}He)										75Mu09	**
*^{52}Cr(^{3}He,p)^{54}Mn^i	IT=6151(5); Q rebuilt with Ame1971										MMC124	**
*^{54}Fe(p,t)^{52}Fe	Q =–21239(8) to ^{52}Fe^i at 5654.5										Nub16c	**
*^{54}Fe(p,t)^{52}Fe^j	IT=8561(5); Q rebuilt with Ame1977										MMC124	**
*^{54}Mn(ε)^{54}Cr	IBE=518(8) to 2$^+$ level at 834.855 keV, B(K)=5.99										Ens148	**
*^{54}Mn(ε)^{54}Cr	IBE=544(8) to 2$^+$ level at 834.855 keV										Ens148	**
*^{54}Cr(^{3}He,t)^{54}Mn^i	CDE=8302(4) Q =–7538(4); recalibration –3 keV for ^{50}Cr(p,n)^{50}Mn from Ame1961										MMC123	**
*^{54}Co(β^+)^{54}Fe	E_{β^+}=4250(110) from ^{54}Co^m at 197.57 to 2949.2 6$^+$ level										Nub16b	**
*^{54}Fe(p,n)^{54}Co	Uncorrected for resonance. Orig T=9204.1(1.8) corrected in reference										76Fr13	**
*^{54}Fe(^{3}He,t)^{54}Co	Original value –8260.2(0.6) recalibrated										AHW	**
*^{54}Fe(^{3}He,t)^{54}Co	F : rejected in reference of same group										09Fa15	**
^{55}Sc−u	−30600	1100	−32380	490	−1.1	2			TO3	1.5	90Tu01	
	−32100	600			−0.3	2			TO6	1.5	98Ba.A	
	−32460	640			0.1	o			MT1	1.0	11Es06	
	−32760	620			0.6	2			MT1	1.0	15Me08	
^{55}Ti−u	−44650	280	−44730	170	−0.2	–			TO3	1.5	90Tu01	
	−44880	260			0.4	–			TO5	1.5	94Se12	
	−44360	350			−0.7	–			TO6	1.5	98Ba.A	
	ave. −44680	250			−0.2	1	48	48 ^{55}Ti			average	
^{55}Cr−^{85}Rb$_{.647}$	−2093.4	1.3	−2090.7	0.4	2.1	U			MA8	1.0	17Mo.A	
C$_4$ H$_7$−^{55}Mn	116757	8	116732.1	0.3	−0.8	U			R09	4.0	72De11	
C$_3$ ^{13}C H$_6$−^{55}Mn	112281	25	112261.9	0.3	−0.2	U			R09	4.0	72De11	
C$_3$ H$_5$ N−^{55}Mn	104202	10	104156.0	0.3	−1.2	U			R09	4.0	72De11	
C$_2$ H$_3$ N$_2$−^{55}Mn	91618	28	91579.9	0.3	−0.3	U			R09	4.0	72De11	
C$_3$ H$_3$ O−^{55}Mn	80372	10	80346.5	0.3	−0.6	U			R09	4.0	72De11	
^{55}Mn−^{85}Rb$_{.647}$	−4884.41	0.84	−4884.8	0.3	−0.4	1	15	15 ^{55}Mn	MA8	1.0	12Na15	
	−4887.0	1.3			1.7	U			MA8	1.0	17Mo.A	
^{55}Ni−u	−48678	18	−48670.0	0.8	0.4	U			LZ1	1.0	11Tu09	
^{55}Cu−u	−33962	167				2			LZ1	1.0	13Ya03	
^{55}Ni−^{55}Co	9333.43	0.62				2			JY1	1.0	10Ka26	
^{55}Mn(p,α)^{52}Cr	2570	8	2570.9	0.3	0.1	U			MIT		64Sp12	
	2600	10			−2.9	U			ANL		67Ka11	
^{55}Mn(d,α)^{53}Cr	8283	8	8285.4	0.3	0.3	U			MIT		64Sp12	
	8277	15			0.6	U			Kop		67Ha.A	
^{54}Cr(n,γ)^{55}Cr	6246.2	0.4	6246.26	0.19	0.2	–					72Wh05	Z
	6246.28	0.21			−0.1	–			Bdn		06Fi.A	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.		Lab	F	Reference	
^{54}Cr(d,p)^{55}Cr		4027	8	4021.70	0.19	−0.7	U				MIT		64Sp12	
		4035	8			−1.7	U				Kop		67Ha.A	
		4022.1	1.2			−0.3	U				NDm		74Jo14	
^{54}Cr(n,γ)^{55}Cr	ave.	6246.26	0.19	6246.26	0.19	0.0	1	100	100	^{55}Cr			average	
^{54}Cr(p,γ)^{55}Mn		8067.2	0.4	8066.6	0.3	−1.5	1	63	42	^{54}Cr			78We12	
^{54}Cr(^{3}He,d)^{55}Mn		2568	18	2573.1	0.3	0.3	U				MIT		69Ra02	
^{55}Mn(γ,n)^{54}Mn		−10192	20	−10226.1	1.1	−1.7	U				Phi		60Ge01	
^{54}Fe(n,γ)^{55}Fe		9297.91	0.3	9298.12	0.19	0.7	–				MMn		80Is02	Z
		9298.53	0.27			−1.5	–				Bdn		06Fi.A	
^{54}Fe(d,p)^{55}Fe		7084	8	7073.55	0.19	−1.3	U				MIT		64Sp12	
		7083	10			−0.9	U				Kop		67Ha.A	
		7072.3	1.7			0.7	U				NDm		74Jo14	
^{54}Fe(n,γ)^{55}Fe	ave.	9298.25	0.20	9298.12	0.19	−0.7	1	90	71	^{54}Fe			average	
^{54}Fe(p,γ)^{55}Co		5064.0	0.7	5064.35	0.30	0.5	–						77Er02	Z
		5063.9	0.4			1.1	–						80Ha36	Z
^{54}Fe(^{3}He,d)^{55}Co		−428	15	−429.12	0.30	−0.1	U				MIT		67Ob04	
		−426.9	2.2			−1.0	U				NDm		74Jo14	
^{54}Fe(p,γ)^{55}Co	ave.	5063.9	0.3	5064.35	0.30	1.2	1	74	55	^{55}Co			average	
^{55}Ti(β^-)^{55}V		7440	200	7480	160	0.2	1	62	52	^{55}Ti			96Do23	
^{55}V(β^-)^{55}Cr		5956	100	5970	100	0.1	1	90	90	^{55}V	ANB		77Na17	
^{55}Cr(β^-)^{55}Mn		2500	40	2602.7	0.4	2.6	U						63Me06	
		2494	25			4.3	B						65Ko09	
^{55}Fe(ε)^{55}Mn		224.5	4.	231.11	0.18	1.7	U						65Be19	
		224.5	3.			2.2	U						69Ka13	
		231.4	0.4			−0.7	–						89Zl.A	
		230.7	1.9			0.2	U						90Is06	
		231.0	1.0			0.1	U						93Wi05	*
		231.37	0.30			−0.9	–						95Da14	*
		231.0	0.3			0.4	–						95Sy01	*
		232.36	0.64			−1.9	U						01Ke14	
^{55}Mn(p,n)^{55}Fe		−1015.7	2.	−1013.46	0.18	1.1	U				Nvl		59Go68	Z
		−1014.6	0.8			1.4	U				Oak		64Jo11	Z
^{55}Fe(ε)^{55}Mn	ave.	231.23	0.19	231.11	0.18	−0.6	1	91	82	^{55}Fe			average	
^{55}Mn(^{3}He,t)^{55}Fe^i		−7883	6				2						71Be29	*
^{55}Co(β^+)^{55}Fe		3466	2	3451.4	0.3	−7.3	B						66Fi06	*
*^{55}Fe(ε)^{55}Mn	Error estimated by evaluator												AHW	**
*^{55}Fe(ε)^{55}Mn	Original error 0.10 increased by evaluator												GAu	**
*^{55}Fe(ε)^{55}Mn	Original statistical error 0.10 increased by evaluator												GAu	**
*^{55}Mn(^{3}He,t)^{55}Fe^i	CDE=8654(6) Q =–7890(6); recalibration +7 keV for ^{54}Fe(p,n)^{54}Co from Ame1961												MMC123	**
*^{55}Co(β^+)^{55}Fe	E_{β^+}=1513(2) to 5/2$^-$ level at 931.29 keV												Ens097	**
^{56}Sc−u		−26680	630				2				MT1	1.0	15Me08	*
^{56}Ti−u		−41300	350	−42210	130	−1.7	–				TO3	1.5	90Tu01	
		−42010	300			−0.4	–				TO5	1.5	94Se12	
		−41770	270			−1.1	–				TO6	1.5	98Ba.A	
		−42319	129			0.6	–				GT1	1.5	04Ma.A	
		−42700	290			1.7	–				LZ1	1.0	15Xu14	
	ave.	−42240	140			0.2	1	90	90	^{56}Ti			average	
^{56}V−u		−49470	250	−49550	190	−0.2	–				TO3	1.5	90Tu01	
		−49640	260			0.2	–				TO5	1.5	94Se12	
		−49310	250			−0.6	–				TO6	1.5	98Ba.A	
	ave.	−49470	220			−0.4	1	75	75	^{56}V			average	
^{56}Cr−^{85}Rb$_{.659}$		−1216.3	2.0	−1220.3	0.6	−2.0	U				MA8	1.0	05Gu27	
^{56}Mn−^{85}Rb$_{.659}$		−2965.1	1.5	−2966.5	0.4	−0.9	U				MA8	1.0	05Gu37	
^{56}Mn−^{39}K$_{1.436}$		−8979.0	2.7	−8979.6	0.4	−0.2	U				MA8	1.0	09Na.A	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
C_4 $H_8-{}^{56}Fe$	127754	10	127664.6	0.3	−2.2	U			R09	4.0	72De11	
C_3 ${}^{13}C$ $H_7-{}^{56}Fe$	123300	47	123194.4	0.3	−0.6	U			R09	4.0	72De11	
C_3 H_6 $N-{}^{56}Fe$	115171	13	115088.6	0.3	−1.6	U			R09	4.0	72De11	
C_3 H_4 $O-{}^{56}Fe$	91381	15	91279.1	0.3	−1.7	U			R09	4.0	72De11	
C_2 H_2 N $O-{}^{56}Fe$	78790	24	78703.1	0.3	−0.9	U			R09	4.0	72De11	
C_2 $O_2-{}^{56}Fe$	54990	9	54893.6	0.3	−2.7	B			R09	4.0	72De11	
${}^{56}Fe-{}^{85}Rb_{.659}$	−6933.79	0.62	−6933.8	0.3	−0.1	1	27	27 ${}^{56}Fe$	MA8	1.0	17Mo.A	
${}^{56}Cu-u$	−41485	16				2			LZ1	1.0	16Zh.A	
${}^{56}Fe-{}^{58}Ni_{.966}$	−2604.70	0.47	−2604.54	0.26	0.3	1	31	26 ${}^{58}Ni$	JY1	1.0	10Ka26	
${}^{56}Co-{}^{58}Ni_{.966}$	2297.85	0.55	2298.0	0.4	0.3	1	58	51 ${}^{56}Co$	JY1	1.0	10Ka26	
${}^{56}Ni-{}^{55}Co_{1.018}$	1176.23	0.48	1175.4	0.4	−1.7	1	60	33 ${}^{55}Co$	JY1	1.0	10Ka26	
${}^{56}Cr-{}^{56}Fe$	5713.49	0.56				2			MA8	1.0	17Mo.A	
${}^{56}Ni-{}^{56}Fe$	7192.00	0.52	7192.3	0.3	0.5	1	42	40 ${}^{56}Ni$	JY1	1.0	10Ka26	
${}^{56}Ni-{}^{56}Co$	2289.61	0.49	2289.7	0.4	0.2	1	67	49 ${}^{56}Co$	JY1	1.0	10Ka26	
${}^{56}Fe-{}^{54}Fe$	−4755	47	−4672.69	0.30	0.4	U			R09	4.0	72De11	
${}^{56}Fe(p,\alpha){}^{53}Mn$	−1060	9	−1052.9	0.4	0.8	U			MIT		64Sp12	
	−1056	9			0.3	U			Ald		66Br05	
	−1052.3	0.8			−0.8	1	29	23 ${}^{53}Mn$	NDm		74Jo14	
${}^{54}Cr(t,p){}^{56}Cr$	5995	30	6011.1	0.6	0.5	U			Ald		68Ch20	
	6024	10			−1.3	U			LAl		71Ca19	
${}^{56}Fe(d,\alpha){}^{54}Mn$	5662	12	5661.4	1.1	−0.1	U			Kop		67Ha.A	
	5673	30			−0.4	U					67Hj01	
${}^{54}Fe({}^{3}He,p){}^{56}Co$	7410	10	7428.1	0.5	1.8	U			CIT		67Mi02	
	7408	15			1.3	U			MIT		68Be10	
${}^{54}Fe({}^{3}He,n){}^{56}Ni$	4513	14	4512.9	0.4	0.0	U			CIT		67Mi02	
${}^{55}Mn(n,\gamma){}^{56}Mn$	7270.53	0.3	7270.44	0.13	−0.3	2			MMn		80Is02	Z
	7270.42	0.15			0.1	2			Bdn		06Fi.A	
${}^{55}Mn(d,p){}^{56}Mn$	5052	5	5045.88	0.13	−1.2	U			MIT		64Sp12	
	5053	8			−0.9	U			Kop		67Ha.A	
${}^{55}Mn(p,\gamma){}^{56}Fe$	10189	7	10183.64	0.16	−0.8	U					69Fr22	
	10193.7	4.5			−2.2	U					70Sa19	*
	10195.7	3.6			−3.4	B					74Pe15	*
	10183.80	0.17			−0.9	1	86	44 ${}^{55}Mn$	Utr		92Gu03	Z
${}^{56}Fe(d,t){}^{55}Fe$	−4938.3	1.3	−4939.87	0.23	−1.2	U			NDm		74Jo14	
${}^{56}Ni(p){}^{55}Co$	−7148.5	30.	−7166.6	0.3	−0.6	U					08Jo04	*
${}^{56}Cu^{i}(p){}^{55}Ni$	2929	31	2948	10	0.6	U			Bor		07Do17	*
	2948	10				3					14Or04	*
${}^{56}Ti(\beta^-){}^{56}V$	7030	330	6830	190	−0.6	1	35	25 ${}^{56}V$			96Do23	
${}^{56}Cr(\beta^-){}^{56}Mn$	1610	150	1626.5	0.6	0.1	U					60Dr03	
${}^{56}Mn(\beta^-){}^{56}Fe$	3685	5	3695.54	0.21	2.1	U					62Ho14	*
${}^{56}Co(\beta^+){}^{56}Fe$	4566.0	2.0	4566.7	0.4	0.3	U					65Pe18	*
${}^{56}Fe(p,n){}^{56}Co$	−5351	10	−5349.0	0.4	0.2	U			Tal		62Ne08	Y
${}^{56}Fe({}^{3}He,t){}^{56}Co^{i}$	−8178	9				2					71Be29	*
*${}^{56}Sc-u$	$M-A$=–24850(590) keV for mixture gs+m at 0#(100#) keV										15Me08	**
*${}^{55}Mn(p,\gamma){}^{56}Fe$	E_p=1537(2) to 11703(4) level										70Sa19	**
*${}^{55}Mn(p,\gamma){}^{56}Fe$	E_p=1537(2) to 11705(3) level										74Pe15	**
*${}^{56}Ni(p){}^{55}Co$	E_p=2540(30) from 9735 level										08Jo04	**
*${}^{56}Cu^{i}(p){}^{55}Ni$	Strongest fragment (strength 2.7); weaker fragment 85(70) keV lower (strength 1.3)										14Or04	**
*${}^{56}Mn(\beta^-){}^{56}Fe$	E_{β^-}=2838(5) to 2^+ level at 846.7778 keV										Ens115	**
*${}^{56}Co(\beta^+){}^{56}Fe$	E_{β^+}=1459(3) to 4^+ level at 2085.1045 keV										Ens115	**
*${}^{56}Fe({}^{3}He,t){}^{56}Co^{i}$	Strongest fragment given as CDE=8950(6); Q =–8186(6) rebuilt with Ame1965										71Be29	**
*	recalibration +7 keV for ${}^{54}Fe(p,n){}^{54}Co$ from Ame1961										MMC123	**
${}^{57}Sc-u$	−22540	1400				2			MT1	1.0	15Me08	
${}^{57}Ti-u$	−35700	1000	−36410	280	−0.5	2			TO3	1.5	90Tu01	
	−36200	400			−0.3	2			TO6	1.5	98Ba.A	
	−37102	408			1.1	2			GT1	1.5	04Ma.A	
	−36280	370			−0.4	2			MT1	1.0	11Es06	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{57}V$-$u	-47300	400	-47680	90	-0.6	U			TO3	1.5	90Tu01	
	-47640	270			-0.1	2			TO5	1.5	94Se12	
	-47320	250			-1.0	2			TO6	1.5	98Ba.A	
	-47703	91			0.3	2			LZ1	1.0	15Xu14	
^{57}Cr$-$u	-56240	250	-56387.6	1.1	-0.4	U			TO3	1.5	90Tu01	
	-56300	260			-0.2	U			TO5	1.5	94Se12	
	-56170	270			-0.5	U			TO6	1.5	98Ba.A	
^{57}Cr$-^{85}$Rb$_{.671}$	2802.1	2.0	2801.5	1.1	-0.3	2			MA8	1.0	05Gu27	
	2801.2	1.4			0.2	2			MA8	1.0	17Mo.A	
^{57}Mn$-^{85}$Rb$_{.671}$	-2525.1	2.3	-2524.9	1.6	0.1	1	49	49 ^{57}Mn	MA8	1.0	05Gu37	
^{57}Mn$-^{39}$K$_{1.462}$	-8650.7	2.8	-8652.9	1.6	-0.8	1	33	33 ^{57}Mn	MA8	1.0	12Na15	
C$_7$ H$_8-^{57}$Fe ^{35}Cl	158378.5	3.5	158355.4	0.3	-2.6	U			M18	2.5	68Hu05	
C$_4$ H$_9-^{57}$Fe	135085	11	135033.2	0.3	-1.2	U			R09	4.0	72De11	
C$_3$ H$_7$ N$-^{57}$Fe	122500	10	122457.1	0.3	-1.1	U			R09	4.0	72De11	
C$_3$ H$_5$ O$-^{57}$Fe	98684	8	98647.6	0.3	-1.1	U			R09	4.0	72De11	
C$_2$ H$_3$ N O$-^{57}$Fe	86104	17	86071.6	0.3	-0.5	U			R09	4.0	72De11	
^{57}Ni$-^{85}$Rb$_{.671}$	-1019.8	2.7	-1019.4	0.6	0.2	U			MA8	1.0	07Gu09	
^{57}Cu$-$u	-50772	43	-50788.2	0.6	-0.4	U			LZ1	1.0	11Tu09	
^{56}Fe ^{13}C$-^{57}$Fe C	2897.67	0.47	2898.32	0.04	0.6	U			H30	2.5	77Ba10	
	2897.68	0.40			0.6	U			H30	2.5	77Ba10	
^{56}Fe H$-^{57}$Fe	7325	7	7368.52	0.04	1.6	U			R09	4.0	72De11	
^{57}Fe$-^{56}$Fe$_{1.018}$	1627.95	0.46	1627.68	0.04	-0.6	U			JY1	1.0	10Ka26	
^{57}Fe$-^{58}$Ni$_{.983}$	-1048.75	0.46	-1048.84	0.27	-0.2	1	34	28 ^{58}Ni	JY1	1.0	10Ka26	
^{57}Ni$-^{58}$Ni$_{.983}$	3350.77	0.72	3350.6	0.5	-0.3	1	55	50 ^{57}Ni	JY1	1.0	10Ka26	
^{57}Cu$-^{56}$Ni$_{1.018}$	8126.29	0.55	8125.6	0.4	-1.2	1	63	48 ^{57}Cu	JY1	1.0	10Ka26	
^{57}Cu$-^{57}$Fe	13817.80	0.86	13819.7	0.5	2.2	1	29	28 ^{57}Cu	JY1	1.0	10Ka26	
^{57}Cu$-^{57}$Ni	9420.42	0.55	9420.3	0.5	-0.2	1	74	50 ^{57}Ni	JY1	1.0	10Ka26	
^{56}Fe ^{37}Cl$-^{57}$Fe ^{35}Cl	-3413.7	4.3	-3406.63	0.08	0.7	U			M18	2.5	68Hu05	
^{57}Fe$-^{56}$Fe	456.6	1.4	456.52	0.04	0.0	U			M18	2.5	68Hu05	
	453.2	2.1			0.6	U			M18	2.5	68Hu05	
	491	39			-0.2	U			R09	4.0	72De11	
^{54}Cr(α,p)^{57}Mn	-4308	8	-4312.6	1.5	-0.6	U			NDm		76Ma03	
	-4302	8			-1.3	U			Can		78An10	
^{57}Fe(p,α)^{54}Mn	237	9	239.8	1.1	0.3	U			MIT		64Sp12	
^{54}Fe(α,p)^{57}Co	-1770.3	1.8	-1773.0	0.5	-1.5	U			NDm		74Jo14	
^{55}Mn(t,p)^{57}Mn	7438.2	3.6	7434.7	1.5	-1.0	1	18	17 ^{57}Mn	NDm		77Ma12	
^{57}Fe(d,α)^{55}Mn	8246	15	8241.38	0.16	-0.3	U			Kop		67Ha.A	
^{56}Fe(n,γ)^{57}Fe	7645.9	0.5	7646.07	0.04	0.3	U			Utr		68Sp01	
	7646.10	0.17			-0.2	o			BNn		76Al16	Z
	7645.96	0.20			0.6	U			BNn		78St25	Z
	7646.13	0.21			-0.3	U			MMn		80Is02	Z
	7645.93	0.15			1.0	–			Ptn		80Ve05	Z
	7646.0956	0.0500			-0.4	–			PTc		97Ro26	∗
	7646.08	0.09			-0.1	–					02Bo11	
	7646.10	0.15			-0.2	–			Bdn		06Fi.A	
^{56}Fe(d,p)^{57}Fe	5425	8	5421.51	0.04	-0.4	U			MIT		64Sp12	
	5425	8			-0.4	U			Kop		67Ha.A	
	5419.8	1.3			1.3	U			NDm		74Jo14	
^{56}Fe(n,γ)^{57}Fe ave.	7646.08	0.04	7646.07	0.04	-0.2	1	99	83 ^{57}Fe			average	
^{56}Fe(p,γ)^{57}Co	6027.7	1.0	6027.5	0.4	-0.2	–					70Ob02	Z
	6029.3	1.5			-1.2	–					71Le21	Z
^{56}Fe(^{3}He,d)^{57}Co	538	20	534.0	0.4	-0.2	U			LAl		65Bl13	
^{56}Fe(p,γ)^{57}Co ave.	6028.2	0.8	6027.5	0.4	-0.9	1	29	29 ^{57}Co			average	
^{56}Fe(p,γ)^{57}Co^i	-1226.4	0.5	-1225.9	0.3	0.9	2					70Ob02	∗
	-1225.6	0.4			-0.6	2					71Le21	∗
^{57}Cu^i(p)^{56}Ni	4650	50	4609	25	-0.8	2					76Vi02	
	4568	10			4.1	C					98Jo.A	
	4595	29			0.5	2					02Jo09	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{57}Ti(β^-)^{57}V		11020	950	10500	270	−0.5	U					96Do23	
^{57}Cr(β^-)^{57}Mn		5100	100	4961.5	1.8	−1.4	U			ANB		78Da04	
^{57}Mn(β^-)^{57}Fe		2690	50	2695.6	1.5	0.1	U					63Va37	
^{57}Co(ε)^{57}Fe		810	30	836.3	0.5	0.9	U					71La02	*
^{57}Fe(p,n)^{57}Co		−1619.4	2.0	−1618.6	0.5	0.4	–			Oak		64Jo11	Z
		−1618.2	2.0			−0.2	–			Can		70Kn03	
	ave.	−1618.8	1.4			0.1	1	10	10 ^{57}Co			average	
^{57}Fe(^{3}He,t)^{57}Co^i		−8122	7	−8108.2	0.3	2.0	U					71Be29	*
^{57}Ni(β^+)^{57}Co		3245	10	3261.7	0.6	1.7	U					50Fr10	*
		3235	10			2.7	U					51Ca28	*
		3246	10			1.6	U					58Ko60	*
^{57}Cu(β^+)^{57}Ni		8742	130	8774.9	0.4	0.3	U					84Sh28	
*^{56}Fe(n,γ)^{57}Fe		Original error 0.0005 increased for calibration										GAu	**
*^{56}Fe(p,γ)^{57}Co^i		T=1247.9 recalibrated to T=1248.5(0.6) keV										AHW	**
*^{56}Fe(p,γ)^{57}Co^i		T=1247.1 recalibrated to T=1247.7(0.4) keV										AHW	**
*^{57}Co(ε)^{57}Fe		IBE=674(30) to 5/2$^-$ level at 136.4743 keV										Ens98c	**
*^{57}Fe(^{3}He,t)^{57}Co^i		CDE=8893(7) Q =–8129(7); recalibration +7 keV for ^{54}Fe(p,n)^{54}Co from Ame1961										MMC123	**
*^{57}Ni(β^+)^{57}Co		E_{β^+}=845(10) 835(10) 849(10) respectively, to 13/2$^-$ level at 1377.663 keV										Ens98c	**
^{58}V−u		−43210	280	−43370	100	−0.4	2			TO3	1.5	90Tu01	
		−43350	280			−0.1	2			TO5	1.5	94Se12	
		−42700	400			−1.1	2			TO6	1.5	98Ba.A	
		−43328	107			−0.3	2			GT1	1.5	04Ma.A	
		−43457	134			0.6	2			LZ1	1.0	15Xu14	
^{58}Cr−u		−55680	230	−55815.5	1.6	−0.4	U			TO3	1.5	90Tu01	
		−55750	260			−0.2	U			TO5	1.5	94Se12	
		−55490	270			−0.8	U			TO6	1.5	98Ba.A	
^{58}Cr−^{85}Rb$_{.682}$		4343.9	1.6				2			MA8	1.0	17Mo.A	
^{58}Mn−^{39}K$_{1.487}$		−5964.9	2.9				2			MA8	1.0	12Na15	*
C$_3$ H$_8$ N−^{58}Fe		132382	12	132400.5	0.4	0.4	U			R09	4.0	72De11	
C$_3$ H$_6$ O−^{58}Fe		108576	13	108591.1	0.4	0.3	U			R09	4.0	72De11	
C$_2$ H$_4$ N O−^{58}Fe		95999	13	96015.0	0.4	0.3	U			R09	4.0	72De11	
C$_3$ H$_6$ O−^{58}Ni		106491	8	106523.0	0.4	1.0	U			R10	4.0	74De22	
C$_3$ ^{13}C H$_9$−^{58}Ni		138424	14	138438.3	0.4	0.3	U			R10	4.0	74De22	
C$_3$ H$_8$ N−^{58}Ni		130302	25	130332.5	0.4	0.3	U			R10	4.0	74De22	
C$_2$ H$_4$ O N−^{58}Ni		93926	10	93947.0	0.4	0.5	U			R10	4.0	74De22	
		93928	15			0.3	U			R10	4.0	74De22	
C$_3$ H$_6$ O−^{58}Ni		106504	14	106523.0	0.4	0.3	U			R10	4.0	74De22	
^{58}Ni−^{58}Fe		2059	32	2068.0	0.3	0.1	U			R09	4.0	72De11	
^{58}Cu−^{58}Ni		9190.61	0.50	9190.6	0.5	0.0	1	90	90 ^{58}Cu	JY1	1.0	10Ka26	
^{58}Ni(p,^{6}He)^{53}Co		−27889	18	−27872.4	1.7	0.9	U			MSU		75Mu09	*
^{58}Ni(α,^{8}He)^{54}Ni		−50190	50	−50135	5	1.1	U			Tex		77Tr05	
^{58}Fe(p,α)^{55}Mn		420	9	421.36	0.24	0.2	U			MIT		64Sp12	
^{58}Ni(p,α)^{55}Co		−1341.0	2.9	−1334.8	0.4	2.1	U			BNL		73Go19	
		−1335.1	0.9			0.3	1	18	12 ^{55}Co	NDm		74Jo14	
^{58}Ni(^{3}He,^{6}He)^{55}Ni		−17556	11	−17553.8	0.7	0.2	U			MSU		77Mu03	*
^{58}Fe(d,α)^{56}Mn		5470	12	5467.23	0.28	−0.2	U			Kop		67Ha.A	
^{56}Fe(^{3}He,p)^{58}Co		6853	15	6882.3	1.1	2.0	U			MIT		72Ly01	
^{58}Ni(d,α)^{56}Co		6522	12	6522.5	0.4	0.0	U			Kop		67Ha.A	
		6506	10			1.6	U			MIT		68Be10	
^{58}Ni(p,t)^{56}Ni		−13987	18	−13982.0	0.3	0.3	U			Bld		65Ho07	
^{58}Ni(p,t)^{56}Ni^j		−23926	4				2					84Ka07	*
^{57}Fe(n,γ)^{58}Fe		10044.60	0.3	10044.59	0.18	0.0	–			MMn		80Is02	Z
		10044.65	0.24			−0.2	–			Bdn		06Fi.A	
^{57}Fe(d,p)^{58}Fe		7815	8	7820.02	0.18	0.6	U			MIT		64Sp12	
		7824	12			−0.3	U			Kop		67Ha.A	
^{57}Fe(n,γ)^{58}Fe	ave.	10044.63	0.19	10044.59	0.18	−0.2	1	93	82 ^{58}Fe			average	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{57}Fe(p,γ)^{58}Co	6952	3	6954.3	1.1	0.8	1	14	14 ^{58}Co			70Er03	
^{58}Ni(p,d)^{57}Ni	−9971.2	7.	−9991.7	0.5	−2.9	U					79Ik04	*
^{58}Ni(^{3}He,α)^{57}Ni	8360.3	4.	8361.4	0.5	0.3	U			MSU		76Na23	
	8384.8	15.			−1.6	U					79Fo09	*
^{58}Ni(^{7}Li,^{8}He)^{57}Cu	−29564	50	−29622.4	0.5	−1.2	U			MSU		85Sh03	
	−29613	17			−0.6	U			Tex		86Ga19	
^{58}Ni(^{14}N,^{15}C)^{57}Cu	−19900	40	−19929.6	0.9	−0.7	U			Ber		87St04	
^{58}Mn(β^-)^{58}Fe	5890	100	6327.6	2.7	4.4	B					69Wa10	*
	5958	100			3.7	B					71Dy01	*
^{58}Fe(t,^{3}He)^{58}Mn	−6318	15	−6309.0	2.7	0.6	U			LAl		77Fl03	*
^{58}Co(β^+)^{58}Fe	2305	6	2308.0	1.1	0.5	U					52Ch31	*
	2307	4			0.2	U					63Rh02	*
^{58}Fe(^{3}He,t)^{58}Co^{i}	−8079	8				2					71Be29	*
^{58}Ni(p,n)^{58}Cu	−9351	5	−9343.4	0.4	1.5	U			Mar		64Ma.A	
	−9352.6	3.4			2.7	U			Ric		66Bo20	Z
	−9346	10			0.3	U			Ric		66Ri09	
	−9346.6	1.7			1.9	U			Yal		69Ov01	Z
	−9347.8	4.0			1.1	U			Har		76Fr13	
^{58}Ni(π^+,π^-)^{58}Zn	−16908	50				2					86Se04	
*^{58}Mn−^{39}K$_{1.487}$	D_M=–5887.8(2.9) μu for ^{58}Mn^m at 71.77 keV; $M-A$=–55755.6(2.7) keV										Nub16b	**
*^{58}Ni(p,^{6}He)^{53}Co	Q increased 1 for recalibration										AHW	**
*^{58}Ni(^{3}He,^{6}He)^{55}Ni	Averaged with reference See ^{46}Ti(^{3}He,^{6}He)										75Mu09	**
*^{58}Ni(p,t)^{56}Ni^{j}	Strongest of three fragments IT=9943(4); Q rebuilt with Ame1977										MMC129	**
*^{58}Ni(p,d)^{57}Ni	Q =–15210(7) for ^{57}Ni^{i} at 5238.8(0.7) keV, strongest fragment IT=5230(7);										Nub16b	**
*	rebuilt with Q_{gs}=–9975 keV, average of 73Ed01 and 65Sh06										73Ed01	**
*^{58}Ni(^{3}He,α)^{57}Ni	IT=5235(15); Q =3146(15) for ^{57}Ni^{i} at 5238.8(0.7) rebuilt with Ame1977										MMC129	**
*^{58}Mn(β^-)^{58}Fe	Q_{β^-}=6100(300); and 5930(100) from ^{58}Mn^m at 71.77 keV										Nub16b	**
*^{58}Mn(β^-)^{58}Fe	Q_{β^-}=6030(100) from ^{58}Mn^m at 71.77 keV										Nub16b	**
*^{58}Fe(t,^{3}He)^{58}Mn	And Q =–6318(15)–77(8) to ^{58}Mn^m at 71.77 keV										Nub16b	**
*^{58}Co(β^+)^{58}Fe	E_{β^+}=472(6) 474(4) respectively, to 2$^+$ level at 810.7662 keV										Ens104	**
*^{58}Fe(^{3}He,t)^{58}Co^{i}	Strongest of two fragments IT=5759(8); Q rebuilt with Ame1964										71Be29	**
*	recalibration +7 keV for ^{54}Fe(p,n)^{54}Co from Ame1961										MMC123	**
^{59}V−u	−38500	400	−40610	170	−3.5	B			TO3	1.5	90Tu01	
	−40700	350			0.2	2			TO5	1.5	94Se12	
	−39900	400			−1.2	2			TO6	1.5	98Ba.A	
	−40677	129			0.3	2			GT1	1.5	04Ma.A	
^{59}Cr−u	−51490	290	−51620	230	−0.3	2			TO3	1.5	90Tu01	*
	−51640	310			0.0	2			TO5	1.5	94Se12	*
	−51100	310			−1.1	2			TO6	1.5	98Ba.A	*
	−52380	500			1.5	2			MT1	1.0	16Me07	*
^{59}Mn−^{39}K$_{1.513}$	−4696.8	2.5				2			MA8	1.0	12Na15	
^{59}Fe−^{85}Rb$_{.694}$	−3908.1	1.0	−3908.4	0.4	−0.3	1	15	15 ^{59}Fe	MA8	1.0	17Ma.A	
C_3 H_7 O−^{59}Co	116467	12	116496.2	0.4	0.6	U			R10	4.0	74De22	
C_2 ^{13}C H_6 O−^{59}Co	112011	25	112026.0	0.4	0.1	U			R10	4.0	74De22	
C_2 H_5 O N−^{59}Co	103901	6	103920.1	0.4	0.8	U			R10	4.0	74De22	
^{59}Zn−u	−50698	29	−50688.0	0.8	0.3	U			LZ1	1.0	11Tu09	
^{58}Ni H−^{59}Co	9970	15	9973.16	0.22	0.1	U			R10	4.0	74De22	
^{59}Zn−^{58}Cu$_{1.017}$	5722.4	1.3	5722.6	0.8	0.1	1	36	27 ^{59}Zn	JY1	1.0	10Ka26	
^{59}Zn−^{59}Cu	9815.22	0.72	9815.2	0.6	−0.1	1	81	73 ^{59}Zn	JY1	1.0	10Ka26	
^{59}Co−^{58}Ni	−2182	35	−2148.12	0.22	0.2	U			R10	4.0	74De22	
^{59}Co(p,α)^{56}Fe	3245	8	3241.4	0.3	−0.4	U			MIT		64Sp12	
	3243	9			−0.2	U			Ald		66Br05	
	3240.4	1.4			0.7	U			NDm		74Jo14	
^{59}Co(d,α)^{57}Fe	8667	15	8662.9	0.3	−0.3	U			Kop		67Ha.A	
	8659.3	3.2			1.1	U			NDm		74Jo14	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{59}Ni(p,t)^{57}Ni		−12738.2	3.3	−12733.7	0.5	1.4	U			MSU		76Na23	
		−12738.4	5.0			0.9	U					78Na11	∗
^{58}Fe(n,γ)^{59}Fe		6581.15	0.30	6581.01	0.11	−0.5	–			Ptn		73Sp06	Z
		6580.94	0.20			0.3	–			Ptn		80Ve05	Z
		6581.02	0.14			−0.1	–			Bdn		06Fi.A	
^{58}Fe(d,p)^{59}Fe		4357	8	4356.44	0.11	−0.1	U			MIT		64Sp12	
		4369	8			−1.6	U			Kop		67Ha.A	
^{58}Fe(n,γ)^{59}Fe	ave.	6581.01	0.11	6581.01	0.11	0.0	1	99	85 ^{59}Fe			average	
^{58}Fe(p,γ)^{59}Co		7359.7	2.0	7363.6	0.4	1.9	U					74Ke14	Z
^{58}Fe(^{3}He,d)^{59}Co		1871	20	1870.1	0.4	0.0	U			LAl		65Bl13	
^{58}Fe(p,γ)^{59}Co−^{56}Fe()^{57}Co		1336.5	0.7	1336.1	0.4	−0.6	1	41	28 ^{57}Co			75Br29	
^{59}Co(γ,n)^{58}Co		−10441	26	−10453.9	1.1	−0.5	U			Phi		60Ge01	
^{59}Co(d,t)^{58}Co		−4196.0	1.4	−4196.6	1.1	−0.5	1	62	61 ^{58}Co	NDm		74Jo14	
^{58}Ni(n,γ)^{59}Ni		8999.37	0.30	8999.28	0.05	−0.3	U					75Wi06	Z
		8999.38	0.20			−0.5	U			MMn		77Is01	Z
		8999.10	0.23			0.8	U			ILn		93Ha05	Z
		8999.28	0.05			0.0	1	99	72 ^{59}Ni	ORn		04Ra23	
		8999.15	0.18			0.7	U			Bdn		06Fi.A	
^{58}Ni(d,p)^{59}Ni		6797	10	6774.71	0.05	−2.2	U			Kop		67Ha.A	
		6785	5			−2.1	U			MIT		70An25	
		6773.5	1.7			0.7	U			NDm		74Jo14	
^{58}Ni(p,γ)^{59}Cu		3418.5	0.5	3418.6	0.4	0.1	1	62	62 ^{59}Cu			63Bo07	Z
		3419	2			−0.2	U					70Fo09	
		3416.7	2.0			0.9	U					75Kl06	Z
^{58}Ni(p,π^-)^{59}Zn		−144735	40	−144783.4	0.8	−1.2	U					83Sh31	
^{59}Mn(β^-)^{59}Fe		5200	100	5139.5	2.4	−0.6	U			ANB		77Pa18	
^{59}Fe(β^-)^{59}Co		1570	4	1564.9	0.4	−1.3	U					52Me53	∗
		1563	3			0.6	U					63Wo01	∗
^{59}Ni(ε)^{59}Co		1074.5	1.3	1073.00	0.19	−1.2	U					76Be02	∗
^{59}Co(p,n)^{59}Ni		−1855.8	2.0	−1855.35	0.19	0.2	U			MIT		51Mc48	Z
		−1854.3	4.0			−0.3	U					57Bu37	Z
		−1861	5			1.1	U			Ric		57Ch30	Z
		−1855.8	1.6			0.3	U			Oak		64Jo11	Z
		−1855.33	0.20			−0.1	1	95	90 ^{59}Co	PTB		98Bo30	
^{59}Co(^{3}He,t)^{59}Ni^i		−8436	8	−8433.5	2.1	0.3	U					71Be29	∗
^{59}Zn(β^+)^{59}Cu		9120	100	9142.8	0.6	0.2	U					81Ar13	
∗^{59}Cr−u	Original –51220(240) μu or $M-A$=–47710(230) keV											GAu	∗∗
∗^{59}Cr−u	Original –51370(270) μu or $M-A$=–47850(250) keV											GAu	∗∗
∗^{59}Cr−u	$M-A$=–47350(250) keV for mixture gs+m at 503.0 keV											Nub16b	∗∗
∗^{59}Cr−u	$M-A$=–48540(440) keV for mixture gs+m at 503.0 keV											Nub16b	∗∗
∗^{59}Ni(p,t)^{57}Ni	Strongest of three IAS fragments, Q=–17977.2(5.0) for ^{57}Ni^i at 5238.8											Nub16b	∗∗
∗^{59}Fe(β^-)^{59}Co	E_{β^-}=475(3) to 3/2$^-$ level at 1099.256 keV											Ens024	∗∗
∗^{59}Fe(β^-)^{59}Co	E_{β^-}=462(3), 273(3) to 3/2$^-$ levels at 1099.256, 1291.605 keV											Ens024	∗∗
∗^{59}Ni(ε)^{59}Co	Authors add B(K)=8.3 of Ni, changed in 7.7 of Co											AHW	∗∗
∗^{59}Co(^{3}He,t)^{59}Ni^i	Strongest fragment Q=–8441(8); recalibration +5 keV for ^{58}Ni(p,n)^{58}Cu^i from Ame1961											MMC129	∗∗
^{60}V−u		−33860	700	−35690	240	−1.7	U			TO3	1.5	90Tu01	∗
		−35560	600			−0.1	2			TO5	1.5	94Se12	∗
		−35180	520			−0.6	2			TO6	1.5	98Ba.A	∗
		−35889	215			0.6	2			GT1	1.5	04Ma.A	
		−35510	430			−0.4	2			MT1	1.0	11Es06	∗
^{60}Cr−u		−49680	240	−50100	210	−1.2	2			TO3	1.5	90Tu01	
		−50270	280			0.4	2			TO5	1.5	94Se12	
		−49910	280			−0.5	2			TO6	1.5	98Ba.A	
		−50929	494			1.7	2			MT1	1.0	16Me07	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{60}Mn−u	−56550	240	−56863.4	2.5	−0.9	U			TO3	1.5	90Tu01	*
	−56810	290			−0.1	U			TO5	1.5	94Se12	*
	−56530	280			−0.8	U			TO6	1.5	98Ba.A	*
^{60}Mn−^{39}K$_{1.538}$	−1044.0	2.5				2			MA8	1.0	12Na15	*
^{60}Co−u	−66380	280	−66184.3	0.5	0.5	U			TO6	1.5	98Ba.A	*
C$_3$ H$_8$ O−^{60}Ni	126796	14	126729.6	0.4	−1.2	U			R10	4.0	74De22	
C$_2$ H$_6$ O N−^{60}Ni	114231	10	114153.6	0.4	−1.9	U			R10	4.0	74De22	
C$_2$ ^{13}C H$_7$ O−^{60}Ni	122315	10	122259.4	0.4	−1.4	U			R10	4.0	74De22	
C H$_2$ N O$_2$−^{60}Ni	77843	16	77768.1	0.4	−1.2	U			R10	4.0	74De22	
C$_5$−^{60}Ni	69275	14	69214.7	0.4	−1.1	U			R10	4.0	74De22	
^{60}Ni−^{85}Rb$_{.706}$	−6937.8	1.6	−6938.3	0.4	−0.3	U			MA8	1.0	07Gu09	
^{60}Zn−^{58}Ni$_{1.034}$	8698.02	0.55	8698.1	0.4	0.1	1	65	65 ^{60}Zn	JY1	1.0	10Ka26	
^{60}Zn−^{59}Cu$_{1.017}$	3373.19	0.55	3373.2	0.4	−0.1	1	65	35 ^{60}Zn	JY1	1.0	10Ka26	
^{60}Ni−^{58}Ni H	−12513	30	−12381.56	0.08	1.1	U			R10	4.0	74De22	
^{60}Ni−^{59}Co	−2503	40	−2408.40	0.22	0.6	U			R10	4.0	74De22	
^{60}Ni−^{58}Ni	−4624	25	−4556.52	0.08	0.7	U			R10	4.0	74De22	
	−4627	45			0.4	U			R10	4.0	74De22	
^{60}Ni H−^{59}Co	5310	40	5416.63	0.22	0.7	U			R10	4.0	74De22	
^{60}Ni(p,α)^{57}Co	−263.6	0.7	−263.5	0.4	0.1	1	37	33 ^{57}Co	NDm		74Jo14	
^{58}Fe(t,p)^{60}Fe	6907	15	6919	3	0.8	2			LAl		71Ca19	
	6947	10			−2.8	2			MSU		76St11	
	6913	4			1.4	2			LAl		78No05	
^{60}Ni(d,α)^{58}Co	6084.5	2.2	6084.8	1.1	0.2	1	25	25 ^{58}Co	NDm		74Jo14	
^{58}Ni(t,p)^{60}Ni	11905	10	11905.21	0.07	0.0	U			Ald		71Da16	
^{60}Ni(p,t)^{58}Ni^i	−20735	40				2					74Ko08	*
^{60}Ni(p,t)^{58}Ni^j	−26444	7				2					84Ka07	*
^{58}Ni(^{3}He,p)^{60}Cu	5770	12	5758.6	1.6	−0.9	U			CIT		67Mi02	
	5746	20			0.6	U			MIT		68Yo01	
^{58}Ni(^{3}He,p)^{60}Cu^i	3210	10	3218	5	0.8	1	26	26 ^{60}Cu^i	MIT		68Yo01	
^{58}Ni(^{3}He,n)^{60}Zn	818	18	805.5	0.4	−0.7	U			CIT		67Mi02	
	821	13			−1.2	U			Oak		72Gr39	
^{58}Ni(^{3}He,n)^{60}Zn^j	−6562	24				2					74Ev02	*
^{59}Co(n,γ)^{60}Co	7491.88	0.08	7491.92	0.07	0.5	2			BNn		84Ko29	Z
	7492.05	0.15			−0.9	2			Bdn		06Fi.A	
^{59}Co(d,p)^{60}Co	5267	11	5267.35	0.07	0.0	U			MIT		64Sp12	
	5272	8			−0.6	U			Kop		67Ha.A	
^{59}Co(p,γ)^{60}Ni^i	−1594	4				2					67Ar01	
^{59}Ni(n,γ)^{60}Ni	11387.6	0.4	11387.73	0.05	0.3	U					75Wi06	Z
	11387.73	0.05			0.0	1	99	75 ^{60}Ni	ORn		04Ra23	
^{60}Ni(p,d)^{59}Ni	−9180	50	−9163.16	0.05	0.3	U			Pri		64Le10	
^{60}Ni(d,t)^{59}Ni	−5130.2	2.1	−5130.50	0.05	−0.1	U			NDm		74Jo14	
^{60}Ni(p,d)^{59}Ni^i	−16505.1	2.1				2					78Ik02	*
^{60}Mn(β^-)^{60}Fe	8234	86	8445	4	2.5	U			ANB		78No03	*
^{60}Co(β^-)^{60}Ni	2823.6	1.0	2822.81	0.21	−0.8	U					68Wo02	*
^{60}Cu(β^+)^{60}Ni	6250	40	6128.0	1.6	−3.1	B					54Nu26	
^{60}Ni(p,n)^{60}Cu	−6912	20	−6910.3	1.6	0.1	U			ChR		58Go77	
	−6909	10			−0.1	U			Ric		66Ri09	
	−6910.3	1.6				2			Yal		69Ov01	Z
^{60}Ni(^{3}He,t)^{60}Cu^i	−8685	6	−8688	5	−0.5	1	74	74 ^{60}Cu^i			71Be29	*
^{60}Zn(β^+)^{60}Cu	4166	64	4170.8	1.6	0.1	U					86Ka38	

*^{60}V−u	Original –33800(700) μu or $M-A$=–31500(650) keV	GAu	**
*^{60}V−u	Original –35500(600) μu or $M-A$=–33070(560) keV	GAu	**
*^{60}V−u	$M-A$=–32700(470) keV for mixture gs+m+n at 0#150 and 203.7(0.7) keV	Nub16b	**
*^{60}V−u	$M-A$=–33010(390) keV for mixture gs+m+n at 0#150 and 203.7(0.7) keV	Nub16b	**
*^{60}Mn−u	$M-A$=–52540(230) keV for mixture gs+m at 271.90 keV	Nub16b	**
*^{60}Mn−u	$M-A$=–52780(260) keV for mixture gs+m at 271.90 keV	Nub16b	**
*^{60}Mn−u	$M-A$=–52520(250) keV for mixture gs+m at 271.90 keV	Nub16b	**
*^{60}Mn−^{39}K$_{1.538}$	D_M=–752.1(2.5) μu for ^{60}Mn^m at 271.90 keV; $M-A$=–52695.9(2.4) keV	Nub16b	**
*^{60}Co−u	$M-A$=–61800(260) keV for mixture gs+m at 58.59 keV	Nub16b	**
*^{60}Ni(p,t)^{58}Ni^i	IT=8830(40); Q rebuilt with Ame1971	MMC124	**
*^{60}Ni(p,t)^{58}Ni^j	IT=14537(7); Q rebuilt with Ame1977	MMC124	**
*^{58}Ni(^{3}He,n)^{60}Zn^j	IT=7380(30); Q rebuilt with Ame1971	MMC124	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference
$*^{60}$Ni(p,d)^{59}Ni^i	Strongest fragment IT=7341; Q rebuilt with Ame1977										MMC129**
$*^{60}$Mn(β^-)^{60}Fe	E_{β^-}=5714(86) from ^{60}Mn^m at 271.90 to (3$^+$,4$^+$) 2792.68 level										Ens13c **
$*^{60}$Co(β^-)^{60}Ni	E_{β^-}=317.88(0.10) to 4$^+$ level at 2505.753 keV										Ens13c **
$*^{60}$Ni(^{3}He,t)^{60}Cu^i	CDE=9454(6) Q =–8690(6); recalibration +5 keV for ^{58}Ni(p,n)^{58}Cu^i from Ame1961										MMC123**
^{61}V−u	−32750	960				2			MT1	1.0	11Es06
^{61}Cr−u	−44500	400	−45600	110	−1.8	2			TO3	1.5	90Tu01
	−45910	300			0.7	2			TO5	1.5	94Se12
	−45120	280			−1.1	2			TO6	1.5	98Ba.A
	−45679	107			0.5	2			GT1	1.5	04Ma.A
	−45634	176			0.2	2			LZ1	1.0	15Xu14
	−46248	548			1.2	U			MT1	1.0	16Me07
^{61}Mn−u	−55160	300	−55547.5	2.5	−0.9	U			TO3	1.5	90Tu01
	−55540	280			0.0	U			TO5	1.5	94Se12
	−55320	270			−0.6	U			TO6	1.5	98Ba.A
^{61}Mn−^{39}K$_{1.564}$	1215.6	2.5				2			MA8	1.0	12Na15
^{61}Fe−^{39}K$_{1.564}$	−6490.7	2.8				2			MA8	1.0	12Na15
C H$_3$ N O$_2$−^{61}Ni	85373	14	85323.4	0.4	−0.9	U			R10	4.0	74De22
C$_5$ H−^{61}Ni	76810	10	76770.1	0.4	−1.0	U			R10	4.0	74De22
^{61}Ga−u	−50654	59	−50600	40	0.9	1	48	48 ^{61}Ga	LZ1	1.0	11Tu09
^{60}Ni H−^{61}Ni	7539	14	7555.34	0.05	0.3	U			R10	4.0	74De22
^{61}Ni−^{60}Ni	339	60	269.69	0.05	−0.3	U			R10	4.0	74De22
^{61}Ni−^{58}Ni H	−12187	30	−12111.87	0.09	0.6	U			R10	4.0	74De22
^{61}Ni−^{59}Co	−2220	30	−2138.71	0.22	0.7	U			R10	4.0	74De22
^{58}Ni(α,n)^{61}Zn	−9810	30	−9526	16	9.5	B			Oak		64St01
^{58}Ni(^{6}Li,t)^{61}Zn	−4736	23	−4743	16	−0.3	R			LAl		78Wo01
^{59}Co(^{3}He,p)^{61}Ni	9635	10	9634.44	0.21	−0.1	U			MIT		67Sp09
^{60}Ni(n,γ)^{61}Ni	7820.22	0.40	7820.10	0.05	−0.3	U					75Wi06 Z
	7819.96	0.20			0.7	U			MMn		77Is01 Z
	7820.02	0.20			0.4	U			ILn		93Ha05 Z
	7820.11	0.05			−0.1	–			ORn		04Ra23
	7820.06	0.16			0.3	–			Bdn		06Fi.A
^{60}Ni(d,p)^{61}Ni	5604	8	5595.54	0.05	−1.1	U			MIT		70An25
	5596.1	1.3			−0.4	U			NDm		74Jo14
^{60}Ni(n,γ)^{61}Ni	ave. 7820.11	0.05	7820.10	0.05	0.0	1	100	79 ^{61}Ni			average
^{61}Ga^i(p)^{60}Zn	3110	30				2					87Ho.A
^{61}Fe(β^-)^{61}Co	3827	100	3977.6	2.7	1.5	U					67Eh02 *
	3887	100			0.9	U					67Gu06 *
^{61}Co(β^-)^{61}Ni	1290	40	1323.8	0.8	0.8	U					56Nu02
^{61}Cu(β^+)^{61}Ni	2227	5	2237.8	1.0	2.2	U					50Ow03
^{61}Ni(p,n)^{61}Cu	−3024.0	4.	−3020.2	1.0	1.0	U			Oak		64Jo11 Z
^{61}Ni(^{3}He,t)^{61}Cu^i	−8630	7				2					71Be29 *
^{61}Zn(β^+)^{61}Cu	5400	200	5635	16	1.2	U					59Cu86
^{61}Ga(β^+)^{61}Zn	9255	50	9210	40	−0.8	1	57	52 ^{61}Ga			02We07
$*^{61}$Fe(β^-)^{61}Co	E_{β^-}=2800(100) 2860(100) respectively, to 3/2$^-$ level at 1027.48 keV										Ens153 **
$*^{61}$Ni(^{3}He,t)^{61}Cu^i	Strongest fragment IT=6380(7); Q rebuilt with Ame1964										MMC129**
*	recalibration +5 keV for ^{58}Ni(p,n)^{58}Cu^i from Ame1961										MMC123**
^{62}Cr−u	−42400	600	−43900	160	−1.7	2			TO3	1.5	90Tu01
	−44200	400			0.5	2			TO5	1.5	94Se12
	−43100	350			−1.5	2			TO6	1.5	98Ba.A
	−44026	118			0.7	2			GT1	1.5	04Ma.A
	−43897	526			0.0	U			MT1	1.0	16Me07
^{62}Mn−u	−51510	270	−52093	7	−1.4	U			TO3	1.5	90Tu01
	−52030	280			−0.1	U			TO5	1.5	94Se12
	−51180	280			−2.2	U			TO6	1.5	98Ba.A

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{62}Mn^m$-$^{39}K$_{1.590}$	5982.3	2.8				2			MA8	1.0	12Na15	
^{62}Fe$-$^{39}K$_{1.590}$	$-$5501.5	3.0				2			MA8	1.0	12Na15	
C$_5$ H$_2$$-$^{62}Ni	87299	10	87305.2	0.5	0.2	U			R10	4.0	74De22	
C H$_4$ N O$_2$$-$^{62}Ni	95859	12	95858.5	0.5	0.0	U			R10	4.0	74De22	
^{62}Cu$-$^{62}Ni	4250.05	0.51				2			JY1	1.0	06Er03	
^{62}Zn$-$^{62}Ni	5988.49	0.58	5988.6	0.5	0.2	1	68	68 ^{62}Zn	JY1	1.0	06Er03	
^{62}Ga$-$^{62}Ni	15845.06	0.71	15844.9	0.5	$-$0.2	1	52	52 ^{62}Ga	JY1	1.0	06Er03	
^{62}Ga$-$^{62}Zn	9856.21	0.45	9856.3	0.4	0.2	1	81	48 ^{62}Ga	JY1	1.0	06Er03	
^{62}Ni$-$^{61}Ni	$-$2669	15	$-$2710.1	0.3	$-$0.7	U			R10	4.0	74De22	
^{62}Ni$-$^{60}Ni	$-$2333	30	$-$2440.4	0.3	$-$0.9	U			R10	4.0	74De22	
^{62}Ni(p,α)^{59}Co	342	10	347.4	0.4	0.5	U			MIT		64Sp12	
	343.3	0.7			5.9	B			NDm		74Jo14	
^{59}Co(α,p)^{62}Ni	$-$346.5	2.3	$-$347.4	0.4	$-$0.4	U			NDm		74Jo14	
^{62}Ni(^{18}O,^{20}Ne)^{60}Fe	911	20	926	3	0.7	U			Hei		84Ha31	
^{62}Ni(d,α)^{60}Co	5611.2	2.4	5614.8	0.4	1.5	U			NDm		74Jo14	
^{60}Ni(t,p)^{62}Ni	9937	10	9934.0	0.3	$-$0.3	U			Ald		71Da16	
^{60}Ni(^{3}He,p)^{62}Cu	5938	25	5956.6	0.6	0.7	U			MIT		67Sp09	
^{60}Ni(^{3}He,n)^{62}Zn	3580	30	3554.8	0.5	$-$0.8	U			Oak		72Gr39	
^{62}Ni(^{14}C,^{15}O)^{61}Fe	$-$7921	100	$-$7661.5	2.7	2.6	F			Ors		84De33	*
^{62}Ni(t,α)^{61}Co	8689	20	8676.6	0.7	$-$0.6	U			LAl		66Bl15	
^{61}Ni(n,γ)^{62}Ni	10596.2	1.5	10595.7	0.3	$-$0.3	–					70Fa06	
	10595.8	0.7			$-$0.1	–					75Wi06	Z
	10595.6	0.4			0.3	–			Bdn		06Fi.A	
^{61}Ni(d,p)^{62}Ni	8379	8	8371.2	0.3	$-$1.0	U			MIT		64Sp12	
	8369	15			0.1	U			Ald		67Te02	
^{62}Ni(d,t)^{61}Ni	$-$4340.6	1.3	$-$4338.5	0.3	1.6	–			NDm		74Jo14	
^{61}Ni(n,γ)^{62}Ni ave.	10595.8	0.3	10595.7	0.3	$-$0.2	1	88	67 ^{62}Ni			average	
^{62}Mn^m(IT)^{62}Mn	343	6				3					15Ga38	*
^{62}Fe(β^-)^{62}Co	3000	200	2546	19	$-$2.3	U					75Fr16	
^{62}Co(β^-)^{62}Ni	5195	30	5322	19	4.2	C					57Ga15	*
^{62}Ni(t,^{3}He)^{62}Co	$-$5350	50	$-$5303	19	0.9	2					72Ba31	
	$-$5296	20			$-$0.4	2			LAl		76Aj03	
^{62}Cu(β^+)^{62}Ni	3932	10	3958.9	0.5	2.7	U					54Nu27	
	3942	10			1.7	U					64Sa32	
	3956	7			0.4	U					67An01	
^{62}Ni(p,n)^{62}Cu	$-$4733	10	$-$4741.2	0.5	$-$0.8	U			Bar		61Ri02	
	$-$4734.8	10.			$-$0.6	U			Ric		66Ri09	
^{62}Ni(^{3}He,t)^{62}Cu^i	$-$8591	6				2					71Be29	*
^{62}Zn(β^+)^{62}Cu	1682	10	1619.5	0.7	$-$6.3	B					50Ha65	
	1697	10			$-$7.8	B					54Nu27	
^{62}Ga(β^+)^{62}Zn	9171	26	9181.1	0.4	0.4	U			ANB		79Da04	
*^{62}Ni(^{14}C,^{15}O)^{61}Fe	F : not unambiguously ground state transition										84De33	**
*^{62}Mn^m(IT)^{62}Mn	E_x =418(2) – 72(+8–3)										GAu	**
*^{62}Co(β^-)^{62}Ni	E_{β^-}=5217(30) from ^{62}Co^m at 22(5) keV										Nub16b	**
*^{62}Ni(^{3}He,t)^{62}Cu^i	CDE=9360(6) Q =–8596(6); recalibration +5 keV for ^{58}Ni(p,n)^{58}Cu^i from Ame1961										MMC124	**
^{63}Cr$-$u	$-$38819	462	$-$38660	380	0.2	2			GT1	1.5	04Ma.A	
	$-$37870	700			$-$1.1	o			MT1	1.0	11Es06	
	$-$38583	462			$-$0.2	2			MT1	1.0	16Me07	
^{63}Mn$-$u	$-$49300	400	$-$50335	4	$-$1.7	U			TO3	1.5	90Tu01	
	$-$50190	300			$-$0.3	U			TO5	1.5	94Se12	
	$-$49600	290			$-$1.7	U			TO6	1.5	98Ba.A	
	$-$50500	107			1.0	o			GT1	1.5	04Ma.A	
	$-$50829	102			1.9	U			GT2	2.5	08Kn.A	
^{63}Mn$-$^{39}K$_{1.615}$	8278.7	4.0				2			MA8	1.0	12Na15	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{63}Fe−u		−59190	240	−59727	5	−1.5	U			TO3	1.5	90Tu01	
		−59570	290			−0.4	U			TO5	1.5	94Se12	
		−58990	300			−1.6	U			TO6	1.5	98Ba.A	
^{63}Fe−^{39}K$_{1.615}$		−1114.5	6.1	−1113	5	0.2	1	57	57 ^{63}Fe	MA8	1.0	12Na15	
^{63}Fe−H C$_2$ F$_2$		−64354	10	−64359	5	−0.5	o			MS1	1.0	08Bl05	
		−64353	10			−0.6	1	21	21 ^{63}Fe	MS1	1.0	10Fe01	
^{63}Fe−C ^{32}S F		−30204	10	−30202	5	0.2	1	21	21 ^{63}Fe	MS1	1.0	10Fe01	
C$_5$ H$_3$−^{63}Cu		93930	4	93877.9	0.5	−3.3	B			R10	4.0	74De22	
C$_4$ H N−^{63}Cu		81347	10	81301.8	0.5	−1.1	U			R10	4.0	74De22	
C$_4$ ^{13}C H$_2$−^{63}Cu		89466	14	89407.7	0.5	−1.0	U			R10	4.0	74De22	
C$_2$ H$_7$ O$_2$−^{63}Cu		115064	16	115007.2	0.5	−0.9	U			R10	4.0	74De22	
^{13}C C H$_8$ O N−^{63}Cu		134404	18	134346.5	0.5	−0.8	U			R10	4.0	74De22	
^{47}Ti O−^{63}Cu		17036	23	17075.1	0.5	0.4	U			R09	4.0	72De11	
^{63}Ga−^{85}Rb$_{.741}$		4658.0	1.4				2			MA8	1.0	07Gu09	
C$_5$ H$_2$−^{63}Ga$_{.984}$		75382.6	6.7	75384.6	1.4	0.3	U			MS1	1.0	07Sc24	
^{63}Ge−u		−50372	40				2			LZ1	1.0	11Tu02	
^{63}Cu−^{62}Ni		1193	35	1252.37	0.06	0.4	U			R10	4.0	74De22	
^{63}Cu−^{61}Ni		−1449	30	−1457.7	0.3	−0.1	U			R10	4.0	74De22	
^{63}Cu(p,α)^{60}Ni		3757	8	3757.4	0.3	0.1	U			MIT		64Sp12	
		3780	10			−2.3	U			Min		67Jo03	
		3754.9	1.5			1.7	U			NDm		76Jo01	
^{60}Ni(α,n)^{63}Zn		−7970	40	−7906.1	1.6	1.6	U			Oak		64St01	
		−7910	20			0.2	U					67Bi04	
^{63}Cu(d,α)^{61}Ni		9376	30	9353.0	0.3	−0.8	U					67Hj01	
^{62}Ni(n,γ)^{63}Ni		6838.04	0.20	6837.77	0.06	−1.4	–			MMn		77Is01	Z
		6837.88	0.18			−0.6	–			ILn		92Ha21	Z
		6837.89	0.14			−0.9	–			Bdn		06Fi.A	
		6837.75	0.18			0.1	–			JAn		12Os04	
^{62}Ni(d,p)^{63}Ni		4620	6	4613.20	0.06	−1.1	U			MIT		70An25	
		4614.0	1.1			−0.7	U			NDm		74Jo14	
^{62}Ni(n,γ)^{63}Ni	ave.	6837.88	0.09	6837.77	0.06	−1.3	1	48	34 ^{63}Ni			average	
^{62}Ni(p,γ)^{63}Cu		6119.2	1.5	6122.40	0.06	2.1	U					72Ki15	
		6122.30	0.08			1.2	1	54	38 ^{63}Cu	Utr		86De14	Z
^{63}Cu(γ,n)^{62}Cu		−10833	17	−10863.6	0.5	−1.8	U			Phi		60Ge01	
^{63}Co(β^-)^{63}Ni		3590	50	3661	19	1.4	1	14	14 ^{63}Co			69Ki.A	
^{63}Ni(β^-)^{63}Cu		65.87	0.15	66.977	0.015	7.4	B					66Hs01	
		66.946	0.020			1.5	o					87He14	
		66.945	0.004			7.9	F					92Ka29	*
		66.9459	0.0054			5.7	F					93Oh02	*
		66.980	0.015			−0.2	1	98	55 ^{63}Ni			99Ho09	
^{63}Zn(β^+)^{63}Cu		3352	20	3366.4	1.5	0.7	U					61Cu02	
		3390	30			−0.8	U					61Va08	
^{63}Cu(p,n)^{63}Zn		−4146.5	4.	−4148.7	1.5	−0.6	–			Ric		55Br16	
		−4139.5	8.			−1.2	U			Oak		55Ki28	Z
		−4150.1	4.4			0.3	–			Tkm		63Ok01	
	ave.	−4148.1	2.9			−0.2	1	28	27 ^{63}Zn			average	
^{63}Cu(^{3}He,t)^{63}Zn^i		−8875	6				2					71Be29	*
^{63}Ga(β^+)^{63}Zn		5520	100	5666.3	2.0	1.5	U					72Fi.A	
*^{63}Ni(β^-)^{63}Cu	F : excitation of atomic electron not taken into account											99Ho09	**
*^{63}Cu(^{3}He,t)^{63}Zn^i	CDE=9644(6) Q =−8880(6); recalibration +5 keV for ^{58}Ni(p,n)^{58}Cu^i from Ame1961											MMC124	**
^{64}Cr−u		−35942	472				2			MT1	1.0	16Me07	
^{64}Mn−u		−45340	350	−46151	4	−1.5	U			TO3	1.5	90Tu01	*
		−46340	350			0.4	U			TO5	1.5	94Se12	*
		−45664	306			−1.1	U			TO6	1.5	98Ba.A	*
		−46280	129			0.7	U			GT1	1.5	04Ma.A	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{64}Mn$-^{85}$Rb$_{.753}$		20271.7	3.8				2			MA8	1.0	12Na15	
^{64}Fe$-$u		−58600	400	−59012	5	−0.7	U			TO3	1.5	90Tu01	
		−59130	300			0.3	U			TO5	1.5	94Se12	
		−58500	350			−1.0	U			TO6	1.5	98Ba.A	
		−59012.2	5.3			0.0	o			MS1	1.0	08Bl05	
H C$_2$ F$_2-^{64}$Fe$_{.984}$		62699.4	5.3				2			MS1	1.0	10Fe01	
^{64}Co$^m-$u		−64075.5	4.5	−64075	4	0.1	o			MS1	1.0	08Bl05	
H C$_2$ F$_2-^{64}$Co$^m_{.984}$		67681.6	4.6	67681	4	−0.1	1	87	87 ^{64}Co^m	MS1	1.0	10Fe01	
^{64}Co$^m-^{32}$S O$_2$		−25974	12	−25976	4	−0.1	1	13	13 ^{64}Co^m	MS1	1.0	10Fe01	
C$_5$ H$_4-^{64}$Ni		103278	10	103333.8	0.5	1.4	U			R10	4.0	74De22	
C$_4$ ^{13}C H$_3-^{64}$Ni		98809	12	98863.6	0.5	1.1	U			R10	4.0	74De22	
C$_4$ H$_2$ N$-^{64}$Ni		90703	16	90757.7	0.5	0.9	U			R10	4.0	74De22	
^{64}Ni$-^{85}$Rb$_{.753}$		−5609.2	1.4	−5611.3	0.5	−1.5	1	13	13 ^{64}Ni	MA8	1.0	07Gu09	
^{64}Zn$-^{85}$Rb$_{.753}$		−4430.1	8.4	−4435.9	0.7	−0.7	U			MA8	1.0	07Ke09	
^{64}Ga$-^{85}$Rb$_{.753}$		3261.3	2.5	3262.7	1.5	0.6	1	38	38 ^{64}Ga	MA8	1.0	07Gu09	
C$_5$ H$_2-^{64}$Ga$_{.969}$		76851.5	2.6	76851.7	1.5	0.1	1	33	33 ^{64}Ga	MS1	1.0	07Sc24	
^{64}Ge$-$u		−57090	690	−58310	4	−1.2	U			GA6	1.5	02Li24	
H ^{32}S O$_2-^{64}$Ge H		20210.5	4.0				2			MS1	1.0	07Sc24	
^{64}Ge$-^{85}$Rb$_{.753}$		8070	43	8112	4	1.0	U			MS1	1.0	12Sc.A	
^{64}Ga$-^{64}$Zn		7698.5	4.1	7698.6	1.6	0.0	1	15	13 ^{64}Ga	CP1	1.0	07Cl01	
^{64}Ge$-^{64}$Zn		12517	33	12548	4	0.9	U			CP1	1.0	07Cl01	
^{64}Ni$-^{63}$Cu		−1523	30	−1630.90	0.22	−0.9	U			R10	4.0	74De22	
^{64}Ga$-^{63}$Ga		−2730	150	−2453.8	2.1	0.7	U			CR1	2.5	89Sh10	
^{64}Ni$-^{62}$Ni		−352	25	−378.53	0.23	−0.3	U			R10	4.0	74De22	
^{64}Ni(^{3}He,^{8}B)^{59}Mn		−19610	30	−19564.0	2.6	1.5	U			MSU		76Ka24	
^{64}Ni(^{3}He,^{7}Be)^{60}Fe		−6511	10	−6524	3	−1.3	R			MSU		76St11	
^{64}Ni(α,^{7}Be)^{61}Fe		−21523	20	−21522.5	2.7	0.0	U			Tex		77Co08	
^{64}Ni(^{14}C,^{17}O)^{61}Fe		−4609	100	−4349.8	2.7	2.6	U			Ors		84Be.A	*
^{64}Ni(p,α)^{61}Co		663.2	0.7				2			NDm		74Jo14	
^{64}Zn(p,α)^{61}Cu		830	15	844.1	0.7	0.9	U					67Br10	
		830	10			1.4	U			Min		67Jo03	
		844.1	0.7				2			NDm		76Jo01	
^{64}Zn(^{3}He,^{6}He)^{61}Zn		−12331	23	−12316	16	0.7	–			MSU		79We02	
	ave.	−12320	16			0.3	1	95	95 ^{61}Zn			average	
^{64}Ni(^{11}B,^{13}N)^{62}Fe		−4930	70	−4898.6	2.8	0.4	U			Tex		77Co08	
^{64}Ni(^{14}C,^{16}O)^{62}Fe		−501	40	−464.0	2.8	0.9	U			Ors		81Be40	
^{64}Ni(^{18}O,^{20}Ne)^{62}Fe		−1915	50	−1961.8	2.8	−0.9	U			Can		76Hi14	
		−1920	21			−2.0	U			Hei		77Bh03	*
		−1947	26			−0.6	U			Hei		84Ha31	
^{64}Ni(d,α)^{62}Co		5190	20	5036	19	−7.7	B					72Ba31	
^{62}Ni(t,p)^{64}Ni		7999	20	8013.44	0.21	0.7	U			Ald		71Da16	
^{62}Ni(^{3}He,p)^{64}Cu		6299	25	6320.47	0.11	0.9	U			MIT		67Sp09	
^{62}Ni(^{3}He,n)^{64}Zn		6118	12	6117.6	0.6	0.0	U			Oak		72Gr39	
^{64}Zn(d,α)^{62}Cu		7508	15	7494.2	0.8	−0.9	U			MIT		67Sp09	
^{64}Zn(p,t)^{62}Zn		−12493	10	−12496.9	0.8	−0.4	U			Bld		72Fa08	
^{64}Ni(^{14}C,^{15}O)^{63}Fe		−11387	60	−11299	4	1.5	U			Ors		82De.A	*
^{64}Ni(^{34}S,^{35}Ar)^{63}Fe		−17931	260	−18348	4	−1.6	U			Hei		83Wi.B	
^{64}Ni(t,α)^{63}Co		7266	20	7277	19	0.6	1	86	86 ^{63}Co	LAl		66Bl15	
^{63}Ni(n,γ)^{64}Ni		9657.32	0.4	9657.46	0.20	0.4	–					75Wi06	Z
		9657.58	0.24			−0.5	–			ILn		92Ha21	
	ave.	9657.51	0.21			−0.2	1	98	87 ^{64}Ni			average	
^{63}Cu(n,γ)^{64}Cu		7916.07	0.12	7916.11	0.10	0.3	–			BNn		83De28	Z
		7915.52	0.08			7.4	B					02Bo11	
		7916.14	0.16			−0.2	–			Bdn		06Fi.A	
^{63}Cu(d,p)^{64}Cu		5697	8	5691.54	0.10	−0.7	U			MIT		64Sp12	
^{63}Cu(n,γ)^{64}Cu	ave.	7916.10	0.10	7916.11	0.10	0.2	1	99	90 ^{64}Cu			average	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{64}Zn(n,d)^{63}Cu	−5520	50	−5488.7	0.6	0.6	U					65Wa14	
^{64}Zn(d,t)^{63}Zn	−5604.9	1.7	−5604.7	1.5	0.1	1	76	73 ^{63}Zn	NDm		76Jo01	
^{64}Co(β^-)^{64}Ni	7000	500	7307	20	0.6	U					69Wa15	
	7000	400			0.8	U					74Ra31	
^{64}Ni(t,^{3}He)^{64}Co	−7288	20				2			LAl		72Fl17	
^{64}Cu(β^+)^{64}Ni	1673.4	1.0	1674.38	0.23	1.0	U					83Ch47	
^{64}Ni(p,n)^{64}Cu	−2458	6	−2456.72	0.23	0.2	U					61Va19	
	−2458.22	0.31			4.8	B			PTB		92Bo02	Z
^{64}Cu(β^-)^{64}Zn	577.8	1.0	579.5	0.6	1.7	1	42	32 ^{64}Zn			83Ch47	
^{64}Ga(β^+)^{64}Zn	7072	30	7171.2	1.5	3.3	B					60Ja07	
^{64}Zn(p,n)^{64}Ga	−7951	4	−7953.5	1.5	−0.6	1	14	12 ^{64}Ga	Tex		72Da.A	
^{64}Zn(^{3}He,t)^{64}Ga	−7206	8	−7189.8	1.5	2.0	U			MSU		74Ro16	*
^{64}Zn(^{3}He,t)^{64}Ga^i	−9141	17	−9096.8	2.5	2.6	U			MIT		70Hi06	
	−9110	6			2.2	1	17	17 ^{64}Ga^i			71Be29	*
^{64}Ga^i(IT)^{64}Ga	1905.1	2.3	1907.0	2.2	0.8	1	88	83 ^{64}Ga^i			74Ro16	
^{64}Ge(β^+)^{64}Ga	4410	250	4517	4	0.4	U					73Da01	*
*^{64}Mn−u	Original –45270(350) μu or $M-A$=–42170(330) keV										GAu	**
*^{64}Mn−u	Original –46270(350) μu or $M-A$=–43100(330) keV										GAu	**
*^{64}Mn−u	$M-A$=–42430(280) keV for mixture gs+m at 174.1(0.5) (4$^+$) keV										Nub16b	**
*^{64}Ni(^{14}C,^{17}O)^{61}Fe	Cited in reference and confirmed in PrvCom sep 88										84De33	**
*^{64}Ni(^{18}O,^{20}Ne)^{62}Fe	$Q-Q$(^{62}Ni(^{18}O,^{20}Ne))=–2843(20), Q(62)=923(4) keV										AHW	**
*^{64}Ni(^{14}C,^{15}O)^{63}Fe	Original –11743(60) reinterpreted as (3/2$^-$) 356.2 level in ^{63}Fe										GAu	**
*^{64}Zn(^{3}He,t)^{64}Ga	$M-A$=–58819(8); Q rebuilt with Ame1971										GAu	**
*^{64}Zn(^{3}He,t)^{64}Ga^i	CDE=9879(6) Q =–9115(6); recalibration +5 keV for ^{58}Ni(p,n)^{58}Cu^i from Ame1961										MMC124	**
*^{64}Ge(β^+)^{64}Ga	E_{β^+}=2960(250) to (1$^+$) level at 427.03 keV										Ens073	**
^{65}Mn−u	−43900	600	−43980	4	−0.1	U			TO5	1.5	94Se12	
	−43500	500			−0.6	U			TO6	1.5	98Ba.A	
	−43790	330			−0.6	U			MT1	1.0	11Es06	
^{65}Mn−^{85}Rb$_{.765}$	23500.6	4.0				2			MA8	1.0	12Na15	
^{65}Fe−u	−54680	300	−54985	5	−0.7	U			TO3	1.5	90Tu01	*
	−55270	320			0.6	U			TO5	1.5	94Se12	*
	−54290	380			−1.2	U			TO6	1.5	98Ba.A	*
	−54985.9	5.4			0.2	o			MS1	1.0	08Bl05	*
O$_2$−^{65}Fe$_{.492}$	16881.7	2.7				2			MS1	1.0	10Fe01	*
^{65}Co−u	−63537.9	2.3	−63537.9	2.2	0.0	o			MS1	1.0	08Bl05	
O$_2$−^{65}Co$_{.492}$	21089.9	1.1				2			MS1	1.0	10Fe01	
^{65}Ni−^{85}Rb$_{.765}$	−2438.0	2.4	−2434.5	0.5	1.5	U			MA8	1.0	07Gu09	
C$_5$ H$_5$−^{65}Cu	111384	4	111335.7	0.7	−3.0	B			R10	4.0	74De22	
C$_4$ H$_3$ N−^{65}Cu	98800	8	98759.6	0.7	−1.3	U			R10	4.0	74De22	
C$_4$ ^{13}C H$_4$−^{65}Cu	106921	18	106865.5	0.7	−0.8	U			R10	4.0	74De22	
^{49}Ti O−^{65}Cu	15030	10	14989.8	0.7	−1.0	U			R09	4.0	72De11	
^{65}Cu−^{85}Rb$_{.765}$	−4730.6	1.2	−4729.7	0.7	0.8	1	34	34 ^{65}Cu	MA8	1.0	07Gu09	
^{65}Ga−^{85}Rb$_{.765}$	215.4	1.5	215.2	0.9	−0.1	1	34	34 ^{65}Ga	MA8	1.0	07Gu09	
^{65}Ge−u	−60080	270	−60631.9	2.3	−1.4	U			GA6	1.5	02Li24	
C$_5$ H$_2$−^{65}Ge$_{.939}$	72585.2	4.0	72583.4	2.2	−0.5	–			MS1	1.0	07Sc24	*
C$_5$ H$_5$−^{65}Ge$_{.985}$	98847.2	4.2	98847.5	2.3	0.1	–			MS1	1.0	07Sc24	*
C$_5$ H$_2$−^{65}Ge$_{.939}$ ave.	72584.2	2.9	72583.4	2.2	−0.3	1	57	57 ^{65}Ge			average	
^{65}Ge H−^{85}Rb$_{.776}$	15634.4	6.2	15644.3	2.3	1.6	1	14	14 ^{65}Ge	MS1	1.0	07Sc24	*
^{65}Ge O H−^{85}Rb$_{.965}$	27237.1	4.3	27230.7	2.3	−1.5	1	29	29 ^{65}Ge	MS1	1.0	12Sc.A	
^{65}As−u	−50389	91				2			LZ1	1.0	11Tu02	
^{65}Cu−^{64}Ni	−275	40	−176.9	0.7	0.6	U			R10	4.0	74De22	
^{65}Cu−^{63}Cu	−1784	10	−1807.7	0.7	−0.6	U			R10	4.0	74De22	
^{65}Cu(p,α)^{62}Ni	4345	8	4346.7	0.7	0.2	U			MIT		64Sp12	
	4340	10			0.7	U			Min		67Jo03	
	4344.6	1.8			1.2	1	14	10 ^{65}Cu	NDm		76Jo01	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{62}Ni(α,n)^{65}Zn		−6510	40	−6480.7	0.7	0.7	U			Oak		64St01	
^{65}Cu(d,α)^{63}Ni		9012	40	8959.9	0.7	−1.3	U					67Hj01	
^{63}Cu(t,p)^{65}Cu		9351	25	9344.7	0.7	−0.3	U			Ald		66Bj02	
^{64}Ni(n,γ)^{65}Ni		6097.86	0.20	6098.08	0.14	1.1	2			MMn		77Is01	Z
		6098.28	0.19			−1.0	2			Bdn		06Fi.A	
^{64}Ni(d,p)^{65}Ni		3876	6	3873.51	0.14	−0.4	U			MIT		64Sp12	
		3867	15			0.4	U			Ald		67Te02	
		3870	5			0.7	U			MIT		70An25	
^{65}Cu(t,α)^{64}Ni		12352	11	12360.2	0.7	0.7	U					72He23	
^{65}Cu(γ,n)^{64}Cu		−9896	28	−9910.4	0.7	−0.5	U			Phi		60Ge01	
^{65}Cu(d,t)^{64}Cu		−3650	60	−3653.2	0.7	−0.1	U			ANL		60Ze02	
^{64}Zn(n,γ)^{65}Zn		7979.3	0.8	7979.32	0.17	0.0	U					71Ot01	Z
		7979.2	0.5			0.2	U					75De.A	Z
		7979.28	0.17			0.2	1	98	55 ^{65}Zn	Bdn		06Fi.A	
^{64}Zn(d,p)^{65}Zn		5758	10	5754.76	0.17	−0.3	U			ANL		67Vo05	
^{64}Zn(p,γ)^{65}Ga		3942.0	1.0	3942.5	0.6	0.5	–					75We24	Z
		3943.0	1.0			−0.5	–					87Vi01	
	ave.	3942.5	0.7			−0.1	1	83	66 ^{65}Ga			average	
^{65}Ge(εp)^{64}Zn		2300	100	2236.8	2.3	−0.6	U			ChR		81Ha44	
^{65}As^{i}(p)^{64}Ge		3603	30	3576	17	−0.9	3					93Ba12	
		3564	20			0.6	3					11Ro47	*
^{65}Ni(β^-)^{65}Cu		2140	10	2138.0	0.7	−0.2	U					64Fr04	
^{65}Zn(β^+)^{65}Cu		1347	2	1351.6	0.4	2.3	U					49Ma57	
		1347	2			2.3	U					53Ba82	
		1347	3			1.5	U					53Pe14	
		1349	3			0.9	U					53Sa26	
		1342	4			2.4	U					53Yu04	
		1346	4			1.4	U					56Av28	
^{65}Cu(p,n)^{65}Zn		−2131.4	1.5	−2134.0	0.4	−1.7	U					56Ma14	Z
		−2135.8	2.5			0.7	U					57Be44	Z
		−2135.3	1.8			0.7	U			Tkm		63Ok01	
		−2135.6	1.7			0.9	U			Oak		64Jo11	Z
		−2134.6	0.8			0.7	–			Yal		69Ov01	Z
		−2133.55	0.43			−1.0	–			PTB		89Sc24	
	ave.	−2133.8	0.4			−0.6	1	91	46 ^{65}Cu			average	
^{65}Ga(β^+)^{65}Zn		3277	30	3254.5	0.7	−0.7	U					57Da07	
^{65}Ge(β^+)^{65}Ga		5220	400	6179.3	2.3	2.4	U					58Po79	
*^{65}Fe−u	$M-A$=–50740(250) keV for mixture gs+m at 393.7(0.2) keV											Nub16b	**
*^{65}Fe−u	$M-A$=–51290(280) keV for mixture gs+m at 393.7(0.2) keV											Nub16b	**
*^{65}Fe−u	$M-A$=–50370(330) keV for mixture gs+m at 393.7(0.2) keV and											Nub16b	**
*	assuming ratio R=0.13(6), from half-life=430 ns and TOF=1 μs											GAu	**
*^{65}Fe−u	D_M=–54988.9(7.1) μu to ground state, D_M=–54557.0(8.4) to ^{65}Fe^m at 393.7 keV											Nub16b	**
*O$_2$−^{65}Fe$_{.492}$	D_M=16883.6(3.6) μu to ground state, D_M=16671.2(4.2) to ^{65}Fe^m at 393.7 keV											Nub16b	**
*C$_5$ H$_2$−^{65}Ge$_{.939}$	For original doublet C$_5$ H$_2$-(^{65}Ge H)$_{0.939}$, D_M=65237.5(4.0) μu											GAu	**
*C$_5$ H$_5$−^{65}Ge$_{.985}$	For original doublet C$_5$ H$_5$-(^{65}Ge H)$_{0.985}$, D_M=91139.5(4.2) μu											GAu	**
*^{65}Ge H−^{85}Rb$_{.776}$	Combining their 3 results yields a precision for ^{65}Ge of 2.4 keV, while											GAu	**
*	their Table III gives 1.2 keV											GAu	**
*^{65}As^{i}(p)^{64}Ge	And E_p=2620(30) to 901.7 level											11Ro47	**
^{66}Mn−u		−39860	860	−39453	12	0.5	U			MT1	1.0	11Es06	*
^{66}Mn−^{85}Rb$_{.776}$		28998	12				2			MA8	1.0	12Na15	
^{66}Fe−u		−52300	700	−53750	4	−1.4	U			TO3	1.5	90Tu01	
		−54020	350			0.5	U			TO5	1.5	94Se12	
		−52800	300			−2.1	U			TO6	1.5	98Ba.A	
		−53935	150			0.8	U			GT1	1.5	04Ma.A	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{66}Fe$-^{28}$Si F_2		−27482.9	4.4				2			MS1	1.0	10Fe01	
^{66}Co$-$u		−60470	300	−60557	15	−0.2	U			TO5	1.5	94Se12	*
		−59870	290			−1.6	U			TO6	1.5	98Ba.A	*
^{66}Co$-$O C F_2		−52278	15	−52278	15	0.0	o			MS1	1.0	08Bl05	
		−52278	15				2			MS1	1.0	10Fe01	
^{66}Ni$-^{85}$Rb$_{.776}$		−2409.5	1.5				2			MA8	1.0	07Gu09	
^{66}Cu$-^{85}$Rb$_{.776}$		−2680.6	2.2	−2680.0	0.7	0.3	1	10	10 ^{66}Cu	MA8	1.0	07Gu09	
C_5 H_5-^{66}Ge$_{.970}$		103278.9	2.5				2			MS1	1.0	07Sc24	*
^{66}As$-$u		−55290	730	−55851	6	−0.5	U			GA6	1.5	02Li24	
^{66}As$-^{85}$Rb$_{.776}$		12607	32	12600	6	−0.2	U			MS1	1.0	07Sc24	
^{66}As O$-^{85}$Rb$_{.965}$		24186.3	6.1				2			MS1	1.0	12Sc.A	
^{66}Zn(p,α)^{63}Cu		1544.3	0.8	1544.6	0.7	0.4	1	74	66 ^{66}Zn	NDm		76Jo01	
^{63}Cu(α,n)^{66}Ga		−7670	30	−7502.5	1.1	5.6	B			Oak		64St01	
^{64}Ni(t,p)^{66}Ni		6559	25	6568.2	1.5	0.4	U			Ald		71Da16	
^{64}Zn(t,p)^{66}Zn		10582	15	10556.0	0.9	−1.7	U			Ald		72Hu06	
^{65}Cu(n,γ)^{66}Cu		7065.80	0.12	7065.93	0.09	1.1	–			BNn		83De29	Z
		7066.13	0.15			−1.3	–			Bdn		06Fi.A	
^{65}Cu(d,p)^{66}Cu		4837	8	4841.36	0.09	0.5	U			MIT		64Sp12	
^{65}Cu(n,γ)^{66}Cu	ave.	7065.93	0.09	7065.93	0.09	0.0	1	100	90 ^{66}Cu			average	
^{66}Zn(d,t)^{65}Zn		−4770	60	−4801.2	0.9	−0.5	U			ANL		60Ze02	
^{66}Co(β^-)^{66}Ni		9700	500	9598	14	−0.2	U					88Bo06	
^{66}Ni(β^-)^{66}Cu		200	30	252.0	1.5	1.7	U					56Jo20	
^{66}Cu(β^-)^{66}Zn		2650	30	2640.9	0.9	−0.3	U					51Fr19	*
		2650	30			−0.3	U					56Jo20	
^{66}Ga(β^+)^{66}Zn		5175.0	3.0	5175.5	0.8	0.2	U					63Ca03	*
		5175.5	0.8				2					14Se12	
^{66}Zn(^{3}He,t)^{66}Ga^i		−9044	6				2					71Be29	*
^{66}Ge(β^+)^{66}Ga		2490	50	2116.6	2.6	−7.5	F					69Ba31	*
		2420	30			−10.1	F					69Sa08	*
		2100	30			0.6	U					70De39	*
^{66}As(β^+)^{66}Ge		9550	50	9582	6	0.6	U			ANB		79Da.A	
*^{66}Mn$-$u	$M-A$=–36900(790) keV for mixture gs+m at 464.5 keV (5^-)											Nub16b	**
*^{66}Co$-$u	Original –60160(300) μu or $M-A$=–56040(280) keV											GAu	**
*^{66}Co$-$u	$M-A$=–55480(270) keV for mixture gs+m+n at 175.1 and 642(5) keV											Nub16b	**
*	and assuming for first isomer a ratio R=0.5(0.2) to ground state,											GAu	**
*	from half-life=1.21 μs and TOF=1 μs											GAu	**
*C_5 H_5-^{66}Ge$_{.970}$	For original doublet C_5 H_5-(^{66}Ge H)$_{0.970}$, D_M=95688.6(2.5) μu											GAu	**
*^{66}Cu(β^-)^{66}Zn	E_{β^-}=2630(30) 1640(30) to ground state and 2^+ level at 1039.2279 keV											Ens104	**
*^{66}Ga(β^+)^{66}Zn	Original E_{β^+}=4153(3) corrected for recoil											14Se12	**
*^{66}Zn(^{3}He,t)^{66}Ga^i	CDE=9813(6) Q =–9049(6); recalibration +5 keV for ^{58}Ni(p,n)^{58}Cu^i from Ame1961											MMC124	**
*^{66}Ge(β^+)^{66}Ga	E_{β^+}=1440(50) to 43.9 level; F : probably distorted by annihilation pile up											AHW	**
*^{66}Ge(β^+)^{66}Ga	E_{β^+}=1370(30) to 43.9 level; F : probably distorted by annihilation pile up											AHW	**
*^{66}Ge(β^+)^{66}Ga	E_{β^+}=1028(30), 668(30), 558(50) to 43.812 1^+, 381.859 1^+, 536.618 1^+ level											Ens104	**
^{67}Mn$-$u		−36600	670	−35920#	320#	1.0	D			MT1	1.0	15Me.A	*
^{67}Fe$-$u		−50190	500	−48960	290	1.6	2			TO5	1.5	94Se12	*
		−48450	380			−0.9	2			TO6	1.5	98Ba.A	*
		−49641	440			1.0	2			GT1	1.5	04Ma.A	
		−49580	300			2.1	o			MT1	1.0	11Es06	*
		−48510	460			−1.0	2			MT1	1.0	15Me.A	
^{67}Co$-$u		−59390	300	−59390	7	0.0	U			TO5	1.5	94Se12	
		−58730	350			−1.3	U			TO6	1.5	98Ba.A	
^{28}Si F_2-^{67}Co$_{.985}$		32232.9	8.0	32232	7	−0.1	2			MS1	1.0	10Fe01	
		32231	13			0.1	2			MS1	1.0	10Fe01	*
^{67}Ni$-$u		−68370	430	−68431	3	−0.1	U			TO5	1.5	94Se12	*
		−68090	470			−0.5	U			TO6	1.5	98Ba.A	*

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{67}Ni−^{85}Rb$_{.788}$	1079.1	3.1				2			MA8	1.0	07Gu09	
^{67}Cu−^{85}Rb$_{.788}$	−2760.0	1.3	−2760.8	1.0	−0.6	1	54	54 ^{67}Cu	MA8	1.0	07Gu09	
^{67}As−u	−60500	260	−60748.9	0.5	−0.6	U			GA6	1.5	02Li24	
^{67}As−^{86}Kr$_{.779}$	8885.7	2.9	8885.4	0.5	−0.1	U			MS1	1.0	07Sc24	
	8808	30			2.6	U			MS1	1.0	07Sc24	
^{67}As−^{85}Rb$_{.788}$	8762.5	1.7	8760.8	0.5	−1.0	U			MS1	1.0	07Sc24	
	8760.87	0.54			−0.1	1	77	77 ^{67}As	MS1	1.0	12Sc.A	
^{67}As O−^{85}Rb$_{.976}$	20258.7	1.0	20258.9	0.5	0.2	1	23	23 ^{67}As	MS1	1.0	12Sc.A	
^{67}Se−u	−50006	72				2			LZ1	1.0	11Tu02	
^{67}Zn N−^{66}Zn ^{15}N	4060.21	0.32	4058.88	0.25	−1.7	U			H30	2.5	77Ba10	∗
^{64}Zn(α,n)^{67}Ge	−9240	60	−8992	5	4.1	B			Oak		64St01	
	−8987.5	12.			−0.4	2			ANL		78Mu05	
	−8993	5			0.2	2					79Al04	
^{65}Cu(t,p)^{67}Cu	7716	25	7716.7	1.1	0.0	U			Ald		66Bj02	
^{65}Cu(^{3}He,p)^{67}Zn	8185	40	8258.9	0.9	1.8	U			MIT		74Is01	
^{66}Zn(n,γ)^{67}Zn	7052.5	0.6	7052.47	0.23	−0.1	–					71Ot01	Z
	7052.5	0.5			−0.1	–					75De.A	Z
	7052.5	0.3			−0.1	–			Bdn		06Fi.A	
^{66}Zn(d,p)^{67}Zn	4827	10	4827.90	0.23	0.1	U			ANL		67Vo05	
	4820	5			1.6	U			MIT		74Is01	
^{67}Zn(d,t)^{66}Zn	−800	60	−795.24	0.23	0.1	U			ANL		60Ze02	
^{66}Zn(n,γ)^{67}Zn ave.	7052.50	0.24	7052.47	0.23	−0.1	1	98	64 ^{67}Zn			average	
^{67}Ni(β^-)^{67}Cu	3830	90	3577	3	−2.8	U					75Re09	
^{67}Cu(β^-)^{67}Zn	577	8	560.8	0.8	−2.0	U					53Ea11	
	560.3	1.0			0.5	1	69	46 ^{67}Cu	ANB		15Ch57	
^{67}Zn(p,n)^{67}Ga	−1776	5	−1783.6	1.1	−1.5	U			Ric		57Ch30	Y
	−1783.3	1.4			−0.2	1	66	55 ^{67}Ga	Oak		64Jo11	Z
^{67}Ge(β^+)^{67}Ga	4330	100	4221	5	−1.1	U					59Ri35	∗
	4370	150			−1.0	U					69Ba07	∗
^{67}As(β^+)^{67}Ge	6010	100	6071	5	0.6	U			ANB		80Mu12	
∗^{67}Mn−u	Trends from Mass Surface TMS suggest ^{67}Mn 630 less bound										GAu	∗∗
∗^{67}Fe−u	Original –50000(500) μu or $M-A$=–46570(470) keV										GAu	∗∗
∗^{67}Fe−u	$M-A$=–44930(330) keV for mixture gs+m at 402(9) keV										Nub16b	∗∗
∗^{67}Fe−u	$M-A$=–45980(250) keV for mixture gs+m at 402(9) keV										Nub16b	∗∗
∗^{28}Si F$_2$−^{67}Co$_{.985}$	$M-A$=–54829(12) for ^{67}Co^m at 491.55(0.11) keV										10Fe01	∗∗
∗^{67}Ni−u	Original –67840(300) μu or $M-A$=–63190(280) keV										GAu	∗∗
∗^{67}Ni−u	$M-A$=–62930(330) keV for mixture gs+m at 1006.6(0.2) keV										Nub16b	∗∗
∗^{67}Zn N−^{66}Zn ^{15}N	Original 4060.21(0.25); plus syst 0.20 μu estimated by evaluator										GAu	∗∗
∗^{67}Ge(β^+)^{67}Ga	E_{β^+}=3140(100) 3180(100) respectively, to 1/2$^-$ level at 166.98 keV										Ens05c	∗∗
^{68}Fe−u	−46300	500	−46690	390	−0.5	2			TO6	1.5	98Ba.A	
	−47330	460			1.4	o			MT1	1.0	11Es06	
	−46830	460			0.3	2			MT1	1.0	15Me.A	
^{68}Co−u	−55640	350	−55750	200	−0.2	o			TO5	1.5	94Se12	
	−54750	300			−2.2	U			TO6	1.5	98Ba.A	
	−55730	140			−0.1	2			GT2	2.5	08Kn.A	∗
	−55760	250			0.0	2			MT1	1.0	11Es06	∗
^{68}Ni−u	−68030	930	−68131	3	−0.1	U			TO5	1.5	94Se12	∗
	−67530	930			−0.4	U			TO6	1.5	98Ba.A	∗
^{68}Ni−^{85}Rb$_{.800}$	2437.0	3.2				2			MA8	1.0	07Gu09	
^{68}Cu−u	−70570	440	−70389.1	1.7	0.3	U			TO6	1.5	98Ba.A	∗
^{68}Cu−^{85}Rb$_{.800}$	179.1	1.7				2			MA8	1.0	07Gu09	∗
^{68}Ga−^{85}Rb$_{.800}$	−1484	37	−1451.6	1.5	0.9	U			MA8	1.0	07Gu09	
^{68}Ge−C$_5$ H$_8$	−134496.7	8.6	−134504.9	2.0	−1.0	U			CP1	1.0	04Cl03	
	−134506.3	2.8			0.5	2			CP1	1.0	04Cl03	
	−134503.5	2.9			−0.5	2			CP1	1.0	04Cl03	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{68}As−u		−63221	107	−63225.9	2.0	0.0	U			GT1	1.5	01Ha66	
^{68}As−C$_5$ H$_8$		−125839	13	−125826.1	2.0	1.0	U			CP1	1.0	04Cl03	
		−125827.7	9.9			0.2	U			CP1	1.0	04Cl03	
		−125827.1	2.9			0.3	–			CP1	1.0	04Cl03	
		−125824.4	3.1			−0.6	–			CP1	1.0	04Cl03	
	ave.	−125825.8	2.1			−0.1	1	88	88 ^{68}As			average	
C F$_3$−^{68}As$_{1.015}$		59385.8	5.7	59383.7	2.0	−0.4	1	12	12 ^{68}As	MS1	1.0	07Sc24	
^{68}Se−u		−56197	86	−58174.8	0.5	−23.0	F			CS1	1.0	01La31	*
		−57560	1070			−0.4	U			GA6	1.5	02Li24	
		−57900	300			−0.9	U			CS1	1.0	08Go23	
^{68}Se−C$_5$ H$_8$		−120801	31	−120775.0	0.5	0.8	U			CP1	1.0	04Cl03	
C F$_3$−^{68}Se$_{1.015}$		54256.87	0.54				2			MS1	1.0	09Sa12	
^{68}Zn ^{35}Cl−^{66}Zn ^{37}Cl		1757.9	1.0	1760.7	0.3	0.7	U			H18	4.0	64Ba03	
^{68}As−^{68}Ge		8698.8	9.9	8678.8	2.8	−2.0	U			CP1	1.0	04Cl03	
^{68}Se−^{68}Ge		13669	27	13729.9	2.1	2.3	U			CP1	1.0	04Cl03	
^{65}Cu(α,n)^{68}Ga		−5800	40	−5824.1	1.5	−0.6	U			Oak		64St01	
^{66}Ni(t,p)^{68}Ni−^{68}Zn()^{70}Zn		−2110	21	−2100	4	0.5	U			Hei		77Bh03	
^{66}Zn(t,p)^{68}Zn		8758	15	8768.8	0.3	0.7	U			Ald		72Hu06	
^{68}Zn(^{14}C,^{15}O)^{67}Ni		−6052	150	−6100	3	−0.3	U			Ors		84De33	
^{67}Zn(n,γ)^{68}Zn		10198.2	0.4	10198.10	0.19	−0.3	–					71Ot01	Z
		10198.06	0.22			0.2	–			Bdn		06Fi.A	
^{68}Zn(d,t)^{67}Zn		−3930	60	−3940.87	0.19	−0.2	U			ANL		60Ze02	
^{67}Zn(n,γ)^{68}Zn	ave.	10198.09	0.19	10198.10	0.19	0.0	1	100	99 ^{68}Zn			average	
^{68}Cu(β^-)^{68}Zn		4580	60	4440.1	1.8	−2.3	U					64Ba13	
		4590	50			−3.0	B					72Sw01	
^{68}Zn(t,^{3}He)^{68}Cu		−4410	20	−4421.5	1.8	−0.6	U			LAl		77Sh08	
^{68}Ga(β^+)^{68}Zn		2921.1	1.2				2					72Sl03	
		2915	10	2921.1	1.2	0.6	U					85Bo58	
^{68}Zn(p,n)^{68}Ga		−3693	6	−3703.4	1.2	−1.7	U			Ric		55Br16	Z
		−3703	5			−0.1	U			Ric		57Ch30	Z
		−3707	5			0.7	U			Oak		64Jo11	Z
^{68}As(β^+)^{68}Ge		8100	100	8084.3	2.6	−0.2	U			ANB		77Pa13	
		8073	54			0.2	U					02Cl.A	*
^{68}Se(β^+)^{68}As		4710	200	4705.1	1.9	0.0	U					04Wo16	
*^{68}Co−u		$M-A$=–51838(96) keV for mixture gs+m at 150#(150#) keV										Nub16b	**
*^{68}Co−u		$M-A$=–51860(210) keV for mixture gs+m at 150#(150#) keV										Nub16b	**
*^{68}Ni−u		$M-A$=–61950(280) keV for mixture gs+n at 2849.1 keV										Nub16b	**
*^{68}Ni−u		$M-A$=–61480(280) keV for mixture gs+n at 2849.1 keV										Nub16b	**
*^{68}Cu−u		$M-A$=–65380(350) keV for mixture gs+m at 721.26 keV										Nub16b	**
*^{68}Cu−^{85}Rb$_{.800}$		This result was first published in reference										04Bl16	**
*^{68}Cu−^{85}Rb$_{.800}$		Also 948.6(1.6) μu for ^{68}Cu^m−^{85}Rb$_{.800}$, yielding excit. of 716.7(2.2) keV										07Gu09	**
*^{68}Se−u		F : other results in same paper not trusted, see ^{80}Y and ^{80}Zr										GAu	**
*^{68}As(β^+)^{68}Ge		From mass difference 8667(64) μu										02Cl.A	**
^{69}Fe−u		−42240	640	−41900#	430#	0.5	D			MT1	1.0	15Me.A	*
^{69}Co−u		−54800	400	−53980	150	1.4	o			TO5	1.5	94Se12	
		−53050	300			−2.1	2			TO6	1.5	98Ba.A	
		−54070	230			0.4	2			MT1	1.0	11Es06	
		−54117	223			0.6	2			LZ1	1.0	15Xu14	
^{69}Ni−u		−64600	400	−64390	4	0.4	U			TO5	1.5	94Se12	*
		−64250	450			−0.2	U			TO6	1.5	98Ba.A	*
^{69}Ni−^{85}Rb$_{.812}$		7237.0	4.0				2			MA8	1.0	07Gu09	
^{69}Cu−^{85}Rb$_{.812}$		1056.0	1.5				2			MA8	1.0	07Gu09	
^{69}Zn−u		−73580	400	−73449.6	0.9	0.2	U			TO6	1.5	98Ba.A	*
C$_5$ H$_9$−^{69}Ga		144852.7	2.4	144851.8	1.3	−0.2	U			M15	2.5	63Ri07	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{69}Ga$-^{85}$Rb$_{.812}$	−2799.8	1.6	−2799.7	1.3	0.0	1	65	65 ^{69}Ga	MA8	1.0	07Gu09	
C F$_3-^{69}$Se	55794.7	1.6	55794.6	1.6	0.0	1	100	100 ^{69}Se	MS1	1.0	07Sc24	
^{69}Ga(p,α)^{66}Zn	4440	10	4435.4	1.4	−0.5	U			ANL		67Ka11	
^{66}Zn(α,n)^{69}Ge	−7520	30	−7444.9	1.5	2.5	U			Oak		64St01	
^{67}Zn(t,p)^{69}Zn	8168	20	8198.37	0.25	1.5	U			Ald		72Hu06	
^{68}Zn(n,γ)^{69}Zn	6482.3	0.8	6482.07	0.16	−0.3	U					71Ot01	Z
	6481.8	0.5			0.5	U					75De.A	Z
	6482.07	0.16				2			Bdn		06Fi.A	
^{68}Zn(d,p)^{69}Zn	4259	10	4257.50	0.16	−0.1	U			ANL		67Vo05	
	4243	10			1.5	U			MIT		75Is04	
^{68}Zn(^{3}He,d)^{69}Ga	1126	20	1116.2	1.4	−0.5	U					74Ri08	
^{69}Se(εp)^{68}Ge	3390	50	3255.1	2.4	−2.7	U			ChR		76Ha29	
	3370	70			−1.6	U			ChR		77Ma24	
^{69}Br(p)^{68}Se	789	37	640	40	−4.0	B			MSU		11Ro18	*
	641	42				3			MSU		14De41	*
^{69}Br^i(p)^{68}Se	4131	50	4129	19	0.0	3					97Xu01	*
	4210.6	50.			−1.6	3			MSU		11Ro47	*
	4113	22			0.7	3			MSU		14De41	*
^{69}Cu(β^-)^{69}Zn	2480	70	2681.6	1.6	2.9	U					66Va12	
^{69}Zn(β^-)^{69}Ga	897	5	910.0	1.4	2.6	U					53Du03	
^{69}Ge(β^+)^{69}Ga	2225	15	2227.1	0.5	0.1	U					51Hu38	*
^{69}Ga(p,n)^{69}Ge	−3008.8	3.2	−3009.5	0.5	−0.2	U			Tkm		63Ok01	
	−3006.0	4.			−0.9	U			Oak		64Jo11	Z
	−3009.50	0.55			0.0	1	100	100 ^{69}Ge	PTB		92Bo.B	Z
^{69}As(β^+)^{69}Ge	3972	50	3990	30	0.3	–					70Bo19	
	4067	50			−1.6	–			ChR		77Ma24	*
	ave. 4020	40			−0.9	1	82	82 ^{69}As			average	
^{69}Se(β^+)^{69}As	6817	75	6680	30	−1.9	1	18	18 ^{69}As	ChR		77Ma24	*
*^{69}Fe−u	Trends from Mass Surface TMS suggest ^{69}Fe 320 less bound										GAu	**
*^{69}Ni−u	$M-A$=–59940(330) keV for mixture gs+m+n at 321(2) and 2700.0 keV										Nub16b	**
*^{69}Ni−u	$M-A$=–59620(380) keV for mixture gs+m+n at 321(2) and 2700.0 keV										Nub16b	**
*	and assuming for second isomer a ratio R=0.13(0.06) to ground state,										GAu	**
*	from half-life=439 ns and TOF=1 μs										GAu	**
*^{69}Zn−u	$M-A$=–68320(350) keV for mixture gs+m at 438.636 keV										Nub16b	**
*^{69}Br(p)^{68}Se	Symmetrized from Q_p=785(+40–34) keV										GAu	**
*^{69}Br(p)^{68}Se	And E_p=751(+132–82) in good agreement with previous item										14De41	**
*^{69}Br^i(p)^{68}Se	Might be also a more intense peak around 3 MeV										GAu	**
*^{69}Br^i(p)^{68}Se	E_p=2970(50) to (2$^+$) level at 1196.7 keV										GAu	**
*^{69}Br^i(p)^{68}Se	A weaker peak around 4 MeV cannot be excluded, could feed lower (2$^+$)										GAu	**
*^{69}Br^i(p)^{68}Se	Original Q =2939(22) corrected to Q_p=2916(22) to (2$^+$) level at 1196.7 keV										16Hu.A	**
*^{69}Ge(β^+)^{69}Ga	$E_{\beta+}$=1215, 610 to ground state 3/2$^-$, 574.220 5/2$^-$ levels										Ens141	**
*^{69}As(β^+)^{69}Ge	$E_{\beta+}$=2812(50) to 3/2$^-$ level at 232.70 keV										Ens141	**
*^{69}Se(β^+)^{69}As	$E_{\beta+}$=5006(75) to 789.46 (1/2$^-$,3/2$^-$) level, and others										Ens141	**
^{70}Co−u	−49000	600	−50060#	320#	−1.2	U			TO6	1.5	98Ba.A	
	−50370	320			1.0	D			MT1	1.0	11Es06	*
^{70}Ni−u	−63980	350	−63568.7	2.3	0.8	U			TO5	1.5	94Se12	*
	−63020	350			−1.0	U			TO6	1.5	98Ba.A	*
^{70}Cu$-^{85}$Rb$_{.824}$	5077.6	1.7	5077.3	1.2	−0.2	2			MA8	1.0	07Gu09	*
	5077.2	2.2			0.1	2			MA8	1.0	07Gu09	*
	5077.0	2.3			0.1	2			MA8	1.0	07Gu09	*
^{70}Ga$-^{85}$Rb$_{.824}$	−1293.0	2.3	−1292.8	1.3	0.1	1	31	31 ^{70}Ga	MA8	1.0	07Gu09	
C$_5$ H$_{10}-^{70}$Ge	154001.3	2.2	154001.6	0.9	0.1	U			M15	2.5	63Ri07	
C$_4$ H$_6$ O$-^{70}$Ge	117616.1	1.8	117616.1	0.9	0.0	U			M15	2.5	63Ri07	
^{70}Se−u	−66890	490	−66484.5	1.7	0.6	o			GA6	1.5	98Ch20	
	−66635	75			1.3	U			GT1	1.5	01Ha66	
	−66520	140			0.2	U			GA6	1.5	02Li24	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{70}Se$-^{13}$C F$_3$		−65048.8	1.7				2			MS1	1.0	09Sa12	
^{70}Se$-^{85}$Rb$_{.824}$		6209	18	6200.8	1.7	−0.5	U			MA8	1.0	11He10	
^{70}Br$-^{13}$C F$_3$		−53772	16				2			MS1	1.0	09Sa12	*
^{70}Ni$-^{72}$Ge$_{.972}$		12173.6	2.3				2			JY1	1.0	07Ra27	
^{70}Zn ^{35}Cl$-^{68}$Zn ^{37}Cl		3429.5	1.7	3425.0	2.2	−0.7	1	10	9 ^{70}Zn	H18	4.0	64Ba03	
^{70}Zn(^{3}He,^{8}B)^{65}Co		−18385	13	−18370	3	1.2	U			Pri		78Ko24	
^{70}Zn(α,^{7}Be)^{67}Ni		−19155	36	−19166	3	−0.3	U			Tex		78Co.A	
		−19164	22			−0.1	U			Pri		78Ko28	
^{70}Zn(^{14}C,^{17}O)^{67}Ni		−1661	100	−1993	3	−3.3	B			Ors		88Gi04	
^{70}Ge(p,α)^{67}Ga		1180.9	1.5	1181.2	1.2	0.2	1	60	45 ^{67}Ga	NDm		76Jo01	
^{70}Ge(^{3}He,^{6}He)^{67}Ge		−10572	30	−10565	5	0.2	U			MSU		78Pa11	
^{70}Zn(^{14}C,^{16}O)^{68}Ni		1727	30	1656	4	−2.4	U			Ors		88Gi04	
^{70}Zn(^{18}O,^{20}Ne)^{68}Ni		172	26	158	4	−0.5	U			Hei		84Ha31	
^{68}Zn(t,p)^{70}Zn		7196	15	7218.5	2.0	1.5	U			Ald		72Hu06	
^{70}Ge(p,t)^{68}Ge		−11251	13	−11243.9	2.1	0.5	U			ChR		72Hs01	
		−11242	7			−0.3	U			Ors		77Gu02	
^{70}Zn(^{14}C,^{15}O)^{69}Ni		−8936	150	−9422	4	−3.2	B			Ors		84De33	
^{70}Zn(d,^{3}He)^{69}Cu		−5605	10	−5624.0	2.4	−1.9	U			ANL		78Ze04	
		−5622	13			−0.2	U			Hei		84Ha31	
^{70}Zn(t,α)^{69}Cu		8682	20	8696.4	2.4	0.7	U			LAl		81Aj02	
^{69}Ga(n,γ)^{70}Ga		7654.0	1.0	7653.65	0.17	−0.4	U					71Ar12	Z
		7651.6	1.0			2.0	F					71Ve03	*
		7653.65	0.17			0.0	1	100	64 ^{70}Ga	Bdn		06Fi.A	
^{69}Ga(d,p)^{70}Ga		5430	10	5429.08	0.17	−0.1	U			Kop		71Ar12	
^{70}Ge(d,^{3}He)^{69}Ga		−3030	7	−3029.6	1.5	0.1	U			Ors		78Ro14	
^{70}Cu(β^-)^{70}Zn		6310	110	6588.4	2.2	2.5	U					75Re09	*
		5928	110			6.0	B					75Re09	*
^{70}Zn(t,^{3}He)^{70}Cu		−6559	20	−6569.8	2.2	−0.5	U			LAl		77Sh08	
		−6602	20			1.6	U			LAl		87Aj.A	
^{70}Zn(p,n)^{70}Ga		−1436.3	2.0	−1436.9	1.6	−0.3	–			Nvl		59Go68	Z
		−1439.1	3.0			0.7	–			Oak		64Jo11	Z
	ave.	−1437.2	1.6			0.1	1	92	88 ^{70}Zn			average	
^{70}Ga(β^-)^{70}Ge		1650	10	1651.7	1.5	0.2	U					57Bu41	
^{70}As(β^+)^{70}Ge		6220	50				2					63Bo14	*
^{70}Se(β^+)^{70}As		2780	200	2410	50	−1.8	F					75La02	*
		2736	85			−3.8	B					01To06	
^{70}Br(β^+)^{70}Se		9970	170	10504	15	3.1	C			ANB		79Da.A	
		9898	80			7.6	B					04Ka38	*

*^{70}Co$-$u	$M-A$=–46820(280) keV for mixture gs+m at 200#200 keV	Nub16b	**
*^{70}Co$-$u	Trends from Mass Surface TMS suggest ^{70}Co 290 less bound	GAu	**
*^{70}Ni$-$u	Original –63860(350) μu or $M-A$=–59490(330) keV	GAu	**
*^{70}Ni$-$u	$M-A$=–58590(330) keV for mixture gs+m at 2860(2) keV and	Nub16b	**
*	assuming ratio R=0.04(2), from half-life=232 ns and TOF=1 μs	GAu	**
*^{70}Cu$-^{85}$Rb$_{.824}$	The three results for ^{70}Cu were first published in reference	04Va07	**
*^{70}Cu$-^{85}$Rb$_{.824}$	D_M=5185.7(2.2) μu for ^{70}Cu^m at 101.1(0.3) keV; $M-A$=–62875.4(2.0) keV	Nub16b	**
*^{70}Cu$-^{85}$Rb$_{.824}$	D_M=5337.4(2.3) μu for ^{70}Cu^n at 242.6(0.5) keV; $M-A$=–62734.1(2.2) keV	Nub16b	**
*^{70}Br$-^{13}$C F$_3$	D_M=–51311(16) μu for ^{70}Br^m at 2292.3(0.8) keV	Nub16b	**
*^{69}Ga(n,γ)^{70}Ga	F : E(γ) systematically lower than for other authors; Z recalibrated	AHW	**
*^{70}Cu(β^-)^{70}Zn	E_{β^-}=4550(120), 3370(170) to 4$^+$ level at 1786.33, 5$^-$ at 3037.61 keV	Ens04c	**
*^{70}Cu(β^-)^{70}Zn	E_{β^-}=6170(110) from ^{70}Cu^n 1$^+$ at 242.6 keV	Nub16b	**
*^{70}As(β^+)^{70}Ge	E_{β^+}=2144(50) to 3$^+$ level at 3046.427, 4$^+$ at 3058.707 keV	Ens04c	**
*^{70}Se(β^+)^{70}As	E_{β^+}=1500(200) to 1$^+$ level at 81.49, 1$^+$ at 234.70, 1$^+$ at 458.12 keV	Ens04c	**
*^{70}Se(β^+)^{70}As	F : author's half-life 20(2)m disagrees with Nubase 41.1(0.3)m	Nub16b	**
*^{70}Br(β^+)^{70}Se	Q_{β^+}=12190(80) from 2292.3 ^{70}Br^m	04Ka38	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.		Lab	F	Reference	
^{71}Co−u		−47100	600	−47630	500	−0.6	2				TO6	1.5	98Ba.A	
		−47870	600			0.4	2				MT1	1.0	11Es06	
^{71}Ni−u		−60000	400	−59481.0	2.4	0.9	U				TO5	1.5	94Se12	
		−58700	350			−1.5	U				TO6	1.5	98Ba.A	
^{71}Cu−^{85}Rb$_{.835}$		6332.4	1.6				2				MA8	1.0	07Gu09	
^{71}Zn−u		−72080	380	−72280.4	2.8	−0.4	U				TO6	1.5	98Ba.A	*
^{71}Zn^m−^{85}Rb$_{.835}$		1544.3	2.6	1544.4	2.5	0.0	1	95	95	^{71}Zn^m	MA8	1.0	08Ba54	
C_5 H_{11}−^{71}Ga		161370.2	3.2	161372.8	0.9	0.3	U				M15	2.5	63Ri07	
^{71}Ga−^{85}Rb$_{.835}$		−1641.6	3.0	−1641.9	0.9	−0.1	–				MA8	1.0	07Gu09	
		−1640.2	1.3			−1.3	–				MA8	1.0	07Ke09	
	ave.	−1640.4	1.2			−1.2	1	53	53	^{71}Ga			average	
^{71}Se−u		−68160	340	−67791	3	0.7	o				GA6	1.5	98Ch20	
		−67687	75			−0.9	U				GT1	1.5	01Ha66	
		−67830	120			0.2	U				GA6	1.5	02Li24	
^{71}Se−^{85}Rb$_{.835}$		5865.0	3.0				2				MA8	1.0	11He10	
^{71}Br−u		−61260	610	−60658	6	0.7	U				GA6	1.5	02Li24	
^{71}Br H_2−C_4 H_9 O		−110347.7	5.8	−110348	6	0.0	1	100	100	^{71}Br	MS1	1.0	09Sa12	
^{71}Kr−u		−49727	151	−49730	140	0.0	1	84	84	^{71}Kr	LZ1	1.0	11Tu02	
^{71}Ni−^{72}Ge$_{.986}$		17352.2	2.4				2				JY1	1.0	07Ra27	
^{68}Zn(α,n)^{71}Ge		−5630	40	−5747.0	1.1	−2.9	U				Oak		64St01	
^{70}Zn(^{18}O,^{17}F)^{71}Cu		−9529	35	−9588.1	2.4	−1.7	U				Ber		89Bo.A	
^{70}Zn(d,p)^{71}Zn		3609	10	3611	3	0.2	1	10	7	^{71}Zn	ANL		67Vo05	
^{70}Zn(^{3}He,d)^{71}Ga		2380	20	2369.9	2.1	−0.5	U						74Ri08	
^{71}Ga(γ,n)^{70}Ga		−9240	60	−9300.3	1.4	−1.0	U				Phi		60Ge01	
^{71}Ga(d,t)^{70}Ga		−3054	10	−3043.1	1.4	1.1	U				Kop		71Ar12	
^{70}Ge(n,γ)^{71}Ge		7415.3	1.5	7415.94	0.11	0.4	U						70Or.A	
		7415.1	2.			0.4	U						72Gr34	
		7415.95	0.15			−0.1	–				MMn		91Is01	Z
		7415.93	0.15			0.1	–				Bdn		06Fi.A	
^{70}Ge(d,p)^{71}Ge		5182	10	5191.37	0.11	0.9	U				Kyu		73Ka03	
^{70}Ge(n,γ)^{71}Ge	ave.	7415.94	0.11	7415.94	0.11	0.0	1	100	85	^{70}Ge			average	
^{70}Ge(p,γ)^{71}As		4619	5	4620	4	0.2	R						75Li14	
^{71}Zn^m(IT)^{71}Zn		157.7	1.3	157.7	1.3	0.0	1	98	93	^{71}Zn			Ens10c	
^{71}Zn(β^-)^{71}Ga		2610	50	2810.4	2.8	4.0	B						61Th01	
		2786	50			0.5	U						61Th01	*
		2796	50			0.3	U						64So01	*
^{71}Ge(ε)^{71}Ga		233.0	0.5	232.64	0.22	−0.7	–				Hei		84Ha.A	
		229.3	1.0			3.3	F						91Zl01	*
		232.1	0.5			1.1	–						93Di03	*
		232.71	0.29			−0.2	–						95Le19	
		233.5	1.2			−0.7	U				TT1		13Fr13	
^{71}Ga(p,n)^{71}Ge		−1018.4	2.0	−1014.98	0.22	1.7	U				Oak		64Jo11	Z
^{71}Ge(ε)^{71}Ga	ave.	232.65	0.22	232.64	0.22	0.0	1	99	86	^{71}Ge			average	
^{71}Ga(^{3}He,t)^{71}Ge−^{65}Cu()^{65}Zn		1122.0	0.9	1119.0	0.4	−3.3	B				Pri		84Ko10	
^{71}As(β^+)^{71}Ge		1997	20	2013	4	0.8	U						53St31	*
		2010	10			0.3	2						54Th36	*
		2012	10			0.1	2						55Gr08	*
^{71}Se(β^+)^{71}As		4428	125	4747	5	2.5	U						73Sc17	
		4762	35			−0.4	U						01To06	
^{71}Kr(ε)^{71}Br		10140	320	10180	130	0.1	1	16	16	^{71}Kr			97Oi01	

*^{71}Zn−u	$M-A$=–67060(350) keV for mixture gs+m at 157.7 keV	Nub16c	**
*^{71}Zn(β^-)^{71}Ga	E_{β^-}=1450(50) 1460(50) respectively, from ^{71}Zn^m at 157.7(1.3) to 9/2$^+$ at 1493.74	Ens10c	**
*^{71}Ge(ε)^{71}Ga	F : sees 17 keV neutrino	AHW	**
*^{71}Ge(ε)^{71}Ga	Original error 0.1 increased for calibration uncertainty	GAu	**
*^{71}As(β^+)^{71}Ge	E_{β^+}=800(20) 813(10) 815(10) respectively, to 5/2$^-$ level at 174.943 keV	Ens10c	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{72}Ni−u	−58700	500	−58214.1	2.4	0.6	U			TO5	1.5	94Se12	
	−57400	400			−1.4	U			TO6	1.5	98Ba.A	
^{72}Cu−u	−64250	510	−64179.7	1.5	0.1	U			TO6	1.5	98Ba.A	∗
^{72}Cu−^{85}Rb$_{.847}$	10534.4	1.5				2			MA8	1.0	07Gu09	
^{72}Zn−^{85}Rb$_{.847}$	1556.9	2.3				2			MA8	1.0	08Ba54	
^{72}Ga−^{85}Rb$_{.847}$	1079.5	1.5	1081.5	0.9	1.4	1	34	34 ^{72}Ga	MA8	1.0	07Gu09	
C$_4$ H$_8$ O−^{72}Ge	135438.4	2.1	135439.05	0.08	0.1	U			M15	2.5	63Ri07	
^{72}Ge−u	−77906	25	−77924.17	0.08	−0.7	U			MR1	1.0	15Wi.A	
	−77927	22			0.1	U			MR1	1.0	15Wi.A	
	−77898	20			−1.3	U			MR1	1.0	15Wi.A	
^{72}Se−^{85}Rb$_{.847}$	1854.6	2.1				2			MA8	1.0	11He10	
^{72}Br ^{27}Al−^{85}Rb$_{1.165}$	20892.1	7.2	20898.0	1.1	0.8	U			MA8	1.0	11He10	
^{72}Br−^{85}Rb$_{.847}$	11308.7	1.1				2			MS1	1.0	15Va05	∗
^{72}Kr−^{85}Rb$_{.847}$	16806.5	8.6				2			MA8	1.0	06Ro11	
^{70}Ge H$_2$−^{72}Ge	17821.3	1.7	17822.9	0.9	0.4	U			M15	2.5	63Ri07	
^{72}Ge ^{35}Cl−^{70}Ge ^{37}Cl	779.8	5.9	777.2	0.9	−0.2	U			H40	2.5	85El01	
^{72}Ni−^{72}Ge	19710.1	2.4				2			JY1	1.0	07Ra27	
^{70}Zn(t,p)^{72}Zn	6231	20	6241.6	2.9	0.5	U			Ald		72Hu06	
^{71}Ga(n,γ)^{72}Ga	6521.1	1.0	6520.47	0.19	−0.6	U					70Li04	Z
	6519.8	1.0			0.7	F					71Ve03	∗
	6520.44	0.19			0.2	1	99	66 ^{72}Ga	Bdn		06Fi.A	
^{72}Ge(d,^{3}He)^{71}Ga	−4241	7	−4242.3	0.8	−0.2	U			Ors		78Ro14	
^{72}Zn(β^-)^{72}Ga	422	20	442.8	2.3	1.0	U					63De11	∗
	458	6			−2.5	B					63Th03	∗
^{72}Ga(β^-)^{72}Ge	4000	20	3997.6	0.8	−0.1	U					55Jo09	∗
	3984	10			1.4	U					60La04	∗
^{72}As(β^+)^{72}Ge	4361	10	4356	4	−0.5	2					50Me55	
	4345	10			1.1	2					68Vi05	
^{72}Ge(p,n)^{72}As	−5140	5	−5138	4	0.3	2			Kyu		76Ki12	
^{72}Br(β^+)^{72}Se	8869	95	8806.4	2.2	−0.7	U					01To06	
^{72}Kr(β^+)^{72}Br	5040	80	5121	8	1.0	U					73Sc17	∗
∗^{72}Cu−u	$M-A$=–59710(470) keV for mixture gs+m at 270.3 keV										Nub16b	∗∗
∗^{72}Br−^{85}Rb$_{.847}$	D_M=11308.4(1.1)uu, 11417.2(1.2) for ground state and ^{72}Br^m at 100.76(0.15) keV										Nub16b	∗∗
∗	respectively $M-A$=–59062.0(1.0) and –58960.7(1.1) keV										15Va05	∗∗
∗^{71}Ga(n,γ)^{72}Ga	F : E(γ) systematically lower than for other authors; Z recalibrated										AHW	∗∗
∗^{72}Zn(β^-)^{72}Ga	E_{β^-}=260(20) 296(6) respectively, to 1$^+$ level at 161.53 keV										Ens102	∗∗
∗^{72}Ga(β^-)^{72}Ge	E_{β^-}=3166(20) 3150(10) respectively, to 2$^+$ level at 834.01 keV										Ens102	∗∗
∗^{72}Kr(β^+)^{72}Br	E_{β^+}=3794(180), 3626(105), 3682(80), 3364(155) to 162.67, 309.84 1$^+$,										73Sc17	∗∗
∗	415.05 1$^+$ and 576.74 1$^+$ levels										Ens102	∗∗
^{73}Ni−u	−52500	500	−53793.3	2.6	−1.7	U			TO6	1.5	98Ba.A	
^{73}Cu−u	−62740	350	−63325.6	2.1	−1.1	U			TO6	1.5	98Ba.A	
^{73}Cu−^{85}Rb$_{.859}$	12447.9	4.2	12447.0	2.1	−0.2	1	25	25 ^{73}Cu	MA8	1.0	07Gu09	
^{73}Zn−u	−70100	380	−70417.4	2.0	−0.6	U			TO6	1.5	98Ba.A	∗
^{73}Zn−^{85}Rb$_{.859}$	5355.2	2.0				2			MA8	1.0	08Ba54	
^{73}Ga−^{85}Rb$_{.859}$	947.3	1.8				2			MA8	1.0	07Gu09	
C$_4$ H$_9$ O−^{73}Ge	141878.4	2.1	141880.95	0.06	0.5	U			M15	2.5	63Ri07	
^{73}Se−^{85}Rb$_{.859}$	2511	11	2528	8	1.5	1	52	52 ^{73}Se	MA8	1.0	11He10	∗
^{73}Br−u	−68428	97	−68328	8	0.7	U			GT1	1.5	01Ha66	
^{73}Br ^{27}Al−^{85}Rb$_{1.176}$	16945.3	7.8				2			MA8	1.0	11He10	
^{73}Kr−^{85}Rb$_{.859}$	15061.8	7.1	15062	7	0.0	o			MA8	1.0	04Ro32	∗
	15062.8	9.7			−0.1	2			MA8	1.0	06Ro11	
	15060.7	10.3			0.1	2			MA8	1.0	06Ro11	
^{73}Ni−^{72}Ge$_{1.014}$	25221.8	2.6				2			JY1	1.0	07Ra27	
^{73}Cu−^{72}Ge$_{1.014}$	15689.2	2.4	15689.5	2.1	0.1	1	75	75 ^{73}Cu	JY1	1.0	07Ra27	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{72}Ge H$-^{73}$Ge	6443.9	1.3	6441.90	0.05	−0.6	U			M15	2.5	63Ri07	
^{73}Br$-^{72}$Br	−4610	330	−4923	8	−0.4	U			CR1	2.5	89Sh10	*
	−4709	166			−0.9	U			CR2	1.5	91Sh19	*
^{72}Ge(n,γ)^{73}Ge	6783.4	0.9	6782.94	0.05	−0.5	U					72Gr34	
	6780.9	2.			1.0	U					72Ha74	
	6782.94	0.05			0.0	1	100	100 ^{72}Ge	MMn		91Is01	Z
	6783.12	0.15			−1.2	U			Bdn		06Fi.A	
^{72}Ge(d,p)^{73}Ge	4571	4	4558.37	0.05	−3.2	B			Ald		69He05	
	4563	10			−0.5	U			Kop		72Ha74	
	4541	10			1.7	U			Kyu		73Ka03	
^{72}Ge(^{3}He,d)^{73}As	160	4	162	4	0.6	1	93	93 ^{73}As	Hei		76Sc13	
^{73}Kr(εp)^{72}Se	3700	150	4027	7	2.2	U			ChR		81Ha44	
^{73}Rb^i(p)^{72}Kr	3803	40				3					93Ba61	
^{73}Ga(β^-)^{73}Ge	1554	40	1598.2	1.7	1.1	U					58Yt22	*
	1564	80			0.4	U					70Wa21	*
^{73}Ge(p,n)^{73}As	−1121.6	15.	−1127	4	−0.4	U			Oak		64Jo11	*
^{73}Se(β^+)^{73}As	2740	10	2725	7	−1.5	1	55	48 ^{73}Se			56Ha10	*
^{73}Br(β^+)^{73}Se	4748	500	4580	10	−0.3	U					70Mu02	*
	4648	400			−0.2	U					74Ro11	*
	4688	140			−0.8	U					87He21	*
	4610	70			−0.4	U					01To06	
^{73}Kr(β^+)^{73}Br	6790	350	7096	10	0.9	U					73Sc17	*
	6860	220			1.1	U					97Oi01	
*^{73}Zn$-$u	$M-A$=–65200(350) keV for mixture gs+m at 195.5 keV										Nub16c	**
*^{73}Se$-^{85}$Rb$_{.859}$	D_M=2524.6(7.3) μu for mixture gs+m at 25.71 keV; $M-A$=–68230.0(6.8) keV										Nub16b	**
*^{73}Kr$-^{85}$Rb$_{.859}$	Combined results of next two items										GAu	**
*^{73}Br$-^{72}$Br	D_M=–4660(330) μu corrected for ^{72}Br gs+m mixture at 100.76 keV										Nub16b	**
*^{73}Br$-^{72}$Br	From ^{72}Br/^{73}Br=0.98635312(227)										AHW	**
*^{73}Ga(β^-)^{73}Ge	E_{β^-}=1190(40) 1200(80) respectively, to 3/2$^-$ level at 364.02 keV										Ens043	**
*^{73}Ge(p,n)^{73}As	T=1205(15) to 5/2$^-$ level at 67.039(0.008)keV										Ens043	**
*^{73}Se(β^+)^{73}As	E_{β^+}=1290(10) to 9/2$^+$ level at 427.906 keV										Ens043	**
*^{73}Br(β^+)^{73}Se	E_{β^+}=3700(500) 3600(400) 3640(140) respectively, to ^{73}Se^m at 25.71 keV										Nub16b	**
*^{73}Kr(β^+)^{73}Br	E_{β^+}=5589(350) to 3/2$^-$ level at 178.08 keV										Ens043	**
^{74}Ni$-$u	−52830	1060	−52020#	210#	0.8	D			MT1	1.0	11Es06	*
^{74}Cu$-$u	−59400	400	−60125	7	−1.2	U			TO6	1.5	98Ba.A	
^{74}Cu$-^{85}$Rb$_{.871}$	16706.0	6.6				2			MA8	1.0	07Gu09	
^{74}Zn$-^{85}$Rb$_{.871}$	6238.4	2.7				2			MA8	1.0	08Ba54	
^{74}Ga$-^{85}$Rb$_{.871}$	3776.9	22.6	3777	3	0.0	U			MA8	1.0	07Ke09	*
	3776.9	4.0			0.0	2			MA8	1.0	07Gu09	
	3806.5	34.6			−0.9	U			MA8	1.0	07Ke09	*
	3776.8	5.4			0.0	2			TT1	1.0	15Ma30	
C ^{32}S$_2-^{74}$Ge H$_2$	7314.0	1.4	7314.522	0.014	0.1	U			M15	2.5	63Ri07	
^{74}Ge$-^{84}$Kr	9680.0337	0.0128	9680.034	0.013	0.0	1	100	100 ^{74}Ge	FS1	1.0	10Mo03	
C$_6$ H$_2-^{74}$Se	93173.8	3.8	93174.129	0.016	0.0	U			M15	2.5	63Ri07	
^{74}Se$-^{84}$Kr	10978.2066	0.0128	10978.207	0.015	0.0	o			FS1	1.0	10Mo03	*
^{74}Se$-^{85}$Rb$_{.871}$	−691.4	7.3	−692.927	0.016	−0.2	U			MA8	1.0	11He10	
^{74}Br ^{27}Al$-^{85}$Rb$_{1.188}$	16246.0	6.8	16242	6	−0.5	1	85	85 ^{74}Br	MA8	1.0	11He10	*
^{74}Kr$-^{85}$Rb$_{.871}$	9915.0	2.2	9915.2	2.2	0.1	o			MA8	1.0	04Ro32	*
	9916.8	2.6			−0.6	–			MA8	1.0	06Ro11	
	9909.7	4.4			1.2	–			MA8	1.0	06Ro11	
	ave. 9915.0	2.2			0.1	1	93	93 ^{74}Kr			average	
^{74}Rb$-^{85}$Rb$_{.871}$	21109	19	21097	3	−0.6	U			MA8	1.0	07Ke09	
	21097.9	4.3			−0.2	o			MA8	1.0	04Ke10	*
	21095.7	5.2			0.3	–			MA8	1.0	07Ke09	
	21102.7	7.5			−0.8	–			MA8	1.0	07Ke09	
	21096.4	6.5			0.1	–			TT1	1.0	15Ma30	
	ave. 21097	4			−0.1	1	83	83 ^{74}Rb			average	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{74}Rb$-$u		$-$55765	125	$-$55734	3	0.2	U			P40	1.0	06Lu19	
^{74}Ge ^{35}Cl$-^{72}$Ge ^{37}Cl		2047.5	1.1	2052.05	0.11	1.0	U			H18	4.0	64Ba03	
		2047.74	0.71			2.4	U			H40	2.5	85El01	
		2052.01	0.26			0.1	U			H44	1.5	91Hy01	
^{74}Se ^{35}Cl$-^{72}$Ge ^{37}Cl		3347.9	4.7	3350.22	0.11	0.2	U			H40	2.5	85El01	
^{73}Ge H$-^{74}$Ge		10105.1	1.7	10106.23	0.06	0.3	U			M15	2.5	63Ri07	
^{74}Se$-^{74}$Ge		1298.5	8.5	1298.173	0.008	0.0	U			H40	2.5	85El01	
		1298.7	3.7			$-$0.1	U			H40	2.5	85El01	
		1298.096	0.053			1.5	U			JY1	1.0	10Ko15	
		1298.1729	0.0080			0.0	1	100	100 ^{74}Se	FS1	1.0	10Mo03	
^{74}Br$-^{73}$Br		$-$1244	410	$-$1761	10	$-$0.5	U			CR1	2.5	89Sh10	*
^{74}Se(p,t)^{72}Se		$-$11979	24	$-$12005.9	2.0	$-$1.1	U			Win		74De31	*
^{74}Ge(^{14}C,^{15}O)^{73}Zn		$-$8018	150	$-$7664.8	1.9	2.4	U			Ors		84De33	
^{74}Ge(d,^{3}He)^{73}Ga		$-$5515	7	$-$5518.6	1.7	$-$0.5	U			Ors		78Ro14	
		$-$5509	13			$-$0.7	U			Hei		84Ha31	
^{73}Ge(n,γ)^{74}Ge		10200.2	0.6	10196.24	0.06	$-$6.6	B					70Ha60	
		10198	2			$-$0.9	U					74Ch18	
		10195.90	0.15			2.2	–			ILn		85Ho.A	Z
		10196.32	0.14			$-$0.6	–					89Bu.A	
		10196.31	0.07			$-$1.1	–			MMn		91Is01	Z
		10196.06	0.20			0.9	–			Bdn		06Fi.A	
	ave.	10196.24	0.06			0.0	1	100	100 ^{73}Ge			average	
^{74}Se(d,^{3}He)^{73}As		$-$3027	8	$-$3056	4	$-$3.6	B			Ors		83Ro08	*
^{74}Zn(β^-)^{74}Ga		2350	100	2293	4	$-$0.6	U					72Er05	*
^{74}Ga(β^-)^{74}Ge		5400	100	5372.8	3.0	$-$0.3	U					62Ei02	*
^{74}As(β^+)^{74}Ge		2558	4	2562.4	1.7	1.1	–					71Bo01	*
^{74}Ge(p,n)^{74}As		$-$3343.5	5.6	$-$3344.7	1.7	$-$0.2	–			Tkm		63Ok01	
		$-$3348.3	5.			0.7	–			Oak		64Jo11	Z
		$-$3346	5			0.3	–					70Fi03	Z
		$-$3347	3			0.8	–			Kyu		73Ki11	
^{74}As(β^+)^{74}Ge	ave.	2562.9	1.9	2562.4	1.7	$-$0.3	1	82	82 ^{74}As			average	
^{74}As(β^-)^{74}Se		1351	4	1353.1	1.7	0.5	1	18	18 ^{74}As			71Bo01	*
^{74}Br(β^+)^{74}Se		6857	100	6925	6	0.7	U					69La15	*
^{74}Se(p,n)^{74}Br		$-$7689	15	$-$7707	6	$-$1.2	1	15	15 ^{74}Br			75Lu02	*
^{74}Kr(β^+)^{74}Br		3000	200	2956	6	$-$0.2	U					74Ro11	
		3327	125			$-$3.0	B					75Sc07	
^{74}Rb(β^+)^{74}Kr		10000	1500	10416	3	0.3	U					76Da.D	
		10413.8	7.0			0.3	1	24	17 ^{74}Rb			03Pi08	*
*^{74}Ni$-$u	Trends from Mass Surface TMS suggest ^{74}Ni 750 less bound											GAu	**
*^{74}Ga$-^{85}$Rb$_{.871}$	D_M=3780.1(22.5) μu corrected –3.0(1.7) keV for gs+m mixture R<0.1 at 59.571 keV											Nub16b	**
*^{74}Ga$-^{85}$Rb$_{.871}$	D_M=3809.7(34.6) μu corrected –3.0(1.7) keV for gs+m mixture R<0.1 at 59.571 keV											Nub16b	**
*^{74}Se$-^{84}$Kr	Not independent measurement, use ^{74}Ge$-^{74}$Se below											10Mo03	**
*^{74}Br ^{27}Al$-^{85}$Rb$_{1.188}$	D_M=16253.4(5.3) μu for mixture gs+m at 13.58 keV; $M-A$=–82474.9(4.9) keV											Nub16b	**
*^{74}Kr$-^{85}$Rb$_{.871}$	Combined results of next two items											GAu	**
*^{74}Rb$-^{85}$Rb$_{.871}$	Combined results of next two items											GAu	**
*^{74}Br$-^{73}$Br	D_M=–1230(410) μu for ^{74}Br^m at 13.58 keV											Nub16b	**
*^{74}Se(p,t)^{72}Se	Original error 12; added systematic error 21 keV											GAu	**
*^{74}Se(d,^{3}He)^{73}As	Q =–3033(8) for Q(^{76}Se(d,^{3}He))=–4020.7(2.0), now 4014.5 keV											AHW	**
*^{74}Zn(β^-)^{74}Ga	E_{β^-}=2100(100) to 1$^+$ level at 251.787 keV											Ens067	**
*^{74}Ga(β^-)^{74}Ge	E_{β^-}=2450(100) to 3$^-$ level at 2949.48 keV											Ens067	**
*^{74}As(β^+)^{74}Ge	Original error increased: authors report E(2$^+$)=593.1(1.5) while											AHW	**
*	E(2$^+$)=595.850(0.006) keV; see also ^{84}Rb(β^+)											Ens067	**
*^{74}As(β^-)^{74}Se	Original value 1350.1(0.7), error increased, see ^{84}Rb(β^+)											AHW	**
*^{74}Br(β^+)^{74}Se	E_{β^+}=5200(100), 4500(100) to 634.76, 1363.21 levels											69La15	**
*	from ^{74}Br^m at 13.8(0.5) keV											93Do05	**
*^{74}Se(p,n)^{74}Br	T=7868(15) to (2$^-$) level at 72.65 keV											Ens067	**
*^{74}Rb(β^+)^{74}Kr	Deduced from measured half-life and branching ratio											GAu	**
*^{74}Rb(β^+)^{74}Kr	Original 10405(9) re-evaluated in reference											11To.A	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{75}Cu−u	−58100	700	−58477.4	2.5	−0.4	U			TO6	1.5	98Ba.A	
^{75}Zn−^{85}Rb$_{.882}$	10641.7	2.1				2			MA8	1.0	08Ba54	
^{75}Ga−^{85}Rb$_{.882}$	4301.7	2.6				2			MA8	1.0	07Gu09	
C$_3$ H$_7$ O$_2$−^{75}As	123009.8	2.6	123009.9	0.9	0.0	U			M15	2.5	63Ri07	
^{75}As−^{85}Rb$_{.882}$	−601.3	7.6	−604.0	0.9	−0.4	U			MA8	1.0	02Ke.A	
^{75}Br ^{27}Al−^{85}Rb$_{1.200}$	13201.3	4.6				2			MA8	1.0	11He10	
^{75}Kr−^{85}Rb$_{.882}$	8747.2	8.7				2			MA8	1.0	06Ro11	
^{75}Rb−^{85}Rb$_{.882}$	16371	8	16374.7	1.3	0.5	U			MA2	1.0	94Ot01	
	16374.7	1.7			0.0	2			MA8	1.0	07Ke09	
	16368	21			0.3	U			MA8	1.0	07Ke09	
	16374.6	1.9			0.0	2			TT1	1.0	15Ma30	
^{75}Cu−^{72}Ge$_{1.042}$	22719.6	2.5				2			JY1	1.0	07Ra27	
^{75}As ^{35}Cl−^{73}Ge ^{37}Cl	1079.6	5.0	1085.7	1.0	0.5	U			H40	2.5	85El01	
^{74}Ge(n,γ)^{75}Ge	6505.9	1.1	6505.84	0.05	−0.1	U					72Gr34	
	6505.5	2.			0.2	U					72Ha74	
	6505.81	0.30			0.1	U					89Bu.A	∗
	6505.26	0.08			7.3	B			MMn		91Is01	Z
	6505.45	0.14			2.8	C			Bdn		06Fi.A	
	6505.84	0.05				2					12Me04	
^{74}Ge(d,p)^{75}Ge	4265	15	4281.27	0.05	1.1	U			MIT		67Sp09	
	4282	10			−0.1	U			Kop		72Ha74	
	4268	10			1.3	U			Kyu		73Ka03	
^{74}Ge(p,γ)^{75}As	6901.6	5.	6900.7	0.9	−0.2	U					74Wa08	
^{74}Ge(^{3}He,d)^{75}As	1414	4	1407.2	0.9	−1.7	U			Hei		76Sc13	
^{75}As(γ,n)^{74}As	−10259	31	−10245.5	1.9	0.4	U			Phi		60Ge01	
^{74}Se(n,γ)^{75}Se	8027.84	0.30	8027.60	0.07	−0.8	U			BNn		81En07	Z
	8027.60	0.08			0.0	–			ILn		84To11	Z
	8027.59	0.16			0.0	–			Bdn		06Fi.A	
ave.	8027.60	0.07			0.0	1	100	100 ^{75}Se			average	
^{75}Zn(β^-)^{75}Ga	6060	80	5906	3	−1.9	U			Stu		86Ek01	
^{75}Ga(β^-)^{75}Ge	3300	200	3392.4	2.4	0.5	U					60Mo01	
^{75}Ge(β^-)^{75}As	1188	20	1177.2	0.9	−0.5	U					55Sc09	
^{75}As(p,n)^{75}Se	−1647.2	2.0	−1647.1	0.9	0.1	–			Nvl		59Go68	Z
	−1647.3	1.1			0.3	–			Oak		64Jo11	Z
	−1643	5			−0.8	U					70Fi03	
ave.	−1647.3	1.0			0.3	1	85	85 ^{75}As			average	
^{75}Br(β^+)^{75}Se	3010	20	3062	4	2.6	U					52Fu04	∗
	3030	50			0.6	U					61Ba43	∗
	3050	20			0.6	U					69Ra24	∗
^{75}Kr(β^+)^{75}Br	4400	200	4783	9	1.9	U					74Ro12	∗
^{75}Sr(ε)^{75}Rb	10600	220				3					03Hu01	
∗^{74}Ge(n,γ)^{75}Ge	Original error 0.03 keV increased										GAu	∗∗
∗^{75}Br(β^+)^{75}Se	E_{β^+}=1700(20) 1720(50) 1740(20) respectively, to 3/2$^-$ level at 286.5714 keV										Ens139	∗∗
∗^{75}Kr(β^+)^{75}Br	E_{β^+}=3200(200) to 132.46 (5/2)$^+$, 154.61 (3/2)$^+$ levels										Ens139	∗∗
^{76}Cu−^{85}Rb$_{.894}$	24135.0	7.2				2			MA8	1.0	07Gu09	
^{76}Zn−^{85}Rb$_{.894}$	11975.5	2.0	11974.9	1.6	−0.3	1	61	61 ^{76}Zn	MA8	1.0	08Ba54	
^{76}Zn−^{88}Rb$_{.864}$	9737.4	2.5	9738.3	1.6	0.4	1	39	39 ^{76}Zn	JY1	1.0	08Ha23	
^{76}Ga−^{85}Rb$_{.894}$	7687.6	2.1				2			MA8	1.0	07Gu09	
C ^{32}S$_2$−^{76}Ge	22741.6	1.5	22739.622	0.019	−0.5	U			M15	2.5	63Ri07	
^{76}Ge−u	−78597.242	0.096	−78597.273	0.019	−0.3	U			ST2	1.0	01Do08	
C$_6$ H$_4$−^{76}Se	112100	8	112086.424	0.017	−0.7	U			M15	2.5	63Ri07	
^{76}Se−u	−80786.205	0.081	−80786.296	0.017	−1.1	U			ST2	1.0	01Do08	
^{76}Kr−^{85}Rb$_{.894}$	4774.3	4.7	4771	4	−0.8	1	84	84 ^{76}Kr	MA8	1.0	06Ro11	
^{76}Rb−^{85}Rb$_{.894}$	13931	8	13933.0	1.0	0.3	U			MA2	1.0	94Ot01	
	13932.2	2.0			0.4	2			MA8	1.0	07Ke09	
	13923	15			0.7	U			MA8	1.0	07Ke09	
	13935.3	1.6			−1.4	2			MA8	1.0	07Ke09	
	13931.0	1.7			1.2	2			TT1	1.0	15Ma30	
	13925.2	4.5			1.7	U			TT1	1.0	15Ma30	
	13933.5	3.4			−0.1	o			TT1	1.0	15Ma30	∗

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{76}Sr ^{19}F$-^{85}$Rb$_{1.118}$	38785	37				2			MA8	1.0	05Si34	
^{76}Sr$-$u	$-$58813	107	$-$58240	40	5.4	F			CS1	1.0	01La31	*
^{76}Ge$-^{84}$Kr	9904.9983	0.0175	9904.998	0.019	0.0	o			FS1	1.0	10Mo03	*
^{76}Se$-^{84}$Kr	7715.9762	0.0169	7715.976	0.017	0.0	1	100	100 ^{76}Se	FS1	1.0	10Mo03	
^{74}Ge H$_2-^{76}$Ge	15425.0	1.7	15425.100	0.023	0.0	U			M15	2.5	63Ri07	
^{76}Ge ^{35}Cl$-^{74}$Ge ^{37}Cl	3175.7	1.5	3175.07	0.07	$-$0.1	U			H18	4.0	64Ba03	
	3170.41	0.74			2.5	U			H40	2.5	85El01	
	3174.61	0.41			0.8	U			H44	1.5	91Hy01	
^{76}Se ^{35}Cl$-^{74}$Ge ^{37}Cl	986.30	0.65	986.05	0.07	$-$0.3	U			H44	1.5	91Hy01	
^{76}Ge$-^{76}$Se	2190.92	0.59	2189.022	0.008	$-$1.3	U			H40	2.5	85El01	
	2188.60	0.42			0.7	U			H44	1.5	91Hy01	
	2188.963	0.054			1.1	U			ST2	1.0	01Do08	
	2188.98	0.16			0.3	U			JY1	1.0	08Ra09	
	2189.0221	0.008			0.0	1	100	100 ^{76}Ge	FS1	1.0	10Mo03	
^{75}Rb$-^{76}$Rb$_{.493}$ ^{74}Rb$_{.507}$	$-$1140	170	$-$1081.1	2.0	0.1	U			P20	2.5	82Au01	
^{76}Ge(^{14}C,^{17}O)^{73}Zn	$-$3779	40	$-$3790.8	1.9	$-$0.3	U			Ors		84Be10	*
^{76}Ge(^{14}C,^{16}O)^{74}Zn	163	40	300.7	2.5	3.4	B			Ors		84Be10	
^{76}Ge(^{18}O,^{20}Ne)^{74}Zn	$-$1219	21	$-$1197.1	2.5	1.0	U			Hei		84Ha31	
^{76}Ge(^{14}C,^{15}O)^{75}Zn	$-$10354	150	$-$10489.7	2.0	$-$0.9	U			Ors		84De33	
^{76}Ge(d,^{3}He)^{75}Ga	$-$6545	7	$-$6543.8	2.4	0.2	U			Ors		78Ro14	
	$-$6536	22			$-$0.4	U			Hei		84Ha31	
^{75}As(n,γ)^{76}As	7329	2	7328.50	0.07	$-$0.3	U					68Jo11	
	7328.421	0.075			1.0	2			ILn		90Ho10	Z
	7328.81	0.15			$-$2.1	2			Bdn		06Fi.A	
^{75}As(d,p)^{76}As	5105	5	5103.93	0.07	$-$0.2	U					76Mo32	
^{75}Se(n,γ)^{76}Se	11154.15	0.30	11153.79	0.07	$-$1.2	U			ILn		83To20	Z
^{76}Zn(β^-)^{76}Ga	4160	80	3993.6	2.4	$-$2.1	U			Stu		86Ek01	
^{76}Ga(β^-)^{76}Ge	6770	150	6916.2	2.0	1.0	o			Stu		77Al17	
	7010	90			$-$1.0	U			Stu		86Ek01	
^{76}Ge(p,n)^{76}As	$-$1705	5	$-$1703.9	0.9	0.2	U					70Fi03	
^{76}As(β^-)^{76}Se	2970	2	2960.6	0.9	$-$4.7	B					69Na11	
^{76}Br(β^+)^{76}Se	5002	20	4963	9	$-$2.0	2					71Dz08	
^{76}Br(n,p)^{76}Se	5730	15	5745	9	1.0	2			ILL		78An14	
^{76}Se(p,n)^{76}Br	$-$5738.6	15.	$-$5745	9	$-$0.4	2					75Lu02	
^{76}Rb(β^+)^{76}Kr	8793	570	8535	4	$-$0.5	U					75We23	
	8063	44			10.7	F					82Mo10	*
	8094	162			2.7	F			BNL		83Li11	*
	8250	150			1.9	U			IRS		93Al03	
*^{76}Rb$-^{85}$Rb$_{.894}$	no accuracy check was performed for this 12$^+$ charge state										15Ma30	**
*^{76}Sr$-$u	F : other results in same paper not trusted, see ^{80}Y										GAu	**
*^{76}Ge$-^{84}$Kr	Not independent measurement, use ^{76}Ge$-^{76}$Se below										10Mo03	**
*^{76}Ge(^{14}C,^{17}O)^{73}Zn	Q =–3974(40) $M-A$=–65410(40) to ^{73}Zn^m at 195.5 keV										GAu	**
*^{76}Rb(β^+)^{76}Kr	E_{β^+}=4558(30) to level (1$^+$,2$^+$) at 2570.95 keV and corrections by authors										Ens953	**
*^{76}Rb(β^+)^{76}Kr	F : 29.6% feeding above 2570.95 level from reference										84Mo22	**
^{77}Cu$-$u	$-$51850	540	$-$52200#	160#	$-$0.6	D			OR1	1.0	06Ha62	*
^{77}Zn$-$u	$-$62790	780	$-$63112.8	2.1	$-$0.3	U			TO6	1.5	98Ba.A	*
	$-$63380	260			0.4	U			GT2	2.5	08Kn.A	*
^{77}Zn$-^{88}$Rb$_{.875}$	14485.7	4.5	14486.1	2.1	0.1	1	22	22 ^{77}Zn	JY1	1.0	08Ha23	
C$_6$ H$_5-^{77}$Se	119211.9	4.2	119211.01	0.07	$-$0.1	U			M15	2.5	63Ri07	
^{77}Rb$-^{39}$K$_{1.974}$	1912	27	2045.0	1.4	4.9	B			MA2	1.0	87Bo59	
^{77}Zn$-^{85}$Rb$_{.906}$	16805.8	2.4	16805.7	2.1	0.0	1	78	78 ^{77}Zn	MA8	1.0	08Ba54	
^{77}Ga$-^{85}$Rb$_{.906}$	9072.8	2.6				2			MA8	1.0	07Gu09	
^{77}Kr$-^{85}$Rb$_{.906}$	4588.5	2.1				2			MA8	1.0	06Ro11	
^{77}Rb$-^{85}$Rb$_{.906}$	10327	8	10320.1	1.4	$-$0.9	U			MA2	1.0	94Ot01	
	10320.1	1.4				2			MA8	1.0	07Ke09	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{77}Sr ^{19}F$-^{85}$Rb$_{1.129}$	35938.0	8.5				2			MA8	1.0	05Si34	
^{75}Rb$-^{77}$Rb$_{.325}$ ^{74}Rb$_{.676}$	−1340	380	−1053.6	2.4	0.3	U			P20	2.5	82Au01	
^{76}Rb$-^{77}$Rb$_{.494}$ ^{75}Rb$_{.507}$	525	30	557.1	1.3	0.4	U			P20	2.5	82Au01	
^{76}Ge(n,γ)^{77}Ge	6072.5	1.0	6071.29	0.05	−1.2	U					72Gr34	Z
	6071.7	1.2			−0.3	U					72Ha74	Z
	6072.3	0.4			−2.5	U			Bdn		06Fi.A	
	6071.29	0.05				2					12Me04	
^{76}Ge(d,p)^{77}Ge	3839	10	3846.72	0.05	0.8	U			Kop		72Ha74	
	3823	12			2.0	U			Kyu		73Ka03	
^{76}Ge(^{3}He,d)^{77}As	2497	3	2498.9	1.7	0.6	1	32	32 ^{77}As	Hei		76Sc13	
^{76}Se(n,γ)^{77}Se	7418.87	0.20	7418.86	0.06	−0.1	–			BNn		81En07	
	7418.85	0.07			0.1	–			ILn		85To10	Z
	7418.85	0.15			0.0	–			Bdn		06Fi.A	
^{76}Se(d,p)^{77}Se	5192	10	5194.29	0.06	0.2	U			Ald		63Ma27	
^{76}Se(n,γ)^{77}Se ave.	7418.85	0.06	7418.86	0.06	0.1	1	99	99 ^{77}Se			average	
^{77}Sr(εp)^{76}Kr	3850	200	3921	9	0.4	U			ChR		76Ha29	
^{77}Zn(β^-)^{77}Ga	7270	120	7203	3	−0.6	U			Stu		86Ek01	
^{77}Ga(β^-)^{77}Ge	5340	60	5220.5	2.4	−2.0	U			Stu		77Al17	
	5690	300			−1.6	U			Stu		86Ek01	
^{77}Ge(β^-)^{77}As	2670	100	2703.5	1.7	0.3	U					52Sm13	*
^{77}As(β^-)^{77}Se	700	7	683.2	1.7	−2.4	U					51Ca04	
	679	4			1.0	1	18	18 ^{77}As			51Je01	
^{77}Br(β^+)^{77}Se	1358	20	1364.7	2.8	0.3	U					51Ca28	
^{77}Se(p,n)^{77}Br	−2147	4	−2147.0	2.8	0.0	2			Oak		58Jo01	
	−2147.0	4.			0.0	2			Tkm		63Ok01	
^{77}Kr(β^+)^{77}Br	3012	30	3065	3	1.8	U					55Th01	*
	3027	40			1.0	U					73Ba22	*
	3300	100			−2.3	U					74Ro11	*
	2760	42			7.3	B					82Mo10	*
^{77}Rb(β^+)^{77}Kr	5180	390	5339.0	2.4	0.4	U					75We23	
	5272	26			2.6	U					82Mo10	
	5113	69			3.3	B			BNL		83Li11	
	5320	70			0.3	U			IRS		93Al03	
^{77}Sr(β^+)^{77}Rb	6986	227	7027	8	0.2	U			BNL		83Li11	
*^{77}Cu−u	Trends from Mass Surface TMS suggest ^{77}Cu 320 more bound										GAu	**
*^{77}Zn−u	$M-A$=–58100(700) keV for mixture gs+m at 772.440 keV										Nub16b	**
*^{77}Zn−u	$M-A$=–58648(95) keV for mixture gs+m at 772.440 keV (1/2$^-$)										Nub16b	**
*^{77}Ge(β^-)^{77}As	E_{β^-}=2196(100) to 9/2$^+$ ^{77}As^m at 475.48 keV										Nub16c	**
*^{77}Kr(β^+)^{77}Br	Error not in 55Th01, estimated by evaluator										AHW	**
*^{77}Kr(β^+)^{77}Br	E_{β^+}=1860(30) 1875(40) respectively, to 5/2$^+$ level at 129.64 keV										Ens126	**
*^{77}Kr(β^+)^{77}Br	E_{β^+}=2000(100) 1528(36) respectively, to (3/2)$^+$ level at 276.22 keV										Ens126	**
^{78}Cu−u	−47770	540				2			OR1	1.0	06Ha62	
^{78}Zn$-^{88}$Rb$_{.886}$	16863.8	2.9	16863.6	2.1	−0.1	1	52	52 ^{78}Zn	JY1	1.0	08Ha23	
^{78}Ga$-^{88}$Rb$_{.886}$	10184.3	3.3	10183.2	2.0	−0.3	1	38	38 ^{78}Ga	JY1	1.0	08Ha23	
C_6 H_6-^{78}Se	129642.6	2.2	129640.95	0.19	−0.3	U			M15	2.5	63Ri07	
C_6 H_6-^{78}Kr	126548.3	3.6	126583.9	0.3	4.0	B			M15	2.5	63Ri07	
	126554	17			1.2	U			R11	1.5	78Di09	
	126560	7			2.3	U			R11	1.5	78Di09	
C_5 N H_4-^{78}Kr	113994	20	114007.8	0.3	0.5	U			R11	1.5	78Di09	
^{78}Kr$-^{86}$Kr$_{.907}$	1441.2	1.0	1442.5	0.3	1.3	1	11	11 ^{78}Kr	MS1	1.0	06Ri15	
^{78}Zn$-^{85}$Rb$_{.918}$	19266.0	3.0	19266.2	2.1	0.1	1	48	48 ^{78}Zn	MA8	1.0	08Ba54	
^{78}Ga$-^{85}$Rb$_{.918}$	12585.2	2.6	12585.9	2.0	0.3	1	62	62 ^{78}Ga	MA8	1.0	07Gu09	
^{78}Kr$-^{85}$Rb$_{.918}$	1342.3	1.4	1343.4	0.3	0.8	U			MA8	1.0	06Ro11	
	1338.9	2.2			2.0	U			MA8	1.0	06Ro11	
^{78}Rb$-^{85}$Rb$_{.918}$	9118	8	9119	3	0.1	2			MA2	1.0	94Ot01	
	9121.3	7.5			−0.3	2			TT1	1.0	12Ga15	*
	9118.3	4.5			0.1	2			TT1	1.0	12Ga15	*

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{78}Sr$-^{85}$Rb$_{.918}$		13157	8				2			MA2	1.0	94Ot01	
^{78}Se ^{35}Cl$_2-^{74}$Ge ^{37}Cl$_2$		2030.4	2.2	2031.70	0.24	0.4	U			H44	1.5	91Hy01	
^{78}Se ^{35}Cl$-^{76}$Ge ^{37}Cl		−1147.60	0.92	−1143.37	0.20	1.8	U			H40	2.5	85El01	
		−1143.57	0.72			0.2	U			H44	1.5	91Hy01	
^{78}Se ^{35}Cl$-^{76}$Se ^{37}Cl		1042.03	1.35	1045.65	0.20	1.1	U			H40	2.5	85El01	
		1044.58	0.45			1.6	U			H44	1.5	91Hy01	
^{76}Se H$_2-^{78}$Kr		14440	25	14497.4	0.3	1.5	U			R11	1.5	78Di09	
^{77}Se H$-^{78}$Kr		7367	26	7372.8	0.3	0.1	U			R11	1.5	78Di09	
^{78}Kr$-^{78}$Se		3074	16	3057.10	0.28	−0.7	U			R11	1.5	78Di09	
		3098	20			−1.4	U			R11	1.5	78Di09	
		3057.18	0.29			−0.3	1	92	89 ^{78}Kr	MS1	1.0	13Bu17	
^{78}Se H$-^{78}$Kr		4724	33	4767.93	0.28	0.9	U			R11	1.5	78Di09	
^{76}Rb$-^{78}$Rb$^x_{.325}$ ^{75}Rb$_{.676}$		−130	40	−69	4	0.6	U			P20	2.5	82Au01	
^{77}Rb$-^{78}$Rb$^x_{.494}$ ^{76}Rb$_{.507}$		−1192	19	−1138	6	1.1	U			P20	2.5	82Au01	
^{78}Kr(α,^{8}He)^{74}Kr		−41080	75	−41031.2	2.0	0.7	U			Tex		82Mo23	*
^{78}Se(p,α)^{75}As		870.9	2.3	872.3	0.9	0.6	1	15	15 ^{75}As	NDm		82Zu04	
^{78}Kr(^{3}He,^{6}He)^{75}Kr		−12581	14	−12516	8	4.7	B					87Mo06	
^{76}Ge(t,p)^{78}Ge		6310	5	6310	4	0.0	2			LAl		78Ar12	
		6310	5			0.0	2			Phi		81St18	
^{78}Se(p,t)^{76}Se		−9433.7	4.3	−9434.83	0.18	−0.3	U			NDm		82Zu04	
^{78}Kr(α,^{6}He)^{76}Kr		−20351	10	−20332	4	1.9	o			Tex		82Mo23	*
^{78}Kr(p,t)^{76}Kr		−12840	15	−12825	4	1.0	U			Tky		81Ma30	
^{78}Se(d,^{3}He)^{77}As		−4904	4	−4905.1	1.7	−0.3	1	18	18 ^{77}As	Ors		83Ro08	*
^{77}Se(n,γ)^{78}Se		10497.7	0.3	10497.77	0.17	0.2	–			BNn		81En07	Z
		10497.75	0.21			0.1	–			Bdn		06Fi.A	
^{78}Se(p,d)^{77}Se		−8271.9	4.0	−8273.21	0.17	−0.3	U			NDm		82Zu04	
^{77}Se(n,γ)^{78}Se	ave.	10497.73	0.17	10497.77	0.17	0.2	1	96	95 ^{78}Se			average	
^{78}Kr(d,t)^{77}Kr		−5804	7	−5822.9	2.0	−2.7	U					87Mo06	
^{78}Zn(β^-)^{78}Ga		6440	140	6222.7	2.7	−1.6	o			Stu		86Ek01	
		6364	90			−1.6	U			Stu		00Me.A	
^{78}Ga(β^-)^{78}Ge		8140	160	8156	4	0.1	o			Stu		77Al17	
		8200	80			−0.5	o			Stu		86Ek01	
		8054	43			2.4	U			Stu		00Me.A	
^{78}Ge(β^-)^{78}As		967	30	955	10	−0.4	R					65Fr04	*
		987	20			−1.6	R					65Kv01	*
^{78}As(β^-)^{78}Se		4270	100	4209	10	−0.6	U					70Mc01	
		4310	100			−1.0	U					71Mo20	*
^{78}Br(β^+)^{78}Se		3542	50	3574	4	0.6	U			Bar		61Ri02	
^{78}Se(p,n)^{78}Br		−4344	10	−4356	4	−1.2	2			Bar		61Ri02	
		−4370	10			1.4	2			LAl		61Sc11	
		−4355.5	7.4			−0.1	2			Tkm		63Ok01	Z
		−4356	5			0.0	2					70Fi03	Z
^{78}Rb(β^+)^{78}Kr		7085	370	7243	3	0.4	U					75We23	*
		7240	50			0.1	U					81Ba40	
		7185	50			1.2	U			IRS		93Al03	*
^{78}Rb^x(IT)^{78}Rb		74	12				3					82Au01	*
*^{78}Rb$-^{85}$Rb$_{.918}$	Correction for e$^-$ binding=+97eV is negligible											12Ga15	**
*^{78}Rb$-^{85}$Rb$_{.918}$	D_M= 9237.6(4.5) μu $M-A$=–66824.9(4.2)keV corrected for e$^-$ binding=+97eV											12Ga15	**
*	from ^{78}Rb^n at 111.19(0.22) keV											Nub16b	**
*^{78}Kr(α,^{8}He)^{74}Kr	Original –41120(75) for 4 events included 1 background event											GAu	**
*^{78}Kr(α,^{6}He)^{76}Kr	Replaced by calibration free ^{80}Kr(α,^{6}He)^{78}Kr$-^{78}$Kr()^{76}Kr											GAu	**
*^{78}Se(d,^{3}He)^{77}As	Original value –4910(4) corrected, see ^{74}Se(d,^{3}He)											AHW	**
*^{78}Ge(β^-)^{78}As	E_{β^-}=690(30) 710(20) respectively, to 1$^+$ level at 277.3 keV											Ens09a	**
*^{78}As(β^-)^{78}Se	E_{β^-}=3000(100) to 2$^+$ level at 1308.644 keV											Ens09a	**
*^{78}Rb(β^+)^{78}Kr	E_{β^+}=3410(370) from ^{78}Rb^n 4$^{(-)}$ at 111.19(0.22) to (4)$^-$ level at 2764.10 keV											Ens09a	**
*^{78}Rb(β^+)^{78}Kr	Q_{β^+}=7180(80); and 7300(50) from ^{78}Rb^n at 111.19(0.22) keV											Ens09a	**
*^{78}Rb^x(IT)^{78}Rb	Corrected; using ^{78}Rb^n(IT)=111.2 keV											GAu	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{79}Cu−u	−46700	540	−44810#	320#	3.5	D			OR1	1.0	06Ha62	*
^{79}Zn−^{88}Rb$_{.898}$	22278.1	2.9	22276.7	2.4	−0.5	1	68	68 ^{79}Zn	JY1	1.0	08Ha23	
^{79}Ga−^{88}Rb$_{.898}$	12490.9	2.0	12490.9	2.0	0.0	1	100	100 ^{79}Ga	JY1	1.0	08Ha23	
^{79}Ga−u	−67064	129	−67147.7	2.0	−0.3	U			GT2	2.5	08Su19	
C$_6$ H$_7$−^{79}Br	136444.3	2.4	136437.6	1.1	−1.1	U			M15	2.5	63Ri07	
	136444	15			−0.3	U			R11	1.5	78Di09	
	136449	12			−0.6	U			R11	1.5	78Di09	
C$_5$ ^{13}C H$_6$−^{79}Br	131976	16	131967.4	1.1	−0.4	U			R11	1.5	78Di09	
	131974	17			−0.3	U			R11	1.5	78Di09	
C$_5$ N H$_5$−^{79}Br	123870	7	123861.6	1.1	−0.8	U			R11	1.5	78Di09	
	123871	14			−0.4	U			R11	1.5	78Di09	
C$_5$ O H$_3$−^{79}Br	100061	15	100052.1	1.1	−0.4	U			R11	1.5	78Di09	
	100057	20			−0.2	U			R11	1.5	78Di09	
C$_4$ N O H−^{79}Br	87489	20	87476.1	1.1	−0.4	U			R11	1.5	78Di09	
^{79}Kr−u	−79981	52	−79917	4	1.2	U			GS2	1.0	05Li24	*
^{79}Y−u	−62070	85				2			LZ1	1.0	16Xi.A	
^{79}Zn−^{85}Rb$_{.929}$	24582.4	4.2	24585.4	2.4	0.7	1	32	32 ^{79}Zn	MA8	1.0	08Ba54	
^{79}Rb−^{85}Rb$_{.929}$	5934	8	5937.2	2.3	0.4	U			MA2	1.0	94Ot01	
	5937.2	2.3				2			MA8	1.0	07Ke09	
^{79}Sr−^{85}Rb$_{.929}$	11655	9				2			MA2	1.0	94Ot01	
^{77}Se H$_2$−^{79}Br	17239	8	17226.6	1.1	−1.0	U			R11	1.5	78Di09	
^{78}Se H−^{79}Br	6806	8	6796.7	1.1	−0.8	U			R11	1.5	78Di09	
^{79}Br−^{78}Kr	−2072	30	−2028.7	1.1	1.0	U			R11	1.5	78Di09	
^{77}Rb−^{79}Rb$_{.487}$ ^{75}Rb$_{.513}$	−1010	40	−996.2	1.8	0.1	U			P20	2.5	82Au01	
^{77}Rb−^{79}Rb$_{.325}$ ^{76}Rb$_{.675}$	−1060	40	−996.1	1.6	0.6	U			P20	2.5	82Au01	
	−990	70			0.0	U			P20	2.5	82Au01	
^{78}Rb^x−^{79}Rb$_{.494}$ ^{77}Rb$_{.506}$	940	40	919	12	−0.2	U			P20	2.5	82Au01	
^{78}Se(n,γ)^{79}Se	6962.6	0.3	6962.83	0.13	0.8	2					79Br.A	Z
	6962.2	0.3			2.1	2			BNn		81En07	Z
	6963.11	0.17			−1.6	2			Bdn		06Fi.A	
^{78}Se(d,p)^{79}Se	4756	6	4738.27	0.13	−3.0	B			MIT		64Sp12	
^{78}Kr(d,p)^{79}Kr	5980	50	6111	3	2.6	U			Yal		56Bl10	
^{78}Kr(^{3}He,d)^{79}Rb	−1585	10	−1579.8	2.2	0.5	U			Phi		87St11	
^{79}Zn(β^-)^{79}Ga	8550	240	9115.4	2.9	2.4	U			Stu		86Ek01	
^{79}Ga(β^-)^{79}Ge	6770	80	6980	40	2.6	o			Stu		77Al17	
	7000	80			−0.3	o			Stu		86Ek01	
	6979	40			0.0	1	86	86 ^{79}Ge	Stu		00Me.A	
^{79}Ge(β^-)^{79}As	4300	200	4110	40	−1.0	U					70Ka04	
	4110	100			0.0	1	14	14 ^{79}Ge	Stu		81Al20	
^{79}As(β^-)^{79}Se	2230	50	2281	5	1.0	U					61Ku09	*
^{79}Se(β^-)^{79}Br	160	5	150.6	1.0	−1.9	U					49Pa.A	
^{79}Kr(β^+)^{79}Br	1612	10	1626	3	1.4	4					52Be55	
	1620	5			1.2	4					54Th39	
	1635	5			−1.8	4					64Bo25	
^{79}Rb(β^+)^{79}Kr	3530	50	3639	4	2.2	U					71Li02	*
	3720	90			−0.9	U					72Br31	*
	3650	70			−0.2	U			IRS		93Al03	
^{79}Sr(β^+)^{79}Rb	5259	78	5326	9	0.9	U			BNL		81Li12	
	5059	67			4.0	B			Ors		82De36	
^{79}Y(β^+)^{79}Sr	7120	450	7660	80	1.2	U					92Mu12	
*^{79}Cu−u	Trends from Mass Surface TMS suggest ^{79}Cu 1760 less bound										GAu	**
*^{79}Kr−u	$M-A$=–74437(30) keV for mixture gs+m at 129.77 7/2$^+$ keV										Nub16c	**
*^{79}As(β^-)^{79}Se	E_{β^-}=1700(50) to 527.93 3/2$^-$ level, and other E_{β^-}										Ens167	**
*^{79}Rb(β^+)^{79}Kr	E_{β^+}=1825(50) 2010(90) respectively, to 3/2$^+$ level at 688.17 keV										Ens167	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{80}Ga$-$u		$-$63441	129	$-$63579	3	$-$0.4	U			GT2	2.5	08Su19	
C$_6$ H$_8-^{80}$Se		146068.5	2.9	146078.5	1.0	1.4	U			M15	2.5	63Ri07	
C$_6$ H$_8-^{80}$Kr		146225.7	4.6	146222.2	0.7	$-$0.3	U			M15	2.5	63Ri07	
		146235	18			$-$0.5	U			R11	1.5	78Di09	
		146215	16			0.3	U			R11	1.5	78Di09	
C$_5$ O H$_4-^{80}$Kr		109834	20	109836.7	0.7	0.1	U			R11	1.5	78Di09	
^{80}Y$-$u		$-$65720	190	$-$65645	7	0.4	U			1.0	1.0	98Is06	
		$-$66664	86			11.8	F			CS1	1.0	01La31	*
		$-$65600	200			$-$0.2	U			CS1	1.0	08Go23	
^{80}Y O$-^{96}$Mo		24594.6	6.7				2			JY1	1.0	06Ka48	
^{80}Zr$-$u		$-$59600	1600	$-$58360#	320#	0.8	D			1.0	1.0	98Is06	*
		$-$59740	161			8.6	F			CS1	1.0	01La31	*
^{80}Zn$-^{88}$Rb$_{.909}$		25165.2	7.3	25167.1	2.8	0.3	1	14	14 ^{80}Zn	JY1	1.0	08Ha23	
^{80}Ga$-^{88}$Rb$_{.909}$		17034.9	3.1				2			JY1	1.0	08Ha23	
^{80}Ge$-^{88}$Rb$_{.909}$		5964.9	2.2				2			JY1	1.0	08Ha23	
^{80}Kr$-^{86}$Kr$_{.930}$		$-$488.9	1.1	$-$489.8	0.7	$-$0.8	1	46	46 ^{80}Kr	MS1	1.0	06Ri15	
^{80}Zn$-^{85}$Rb$_{.941}$		27559.1	3.0	27558.8	2.8	$-$0.1	1	86	86 ^{80}Zn	MA8	1.0	08Ba54	
^{80}Kr$-^{85}$Rb$_{.941}$		$-$614.5	1.7	$-$616.1	0.7	$-$0.9	1	19	19 ^{80}Kr	MA8	1.0	06Ro11	
		$-$627.1	9.6			1.1	U			MA8	1.0	10Na13	*
^{80}Rb$-^{85}$Rb$_{.941}$		5528	8	5522.3	2.0	$-$0.7	U			MA2	1.0	94Ot01	
		5522.3	2.0				2			MA8	1.0	07Ke09	
^{80}Sr$-^{85}$Rb$_{.941}$		7531	8	7523	4	$-$1.0	2			MA2	1.0	94Ot01	
		7513	14			0.7	U			MA8	1.0	05Si34	
		7521.3	4.2			0.5	2			SH1	1.0	11Ha08	
^{80}Se ^{35}Cl$-^{78}$Se ^{37}Cl		2164.8	1.4	2162.7	1.0	$-$0.4	U			H18	4.0	64Ba03	
		2160.8	9.2			0.1	U			H40	2.5	85El01	
^{80}As$-^{80}$Kr		6096.5	3.5				2			MS1	1.0	07Bo50	
^{80}Kr$-^{79}$Br		$-$1955	28	$-$1959.6	1.2	$-$0.1	U			R11	1.5	78Di09	
^{80}Kr$-^{78}$Kr		$-$4046	30	$-$3988.3	0.8	1.3	U			R11	1.5	78Di09	
^{79}Rb$-^{80}$Rb$_{.658}$ ^{77}Rb$_{.342}$		$-$1218	27	$-$1139.5	2.5	1.2	U			P20	2.5	82Au01	
^{79}Rb$-^{80}$Rb$_{.494}$ ^{78}Rb$^x_{.506}$		$-$1313	24	$-$1316	7	$-$0.1	U			P20	2.5	82Au01	
^{80}Se(p,α)^{77}As		1020.0	2.8	1020.9	1.8	0.3	1	40	32 ^{77}As	NDm		82Zu04	
^{80}Kr(^{3}He,^{6}He)^{77}Kr		$-$10398	24	$-$10384.8	2.1	0.6	U					87Mo06	
^{80}Se(d,α)^{78}As		5755	12	5768	10	1.1	2			Phi		77Mo13	
^{80}Se(p,t)^{78}Se		$-$8395.1	3.0	$-$8394.4	1.0	0.2	–			NDm		82Zu04	
	ave.	$-$8394.1	2.1			$-$0.1	1	21	20 ^{80}Se			average	
^{80}Kr(α,^{6}He)^{78}Kr$-^{78}$Kr()^{76}Kr		1432	10	1449	4	1.7	1	17	16 ^{76}Kr			82Mo23	
^{78}Kr(^{3}He,n)^{80}Sr		2990	30	2993	3	0.1	U					79Al19	
^{80}Se(d,^{3}He)^{79}As		$-$5921	7	$-$5919	5	0.3	–			Ors		83Ro08	*
		$-$5921	13			0.2	–			Hei		83Wi14	
^{80}Se(t,α)^{79}As		8407	10	8401	5	$-$0.6	–			Phi		83Mo09	
^{80}Se(d,^{3}He)^{79}As	ave.	$-$5919	5	$-$5919	5	0.0	1	100	100 ^{79}As			average	
^{80}Se(p,d)^{79}Se		$-$7687.6	3.0	$-$7688.7	1.0	$-$0.4	R			NDm		82Zu04	
^{79}Br(n,γ)^{80}Br		7892.11	0.20	7892.28	0.13	0.8	3			ILn		78Do06	Z
		7892.41	0.18			$-$0.7	3			Bdn		06Fi.A	
^{79}Br(d,p)^{80}Br		5640	20	5667.71	0.13	1.4	U			Mtr		72Ch33	
^{80}Zn(β^-)^{80}Ga		7540	200	7575	4	0.2	U			Stu		86Ek01	
		7150	150			2.8	U			Trs		86Gi07	
^{80}Ga(β^-)^{80}Ge		10000	300	10312	4	1.0	o			Stu		81Al20	
		10380	120			$-$0.6	U			Stu		86Ek01	
^{80}Ge(β^-)^{80}As		2640	70	2679	4	0.6	U			Stu		77Al17	
		2630	20			2.5	U			Trs		86Gi07	
^{80}As(β^-)^{80}Se		6000	200	5545	3	$-$2.3	U					59Me68	
		5470	90			0.8	U			Trs		86Gi07	
^{80}Se(t,^{3}He)^{80}As		$-$5560	25	$-$5526	3	1.3	U			LAl		79Aj02	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{80}Br(β^+)^{80}Se	1884	10	1870.5	0.3	−1.4	U					54Li19	
	1872	7			−0.2	U					69Ka06	
^{80}Se(p,n)^{80}Br	−2655.2	2.8	−2652.8	0.3	0.9	U			Tkm		63Ok01	
	−2652.5	3.0			−0.1	U			Oak		64Jo11	Z
	−2653.2	5.			0.1	U					70Fi03	
	−2652.81	0.31				2			PTB		92Bo02	Z
^{80}Br(β^-)^{80}Kr	1970	30	2004.4	1.2	1.1	U					52Fu04	
	2040	20			−1.8	U					54Li19	
	1997	10			0.7	U					69Ka06	
^{80}Rb(β^+)^{80}Kr	5120	500	5717.9	2.0	1.2	U					61Ho13	
	5500	350			0.6	U					75We23	*
	5650	100			0.7	U			IRS		93Al03	
^{80}Kr(p,n)^{80}Rb	−6484.0	20.	−6500.2	2.0	−0.8	U					72Ja.A	
^{80}Y(β^+)^{80}Sr	6952	152	9163	7	14.5	F			BNL		81Li12	*
	6934	242			9.2	F			Ors		82De36	*
	6200	600			4.9	F					96Sh27	*
*^{80}Y−u	F : below lower limit M>–65890(90) μu –61376(83) keV determined in reference										03Ba18	**
*^{80}Zr−u	Trends from Mass Surface TMS suggest ^{80}Zr 1160 less bound										GAu	**
*^{80}Zr−u	F : other results in same paper not trusted, see ^{80}Y and ^{68}Se										GAu	**
*^{80}Kr−^{85}Rb$_{.941}$	Only one measurement										GAu	**
*^{80}Se(d,^{3}He)^{79}As	Originally –5927(7), see ^{74}Se(d,^{3}He)										AHW	**
*^{80}Rb(β^+)^{80}Kr	E_{β^+}=3860(350) to 2$^+$ level at 616.60 keV										Ens058	**
*^{80}Y(β^+)^{80}Sr	F : below lower limit Q_{β^-} $>$ 8929(23) keV determined in reference										03Ba18	**
^{81}Ge−u	−71710	240	−71167.1	2.2	0.9	U			GT2	2.5	08Kn.A	*
C_6 H_9−^{81}Br	154135.3	3.8	154137.1	1.0	0.2	U			M15	2.5	63Ri07	
	154143	17			−0.2	U			R11	1.5	78Di09	
	154134	10			0.2	U			R11	1.5	78Di09	
C_5 N H_7−^{81}Br	141561	10	141561.0	1.0	0.0	U			R11	1.5	78Di09	
	141553	18			0.3	U			R11	1.5	78Di09	
C_5 O H_5−^{81}Br	117742	12	117751.6	1.0	0.5	U			R11	1.5	78Di09	
C_4 O_2 H−^{81}Br	81356	20	81366.1	1.0	0.3	U			R11	1.5	78Di09	
C_4 ^{13}C O H_4−^{81}Br	113275	14	113281.4	1.0	0.3	U			R11	1.5	78Di09	
^{81}Rb−u	−80958	41	−81006	5	−1.2	U			GS2	1.0	05Li24	*
^{81}Y O−^{97}Mo	18352.0	5.8				2			JY1	1.0	06Ka48	
^{81}Zr−u	−61686	101				2			LZ1	1.0	16Xi.A	
^{81}Ga−^{88}Rb$_{.920}$	19723.5	3.5				2			JY1	1.0	08Ha23	
^{81}Ge−^{88}Rb$_{.920}$	10422.6	2.2				2			JY1	1.0	08Ha23	
^{81}As−^{88}Rb$_{.920}$	3721.9	3.3	3721.9	2.8	0.0	1	74	74 ^{81}As	JY1	1.0	08Ha23	
^{81}Zn−^{85}Rb$_{.953}$	34467.0	5.4				2			MA8	1.0	08Ba54	
^{81}Rb−^{85}Rb$_{.953}$	3063	8	3058	5	−0.6	–			MA2	1.0	94Ot01	
	3055.4	9.2			0.3	–			SH1	1.0	11Ha08	*
ave.	3060	6			−0.2	1	76	76 ^{81}Rb			average	
^{81}Sr−^{85}Rb$_{.953}$	7278	8	7276	3	−0.3	2			MA2	1.0	94Ot01	
	7272	12			0.3	U			MA8	1.0	05Si34	
	7275.3	3.7			0.1	2			SH1	1.0	11Ha08	
^{81}Se−^{80}Kr$_{1.013}$	2704.2	2.4	2702.1	1.2	−0.9	1	26	18 ^{81}Se	MS1	1.0	07Bo50	*
^{80}Se H−^{81}Br	8023	8	8058.6	1.5	3.0	B			R11	1.5	78Di09	
^{80}Kr H−^{81}Br	7922	18	7914.9	1.3	−0.3	U			R11	1.5	78Di09	
^{81}Br−H ^{79}Br	−9865	13	−9874.4	1.5	−0.3	U			M15	2.5	63Ri07	
^{81}Br−^{80}Kr	−91	32	−89.8	1.3	0.0	U			R11	1.5	78Di09	
^{81}Br−^{79}Br	−2020	32	−2049.4	1.5	−0.6	U			R11	1.5	78Di09	
	−2014	35			−0.7	U			R11	1.5	78Di09	
^{79}Rb−^{81}Rb$_{.325}$ ^{78}Rb$^x_{.675}$	−1130	30	−1148	9	−0.2	U			P20	2.5	82Au01	Y
^{80}Rb−^{81}Rb$_{.494}$ ^{79}Rb$_{.506}$	927	29	926	3	0.0	U			P20	2.5	82Au01	Y
^{80}Se(n,γ)^{81}Se	6700.9	0.5	6700.8	0.3	−0.1	–			BNn		81En07	Z
	6700.9	0.5			−0.1	–			Bdn		06Fi.A	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{80}Se(d,p)^{81}Se		4490	6	4476.3	0.3	−2.3	U			MIT		64Sp12	
		4477.5	3.0			−0.4	U			NDm		82Zu04	
^{80}Se(n,γ)^{81}Se	ave.	6700.9	0.4	6700.8	0.3	−0.1	1	97	71 ^{81}Se			average	
^{81}Br(γ,n)^{80}Br		−10130	35	−10159.4	1.4	−0.8	U			Phi		60Ge01	
^{80}Kr(d,p)^{81}Kr		5660	15	5649.6	1.2	−0.7	U			Tex		75Ch11	*
		5646	4			0.9	1	10	7 ^{81}Kr	Oak		86Bu18	
^{80}Kr(^{3}He,d)^{81}Rb		−637	10	−641	5	−0.4	1	24	24 ^{81}Rb	Phi		87St11	
^{81}Zr(εp)^{80}Sr		4700	200	5560	90	4.3	B					99Hu05	
^{81}Ga(β^-)^{81}Ge		8320	150	8664	4	2.3	U			Stu		81Al20	
^{81}Ge(β^-)^{81}As		6230	120	6242	3	0.1	U			Stu		81Al20	*
^{81}As(β^-)^{81}Se		3800	200	3855.7	2.8	0.3	U					60Mo01	
		3730	100			1.3	U			Stu		77Al17	
^{81}Se(β^-)^{81}Br		1600	50	1588.0	1.4	−0.2	U					60Ku06	
		1560	50			0.6	U					67Yt03	
^{81}Kr(ε)^{81}Br		280.7	0.5	280.9	0.5	0.3	1	89	84 ^{81}Kr			88Ax01	*
^{81}Br(p,n)^{81}Kr		−1062	4	−1063.2	0.5	−0.3	U					84Fi.A	
^{81}Br(^{3}He,t)^{81}Kr		−296	6	−299.4	0.5	−0.6	U					84Bu23	
^{81}Br(^{3}He,t)^{81}Kr−^{51}V()^{51}Cr		470.6	1.8	471.6	0.5	0.6	U			Pri		82Ko06	*
^{81}Rb(β^+)^{81}Kr		2260	30	2240	5	−0.7	U					75Va24	*
		2290	50			−1.0	U					77Li14	
^{81}Sr(β^+)^{81}Rb		3990	30	3929	6	−2.0	U					73Br32	*
^{81}Y(β^+)^{81}Sr		5408	86	5815	6	4.7	B			BNL		81Li12	
		5620	89			2.2	U			Ors		82De36	
^{81}Zr(β^+)^{81}Y		7160	290	8250	90	3.8	B			Ors		82De36	
*^{81}Ge−u	$M-A$=–66454(93) keV for mixture gs+m at 679.14 keV											Nub16b	**
*^{81}Rb−u	$M-A$=–75369(29) keV for mixture gs+m at 86.31 keV											Nub16b	**
*^{81}Rb−^{85}Rb$_{.953}$	D_M=3148.1(9.2) keV for ^{81}Rb^m at 86.31(0.07) keV; $M-A$=–75373.1(8.6) keV											Nub16b	**
*^{81}Se−^{80}Kr$_{1.013}$	D_M=2814.8(2.4) μu for ^{81}Se^m at 103.00(0.06)keV; $M-A$=–76283.2(2.4) keV											Nub16b	**
*^{80}Kr(d,p)^{81}Kr	Original value 5610(15) reinterpreted as going to 49.57 level											76Me08	**
*^{81}Ge(β^-)^{81}As	Q_{β^-}=6230(120); and 6930(280) from ^{81}Ge^m at 679.14 keV											Nub16b	**
*^{81}Kr(ε)^{81}Br	LM=0.42(0.05), $Q(\varepsilon)$=4.7(0.5) to 5/2$^-$ level at 275.985 keV											Ens08a	**
*^{81}Br(^{3}He,t)^{81}Kr−^{51}V()^{51}Cr	$Q-$Q to 456.89(0.03) level=13.7(1.8) keV											GAu	**
*^{81}Rb(β^+)^{81}Kr	E_{β^+}=1050(30) to 1/2$^-$ level at 190.64 keV											Ens08a	**
*^{81}Sr(β^+)^{81}Rb	E_{β^+}=2684(30) to 301.241 3/2$^-$ level, and other E_{β^+}											Ens08a	**
^{82}Ga−u		−56812	268	−56823.5	2.6	0.0	U			GT1	1.5	04Ma.A	
^{82}Ge−u		−70400	129	−70226.0	2.4	0.5	U			GT2	2.5	08Su19	
C$_6$ H$_{10}$−^{82}Se		161545.0	4.6	161550.8	0.5	0.5	U			M15	2.5	63Ri07	
C$_6$ H$_{10}$−^{82}Kr		164769.8	3.4	164769.167	0.006	−0.1	U			M15	2.5	63Ri07	
		164787	14			−0.8	U			R11	1.5	78Di09	
		164784	16			−0.6	U			R11	1.5	78Di09	
C$_5$ N H$_8$−^{82}Kr		152200	25	152193.107	0.006	−0.2	U			R11	1.5	78Di09	
C$_5$ O H$_6$−^{82}Kr		128396	20	128383.658	0.006	−0.4	U			R11	1.5	78Di09	
^{82}Rb−u		−81775	39	−81791	3	−0.4	U			GS2	1.0	05Li24	*
^{82}Sr−u		−81604	63	−81600	6	0.1	U			GS2	1.0	05Li24	
^{82}Y O−^{98}Mo		16441.2	5.9				2			JY1	1.0	06Ka48	
^{82}Zr−u		−68311	12				2			LZ1	1.0	16Xi.A	
^{82}Ga−^{88}Rb$_{.932}$		25830.4	2.6				2			JY1	1.0	08Ha23	
^{82}Ge−^{88}Rb$_{.932}$		12427.9	2.4				2			JY1	1.0	08Ha23	
^{82}As−^{88}Rb$_{.932}$		7392.6	4.0				2			JY1	1.0	08Ha23	*
^{82}Kr−^{86}Kr$_{.953}$		−1329.4	1.1	−1330.771	0.005	−1.2	U			MS1	1.0	06Ri15	
		−1330.7684	0.0094			−0.3	1	26	25 ^{82}Kr	FS1	1.0	13Ho22	
^{82}Zn−^{85}Rb$_{.965}$		39697.0	3.3				2			MA8	1.0	13Wo06	
^{82}Kr−^{85}Rb$_{.965}$		−1394.9	2.6	−1395.944	0.006	−0.4	U			MA8	1.0	06Ro11	
^{82}Rb^m−^{85}Rb$_{.965}$		3407	9	3406.0	2.8	−0.1	U			MA2	1.0	94Ot01	
		3406.0	2.8				2			MA8	1.0	05Gu37	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{82}Sr$-^{85}$Rb$_{.965}$		3517	8	3523	6	0.7	1	65	65 ^{82}Sr	MA2	1.0	94Ot01	
^{82}Se ^{35}Cl$-^{80}$Se ^{37}Cl		3128.92	0.63	3127.9	1.0	−0.7	1	41	37 ^{80}Se	H40	2.5	85El01	
^{80}Se H$_2-^{82}$Kr		18665	18	18690.7	1.0	1.0	U			R11	1.5	78Di09	
		18671	19			0.7	U			R11	1.5	78Di09	
^{82}Kr$-^{84}$Kr$_{.976}$		−140.6277	0.0051	−140.627	0.005	0.1	1	78	75 ^{82}Kr	FS1	1.0	13Ho22	
^{81}Br H$-^{82}$Se		7419	8	7413.7	1.2	−0.4	U			R11	1.5	78Di09	
^{81}Br H$-^{82}$Kr		10662	20	10632.1	1.0	−1.0	U			R11	1.5	78Di09	
^{82}Se$-^{82}$Kr		3222	16	3218.4	0.5	−0.2	U			R11	1.5	78Di09	
		3218	22			0.0	U			R11	1.5	78Di09	
		3216.1	1.6			1.0	U			H45	1.5	93Nx01	
		3218.36	0.52			0.0	1	93	93 ^{82}Se	MS1	1.0	13Li01	
^{82}Kr$-^{78}$Se H$_3$		−27269	35	−27303.19	0.19	−0.7	U			R11	1.5	78Di09	
^{80}Se H$_3-^{82}$Kr		26466	32	26515.7	1.0	1.0	U			R11	1.5	78Di09	
^{82}Kr$-^{81}$Br		−2805	32	−2807.1	1.0	0.0	U			R11	1.5	78Di09	
^{82}Se H$-^{82}$Kr		11082	40	11043.4	0.5	−0.6	U			R11	1.5	78Di09	
^{79}Rb$-^{82}$Rb$_{.241}$ ^{78}Rb$^x_{.760}$		−1536	29	−1627	10	−1.3	U			P20	2.5	82Au01	Y
^{81}Rb$-^{82}$Rb$_{.741}$ ^{78}Rb$^x_{.260}$		−1680	40	−1618	6	0.6	U			P20	2.5	82Au01	Y
^{80}Rb$-^{82}$Rb$_{.325}$ ^{79}Rb$_{.675}$		440	40	377.6	2.6	−0.6	U			P20	2.5	82Au01	Y
^{82}Kr(^{3}He,^{6}He)^{79}Kr		−8822	31	−8810	3	0.4	U					87Mo06	
^{82}Se(^{14}C,^{16}O)^{80}Ge		−449	60	−301.7	2.1	2.5	U			Ors		83Be.C	
^{82}Se(^{18}O,^{20}Ne)^{80}Ge		−2020	40	−1799.5	2.1	5.5	B			Hei		83Wi14	*
^{82}Se(p,t)^{80}Se		−7496.1	3.0	−7495.3	0.9	0.3	1	10	9 ^{80}Se	NDm		82Zu04	
^{82}Se(d,^{3}He)^{81}As		−6864	10	−6856.1	2.7	0.8	–			Ors		83Ro08	*
		−6861	18			0.3	U			Hei		83Wi14	
^{82}Se(t,α)^{81}As		7467	6	7464.3	2.7	−0.4	–			Phi		82Mo04	
^{82}Se(d,^{3}He)^{81}As	ave.	−6856	5	−6856.1	2.7	0.0	1	27	26 ^{81}As			average	
^{82}Se(p,d)^{81}Se		−7051.8	2.8	−7051.6	1.0	0.1	1	12	11 ^{81}Se	NDm		82Zu04	
^{81}Br(n,γ)^{82}Br		7592.80	0.20	7592.94	0.12	0.7	–			ILn		78Do06	Z
		7593.02	0.15			−0.5	–			Bdn		06Fi.A	
^{81}Br(d,p)^{82}Br		5400	20	5368.38	0.12	−1.6	U			Mtr		72Ch33	
^{81}Br(n,γ)^{82}Br	ave.	7592.94	0.12	7592.94	0.12	0.0	1	100	94 ^{81}Br			average	
^{82}Ge(β^-)^{82}As		4700	140	4690	4	−0.1	U			Stu		81Al20	
^{82}As(β^-)^{82}Se		7270	200	7488	4	1.1	U					70Va31	*
		6360	200			5.6	B					70Ka04	*
		7740	30			−8.4	C			Stu		00Me.A	*
		7531	21			−2.0	U			Stu		04Ga44	*
^{82}Se(t,^{3}He)^{82}As		−7500	25	−7470	4	1.2	U			LAl		79Aj02	
^{82}Br(β^-)^{82}Kr		3092.9	1.0	3093.1	1.0	0.2	1	94	94 ^{82}Br			56Wa24	*
^{82}Rb(β^+)^{82}Kr		4400	15	4404	3	0.3	U					69Be74	*
		4420	60			−0.3	U			IRS		93Al03	*
^{82}Kr(p,n)^{82}Rb		−5161	20	−5186	3	−1.3	U					72Ja.A	
^{82}Rb^m(IT)^{82}Rb		69.0	1.5				3					Ens035	
^{82}Y(β^+)^{82}Sr		7868	185	7946	8	0.4	U			BNL		81Li12	
		7793	123			1.2	U			Ors		82De36	
^{82}Zr(β^+)^{82}Y		4000	500	4433	12	0.9	F			Ors		82De36	*

*^{82}Rb$-$u	$M-A$=–76138(30) keV for mixture gs+m at 69.0(1.5) keV	Nub16b	**
*^{82}As$-^{88}$Rb$_{.932}$	D_M=7395.1(4.6) 7532.5(4.0) μu to ground state and ^{82}As^m at 132.1(0.2) keV	Nub16b	**
*^{82}Se(^{18}O,^{20}Ne)^{80}Ge	Recalibrated to ^{64}Ni()^{62}Fe=–1938(15) keV	AHW	**
*^{82}Se(d,^{3}He)^{81}As	Originally –6870(10), see ^{74}Se(d,^{3}He)	AHW	**
*^{82}As(β^-)^{82}Se	E_{β^-}=7200(200) to ground state (80%) and 654.75 2$^+$ level (10%)	Ens035	**
*^{82}As(β^-)^{82}Se	E_{β^-}=3600(200) from ^{82}As^m at 132.1 to 5$^-$ level at 2893.70 and higher levels	Ens035	**
*^{82}As(β^-)^{82}Se	and E_{β^-}=7625(22) from ^{82}As^m at 132.1 keV	00Me.A	**
*^{82}As(β^-)^{82}Se	Average of 3 branches; and 7677(17) average of 2 branches from ^{82}As^m at 132.1	04Ga44	**
*^{82}Br(β^-)^{82}Kr	E_{β^-}=444(1) to 4$^-$ level at 2648.360 keV	Ens035	**
*^{82}Rb(β^+)^{82}Kr	E_{β^+}=3350(60); and 800(15) from ^{82}Rb^m at 69.0(1.5) to 4$^-$ level at 2648.360	Ens035	**
*^{82}Rb(β^+)^{82}Kr	Q_{β^+}=4360(100); and 4510(60) of ^{82}Rb^m at 69.0(1.5) keV	Nub16b	**
*^{82}Zr(β^+)^{82}Y	F : for 2.5(0.1) m activity, but Ensdf adopts 32(5) s	Ens035	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{83}Ge−u		−65626	268	−65460.9	2.6	0.4	o			GT1	1.5	04Ma.A	
		−65270	320			−0.6	U			OR1	1.0	06Ha62	
		−65276	129			−0.6	U			GT2	2.5	08Su19	
^{83}As−u		−74677	129	−74793	3	−0.4	U			GT2	2.5	08Su19	
C_6 H_{11}−^{83}Kr		171946.8	3.4	171948.836	0.010	0.2	U			M15	2.5	63Ri07	
		171948	16			0.0	U			R11	1.5	78Di09	
C_5 N H_9−^{83}Kr		159344	25	159372.776	0.010	0.8	U			R11	1.5	78Di09	
		159360	19			0.4	U			R11	1.5	78Di09	
C_5 O H_7−^{83}Kr		135543	25	135563.327	0.010	0.5	U			R11	1.5	78Di09	
^{83}Y O−^{98}Mo$_{1.010}$		12941	20				2			JY1	1.0	06Ka48	*
^{83}Zr O−^{98}Mo$_{1.010}$		19697.9	6.9				2			JY1	1.0	06Ka48	
^{83}Nb−u		−61789	162				2			LZ1	1.0	16Xi.A	
^{83}Ga−^{88}Rb$_{.943}$		30749.7	2.8				2			JY1	1.0	08Ha23	
^{83}Ge−^{88}Rb$_{.943}$		18168.5	2.6				2			JY1	1.0	08Ha23	
^{83}As−^{88}Rb$_{.943}$		8836.3	3.0				2			JY1	1.0	08Ha23	
^{80}Se H_3−^{83}Kr		25825	25	25870.4	1.0	1.2	U			R11	1.5	78Di09	
^{83}Kr−^{86}Kr$_{.965}$		386.6	1.1	387.261	0.009	0.6	U			MS1	1.0	06Ri15	
^{83}Rb−^{85}Rb$_{.976}$		1207	8	1207.4	2.5	0.1	U			MA2	1.0	94Ot01	
		1207.4	2.5			0.0	1	100	100 ^{83}Rb	MA8	1.0	07Ke09	
^{82}Se H−^{83}Kr		10380	18	10398.1	0.5	0.7	U			R11	1.5	78Di09	
		10368	16			1.3	U			R11	1.5	78Di09	
^{82}Kr H−^{83}Kr		7160	18	7179.669	0.010	0.7	U			R11	1.5	78Di09	
^{83}Kr−^{84}Kr$_{.988}$		1566.7601	0.0089	1566.760	0.009	0.0	1	100	100 ^{83}Kr	FS1	1.0	13Ho22	
^{83}Sr−^{83}Rb		2447	9	2440	7	−0.8	1	59	59 ^{83}Sr	MA2	1.0	94Ot01	
^{83}Kr−^{80}Se H_2		−18022	36	−18045.3	1.0	−0.4	U			R11	1.5	78Di09	
^{85}Rb−^{83}Kr H		−10211	45	−10161.813	0.010	0.7	U			R11	1.5	78Di09	
^{83}Kr−^{82}Se		−2572	35	−2573.0	0.5	0.0	U			R11	1.5	78Di09	
^{83}Kr−^{82}Kr		648	12	645.363	0.010	−0.1	U			M15	2.5	63Ri07	
^{81}Rb−^{83}Rb$_{.488}$ ^{79}Rb$_{.513}$		−529	26	−548	5	−0.3	U			P20	2.5	82Au01	Y
^{81}Rb−^{83}Rb$_{.325}$ ^{80}Rb$_{.675}$		−1054	27	−1040	5	0.2	U			P20	2.5	82Au01	Y
^{82}Rb−^{83}Rb$_{.659}$ ^{80}Rb$_{.342}$		627	24	604	3	−0.4	U			P20	2.5	82Au01	Y
^{82}Rb−^{83}Rb$_{.494}$ ^{81}Rb$_{.506}$		1098	23	1054	4	−0.8	U			P21	2.5	82Au01	Y
^{82}Ge(d,p)^{83}Ge		1470	70	1408	3	−0.9	U			NDm		05Th03	
^{82}Se(d,p)^{83}Se		3593.4	3.0				2			NDm		78Mo12	
^{82}Se(^{3}He,d)^{83}Br		3207.4	5.6	3215	4	1.4	1	46	46 ^{83}Br	NDm		83Zu01	
^{82}Kr(^{3}He,d)^{83}Rb		288	10	274.3	2.3	−1.4	U			Phi		87St11	
^{83}Zr(εp)^{82}Sr		2750	100	2809	9	0.6	U					83Ha06	
^{83}As(β^-)^{83}Se		5460	220	5671	4	1.0	U			Stu		77Al17	
^{83}Se(β^-)^{83}Br		3610	40	3673	5	1.6	U					67Ma35	
		3681	20			−0.4	U					68Sc10	*
^{83}Br(β^-)^{83}Kr		982	10	977	4	−0.5	–					51Du03	*
		967	15			0.7	U					63Pa09	*
		966	6			1.8	–					69Ph03	*
	ave.	970	5			1.3	1	54	54 ^{83}Br			average	
^{83}Rb(ε)^{83}Kr		750	20	920.0	2.3	8.5	B					70Go45	*
^{83}Sr(β^+)^{83}Rb		2264	10	2273	6	0.9	1	41	41 ^{83}Sr			68Et01	*
^{83}Y(β^+)^{83}Sr		4509	85	4592	20	1.0	U			BNL		81Li12	*
		4455	50			2.7	B			Ors		82De36	*
^{83}Zr(β^+)^{83}Y		5868	85	6294	20	5.0	B			Ors		82De36	*
^{83}Nb(β^+)^{83}Zr		7500	300	8360	150	2.9	B					88Ku14	

*^{83}Y O−^{98}Mo$_{1.010}$	D_M=12973.8(5.9) μu for mixture gs+m at 62.04(0.10) keV; $M-A$=–72172.9(5.8) keV	Nub16b	**
*^{83}Se(β^-)^{83}Br	Q_{β^-}=3910(20) from ^{83}Se^m at 228.92 keV	Nub16b	**
*^{83}Br(β^-)^{83}Kr	E_{β^-}=940(10) 925(15) 924(6) respectively, to ^{83}Kr^n at 41.5575 keV	Nub16b	**
*^{83}Rb(ε)^{83}Kr	LK=0.132(0.002) to 5/2$^-$ level at 561.9585, recalculated Q	Ens153	**
*^{83}Sr(β^+)^{83}Rb	E_{β^+}=1227(8) 24% to ground state, 20% to ^{83}Rb^m at 42.0780, and other E_{β^+}	Nub16b	**
*^{83}Y(β^+)^{83}Sr	E_{β^+}=2868(85) from ^{83}Y^m at 62.04 keV to (3/2$^-$) level at 681.11 keV	Ens153	**
*^{83}Y(β^+)^{83}Sr	E_{β^+}=3353(50) to 9/2$^+$ level at 35.47 keV	Ens153	**
*	and E_{β^+}=2941(84) from ^{83}Y^m at 62.04 to (3/2$^-$) level at 681.11 keV	Ens153	**
*^{83}Zr(β^+)^{83}Y	Q_{β^+}=5806(85) to ^{83}Y^m at 62.04 keV	Nub16b	**
*^{83}Zr(β^+)^{83}Y	Recalculated value 5802(50) of reference not accepted	87Ra06	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.		Lab	F	Reference	
^{84}Ge−u		−62270	430	−62425	3	−0.4	U				OR1	1.0	06Ha62	
^{84}As−u		−70530	320	−70697	3	−0.5	U				OR1	1.0	06Ha62	*
		−70710	140			0.0	U				GT2	2.5	08Su19	*
C_6 H_{12}−^{84}Kr		182399.4	2.5	182402.658	0.004	0.5	U				M15	2.5	63Ri07	
		182392	6			1.2	U				R11	1.5	78Di09	
C_5 N H_{10}−^{84}Kr		169819	18	169826.598	0.004	0.3	U				R11	1.5	78Di09	
		169819	13			0.4	U				R11	1.5	78Di09	
C_5 O H_8−^{84}Kr		146010	20	146017.149	0.004	0.2	U				R11	1.5	78Di09	
C_4 ^{13}C O H_7−^{84}Kr		141543	18	141546.952	0.004	0.1	U				R11	1.5	78Di09	
^{84}Kr−N_6		−106946.3154	0.0152	−106946.298	0.004	1.1	o				FS1	1.0	05Sh38	*
		−106946.2971	0.0086			−0.1	1	22	21	^{84}Kr	FS1	1.0	09Re03	
^{84}Kr H−^{85}Rb		7515	18	7533.023	0.004	0.7	U				R11	1.5	78Di09	
C_6 H_{12}−^{84}Sr		180470.8	2.6	180481.3	1.3	1.6	U				M15	2.5	63Ri07	
^{84}Y O−^{97}Mo$_{1.031}$		12483.5	5.1	12482	5	−0.2	1	82	82	^{84}Y	JY1	1.0	08We10	
^{84}Zr O−^{98}Mo$_{1.020}$		14728.6	5.9				2				JY1	1.0	06Ka48	
^{84}Nb−u		−65721	14				2				LZ1	1.0	16Xi.A	
^{84}Ge−^{88}Rb$_{.955}$		22268.7	3.4				2				JY1	1.0	08Ha23	
^{84}As−^{88}Rb$_{.955}$		13996.9	3.4				2				JY1	1.0	08Ha23	
^{84}Se−^{88}Rb$_{.955}$		3160.4	2.1	3160.4	2.1	0.0	1	100	100	^{84}Se	JY1	1.0	08Ha23	
^{82}Se H_2−^{84}Kr		20834	16	20851.9	0.5	0.7	U				R11	1.5	78Di09	
^{84}Kr−^{86}Kr$_{.977}$		−1168.3	1.0	−1168.8534	0.0022	−0.6	U				MS1	1.0	06Ri15	
^{83}Kr H−^{84}Kr		10465	16	10453.822	0.009	−0.5	U				R11	1.5	78Di09	
^{84}Kr−^{85}Rb$_{.988}$		−1349.4	1.5	−1350.534	0.004	−0.8	U				MA8	1.0	06De36	
^{84}Rb−^{85}Rb$_{.988}$		1536	8	1527.0	2.4	−1.1	U				MA2	1.0	94Ot01	
^{84}Sr−^{85}Rb$_{.988}$		570.9	1.5	570.9	1.3	0.0	–				MA8	1.0	07Ke09	
		572.1	4.3			−0.3	–				SH1	1.0	11Ha08	
	ave.	571.0	1.4			−0.1	1	89	89	^{84}Sr			average	
^{84}Kr−^{80}Se H_3		−28505	48	−28499.2	1.0	0.1	U				R11	1.5	78Di09	
^{84}Kr−^{83}Kr		−2628	12	−2628.790	0.009	0.0	U				M15	2.5	63Ri07	
		−2646	30			0.4	U				R11	1.5	78Di09	
^{84}Kr−^{40}Ar$_2$		−13268.5136	0.0171	−13268.519	0.006	−0.3	1	13	7	^{40}Ar	FS1	1.0	05Sh38	*
C_2 O_4−^{84}Kr		68160.7359	0.0205	68160.750	0.004	0.7	o				FS1	1.0	05Sh38	*
		68160.7516	0.0131			−0.1	1	10	9	^{84}Kr	FS1	1.0	09Re03	
^{82}Se(t,p)^{84}Se		6016	15	6014.7	2.0	−0.1	U				LAl		74Kn02	
^{84}Sr(p,t)^{82}Sr		−12310	10	−12300	6	1.0	1	36	35	^{82}Sr	Oak		73Ba56	
		−12295	24			−0.2	U				Win		74De31	*
^{83}Kr(n,γ)^{84}Kr		10519.5	1.8	10520.019	0.008	0.3	U						72Ma42	Z
		10520.6	0.3			−1.9	U				Bdn		06Fi.A	
^{84}Sr(d,t)^{83}Sr		−5720	30	−5666	7	1.8	U						70Be24	*
^{84}As(β^-)^{84}Se		7195	200	10094	4	14.5	F				Trs		94Gi07	*
		9120	880			1.1	U						96WaZX	
^{84}Se(β^-)^{84}Br		1818	50	1835	26	0.3	1	27	26	^{84}Br			68Re12	*
		1808	100			0.3	U						70Ei02	*
^{84}Br(β^-)^{84}Kr		4650	30	4656	26	0.2	1	74	74	^{84}Br			70Ha21	*
^{84}Br^m(β^-)^{84}Kr		4970	100				2						70Ha21	*
^{84}Rb(β^+)^{84}Kr		2679	3	2680.4	2.2	0.5	–						64La03	
		2682	5			−0.3	–						71Bo01	*
^{84}Rb(n,p)^{84}Kr		3450	10	3462.7	2.2	1.3	U				ILL		76An05	
^{84}Rb(β^+)^{84}Kr	ave.	2679.8	2.6	2680.4	2.2	0.2	1	73	73	^{84}Rb			average	
^{84}Rb(β^-)^{84}Sr		892	4	890.6	2.3	−0.3	1	34	27	^{84}Rb			71Bo01	*
^{84}Y(β^+)^{84}Sr		6950	30	6755	4	−6.5	F						70Va.A	*
		6750	10			0.5	1	19	18	^{84}Y			70Re.A	*
		6423	135			2.5	U				BNL		81Li12	*
		6408	124			2.8	U				Ors		82De36	*
^{84}Nb(β^+)^{84}Zr		7200	300	10203	14	10.0	B						96Sh27	

*^{84}As−u	Erroneously reported as –75700(300) keV in the publication	08Ha.A	**
*^{84}As−u	$M-A$=–65869(119) keV for mixture gs+m at 0#(100#) keV	Nub16b	**
*^{84}Kr−N_6	Corrected in reference of same group	09Re03	**
*^{84}Kr−^{40}Ar$_2$	Corrected in reference of same group	09Re03	**
*C_2 O_4−^{84}Kr	Corrected in reference of same group	09Re03	**
*^{84}Sr(p,t)^{82}Sr	Original error 12; added systematic error 21 keV	GAu	**
*^{84}Sr(d,t)^{83}Sr	Q =–5755(30) to 9/2$^+$ level at 35.47 keV	Ens153	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
$*^{84}$As(β^-)^{84}Se	F : observed (β^-n) decay implies $Q_{\beta^-} > 8681(15)$ keV										93Ru01	**
$*^{84}$Se(β^-)^{84}Br	E_{β^-}=1410(50) 1400(100) respectively, to 1^+ level at 408.2 keV										Ens09a	**
$*^{84}$Br(β^-)^{84}Kr	E_{β^-}=4626(15),3810(50),2700(50) to ground state, 881.615 2^+, 1897.784 0^+										Ens09a	**
$*^{84}$Br^m(β^-)^{84}Kr	E_{β^-}=2200(100) to 5^- level at 2770.94 keV										Ens09a	**
$*^{84}$Rb(β^+)^{84}Kr	Original error increased: authors report E(2^+)=877.2(1.5) while										AHW	**
*	E(2^+)=881.615(0.003) keV; see also ^{74}As(β^+)										Ens09a	**
$*^{84}$Rb(β^-)^{84}Sr	Originally 891.8(2.0), error increased, see ^{84}Rb(β^+)										AHW	**
$*^{84}$Y(β^+)^{84}Sr	F : possibly additioned with e$^+$e$^-$										AHW	**
$*^{84}$Y(β^+)^{84}Sr	E_{β^+}=1641(10) and 2242(17) to levels at 4062 and 3511 keV										70Re.A	**
$*^{84}$Y(β^+)^{84}Sr	Q_{β^+}=6409(170), and 6499(135) from ^{84}Y^m at 67 keV										00Do10	**
$*^{84}$Y(β^+)^{84}Sr	Q_{β^+}=6475(124) from ^{84}Y^m at 67 keV										00Do10	**
^{85}Ge−u	−57220	540	−57030	4	0.4	U			OR1	1.0	06Ha62	
^{85}As−u	−68095	225	−67836	3	0.8	o			GT1	1.5	04Ma.A	
	−67887	129			0.2	U			GT2	2.5	08Su19	
C_6 H_{13}−^{85}Rb	189927.6	3.9	189935.682	0.005	0.8	U			M15	2.5	63Ri07	
	189930	15			0.3	U			R11	1.5	78Di09	
C_4 N O H_7−^{85}Rb	140985	18	140974.112	0.005	−0.4	U			R11	1.5	78Di09	
^{85}Rb−^{39}K$_{2.179}$	−9124.6	2.7	−9126.700	0.012	−0.8	U			MA8	1.0	09Na.A	
^{85}Rb−^{120}Sn$_{.708}$	−18970.8	2.2	−18969.2	0.7	0.7	U			JY1	1.0	11Ha48	
^{85}Y−u	−83559	31	−83567	20	−0.3	2			GS2	1.0	05Li24	*
^{85}Zr O−^{98}Mo$_{1.031}$	13886.7	6.9				2			JY1	1.0	06Ka48	
^{85}Nb O−^{98}Mo$_{1.031}$	21246	26	21289	4	1.7	U			JY1	1.0	06Ka48	*
^{85}Ge−^{88}Rb$_{.966}$	28638.8	4.0				2			JY1	1.0	08Ha23	
^{85}As−^{88}Rb$_{.966}$	17832.8	3.3				2			JY1	1.0	08Ha23	
^{85}Se−^{88}Rb$_{.966}$	7929.9	2.8				2			JY1	1.0	08Ha23	
^{85}Br−^{88}Rb$_{.966}$	1314.9	3.3				2			JY1	1.0	07Ra23	
^{85}Nb−^{85}Rb	17056.1	4.4				2			SH1	1.0	11Ha08	*
^{85}Mo−^{85}Rb	26471	17				2			SH1	1.0	11Ha08	
C_6 H_{14}−^{85}Rb	197760.706	0.014	197760.714	0.005	0.6	U			MI2	1.0	99Br47	
^{85}Rb−C_6 H_{12}	−182110.662	0.024	−182110.649	0.005	0.5	U			MI2	1.0	99Br47	
^{85}Rb−^{84}Kr	300	32	292.009	0.004	−0.2	U			R11	1.5	78Di09	
	292.0121	0.0064			−0.5	1	39	34 ^{85}Rb	FS1	1.0	10Mo30	
^{83}Rb−^{85}Rb$_{.488}$ ^{81}Rb$_{.512}$	−351	22	−339	3	0.2	U			P21	2.5	82Au01	Y
^{84}Kr(d,p)^{85}Kr	4895	8	4887.7	2.0	−0.9	U			MIT		63Ho.A	
^{85}Rb(γ,n)^{84}Rb	−10650	80	−10479.7	2.2	2.1	U			Phi		60Ge01	
^{85}Rb(p,d)^{84}Rb	−8275	6	−8255.1	2.2	3.3	B			Bld		78Sh11	
^{84}Sr(d,p)^{85}Sr	6303	8	6300	3	−0.3	1	14	12 ^{85}Sr			71Mo02	
^{85}Mo(εp)^{84}Zr	5100	200	6623	17	7.6	B					99Hu05	
^{85}Se(β^-)^{85}Br	6185	90	6162	4	−0.3	o			Bwg		87Gr.A	
	6182	23			−0.9	U			Bwg		92Gr.A	
^{85}Br(β^-)^{85}Kr	2870	19	2905	4	1.8	U			Stu		79Al05	
^{85}Kr(β^-)^{85}Rb	687	2				2					70Wo08	
^{85}Sr(ε)^{85}Rb	1007	30	1064.1	2.8	1.9	U					69Mc05	
^{85}Rb(p,n)^{85}Sr	−1890	30	−1846.4	2.8	1.5	U			BNL		58El44	
^{85}Rb(^{3}He,t)^{85}Sr	−1083	3	−1082.6	2.8	0.1	1	88	88 ^{85}Sr	Pri		82Ko06	
^{85}Y(β^+)^{85}Sr	3255	25	3261	19	0.2	R					63Do07	*
^{85}Zr(β^+)^{85}Y	4693	99	4667	20	−0.3	U			Ors		82De36	
^{85}Nb(β^+)^{85}Zr	6000	200	6896	8	4.5	F					88Ku14	*
$*^{85}$Y−u	$M-A$=–77824(28) keV for mixture gs+m at 19.68 keV										Nub16c	**
$*^{85}$Nb O−^{98}Mo$_{1.031}$	D_M=21292.2(6.9) μu for mixture gs+m at 150#80 keV; $M-A$=–66274.8(6.6) keV										Nub16b	**
$*^{85}$Nb−^{85}Rb	Misprint in publication 1.000200869 (not 1.00200869)										GAu	**
$*^{85}$Y(β^+)^{85}Sr	E_{β^+}=1540(20) to 3/2$^-$ level at 743.25 keV										Ens148	**
*	and E_{β^+}=2240(10) from ^{85}Y^m at 19.68 (conflicting → outer error used)										Nub16b	**
$*^{85}$Nb(β^+)^{85}Zr	F : see discussion of this result in reference										06Ka48	**
*	Q_{β^+}=6100(200) in text p.268 and in Table 1										GAu	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{86}Ge−u	−54750	540	−53030	470	3.2	B			OR1	1.0	06Ha62	
	−53033	188				2			GT3	2.5	16Kn03	
^{86}As−u	−63586	247	−63298	4	0.8	o			GT1	1.5	04Ma.A	
	−63189	129			−0.3	U			GT2	2.5	08Su19	
^{86}Se−u	−75702	128	−75688.3	2.7	0.0	U			GT2	2.5	08Su19	
C_6 H_{14}−^{86}Kr	198936.7	2.7	198939.825	0.004	0.5	U			M15	2.5	63Ri07	
	198933	15			0.3	U			R11	1.5	78Di09	
C_5 N H_{12}−^{86}Kr	186366	20	186363.765	0.004	−0.1	U			R11	1.5	78Di09	
^{86}Kr−u	−89389.271	0.110	−89389.374	0.004	−0.9	U			ST2	1.0	02Bf02	
^{86}Kr−^{120}Sn$_{.717}$	−19269.6	2.2	−19268.1	0.7	0.7	U			JY1	1.0	11Ha48	
C_6 H_{14}−^{86}Sr	200264.9	3.6	200289.725	0.006	2.8	U			M15	2.5	63Ri07	
^{86}Y−u	−85019	75	−85114	15	−1.3	U			GS2	1.0	05Li24	∗
^{86}Zr O−^{98}Mo$_{1.041}$	9692.8	6.9	9686	4	−0.9	1	31	31 ^{86}Zr	JY1	1.0	06Ka48	
^{86}Nb O−^{98}Mo$_{1.041}$	19171.0	5.9				2			JY1	1.0	06Ka48	
^{86}As−^{88}Rb$_{.977}$	23346.2	3.7				2			JY1	1.0	08Ha23	
^{86}Se−^{88}Rb$_{.977}$	10956.4	2.7				2			JY1	1.0	08Ha23	
^{86}Br−^{88}Rb$_{.977}$	5450.1	3.3				2			JY1	1.0	07Ra23	
^{86}Kr−^{84}Kr$_{1.024}$	1236.9544	0.0042	1236.9565	0.0023	0.5	1	30	20 ^{84}Kr	FS1	1.0	12Ra34	
^{86}Sr−^{84}Kr$_{1.024}$	−112.9463	0.0054	−112.944	0.004	0.5	1	59	54 ^{86}Sr	FS1	1.0	12Ra34	
^{86}Kr−^{85}Rb$_{1.012}$	−120.3	3.6	−120.591	0.004	−0.1	U			MA8	1.0	06Ro11	
	−119.1	1.6			−0.9	U			MA8	1.0	06De36	
	−54	88			−0.8	U			MA9	1.0	10Na13	∗
^{86}Rb−^{85}Rb$_{1.012}$	441	9	436.23	0.21	−0.5	U			MA2	1.0	94Ot01	
^{86}Sr ^{19}F−^{85}Rb$_{1.235}$	16608	13	16603.565	0.006	−0.3	U			MA8	1.0	05Si34	
^{86}Zr−^{85}Rb$_{1.012}$	5562.7	4.6	5566	4	0.6	1	69	69 ^{86}Zr	SH1	1.0	11Ha08	
^{86}Mo−^{85}Rb$_{1.012}$	20443.6	4.0				2			SH1	1.0	11Ha08	
^{86}Sr−^{86}Kr	−1349.8965	0.0060	−1349.900	0.004	−0.6	1	49	46 ^{86}Sr	FS1	1.0	12Ra34	
^{86}Kr−^{85}Rb	−1206	42	−1179.111	0.004	0.4	U			R11	1.5	78Di09	
	−1179.1083	0.0071			−0.4	–			FS1	1.0	10Mo30	∗
	−1179.1109	0.0059			−0.1	–			FS1	1.0	10Mo30	∗
ave.	−1179.110	0.005			−0.3	1	69	66 ^{85}Rb			average	
^{86}Kr−N_6	−107833.3986	0.0074	−107833.400	0.004	−0.3	1	28	27 ^{86}Kr	FS1	1.0	09Re03	
C_2 O_4−^{86}Kr	69047.8337	0.0155	69047.852	0.004	1.2	o			FS1	1.0	05Sh38	∗
	69047.8440	0.0113			0.7	1	12	12 ^{86}Kr	FS1	1.0	09Re03	
^{86}Kr−^{84}Kr	−908	32	−887.1024	0.0023	0.4	U			R11	1.5	78Di09	
	−887.1041	0.0125			0.1	o			FS1	1.0	05Sh38	∗
	−887.1080	0.0069			0.8	–			FS1	1.0	09Re03	∗
	−887.0954	0.0060			−1.2	–			FS1	1.0	10Mo30	∗
ave.	−887.101	0.005			−0.3	1	25	15 ^{84}Kr			average	
^{86}Sr(p,t)^{84}Sr	−11535	10	−11534.4	1.2	0.1	U			Oak		73Ba56	
^{85}Rb(n,γ)^{86}Rb	8651.1	1.0	8650.98	0.20	−0.1	U					69Da15	Z
	8651.3	1.5			−0.2	U					70Or.A	
	8650.98	0.20				2			Bdn		06Fi.A	
^{85}Rb(d,p)^{86}Rb	6433	10	6426.41	0.20	−0.7	U			Tal		69Da15	
^{86}Se(β^-)^{86}Br	5095	100	5129	4	0.3	o			Bwg		87Gr.A	
	5099	11			2.7	C			Bwg		92Gr.A	
^{86}Br(β^-)^{86}Kr	7620	60	7633	3	0.2	U			Stu		79Al05	
	7626	11			0.7	U			Bwg		92Gr.A	
^{86}Rb(β^-)^{86}Sr	1774	5	1776.10	0.20	0.4	U					64Da16	
	1770	3			2.0	U					66An10	
	1779.2	2.5			−1.2	U					75Be21	
	1775	3			0.4	U					75Ra09	
^{86}Y(β^+)^{86}Sr	5220	20	5240	14	1.0	2					62Ya01	∗
	5260	20			−1.0	2					65Va02	∗
^{86}Nb(β^+)^{86}Zr	7978	80	8835	7	10.7	F					82De43	∗
^{86}Mo(β^+)^{86}Nb	5019	430	5024	7	0.0	U					94Sh07	∗
∗^{86}Y−u	$M-A$=–79086(29) keV for mixture gs+m at 218.21 keV										Nub16b	∗∗
∗^{86}Kr−^{85}Rb$_{1.012}$	Typo in original paper, ratio should read 1.011 763 90(1 03)										GAu	∗∗
∗^{86}Kr−^{85}Rb	Different charge states : 3^+ and 2^+										10Mo30	∗∗
∗C_2 O_4−^{86}Kr	Corrected in reference of same group										09Re03	∗∗
∗^{86}Kr−^{84}Kr	Corrected in reference of same group										09Re03	∗∗
∗^{86}Kr−^{84}Kr	Different charge states in these two results: 3^+ and 2^+										10Mo30	∗∗

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
*^{86}Y(β^+)^{86}Sr	E_{β^+}=2019(20) 1960(20) respectively, to 2229.81 4$^+$ level, and other E_{β^+}										Ens14c	**
*^{86}Nb(β^+)^{86}Zr	F : see discussion of this result in reference										06Ka48	**
*^{86}Mo(β^+)^{86}Nb	E_{β^+}=3900(400) to (1$^+$) level at 97.1 keV										94Sh07	**
^{87}Se−u	−71357	128	−71311.4	2.4	0.1	U			GT2	2.5	08Su19	
^{87}Kr−u	−86622	30	−86645.24	0.26	−0.8	U			GS2	1.0	05Li24	
C_4 H_7 O_2−^{87}Rb	135417.8	2.7	135423.934	0.006	0.9	U			M15	2.5	63Ri07	
C_5 ^{13}C H_{14}−^{87}Rb	203767	15	203724.755	0.006	−1.9	U			R11	1.5	78Di09	
C_4 O N H_9−^{87}Rb	159277	15	159233.383	0.006	−1.9	U			R11	1.5	78Di09	
C_3 ^{13}C O N H_8−^{87}Rb	154809	25	154763.186	0.006	−1.2	U			R11	1.5	78Di09	
C_4 H_7 O_2−^{87}Sr	135722.2	3.5	135726.969	0.005	0.5	U			M15	2.5	63Ri07	
^{87}Y−u	−89153	30	−89123.9	1.2	1.0	U			GS2	1.0	03Li.A	*
^{87}Zr−u	−85222	30	−85183	4	1.3	U			GS2	1.0	05Li24	
^{87}Zr O−^{97}Mo$_{1.062}$	9543.3	5.2	9542	4	−0.2	1	73	73 ^{87}Zr	JY1	1.0	08We10	
^{87}Nb$_{1.069}$−C_7 H_9	−155224	30	−155205	8	0.6	U			CP1	1.0	11Fa10	
^{87}Nb O−^{98}Mo$_{1.051}$	15027.9	7.3				2			JY1	1.0	06Ka48	*
^{87}Mo$_{1.069}$−C_7 H_9	−147186.1	4.8	−147184	3	0.5	1	47	47 ^{87}Mo	CP1	1.0	11Fa10	
^{87}Sr−^{84}Kr$_{1.036}$	565.8516	0.0059	565.850	0.004	−0.2	1	47	41 ^{87}Sr	FS1	1.0	12Ra34	
^{87}Kr−^{85}Rb$_{1.024}$	3683.0	2.9	3682.07	0.26	−0.3	U			MA8	1.0	06De36	
	3684.1	4.7			−0.4	U			MA8	1.0	10Na13	
^{87}Rb−^{85}Rb$_{1.024}$	−490	9	−492.156	0.007	−0.2	U			MA2	1.0	94Ot01	
	−493.0	2.7			0.3	U			MA8	1.0	06De36	
	−492.33	0.80			0.2	U			MA8	1.0	07Ke09	
	−492.4	1.4			0.2	U			MA8	1.0	09Na.A	
	−492.04	0.87			−0.1	U			MA8	1.0	11He10	
^{87}Sr−^{85}Rb$_{1.024}$	−780	9	−795.191	0.005	−1.7	U			MA2	1.0	94Ot01	
^{87}Mo−^{85}Rb$_{1.024}$	18525.6	4.2	18524	3	−0.5	1	53	53 ^{87}Mo	SH1	1.0	11Ha08	
^{87}Tc−^{85}Rb$_{1.024}$	28394.5	4.5				2			SH1	1.0	11Ha08	*
^{87}As−^{88}Rb$_{.989}$	28000.6	3.2				2			JY1	1.0	08Ha23	
^{87}Se−^{88}Rb$_{.989}$	16397.5	2.4				2			JY1	1.0	08Ha23	
^{87}Br−^{88}Rb$_{.989}$	8382.9	3.4				2			JY1	1.0	07Ra23	
^{86}Kr H−^{87}Rb	9309	16	9255.127	0.006	−2.2	U			R11	1.5	78Di09	
^{87}Sr−^{86}Kr$_{1.012}$	−660.4616	0.0050	−660.461	0.004	0.2	1	62	59 ^{87}Sr	FS1	1.0	12Ra34	
C_6 H_{16}−^{87}Rb	216019.966	0.023	216019.985	0.007	0.8	U			MI2	1.0	99Br47	
^{87}Rb−C_6 H_{14}	−200369.931	0.015	−200369.920	0.007	0.7	1	19	18 ^{87}Rb	MI2	1.0	99Br47	
^{87}Rb−^{86}Kr	−1477	30	−1430.095	0.006	1.0	U			R11	1.5	78Di09	
	−1430.0932	0.0059			−0.3	1	87	81 ^{87}Rb	FS1	1.0	10Mo30	
^{87}Sr−^{86}Sr	−382	12	−383.230	0.006	0.0	U			M15	2.5	63Ri07	
^{87}Rb−^{85}Rb	−2620	35	−2609.206	0.007	0.2	U			R11	1.5	78Di09	
^{85}Rb−^{87}Rb$_{.489}$ ^{83}Rb$_{.512}$	−310	30	−314.8	1.2	−0.1	U			P21	2.5	82Au01	
^{84}Rb−^{87}Rb$_{.241}$ ^{83}Rb$_{.759}$	850	72	643.7	2.8	−1.1	U			P21	2.5	82Au01	*
^{87}Sr(p,t)^{85}Sr	−11440	10	−11437.6	2.8	0.2	U			Oak		73Ba56	
^{87}Br(β^-n)^{86}Kr	1335	25	1303	3	−1.3	U					84Kr.B	
^{86}Kr(n,γ)^{87}Kr	5515.04	0.6	5515.17	0.25	0.2	2					77Je03	Z
	5515.20	0.27			−0.1	2			Bdn		06Fi.A	
^{86}Kr(d,p)^{87}Kr	3286	8	3290.61	0.25	0.6	U			MIT		63Ho.A	
^{87}Rb(γ,n)^{86}Rb	−9990	70	−9922.11	0.20	1.0	U			Phi		60Ge01	
^{87}Rb(d,t)^{86}Rb	−3659	15	−3664.89	0.20	−0.4	U			Tal		69Da15	
^{86}Sr(n,γ)^{87}Sr	8428.12	0.17	8428.294	0.005	1.0	U			ILn		86Wi16	Z
	8428.17	0.17			0.7	U			Bdn		06Fi.A	
^{86}Sr(d,p)^{87}Sr	6203	8	6203.728	0.005	0.1	U					71Mo02	
^{86}Sr(p,γ)^{87}Y	5785.4	3.3	5784.3	1.1	−0.3	R					71Um03	
^{86}Sr(^{3}He,d)^{87}Y	346	15	290.8	1.1	−3.7	B			ANL		71Ma11	
^{87}Mo(εp)^{86}Zr	3700	300	3795	5	0.3	U					83Ha06	
^{87}Se(β^-)^{87}Br	7250	150	7466	4	1.4	o			Bwg		87Gr.A	
	7275	35			5.4	B			Bwg		92Gr.A	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{87}Br(β^-)^{87}Kr	6830	120	6818	3	−0.1	U			Stu		79Al05	
	6750	150			0.5	o			Bwg		87Gr.B	
	6855	25			−1.5	U			Bwg		92Gr.A	
^{87}Kr(β^-)^{87}Rb	3888	7	3888.27	0.25	0.0	U					73Wo01	
^{87}Rb(β^-)^{87}Sr	272	3	282.275	0.006	3.4	B					59Fl40	
	274	3			2.8	B					61Be41	
^{87}Rb(^{3}He,t)^{87}Sr−^{81}Br()^{81}Kr	564.0	1.5	563.1	0.5	−0.6	1	10	9 ^{81}Kr	Pri		82Ko06	
^{87}Y(β^+)^{87}Sr	2190	50	1861.7	1.1	−6.6	B					67Mi13	∗
	1791	40			1.8	U					69Zo04	∗
^{87}Sr(p,n)^{87}Y	−2644.2	1.2	−2644.0	1.1	0.1	2					71Um03	Z
^{87}Zr(β^+)^{87}Y	3663	40	3671	4	0.2	U					65Ba48	∗
^{87}Nb(β^+)^{87}Zr	5165	60	5473	8	5.1	B					82De43	∗
^{87}Mo(β^+)^{87}Nb	6382	308	6990	7	2.0	U					82De43	∗
	6589	300			1.3	U					91Mi15	∗
∗^{87}Y−u	$M-A$=–82665(28) keV for ^{87}Y^m at 380.82 keV										Nub16b	∗∗
∗^{87}Nb O−^{98}Mo$_{1.051}$	D_M=15030.0(6.9) μu for mixture gs+m at 3.9(0.1) keV; $M-A$=–73870.2(6.7) keV										Nub16b	∗∗
∗^{87}Tc−^{85}Rb$_{1.024}$	Most probably the high-spin isomer										11Ha08	∗∗
∗^{84}Rb−^{87}Rb$_{.241}$ ^{83}Rb$_{.759}$	D_M=1080(40) keV corrected –230(60) for mixture gs+m at 463.59 keV										Nub16b	∗∗
∗^{87}Y(β^+)^{87}Sr	E_{β^+}=780(50) to ^{87}Sr^m at 388.5287 keV										Nub16b	∗∗
∗^{87}Y(β^+)^{87}Sr	E_{β^+}=1150(40) from ^{87}Y^m at 380.82 keV										Nub16b	∗∗
∗^{87}Zr(β^+)^{87}Y	E_{β^+}=2260(40) to ^{87}Y^m at 380.82 keV										Nub16b	∗∗
∗^{87}Nb(β^+)^{87}Zr	Q_{β^+}=5169(60) from ^{87}Nb^m at 3.9(0.1) keV										Nub16b	∗∗
∗^{87}Mo(β^+)^{87}Nb	Q_{β^+}=6378(308)) to ^{87}Nb^m at 3.9(0.1) keV										Nub16b	∗∗
∗^{87}Mo(β^+)^{87}Nb	E_{β^+}=5300(300) to (7/2)$^+$ level at 266.9 keV										Ens15a	∗∗
^{88}Se−u	−68555	129	−68583	4	−0.1	U			GT2	2.5	08Su19	
^{88}Br−u	−75832	100	−75917	3	−0.3	o			GT2	2.5	08Kn.A	
	−75823	129			−0.3	U			GT2	2.5	08Su19	
C$_4$ H$_8$ O$_2$−^{88}Sr	146789.1	4.7	146817.242	0.006	2.4	U			M15	2.5	63Ri07	
^{88}Y−u	−90500	31	−90498.7	1.6	0.0	U			GS2	1.0	05Li24	
^{88}Zr O−^{98}Mo$_{1.061}$	5502.3	6.9	5502	6	0.0	1	71	71 ^{88}Zr	JY1	1.0	06Ka48	
^{88}Nb O−^{98}Mo$_{1.061}$	13452	78	13510	60	0.7	1	66	66 ^{88}Nb	JY1	1.0	06Ka48	∗
^{88}Sr−^{84}Kr$_{1.048}$	−1637.3606	0.0069	−1637.366	0.005	−0.8	1	46	42 ^{88}Sr	FS1	1.0	12Ra34	
^{88}Kr−^{85}Rb$_{1.035}$	5745.5	2.8				2			MA8	1.0	06De36	
^{88}Rb−^{85}Rb$_{1.035}$	2615	9	2613.21	0.17	−0.2	U			MA4	1.0	02Ra23	
^{88}Sr−^{85}Rb$_{1.035}$	−3108	20	−3090.126	0.006	0.9	U			MA8	1.0	07Ke09	
	−3088	11			−0.2	U			MA8	1.0	05Si34	
^{88}Mo−^{85}Rb$_{1.035}$	13265.4	4.1				2			JY1	1.0	08We10	
^{88}Tc−^{85}Rb$_{1.035}$	25080	160				2			JY1	1.0	08We10	∗
^{88}Sr−^{86}Kr$_{1.023}$	−2942.4188	0.0059	−2942.415	0.005	0.7	1	61	58 ^{88}Sr	FS1	1.0	12Ra34	
^{88}Se−^{88}Rb	20101.9	3.6				2			JY1	1.0	08Ha23	
^{88}Br−^{88}Rb	12767.7	3.4				2			JY1	1.0	07Ra23	
^{88}Sr−^{87}Sr	−3260	12	−3265.241	0.006	−0.2	U			M15	2.5	63Ri07	
^{86}Kr(t,p)^{88}Kr	4091	15	4086.5	2.6	−0.3	U			LAl		76Fl02	
^{88}Sr(p,t)^{86}Sr	−11060	10	−11059.368	0.006	0.1	U			Oak		73Ba56	
^{87}Rb(n,γ)^{88}Rb	6082.52	0.16	6082.52	0.16	0.0	1	99	99 ^{88}Rb	Bdn		06Fi.A	
^{87}Rb(d,p)^{88}Rb	3858	15	3857.96	0.16	0.0	U			Oak		71Ra17	
	3837	20			1.0	U					71To05	
^{87}Sr(n,γ)^{88}Sr	11112.63	0.22	11112.869	0.006	1.1	U			ILn		87Wi15	Z
	11112.64	0.22			1.0	U			Bdn		06Fi.A	
^{87}Sr(d,p)^{88}Sr	8865	5	8888.303	0.005	4.7	B			MIT		68Co20	
^{88}Se(β^-)^{88}Br	6854	31	6832	5	−0.7	U			Bwg		92Gr.A	
^{88}Br(β^-)^{88}Kr	8970	130	8975	4	0.0	U			Stu		79Al05	
	8880	200			0.5	o			Bwg		87Gr.B	
	8960	36			0.4	U			Bwg		92Gr.A	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.		Lab	F	Reference	
^{88}Kr(β^-)^{88}Rb		2930	30	2917.7	2.6	−0.4	U				Trs		78Wo15	
^{88}Rb(β^-)^{88}Sr		5310	60	5312.62	0.16	0.0	U				Trs		78Wo15	
		5318	9			−0.6	U				Gsn		80De02	∗
		5313	5			−0.1	U				Trs		82Br23	
^{88}Y(β^+)^{88}Sr		3622.6	1.5				2						79An36	∗
^{88}Sr(p,n)^{88}Y		−4402	6	−4404.9	1.5	−0.5	U				Bar		61Sh23	
		−4406	10			0.1	U				Tal		62Ne08	
^{88}Nb(β^+)^{88}Zr		7550	100	7460	60	−0.9	1	35	34	^{88}Nb			84Ox01	
^{88}Nb^m(β^+)^{88}Zr		7590	100				2						84Ox01	
^{88}Tc(β^+)^{88}Mo		8600	1300	11010	150	1.9	U						96Od01	
		7800	600			5.3	B						96Sh27	
∗^{88}Nb O−^{98}Mo$_{1.061}$	D_M=13527.5(6.9) μu for mixture gs+m at 140(120) keV; $M-A$=–76150.9(6.7) keV												Nub16b	∗∗
∗^{88}Tc−^{85}Rb$_{1.035}$	Most probably the high-spin isomer												08We10	∗∗
∗^{88}Tc−^{85}Rb$_{1.035}$	D_M=25082.4(4.1) μu for mixture gs+m at 0#300 keV; $M-A$=–61679.1(3.8) keV												Nub16b	∗∗
∗^{88}Rb(β^-)^{88}Sr	Original error 4 corrected in reference												94Ha.A	∗∗
∗^{88}Y(β^+)^{88}Sr	E_{β^+}=764.6(1.5) to 2$^+$ level at 1836.090 keV												Ens141	∗∗
^{89}Se−u		−63285	225	−63331	4	−0.1	o				GT1	1.5	04Ma.A	
		−63291	129			−0.1	U				GT2	2.5	08Su19	
C$_7$ H$_5$−^{89}Y		133247.0	3.4	133284.0	1.7	4.3	B				M15	2.5	63Ri07	
^{89}Nb−u		−86588	34	−86555	25	1.0	–				GS2	1.0	05Li24	∗
	ave.	−86582	29			1.0	1	78	78	^{89}Nb			average	
^{89}Kr−^{85}Rb$_{1.047}$		10191.6	2.3				2				MA8	1.0	06De36	
^{89}Rb−^{85}Rb$_{1.047}$		4628	9	4634	6	0.7	1	42	42	^{89}Rb	MA4	1.0	02Ra23	
^{89}Mo−^{85}Rb$_{1.047}$		11824.3	4.2				2				JY1	1.0	08We10	
^{89}Tc−^{85}Rb$_{1.047}$		20007	17	20005	4	−0.1	U				SH1	1.0	08We10	
		20004.8	4.1				2				JY1	1.0	08We10	
^{89}Se−^{88}Rb$_{1.011}$		26329.0	4.0				2				JY1	1.0	08Ha23	
^{89}Br−^{88}Rb$_{1.011}$		16364.5	3.5				2				JY1	1.0	07Ra23	
^{88}Rb−^{89}Rb$_{.494}$ ^{87}Rb$_{.506}$		545	23	563.4	2.7	0.3	U				P21	2.5	82Au01	
^{89}Y(d,α)^{87}Sr		7889	15	7882.5	1.6	−0.4	U				Mtr		72Br13	
^{88}Sr(n,γ)^{89}Sr		6358.70	0.13	6358.72	0.09	0.1	–				ILn		89Wi05	Z
		6358.73	0.13			−0.1	–				Bdn		06Fi.A	
^{88}Sr(d,p)^{89}Sr		4133	5	4134.15	0.09	0.2	U				MIT		67Sp09	
^{88}Sr(n,γ)^{89}Sr	ave.	6358.71	0.09	6358.72	0.09	0.0	1	100	100	^{89}Sr			average	
^{88}Sr(p,γ)^{89}Y		7078	4	7075.7	1.6	−0.6	1	16	16	^{89}Y			75Be.B	Z
^{89}Y(γ,n)^{88}Y		−11540	40	−11480.7	2.2	1.5	U				Phi		63Ge02	
^{89}Br(β^-)^{89}Kr		8140	140	8262	4	0.9	U				Stu		81Ho17	
		8120	120			1.2	o				Bwg		87Gr.B	
		8155	30			3.6	C				Bwg		92Gr.A	
^{89}Kr(β^-)^{89}Rb		5150	30	5177	6	0.9	U						67Ki01	
		5191	60			−0.2	U				Trs		78Wo15	∗
		5140	120			0.3	U				Stu		81Ho17	∗
^{89}Rb(β^-)^{89}Sr		4486	12	4497	5	0.9	–						66Ki06	
		4491	15			0.4	o				Gsn		80Bl.A	
		4510	9			−1.5	–				Gsn		80De02	∗
	ave.	4501	7			−0.7	1	57	57	^{89}Rb			average	
^{89}Sr(β^-)^{89}Y		1463	5	1499.3	1.6	7.3	B						49La06	
		1488	4			2.8	B						70Wo05	
^{89}Zr(β^+)^{89}Y		2841	10	2832.8	2.8	−0.8	U						51Hy24	∗
		2832	10			0.1	U						53Sh48	∗
		2828	7			0.7	–						60Ha26	∗
^{89}Y(p,n)^{89}Zr		−3612.8	4.	−3615.1	2.8	−0.6	–				Tkm		63Ok01	Z
		−3619.4	6.			0.7	–				Oak		64Jo11	Z
^{89}Zr(β^+)^{89}Y	ave.	2832	3	2832.8	2.8	0.4	1	85	81	^{89}Zr			average	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{89}Nb(β^+)^{89}Zr		3870	100	4250	24	3.8	B					55Ma13	
		4340	50			−1.8	1	23	22 ^{89}Nb			74Vo08	
^{89}Mo(β^+)^{89}Nb		5970	300	5610	24	−1.2	U					64Bu12	
^{89}Tc(β^+)^{89}Mo		7510	210	7620	5	0.5	U					91He04	*
*^{89}Nb−u	$M-A$=–80656(28) keV for mixture gs+m at 0#30 keV											Nub16b	**
*^{89}Kr(β^-)^{89}Rb	E_{β^-}=4970(60) to 220.948 level											GAu	**
*^{89}Kr(β^-)^{89}Rb	Splitting Table 3a into 3 groups yields 4610(120) 4867(152) 5135(123) keV											GAu	**
*^{89}Rb(β^-)^{89}Sr	Original error 8 corrected in reference											94Ha.A	**
*^{89}Zr(β^+)^{89}Y	E_{β^+}=910(10) 901(10) 897(7) respectively, to ^{89}Y^m at 908.97 keV											Nub16b	**
*^{89}Tc(β^+)^{89}Mo	E_{β^+}=6370(210) to 118.8 level; no Fermi−Kurie plot											91He04	**
^{90}Se−u		−59904	236				2			GT1	1.5	04Ma.A	
C$_4$ H$_{10}$ O$_2$−^{90}Zr		163377	6	163380.80	0.13	0.3	U			M15	2.5	63Ri07	
^{90}Zr−u		−95301.36	0.23	−95301.24	0.13	0.5	1	30	30 ^{90}Zr	MS1	1.0	15Gu09	
^{90}Nb−u		−88872	50	−88741	4	2.6	U			GS2	1.0	05Li24	*
^{90}Mo−C$_7$ H$_6$		−133018.9	4.7	−133019	4	0.0	1	63	63 ^{90}Mo	CP1	1.0	11Fa10	
^{90}Mo$_{1.033}$−C$_7$ H$_9$		−159318	23	−159334	4	−0.7	U			CP1	1.0	11Fa10	
^{90}Tc−C$_7$ H$_6$		−122880.3	6.7	−122876.3	1.1	0.6	U			CP1	1.0	11Fa10	
^{90}Tc$_{1.033}$−C$_7$ H$_9$		−148835	22	−148856.9	1.1	−1.0	U			CP1	1.0	11Fa10	
		−148854.2	8.5			−0.3	U			CP1	1.0	11Fa10	
^{90}Ru$_{1.033}$−C$_7$ H$_9$		−142382	11	−142380	4	0.2	1	14	14 ^{90}Ru	CP1	1.0	11Fa10	
^{90}Kr−^{85}Rb$_{1.059}$		12942.6	2.0				2			MA8	1.0	06De36	
^{90}Rb−^{85}Rb$_{1.059}$		8211	9	8213	7	0.3	1	60	60 ^{90}Rb	MA4	1.0	02Ra23	*
^{90}Tc−^{85}Rb$_{1.059}$		17489.2	8.0	17488.6	1.1	−0.1	U			SH1	1.0	08We10	
		17489.8	4.2			−0.3	U			JY1	1.0	08We10	
^{90}Ru−^{85}Rb$_{1.059}$		23775	11	23759	4	−1.5	–			SH1	1.0	08We10	
		23756.6	4.7			0.5	–			JY1	1.0	08We10	
	ave.	23759	4			−0.1	1	86	86 ^{90}Ru			average	
^{90}Tc−^{86}Kr$_{1.047}$		17664.6	1.1				2			JY1	1.0	12Ka12	
^{90}Tc^m−^{86}Kr$_{1.047}$		17819.2	1.4				2			JY1	1.0	12Ka12	
^{90}Zr−^{87}Rb$_{1.034}$		−1393.79	0.16	−1393.91	0.13	−0.7	1	62	62 ^{90}Zr	MS1	1.0	15Gu09	
^{90}Br−^{88}Rb$_{1.023}$		22017.0	3.6				2			JY1	1.0	07Ra23	
^{89}Rb−^{90}Rb$^x_{.791}$ ^{85}Rb$_{.209}$		−1826	24	−1818	12	0.1	U			P21	2.5	82Au01	
^{90}Zr(α,^{8}He)^{86}Zr		−40136	30	−39988	4	4.9	B			INS		90Ka01	
^{90}Zr(^{3}He,^{6}He)^{87}Zr		−12083	8	−12086	4	−0.4	1	27	27 ^{87}Zr	MSU		78Pa11	
^{90}Zr(p,t)^{88}Zr		−12805	10	−12805	5	0.0	1	29	29 ^{88}Zr	Oak		71Ba43	
^{89}Y(n,γ)^{90}Y		6857.1	1.0	6857.03	0.10	−0.1	U			ORn		81Ra07	
		6857.26	0.30			−0.8	–					83De17	
		6856.98	0.17			0.3	–			ILn		93Mi04	Z
		6857.01	0.14			0.1	–			Bdn		06Fi.A	
^{89}Y(d,p)^{90}Y		4635	5	4632.46	0.10	−0.5	U					64Wa14	
^{89}Y(n,γ)^{90}Y	ave.	6857.03	0.10	6857.03	0.10	0.0	1	100	63 ^{89}Y			average	
^{89}Y(p,γ)^{90}Zr		8351	4	8353.2	1.6	0.5	1	16	16 ^{89}Y			75Be.B	
^{90}Zr(γ,n)^{89}Zr		−11940	50	−11968	3	−0.6	U			Phi		63Ge02	
^{90}Zr(p,d)^{89}Zr		−9728	10	−9744	3	−1.6	U			Oak		71Ba43	
^{90}Zr(d,t)^{89}Zr		−5719.2	7.1	−5711	3	1.1	1	19	19 ^{89}Zr	SPa		79Bo37	
^{90}Zr(^{3}He,α)^{89}Zr		8580	50	8609	3	0.6	U			Phi		67Fo04	
^{90}Br(β^-)^{90}Kr		9800	400	10959	4	2.9	U			Stu		81Ho17	
		10280	110			6.2	C			Bwg		87Gr.B	
		10350	75			8.1	C			Bwg		92Gr.A	
^{90}Kr(β^-)^{90}Rb		4410	30	4405	7	−0.2	U					70Ma11	
		4390	40			0.4	U			Trs		78Wo15	
		4380	25			1.0	U			Bwg		87Gr.A	
^{90}Rb^x(IT)^{90}Rb		71	12				2					82Au01	
^{90}Rb(β^-)^{90}Sr		6550	60	6584	7	0.6	U			Trs		78Wo15	
		6560	150			0.2	U			Bwg		78St02	
		6585	15			−0.1	o			Gsn		80Bl.A	
		6578	15			0.4	o			Gsn		80De02	
		6587	10			−0.3	1	43	40 ^{90}Rb	Gsn		92Pr03	
^{90}Sr(β^-)^{90}Y		546	2	545.9	1.4	0.0	–					64Da16	
		546	2			0.0	–					83Ha35	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{90}Sr(β^-)^{90}Y	ave.	546.0	1.4	545.9	1.4	0.0	1	99	97 ^{90}Sr			average	
^{90}Y(β^-)^{90}Zr		2271	2	2278.5	1.6	3.7	B					61Ni02	
		2284	5			−1.1	–					64Da16	
		2273	5			1.1	–					64La13	
		2280	5			−0.3	–					66Ri01	
		2278	8			0.1	U			Gsn		80Bl.A	
		2279.5	2.9			−0.4	–					83Ha35	
	ave.	2279.2	2.0			−0.4	1	62	62 ^{90}Y			average	
^{90}Nb(β^+)^{90}Zr		6111	4	6111	3	0.0	1	69	69 ^{90}Nb			68Pe01	*
^{90}Mo(β^+)^{90}Nb		2489	4	2489	3	0.0	1	69	37 ^{90}Mo			66Pe10	*
^{90}Tc(β^+)^{90}Mo		8920	410	9448	4	1.3	U					74Ia01	*
		9270	300			0.6	U					81Ox01	*
		8726	300			2.4	U					81Ox01	*
*^{90}Nb−u	$M-A$=–82721(29) keV for mixture gs+n at 122.370 keV											Nub16b	**
*^{90}Rb−^{85}Rb$_{1.059}$	D_M=8326(9) μu for ^{90}Rb^m at 106.90 keV; $M-A$=–79260(9) keV											Nub16b	**
*^{90}Nb(β^+)^{90}Zr	E_{β^+}=1500(4) to 6$^+$ level at 3589.419 keV											Ens981	**
*^{90}Mo(β^+)^{90}Nb	E_{β^+}=1085(4) to 1$^+$ level at 382.01 keV											Ens981	**
*^{90}Tc(β^+)^{90}Mo	E_{β^+}=7900(400) from ^{90}Tc^m at 144.1 to ground state (85%) and 947.97 (15%) level											74Ia01	**
*^{90}Tc(β^+)^{90}Mo	E_{β^+}=5300(300) to 2946.82 level											Ens981	**
*^{90}Tc(β^+)^{90}Mo	E_{β^+}=6900(300) from ^{90}Tc^m at 144.0(1.7) to 2$^+$ level a 947.97 keV											Ens981	**
^{91}Se−u		−54300	186				2			GT3	2.5	16Kn03	
^{91}Rb−u		−83532	21	−83463	8	1.3	U			Pb1	2.5	89Al33	
C$_7$ H$_7$−^{91}Zr		149143.1	4.4	149135.00	0.11	−0.7	U			M15	2.5	63Ri07	
^{91}Zr−u		−94359.85	0.25	−94359.78	0.11	0.3	1	20	20 ^{91}Zr	MS1	1.0	15Gu09	
^{91}Nb−u		−93064	46	−93010	3	1.2	U			GS2	1.0	05Li24	*
^{91}Mo−C$_7$ H$_7$		−143031.3	8.3	−143030	7	0.2	1	65	65 ^{91}Mo	CP1	1.0	11Fa10	
^{91}Tc−C$_7$ H$_7$		−136340.9	6.7	−136350.3	2.5	−1.4	–			CP1	1.0	11Fa10	
		−136353.6	4.6			0.7	–			CP1	1.0	11Fa10	
	ave.	−136350	4			−0.2	1	45	45 ^{91}Tc			average	
^{91}Ru$_{1.011}$−C$_7$ H$_8$		−136730	620	−136664.6	2.4	0.1	U			CP1	1.0	11Fa10	
^{91}Ru−C$_7$ H$_7$		−128035.6	3.9	−128033.7	2.4	0.5	1	37	37 ^{91}Ru	CP1	1.0	11Fa10	
^{91}Ru$_{1.022}$−C$_7$ H$_9$		−145260	23	−145295.4	2.4	−1.5	U			CP1	1.0	11Fa10	
^{91}Kr−^{85}Rb$_{1.071}$		18279.5	2.4				2			MA8	1.0	06De36	
^{91}Rb−^{85}Rb$_{1.071}$		11003	10	11010	8	0.7	1	70	70 ^{91}Rb	MA4	1.0	02Ra23	
^{91}Sr−^{85}Rb$_{1.071}$		4702	9	4669	6	−3.7	B			MA4	1.0	02Ra23	
^{91}Tc−^{85}Rb$_{1.071}$		12898.3	5.4	12898.2	2.5	0.0	1	22	22 ^{91}Tc	SH1	1.0	08We10	
^{91}Ru−^{85}Rb$_{1.071}$		21223	11	21214.7	2.4	−0.8	–			SH1	1.0	08We10	
		21215.5	4.2			−0.2	–			JY1	1.0	08We10	
	ave.	21216	4			−0.4	1	37	37 ^{91}Ru			average	
^{91}Zr−^{87}Rb$_{1.046}$		637.32	0.19	637.39	0.11	0.4	1	35	35 ^{91}Zr	MS1	1.0	15Gu09	
^{91}Br−^{88}Rb$_{1.034}$		26098.3	3.8				2			JY1	1.0	07Ra23	
^{91}Tc−^{94}Mo$_{.968}$		10303.0	4.4	10304.1	2.5	0.2	1	33	33 ^{91}Tc	JY1	1.0	08We10	
^{91}Ru−^{94}Mo$_{.968}$		18620.9	4.7	18620.6	2.4	−0.1	1	26	26 ^{91}Ru	JY1	1.0	08We10	
^{91}Zr−^{90}Zr		942	12	941.47	0.16	0.0	U			M15	2.5	63Ri07	
^{90}Rb^x−^{91}Rb$_{.824}$ ^{85}Rb$_{.176}$		−686	24	−770	15	−1.4	U			P21	2.5	82Au01	
^{91}Zr(p,t)^{89}Zr		−10677	10	−10681	3	−0.4	U			Oak		71Ba43	
^{90}Zr(n,γ)^{91}Zr		7194.4	0.5	7194.35	0.15	−0.1	–					81Lo.A	Z
		7192.7	0.8			2.1	–			Bdn		06Fi.A	
^{90}Zr(d,p)^{91}Zr		4959	20	4969.78	0.15	0.5	U			Pit		64Co11	
		4969	8			0.1	U			MIT		72Gr12	
		4970.3	2.2			−0.2	U			SPa		79Bo37	
^{91}Zr(p,d)^{90}Zr		−4977	10	−4969.78	0.15	0.7	U			Oak		71Ba43	
^{91}Zr(d,t)^{90}Zr		−932	20	−937.12	0.15	−0.3	U			Pit		64Co11	
		−940.3	3.7			0.9	U			SPa		79Bo37	
^{90}Zr(n,γ)^{91}Zr	ave.	7193.9	0.4	7194.35	0.15	1.0	1	13	7 ^{90}Zr			average	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{90}Zr(p,γ)^{91}Nb		5167	5	5154.4	2.9	−2.5	B					71Ra08	
		5167	4			−3.1	C					75Be.B	Z
^{90}Zr(^{3}He,d)^{91}Nb		−227	20	−339.0	2.9	−5.6	B			Hei		70Kn05	
^{90}Zr(α,t)^{91}Nb		−14643	27	−14659.4	2.9	−0.6	U			Brk		71Zi03	
^{91}Ru^m(εp)^{90}Mo		4300	500				2					83Ha06	
^{91}Br(β^-)^{91}Kr		9790	100	9867	4	0.8	U			Bwg		89Gr03	
		9805	50			1.2	U			Bwg		92Gr.A	
^{91}Kr(β^-)^{91}Rb		6420	80	6771	8	4.4	B			Trs		78Wo15	
		6450	80			4.0	B			Bwg		89Gr03	
^{91}Rb(β^-)^{91}Sr		5830	45	5907	9	1.7	U			Trs		78Wo15	*
		5927	24			−0.8	o			Gsn		80De02	*
		5920	28			−0.5	–			McG		83Ia02	*
		5930	22			−1.1	–			Gsn		92Pr03	*
	ave.	5926	17			−1.1	1	26	18 ^{91}Rb			average	
^{91}Sr(β^-)^{91}Y		2669	10	2699	5	3.0	B					53Am08	*
		2684	10			1.5	–					73Ha11	*
		2704	8			−0.6	–			Gsn		80De02	*
		2709	15			−0.6	–			McG		83Ia02	
	ave.	2698	6			0.2	1	83	81 ^{91}Sr			average	
^{91}Y(β^-)^{91}Zr		1545	5	1544.3	1.8	−0.1	–					64La13	
		1544	2			0.1	–					75Ra08	
	ave.	1544.1	1.9			0.1	1	98	98 ^{91}Y			average	
^{91}Zr(p,n)^{91}Nb		−2045	6	−2039.9	2.9	0.8	–			Oak		70Ki01	
		−2038.8	3.4			−0.3	–			Kyu		71Ma47	
	ave.	−2040.3	3.0			0.1	1	98	98 ^{91}Nb			average	
^{91}Mo(β^+)^{91}Nb		4460	30	4429	7	−1.0	–					56Sm96	
		4435	23			−0.3	–					93Os06	
	ave.	4444	18			−0.8	1	14	11 ^{91}Mo			average	
^{91}Tc(β^+)^{91}Mo		6220	200	6222	7	0.0	U					74Ia01	
*^{91}Nb−u	$M-A$=–86636(30) keV for mixture gs+m at 104.60 keV											Nub16b	**
*^{91}Rb(β^-)^{91}Sr	E_{β^-}=5760(40) to ^{91}Sr ground state <8% and 93.628 keV (3/2)$^+$ level 25%											Ens13a	**
*^{91}Rb(β^-)^{91}Sr	Original error 8 corrected to 13 keV in reference											94Ha.A	**
*^{91}Rb(β^-)^{91}Sr	E_{β^-}=5857 to mixture ^{91}Sr ground state <8% and 93.628 (3/2)$^+$ level 25%											Ens13a	**
*^{91}Rb(β^-)^{91}Sr	E_{β^-}=5850(20) and E_{β^-}=5860(10) respectively, to ^{91}Sr ground state <8% and 93.628 level 25%											Ens13a	**
*^{91}Sr(β^-)^{91}Y	E_{β^-}=2665(10), 2030(20), 1359(10), 1093(10) to											53Am08	**
*	ground state, 3/2$^-$ level at 653.02 keV, (5/2)$^+$ at 1305.39, (5/2)$^-$ at 1545.90											Ens13a	**
*^{91}Sr(β^-)^{91}Y	Original error 4 increased: in disagreement with other results											AHW	**
*^{91}Sr(β^-)^{91}Y	Original error 3 corrected in reference											94Ha.A	**
^{92}Br−u		−60711	103	−60368	7	1.3	U			GT2	2.5	08Kn.A	
^{92}Rb−u		−80323	32	−80272	7	0.6	U			Pb1	2.5	89Al33	
C_7 H_8−^{92}Zr		157569.4	3.8	157564.94	0.11	−0.5	U			M15	2.5	63Ri07	
^{92}Zr−u		−94964.66	0.18	−94964.68	0.11	−0.1	1	37	37 ^{92}Zr	MS1	1.0	15Gu09	
^{92}Nb−u		−92851	56	−92811.4	1.9	0.7	U			GS2	1.0	05Li24	*
C_7 H_8−^{92}Mo		155790.0	3.2	155793.10	0.17	0.4	U			M15	2.5	63Ri07	
^{92}Mo$_{1.011}$−C_7 H_9		−164641.3	7.0	−164643.26	0.17	−0.3	U			CP1	1.0	11Fa10	
^{92}Mo−u		−93193.14	0.47	−93192.84	0.17	0.6	1	13	13 ^{92}Mo	MS1	1.0	15Gu09	
^{92}Tc−C_7 H_8		−147328	13	−147330	3	−0.2	U			CP1	1.0	11Fa10	
^{92}Tc$_{.989}$−C_7 H_7		−138569	10	−138573	3	−0.4	–			CP1	1.0	11Fa10	
^{92}Tc$_{1.011}$−C_7 H_9		−156087.6	6.1	−156088	3	0.0	–			CP1	1.0	11Fa10	
^{92}Tc$_{.989}$−C_7 H_7	ave.	−138572	5	−138573	3	−0.2	1	40	40 ^{92}Tc			average	
^{92}Ru−C_7 H_8		−142352	18	−142365.9	2.9	−0.8	o			CP1	1.0	08Fa11	
		−142352	18			−0.8	U			CP1	1.0	11Fa10	
		−142377	10			1.1	o			CP1	1.0	08Fa11	
		−142378	10			1.2	U			CP1	1.0	11Fa10	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
$^{92}Ru_{1.011}-C_7\ H_9$		−151074.5	5.6	−151068.3	2.9	1.1	o			CP1	1.0	08Fa11	
		−151074.5	5.6			1.1	1	28	28 ^{92}Ru	CP1	1.0	11Fa10	
$^{92}Rh_{1.011}-C_7\ H_9$		−138825	23	−138802	5	1.0	U			CP1	1.0	11Fa10	
		−138818	17			1.0	U			CP1	1.0	11Fa10	
$^{92}Kr-^{85}Rb_{1.082}$		21616.6	2.9				2			MA8	1.0	06De36	
$^{92}Rb-^{85}Rb_{1.082}$		15176	9	15172	7	−0.4	1	53	53 ^{92}Rb	MA4	1.0	02Ra23	
$^{92}Sr-^{85}Rb_{1.082}$		6482	9	6482	4	0.0	–			MA4	1.0	02Ra23	
		6484.0	4.3			−0.5	–			MA8	1.0	05Gu37	
	ave.	6484	4			−0.5	1	90	90 ^{92}Sr			average	
$^{92}Mo-^{85}Rb_{1.082}$		2251.43	0.85	2250.66	0.17	−0.9	U			JY1	1.0	12Ka13	
$^{92}Tc-^{85}Rb_{1.082}$		10728	12	10713	3	−1.2	U			SH1	1.0	08We10	
		10712.5	4.3			0.2	1	60	60 ^{92}Tc	JY1	1.0	08We10	
$^{92}Ru-^{85}Rb_{1.082}$		15684.3	5.7	15677.9	2.9	−1.1	–			SH1	1.0	08We10	
		15677.9	4.3			0.0	–			JY1	1.0	08We10	
	ave.	15680	3			−0.7	1	72	72 ^{92}Ru			average	
$^{92}Rh-^{85}Rb_{1.082}$		27841	37	27811	5	−0.8	U			SH1	1.0	08We10	
		27811.2	4.7				2			JY1	1.0	08We10	
$^{92}Zr-^{87}Rb_{1.057}$		1031.51	0.21	1031.50	0.11	0.0	1	27	27 ^{92}Zr	MS1	1.0	15Gu09	
$^{92}Mo-^{87}Rb_{1.057}$		2803.38	0.18	2803.34	0.17	−0.2	1	87	87 ^{92}Mo	MS1	1.0	15Gu09	
$^{92}Br-^{88}Rb_{1.045}$		32306.8	7.2				2			JY1	1.0	07Ra23	
$^{92}Zr\ ^{35}Cl-^{90}Zr\ ^{37}Cl$		3285	2	3286.67	0.18	0.2	U			H13	4.0	63Ba20	
$^{92}Zr-^{91}Zr$		−603	12	−604.90	0.10	−0.1	U			M15	2.5	63Ri07	
$^{88}Rb-^{92}Rb_{.410}\ ^{85}Rb_{.592}$		−3258	22	−3309.2	2.5	−0.9	U			P21	2.5	82Au01	
$^{89}Rb-^{92}Rb_{.553}\ ^{85}Rb_{.449}$		−3457	24	−3470	6	−0.2	U			P21	2.5	82Au01	
$^{91}Rb-^{92}Rb_{.848}\ ^{85}Rb_{.153}$		−1703	25	−1766	9	−1.0	U			P21	2.5	82Au01	
$^{90}Rb^x-^{92}Rb_{.699}\ ^{85}Rb_{.303}$		−2059	24	−2131	14	−1.2	U			P21	2.5	82Au01	
$^{90}Rb^x-^{92}Rb_{.326}\ ^{89}Rb_{.674}$		209	24	157	14	−0.9	U			P21	2.5	82Au01	
$^{92}Mo(\alpha,^{8}He)^{88}Mo$		−43278	20	−43307	4	−1.4	U			INS		90Ka01	
$^{92}Mo(p,\alpha)^{89}Nb$		−1306	50	−1319	24	−0.3	R			ANL		75Se.A	
$^{92}Mo(^{3}He,^{6}He)^{89}Mo$		−14465	15	−14455	4	0.7	U			MSU		80Pa02	
$^{92}Zr(p,t)^{90}Zr$		−7372	14	−7347.33	0.15	1.8	U			Bld		66St15	
		−7350	10			0.3	U			Oak		71Ba43	
$^{92}Mo(p,t)^{90}Mo$		−14330	30	−14297	3	1.1	U			VUn		76Ka08	
$^{92}Rb(\beta^-n)^{91}Sr$		785	15	808	8	1.5	1	26	15 ^{92}Rb			84Kr.B	
$^{91}Zr(n,\gamma)^{92}Zr$		8634.91	0.20	8634.78	0.09	−0.7	–			ILn		79Br25	Z
		8634.64	0.15			0.9	–					81Su.A	Z
		8635.00	0.24			−0.9	–			Bdn		06Fi.A	
$^{91}Zr(d,p)^{92}Zr$		6470	30	6410.21	0.09	−2.0	U					62Ma06	
		6395	20			0.8	U			Pit		64Co11	
		6410.9	4.3			−0.2	U			SPa		79Bo37	
$^{92}Zr(p,d)^{91}Zr$		−6410	11	−6410.21	0.09	0.0	U			Bld		66St15	
		−6410	10			0.0	U			Oak		71Ba43	
$^{92}Zr(d,t)^{91}Zr$		−2363	25	−2377.55	0.09	−0.6	U			Pit		64Co11	
$^{91}Zr(n,\gamma)^{92}Zr$	ave.	8634.79	0.11	8634.78	0.09	−0.1	1	75	39 ^{91}Zr			average	
$^{92}Mo(p,d)^{91}Mo$		−10446	15	−10447	6	0.0	–			Tex		73Ko03	
		−10432	25			−0.6	–			Grn		73Mo03	
	ave.	−10442	13			−0.3	1	24	24 ^{91}Mo			average	
$^{92}Br(\beta^-)^{92}Kr$		12155	100	12537	7	3.8	B			Bwg		89Gr03	
		12220	55			5.8	C			Bwg		92Gr.A	
$^{92}Kr(\beta^-)^{92}Rb$		6160	80	6003	7	−2.0	U			Trs		78Wo15	
		6045	80			−0.5	o			Bwg		89Gr03	
		5987	10			1.6	o			Bwg		92Gr.A	
		5993	27			0.4	U			Bwg		92Gr06	
$^{92}Rb(\beta^-)^{92}Sr$		8080	160	8095	6	0.1	U			Trs		78Wo15	
		8091	15			0.3	o			Gsn		80Bl.A	
		8111	15			−1.1	o			Gsn		80De02	
		8080	30			0.5	–			McG		83Ia02	
		8095	25			0.0	o			Bwg		87Gr.A	
		8096	16			−0.1	–			Bwg		92Gr.A	
		8107	15			−0.8	–			Gsn		92Pr03	
	ave.	8099	10			−0.4	1	39	32 ^{92}Rb			average	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{92}Sr(β^-)^{92}Y		1929	50	1949	9	0.4	U					57He39	*
		1930	30			0.6	–			Trs		78Wo15	*
		1920	20			1.5	–			McG		83Ia02	
	ave.	1923	17			1.6	1	32	29 ^{92}Y			average	
^{92}Y(β^-)^{92}Zr		3640	20	3643	9	0.1	–					62Bu16	
		3630	15			0.8	–			McG		83Ia02	
	ave.	3634	12			0.7	1	58	58 ^{92}Y			average	
^{92}Nb(β^+)^{92}Zr		2005	6	2005.7	1.8	0.1	U					59We30	*
		2008	6			−0.4	U					62Bu16	*
^{92}Zr(p,n)^{92}Nb		−2790.7	2.3	−2788.1	1.8	1.1	–			Kyu		74Ku01	
		−2792	5			0.8	–					75Ke12	
	ave.	−2790.9	2.1			1.4	1	73	73 ^{92}Nb			average	
^{92}Tc(β^+)^{92}Mo		7880	100	7883	3	0.0	U					64Va05	
^{92}Mo(p,n)^{92}Tc		−8672	50	−8665	3	0.1	U			Tal		66Mo06	*
^{92}Mo(^{3}He,t)^{92}Tc		−7882	30	−7901	3	−0.6	U			ChR		73Ha02	
*^{92}Nb−u	$M-A$=–86422(34) keV for mixture gs+m at 135.5 keV											Nub16b	**
*^{92}Sr(β^-)^{92}Y	E_{β^-}=545(50) 546(30) respectively, to 1$^+$ level at 1383.91 keV											Ens12a	**
*^{92}Nb(β^+)^{92}Zr	p$^+$ =56(6)×10^{-5}, 60(6)×10^{-5} respectively, to 2$^+$ level at 934.51 keV											Ens12a	**
*	recalculated Q_{β^+}=2140(6) 2143(6) respectively, from ^{92}Nb^m at 135.5 keV											AHW	**
*^{92}Mo(p,n)^{92}Tc	T=9040(50) to (4$^+$) level at 270.09 keV											Ens12a	**
^{93}Br−u		−56866	322	−56780	460	0.2	o			GT1	1.5	04Ma.A	
		−56780	185				2			GT3	2.5	16Kn03	
^{93}Rb−u		−78036	21	−77961	8	1.4	U			Pb1	2.5	89Al33	
		−77868	100			−0.4	U			GT2	2.5	08Kn.A	
C$_7$ H$_9$−^{93}Nb		164046.9	3.5	164052.1	1.6	0.6	U			M15	2.5	63Ri07	
^{93}Mo−u		−93194	30	−93191.23	0.19	0.1	U			GS2	1.0	05Li24	*
^{93}Tc−u		−89729	31	−89754.9	1.1	−0.8	U			GS2	1.0	05Li24	
^{93}Tc−C$_7$ H$_9$		−160189.5	7.7	−160180.1	1.1	1.2	U			CP1	1.0	11Fa10	
		−160170	22			−0.5	U			CP1	1.0	11Fa10	
		−160189.4	8.5			1.1	U			CP1	1.0	11Fa10	
^{93}Tc$_{.989}$−C$_7$ H$_8$		−151270	190	−151367.8	1.1	−0.5	U			CP1	1.0	11Fa10	
^{93}Ru−C$_7$ H$_9$		−153318.2	6.4	−153320.8	2.2	−0.4	–			CP1	1.0	11Fa10	
		−153307	23			−0.6	U			CP1	1.0	11Fa10	
		−153324.0	4.8			0.7	–			CP1	1.0	11Fa10	
		−153321.9	3.5			0.3	–			CP1	1.0	11Fa10	
	ave.	−153321.9	2.6			0.4	1	73	73 ^{93}Ru			average	
^{93}Rh−C$_7$ H$_9$		−144485	25	−144512.5	2.8	−1.1	o			CP1	1.0	08Fa11	
		−144485	26			−1.1	U			CP1	1.0	11Fa10	
		−144527.7	5.3			2.9	U			CP1	1.0	08Fa11	
		−144527.7	5.2			2.9	U			CP1	1.0	11Fa10	
		−144512.9	3.8			0.1	1	55	55 ^{93}Rh	CP1	1.0	11Fa10	
^{93}Kr−^{85}Rb$_{1.094}$		27649.2	2.7				2			MA8	1.0	06De36	
^{93}Rb−^{85}Rb$_{1.094}$		18549	10	18541	8	−0.8	1	71	71 ^{93}Rb	MA4	1.0	02Ra23	
^{93}Sr−^{85}Rb$_{1.094}$		10526	10	10526	8	0.0	1	66	66 ^{93}Sr	MA4	1.0	02Ra23	
^{93}Ru−^{85}Rb$_{1.094}$		13609.4	4.3	13606.5	2.2	−0.7	1	27	27 ^{93}Ru	JY1	1.0	08We10	
^{93}Rh−^{85}Rb$_{1.094}$		22428	12	22414.8	2.8	−1.1	–			SH1	1.0	08We10	
		22413.5	4.5			0.3	–			JY1	1.0	08We10	
	ave.	22415	4			−0.1	1	45	45 ^{93}Rh			average	
^{91}Rb−^{93}Rb$_{.489}$ ^{89}Rb$_{.511}$		−471	9	−479	9	−0.4	1	15	12 ^{91}Rb	P31	2.5	86Au02	
^{91}Rb−^{93}Rb$_{.326}$ ^{90}Rb$^x_{.674}$		−656	23	−627	12	0.5	U			P21	2.5	82Au01	
^{92}Rb−^{93}Rb$_{.495}$ ^{91}Rb$_{.505}$		465	23	436	8	−0.5	U			P21	2.5	82Au01	
^{93}Rb(β^-n)^{92}Sr		2220	30	2176	9	−1.5	U					84Kr.B	
^{92}Sr(n,γ)^{93}Sr		5230	6	5290	8	10.0	B					80Kr07	
^{92}Zr(n,γ)^{93}Zr		6733.7	1.1	6734.3	0.4	0.6	–					72Gr23	Z
		6734.0	0.7			0.5	–					79Ke.D	Z
		6735.3	0.7			−1.4	–			Bdn		06Fi.A	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{92}Zr(d,p)^{93}Zr		4493	20	4509.8	0.4	0.8	U			Pit		64Co11	
^{92}Zr(n,γ)^{93}Zr	ave.	6734.5	0.5	6734.3	0.4	−0.4	1	98	98 ^{93}Zr			average	
^{93}Nb(γ,n)^{92}Nb		−8780	60	−8830.9	2.0	−0.8	U			Phi		60Ge01	
		−8825	3			−2.0	1	44	27 ^{92}Nb	McM		79Ba06	
^{93}Nb(d,t)^{92}Nb		−2581	20	−2573.6	2.0	0.4	U			Pit		64Co11	
		−2571	10			−0.3	U			Tal		64Sh04	
^{92}Mo(n,γ)^{93}Mo		8067.4	1.5	8069.81	0.09	1.6	U					73Wa17	
		8066	2			1.9	U					77Ri04	
		8069.81	0.09				2			MMn		91Is02	Z
		8070.0	0.3			−0.6	U			Bdn		06Fi.A	
^{92}Mo(d,p)^{93}Mo		5853	20	5845.24	0.09	−0.4	U			Pit		64Co11	
^{92}Mo(p,γ)^{93}Tc		4081	5	4086.5	1.0	1.1	U					75Be.B	
		4086.5	1.0				2					83Ay01	
^{92}Mo(^{3}He,d)^{93}Tc		−1411	4	−1407.0	1.0	1.0	U			Hei		83Wi.A	
^{93}Kr(β^-)^{93}Rb		8700	500	8484	8	−0.4	U			Trs		78Wo15	
		8600	100			−1.2	U			Bwg		87Gr.A	
^{93}Rb(β^-)^{93}Sr		7560	120	7466	9	−0.8	U			Trs		78Wo15	
		7488	15			−1.5	o			Gsn		80Bl.A	
		7485	15			−1.3	o			Gsn		80De02	
		7440	30			0.9	–			McG		83Ia02	
		7455	35			0.3	–			Bwg		87Gr.A	
		7456	15			0.7	–			Gsn		92Pr03	
	ave.	7453	13			1.0	1	50	26 ^{93}Rb			average	
^{93}Sr(β^-)^{93}Y		4130	100	4141	12	0.1	U			Bwg		78St02	
		4110	20			1.6	1	34	24 ^{93}Y	McG		83Ia02	
^{93}Y(β^-)^{93}Zr		2890	20	2895	10	0.2	–					59Kn38	
		2880	15			1.0	–			McG		83Ia02	
	ave.	2884	12			0.9	1	76	76 ^{93}Y			average	
^{93}Zr(β^-)^{93}Nb		93.8	2.	90.8	1.5	−1.5	1	55	53 ^{93}Nb			53Gl.A	*
^{93}Mo(ε)^{93}Nb		158	15	405.8	1.5	16.5	B					64Ho08	*
^{93}Nb(p,n)^{93}Mo		−1188	10	−1188.1	1.5	0.0	U					68Fi01	
		−1190	5			0.4	U					75Ch05	
^{93}Tc(β^+)^{93}Mo		3185.1	5.	3201.0	1.0	3.2	B					51Bo48	*
		3192.1	3.			3.0	B					74An24	*
^{93}Ru(β^+)^{93}Tc		6337	85	6389.4	2.3	0.6	U					83Ay01	
*^{93}Mo−u	$M-A$=–84385(28) keV for ^{93}Mo^m at 2424.95 keV											Ens115	**
*^{93}Zr(β^-)^{93}Nb	E_{β^-}=63(2) to 1/2$^-$ level at 30.77 keV											Ens115	**
*^{93}Mo(ε)^{93}Nb	L/K=0.36(0.04) to 1/2$^-$ level at 30.82 keV, recalculated Q											Ens115	**
*^{93}Tc(β^+)^{93}Mo	E_{β^+}=800(5) 807(3) respectively, to 7/2$^+$ level 1363.048 keV											Ens115	**
^{94}Br−u		−50242	429	−50890#	320#	−0.6	D			GT3	2.5	16Kn03	*
^{94}Kr−u		−66238	247	−65860	13	1.0	U			GT1	1.5	04Ma.A	
^{94}Kr−^{85}Rb$_{1.106}$		31701	13				2			MA8	1.0	06De36	
		31665	24	31701	13	1.5	U			MA8	1.0	10Na13	
		31649	97			0.5	U			MA9	1.0	10Na13	*
^{94}Rb−u		−73602	54	−73605.2	2.2	0.0	F			Pb1	2.5	89Al33	*
^{94}Rb−^{85}Rb$_{1.106}$		23958	10	23955.4	2.2	−0.3	U			MA4	1.0	02Ra23	
		23955.6	2.6			−0.1	1	70	70 ^{94}Rb	TT1	1.0	12Si10	*
^{94}Sr−^{85}Rb$_{1.106}$		12924	10	12916.2	1.8	−0.8	U			MA4	1.0	02Ra23	
		12916.0	1.8			0.1	1	98	98 ^{94}Sr	TT1	1.0	12Si10	*
C_7 H_{10}−^{94}Zr		171929.4	3.9	171937.80	0.18	0.9	U			M15	2.5	63Ri07	
^{94}Zr−u		−93687.34	0.20	−93687.48	0.18	−0.7	1	77	77 ^{94}Zr	MS1	1.0	15Gu09	
^{94}Mo−^{85}Rb$_{1.106}$		2645.6	1.0	2644.14	0.15	−1.5	U			JY1	1.0	12Ka13	
C_7 H_{10}−^{94}Mo		173159.6	3.2	173166.73	0.15	0.9	U			M15	2.5	63Ri07	
^{94}Mo−u		−94916.31	0.42	−94916.41	0.15	−0.2	1	13	13 ^{94}Mo	MS1	1.0	15Gu09	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{94}Tc−u		−90362	39	−90348	4	0.4	U			GS2	1.0	05Li24	*
^{94}Ru−^{85}Rb$_{1.106}$		8891	25	8903	3	0.5	U			SH1	1.0	08We10	
		8907.1	4.5			−0.8	1	56	56 ^{94}Ru	JY1	1.0	08We10	
^{94}Ru−C$_7$ H$_{10}$		−166912.2	5.1	−166907	3	0.9	1	44	44 ^{94}Ru	CP1	1.0	11Fa10	
^{94}Rh−^{85}Rb$_{1.106}$		19291.2	4.6	19291	4	0.0	1	62	62 ^{94}Rh	JY1	1.0	08We10	
^{94}Rh−C$_7$ H$_{10}$		−156520.2	5.9	−156520	4	0.1	1	38	38 ^{94}Rh	CP1	1.0	11Fa10	
^{94}Rh$_{.989}$−C$_7$ H$_9$		−147834	30	−147834	4	0.0	U			CP1	1.0	11Fa10	
^{94}Kr−^{86}Kr$_{1.093}$		31710	110	31843	13	1.2	U			MA9	1.0	10Na13	
^{94}Zr−^{87}Rb$_{1.080}$		4397.13	0.37	4397.55	0.18	1.1	1	23	23 ^{94}Zr	MS1	1.0	15Gu09	
^{94}Mo−^{87}Rb$_{1.080}$		3168.68	0.35	3168.62	0.15	−0.2	1	19	19 ^{94}Mo	MS1	1.0	15Gu09	
^{94}Rb−^{88}Rb$_{1.068}$		21109.1	4.0	21109.8	2.2	0.2	1	30	30 ^{94}Rb	JY1	1.0	07Ra23	
^{94}Zr ^{35}Cl−^{92}Zr ^{37}Cl		4235.0	2.	4227.31	0.22	−1.0	U			H13	4.0	63Ba20	
^{94}Mo ^{35}Cl−^{92}Mo ^{37}Cl		1234.0	2.	1226.55	0.24	−0.9	U			H11	4.0	63Bi12	
^{94}Pd−^{94}Mo		23952.7	4.6				2			JY1	1.0	08We10	
^{92}Rb−^{94}Rb$_{.587}$ ^{89}Rb$_{.413}$		−764	24	−779	7	−0.2	U			P21	2.5	82Au01	Y
^{92}Rb−^{94}Rb$_{.489}$ ^{90}Rb$^x_{.511}$		−717	23	−726	9	−0.2	U			P21	2.5	82Au01	Y
^{93}Rb−^{94}Rb$_{.742}$ ^{90}Rb$^x_{.258}$		−1296	25	−1289	9	0.1	U			P21	2.5	82Au01	Y
^{93}Rb−^{94}Rb$_{.495}$ ^{92}Rb$_{.505}$		−840	40	−921	8	−0.8	F			P31	2.5	86Au02	*
^{94}Zr(d,α)^{92}Y		8278	25	8258	9	−0.8	1	13	13 ^{92}Y	Grn		74Gi09	
^{94}Zr(p,t)^{92}Zr		−6466	12	−6471.13	0.19	−0.4	U			Bld		66St15	
		−6470	10			−0.1	U			Oak		71Ba43	
^{94}Ag^n(2p)^{92}Rh		3449	100	2500#	300#	−9.5	F					06Mu03	*
^{94}Rb(β^-n)^{93}Sr		3580	80	3452	8	−1.6	U					84Kr.B	
^{94}Zr(p,d)^{93}Zr		−5983	15	−5994.0	0.5	−0.7	U			Bld		66St15	
		−6000	10			0.6	U			Oak		71Ba43	
^{94}Zr(d,t)^{93}Zr		−1969	20	−1961.4	0.5	0.4	U			Pit		64Co11	
		−1960.2	2.4			−0.5	U			SPa		79Bo37	
^{93}Nb(n,γ)^{94}Nb		7229.13	0.12	7227.54	0.08	−13.2	C					84Bo.C	
		7227.51	0.09			0.3	–			MMn		88Ke09	Z
		7227.63	0.15			−0.6	–			Bdn		06Fi.A	
	ave.	7227.54	0.08			0.0	1	100	69 ^{94}Nb			average	
^{94}Mo(d,t)^{93}Mo		−3441	20	−3421.08	0.23	1.0	U			Pit		64Co11	
^{94}Ag^n(p)^{93}Pd		5780	30	5790	17	0.3	4					05Mu15	*
		5794	20			−0.2	4					09Ce04	*
^{94}Rb(β^-)^{94}Sr		10304	20	10282.9	2.6	−1.1	o			Gsn		80Bl.A	
		10322	100			−0.4	o			Gsn		80De02	*
		10353	140			−0.5	U			Trs		82Br23	*
		10335	45			−1.2	U			Bwg		82Pa24	*
		10312	20			−1.5	U			Gsn		92Pr03	*
^{94}Sr(β^-)^{94}Y		3512	10	3506	6	−0.6	1	41	40 ^{94}Y	Gsn		80De02	*
^{94}Y(β^-)^{94}Zr		4920	9	4918	6	−0.2	1	50	50 ^{94}Y	Gsn		80De02	*
^{94}Nb(β^-)^{94}Mo		2043.3	6.	2045.0	1.5	0.3	–					66Sn02	*
		2046.3	3.			−0.4	–					68Ho10	*
	ave.	2045.7	2.7			−0.3	1	31	31 ^{94}Nb			average	
^{94}Tc(β^+)^{94}Mo		4261	5	4256	4	−1.1	2					64Ha29	*
^{94}Mo(p,n)^{94}Tc		−5027.8	7.	−5038	4	−1.5	2					73Mc04	*
^{94}Rh(β^+)^{94}Ru		9930	400	9676	5	−0.6	U					80Ox01	*
		9750	320			−0.2	U					06Ba55	
^{94}Pd(β^+)^{94}Rh		6700	320	6805	5	0.3	U					06Ba55	
^{94}Ag^n(β^+)^{94}Pd		17700	500	20180#	300#	5.0	D					04Mu30	*

*^{94}Br−u	Trends from Mass Surface TMS suggest ^{94}Br 600 more bound	GAu	**
*^{94}Kr−^{85}Rb$_{1.106}$	Typo in original paper, ratio should read 1.006 255 64(1 14)	GAu	**
*^{94}Rb−u	F : possibly isomeric mixture	92Al.B	**
*^{94}Rb−^{85}Rb$_{1.106}$	D_M=23956.4(2.6) μu $M-A$=–68561.8(2.4)keV corrected for e$^-$ binding=–775eV	12Si10	**
*^{94}Sr−^{85}Rb$_{1.106}$	D_M=12916.7(1.8) μu $M-A$=–78845.2(1.7)keV corrected for e$^-$ binding=–625eV	12Si10	**
*^{94}Tc−u	$M-A$=–84133(29) keV for mixture gs+m at 76(3) keV	Nub16b	**
*^{93}Rb−^{94}Rb$_{.495}$ ^{92}Rb$_{.505}$	F : rejection based on line-shape analysis	86Au02	**
*^{94}Ag^n(2p)^{92}Rh	Q_{2p}=1900(100) to (11$^+$) level at 1548.6 keV	Ens12a	**
*^{94}Ag^n(2p)^{92}Rh	F : no evidence from He-jet experiment	09Ce04	**
*^{94}Ag^n(2p)^{92}Rh	F : possibly misidentified ^{92}Rh γ rays	09Je05	**
*^{94}Ag^n(p)^{93}Pd	E_p=790(30), 1010(30) to (33/2$^+$) at 4995.6, (33/2$^-$,35/2$^-$) at 4752.7	Ens115	**
*^{94}Ag^n(p)^{93}Pd	E_p=790(20) to level (33/2$^+$) at 4995.6 keV	Ens115	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item			
$*^{94}$Rb(β^-)^{94}Sr	Original value 10304(30) corrected in reference	94Ha.A	**
$*^{94}$Rb(β^-)^{94}Sr	Original error 100 keV increased by 100 in reference for lower level feeding	94Ha.A	**
$*^{94}$Rb(β^-)^{94}Sr	As corrected in reference	87Gr.A	**
$*^{94}$Rb(β^-)^{94}Sr	E_{β^-}=9475(20) to 2^+ level at 836.91 keV	Ens116	**
$*^{94}$Sr(β^-)^{94}Y	Original error 6 corrected in reference	94Ha.A	**
$*^{94}$Y(β^-)^{94}Zr	Original error 5 corrected in reference	94Ha.A	**
$*^{94}$Nb(β^-)^{94}Mo	E_{β^-}=470(6) 473(3) respectively, to level 4^+ at 1573.76 keV	Ens069	**
$*^{94}$Tc(β^+)^{94}Mo	E_{β^+}=816(5) to 6^+ level at 2423.45 keV	Ens069	**
$*^{94}$Mo(p,n)^{94}Tc	T=5158(7) to ^{94}Tc^m at 76(3) keV	Nub16b	**
$*^{94}$Rh(β^+)^{94}Ru	E_{β^+}=6400(400) to (3,4,5) level at 2503.2 keV	Ens069	**
$*^{94}$Ag^n(β^+)^{94}Pd	Q_{β^+} larger than 17.7 MeV, uncertainty not given	04Mu30	**
$*^{94}$Ag^n(β^+)^{94}Pd	Trends from Mass Surface TMS suggest ^{94}Ag^n 2480 less bound	GAu	**

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{95}Kr$-$u		$-$60183	150	$-$60289	20	$-$0.5	U			GT1	1.5	04Ma.A	
^{95}Kr$-^{85}$Rb$_{1.118}$		38330	20				2			MA8	1.0	06De36	
^{95}Rb$-$u		$-$70618	86	$-$70737	22	$-$0.6	U			Pb1	2.5	89Al33	
^{95}Sr$-^{85}$Rb$_{1.118}$		17987	10	17975	6	$-$1.2	1	39	39 ^{95}Sr	MA4	1.0	02Ra23	
^{95}Mo$-^{85}$Rb$_{1.118}$		4457.6	1.0	4456.52	0.13	$-$1.1	U			JY1	1.0	12Ka13	
C$_7$ H$_{11}-^{95}$Mo		180236.5	3.5	180237.91	0.13	0.2	U			M15	2.5	63Ri07	
^{95}Mo$-$u		$-$94161.96	0.38	$-$94162.56	0.13	$-$1.6	1	12	12 ^{95}Mo	MS1	1.0	15Gu09	
^{95}Tc$-$u		$-$92417	32	$-$92348	5	2.2	U			GS2	1.0	05Li24	*
^{95}Rh$-^{85}$Rb$_{1.118}$		14515.1	4.5	14517	4	0.4	1	86	86 ^{95}Rh	JY1	1.0	08We10	
^{95}Rh$_{.989}-$C$_7$ H$_{10}$		$-$161416	11	$-$161427	4	$-$1.0	1	14	14 ^{95}Rh	CP1	1.0	11Fa10	
^{95}Mo$-^{87}$Rb$_{1.092}$		5012.33	0.44	5012.30	0.13	$-$0.1	U			MS1	1.0	15Gu09	
^{95}Sr$-^{97}$Zr$_{.979}$		6529	10	6529	6	0.0	1	39	39 ^{95}Sr	JY1	1.0	06Ha03	
^{95}Y$-^{97}$Zr$_{.979}$		$-$32.4	6.7	$-$9	7	3.6	B			JY1	1.0	07Ha32	
^{95}Pd$-^{94}$Mo$_{1.011}$		20848.9	4.7	20849	3	0.0	2			JY1	1.0	08We10	
		20849.1	4.5			0.0	2			JY1	1.0	08We10	*
^{95}Mo$-^{94}$Mo		757	12	753.85	0.10	$-$0.1	U			M15	2.5	63Ri07	
^{93}Rb$-^{95}$Rb$_{.653}$ ^{89}Rb$_{.348}$		$-$1323	25	$-$1157	15	2.7	U			P21	2.5	82Au01	
^{93}Rb$-^{95}$Rb$_{.587}$ ^{90}Rb$^x_{.413}$		$-$1376	24	$-$1193	15	3.0	B			P21	2.5	82Au01	
^{94}Rb$-^{95}$Rb$_{.792}$ ^{90}Rb$^x_{.209}$		$-$16	28	196	16	3.0	B			P21	2.5	82Au01	Y
^{92}Rb$-^{95}$Rb$_{.242}$ ^{91}Rb$_{.758}$		80	23	104	10	0.4	U			P21	2.5	82Au01	
^{93}Rb$-^{95}$Rb$_{.489}$ ^{91}Rb$_{.511}$		$-$654	12	$-$671	13	$-$0.6	F			P31	2.5	86Au02	*
^{94}Rb$-^{95}$Rb$_{.660}$ ^{92}Rb$_{.341}$		433	15	423	14	$-$0.3	1	13	13 ^{95}Rb	P31	2.5	86Au02	
		462	28			$-$0.6	U			P31	2.5	86Au02	
^{95}Mo(n,α)^{92}Zr		6405	30	6393.57	0.16	$-$0.4	U			ILL		75Em04	
^{95}Rb(β^-n)^{94}Sr		5120	100	4883	20	$-$2.4	U					84Kr.B	
^{94}Zr(n,γ)^{95}Zr		6461.6	1.0	6461.9	0.9	0.3	–					79Ke.D	Z
		6357.8	0.3			347.1	F			Bdn		06Fi.A	*
		6460.3	0.5			3.3	C			Bdn		08Fi.A	*
^{94}Zr(d,p)^{95}Zr		4223	20	4237.4	0.9	0.7	U			Pit		64Co11	
		4237.4	2.0			0.0	–			SPa		79Bo37	
^{94}Zr(n,γ)^{95}Zr	ave.	6461.7	0.9	6461.9	0.9	0.3	1	92	91 ^{95}Zr			average	
^{94}Mo(n,γ)^{95}Mo		7367	2	7369.11	0.09	1.1	U					77Ri04	
		7369.10	0.10			0.1	1	89	68 ^{94}Mo	MMn		91Is02	Z
		7368.4	0.5			1.4	U			Bdn		06Fi.A	
^{94}Mo(d,p)^{95}Mo		5137	20	5144.54	0.09	0.4	U			Pit		64Co11	
^{95}Pd(εp)^{94}Ru		5116	300	5329	4	0.7	U					82Ku15	*
^{95}Rb(β^-)^{95}Sr		9224	30	9228	20	0.1	o			Gsn		80Bl.A	
		9276	100			$-$0.5	o			Gsn		80De02	*
		9300	30			$-$2.4	C			Gsn		84Bl.A	
		9280	45			$-$1.2	–			Bwg		87Gr.A	
		9272	35			$-$1.3	–			Gsn		92Pr03	
	ave.	9275	28			$-$1.7	1	53	51 ^{95}Rb			average	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.		Lab	F	Reference	
^{95}Sr(β^-)^{95}Y		6110	150	6089	7	−0.1	U						70Ma.A	
		6060	100			0.3	U				Bwg		78St02	
		6082	10			0.7	1	52	32	^{95}Y	Gsn		84Bl.A	
		6052	25			1.5	U						90Ma03	
^{95}Y(β^-)^{95}Zr		4445	9	4451	7	0.7	1	57	56	^{95}Y	Gsn		80De02	∗
^{95}Zr(β^-)^{95}Nb		1125	8	1126.3	1.0	0.2	U						54Za05	
		1119	5			1.5	U						55Dr43	
		1122.7	3.			1.2	1	11	8	^{95}Zr			74An22	∗
^{95}Nb(β^-)^{95}Mo		925.5	0.5	925.6	0.5	0.2	1	98	97	^{95}Nb			63La06	∗
^{95}Tc(β^+)^{95}Mo		1683	10	1691	5	0.8	–						65Cr04	∗
		1693	6			−0.4	–						74An05	∗
^{95}Mo(p,n)^{95}Tc		−2440	30	−2473	5	−1.1	U						57Le27	
		−2490	6			2.9	B				Oak		70Ki01	
^{95}Tc(β^+)^{95}Mo	ave.	1690	5	1691	5	0.0	1	97	97	^{95}Tc			average	
^{95}Ru(β^+)^{95}Tc		2558	30	2564	11	0.2	1	12	10	^{95}Ru			68Pi03	∗
^{95}Rh(β^+)^{95}Ru		5110	150	5117	10	0.0	U						75We03	∗
∗^{95}Tc−u	$M-A$=–86066(28) keV for mixture gs+m at 38.91 keV												Nub16b	∗∗
∗^{95}Pd−^{94}Mo$_{1.011}$	D_M=22862.1(4.5) μu for ^{95}Pd^m at 1875.13 keV; $M-A$=–68090.2(4.4) keV												Nub16b	∗∗
∗^{93}Rb−^{95}Rb$_{.489}$ ^{91}Rb$_{.511}$	F : Rejected by authors												86Au02	∗∗
∗^{94}Zr(n,γ)^{95}Zr	F : value from 06Fi.A retracted												08Fi.A	∗∗
∗^{94}Zr(n,γ)^{95}Zr	Weak evidence												08Fi.A	∗∗
∗^{95}Pd(εp)^{94}Ru	E_p=4300(300) from ^{95}Pd^m at 1875.13 to ^{94}Ru^m at 2644.1 keV												Nub16b	∗∗
∗	same E_p; both from figures												82No06	∗∗
∗^{95}Rb(β^-)^{95}Sr	E_{β^-}=8595(100) to (3/2$^+$,5/2$^+$) level at 680.70, corrected in reference												92Pr03	∗∗
∗^{95}Y(β^-)^{95}Zr	Original error 5 corrected in reference												94Ha.A	∗∗
∗	Q_{β^-}=4417(10) given by same group, not used												84Bl.A	∗∗
∗^{95}Zr(β^-)^{95}Nb	E_{β^-}=887(3) to 1/2$^-$ level at 235.69 keV												Ens10a	∗∗
∗^{95}Nb(β^-)^{95}Mo	E_{β^-}=159.7(0.5) to 7/2$^+$ level at 765.803 keV												Ens10a	∗∗
∗^{95}Tc(β^+)^{95}Mo	E_{β^+}=700(10) 710(6) respectively, from ^{95}Tc^m at 38.91 keV												Nub16b	∗∗
∗^{95}Ru(β^+)^{95}Tc	E_{β^+}=1200(30) to 7/2$^+$ level at 336.413 keV												Ens10a	∗∗
∗^{95}Rh(β^+)^{95}Ru	E_{β^+}=3150(150) to 7/2$^+$ level at 941.79 keV												Ens10a	∗∗
^{96}Kr−^{85}Rb$_{1.129}$		42606	22				2				MA8	1.0	10Na13	
^{96}Rb−u		−65508	43	−65867	4	−3.3	F				Pb1	2.5	89Al33	∗
^{96}Zr−^{87}Rb$_{1.103}$		8451.49	0.34	8451.50	0.12	0.0	1	13	13	^{96}Zr	MS1	1.0	15Gu09	
C$_7$ H$_{12}$−^{96}Zr		185628	6	185622.77	0.12	−0.3	U				M15	2.5	63Ri07	
^{96}Zr−u		−91691	43	−91722.38	0.12	−0.7	U				JY0	1.0	04Ri12	
		−91722.60	0.17			1.3	1	52	52	^{96}Zr	MS1	1.0	15Gu09	
^{96}Mo−^{85}Rb$_{1.129}$		4265.7	1.1	4264.16	0.13	−1.4	U				JY1	1.0	12Ka13	
^{96}Mo−^{87}Rb$_{1.103}$		4848.96	0.43	4848.65	0.13	−0.7	U				MS1	1.0	15Gu09	
C$_7$ H$_{12}$−^{96}Mo		189226.9	3.0	189225.61	0.13	−0.2	U				M15	2.5	63Ri07	
^{96}Mo−u		−95324.94	0.47	−95325.23	0.13	−0.6	U				MS1	1.0	15Gu09	
^{96}Tc−u		−92192	32	−92133	6	1.8	U				GS2	1.0	05Li24	∗
C$_7$ H$_{12}$−^{96}Ru		186304.6	3.8	186311.47	0.18	0.7	U				M16	2.5	63Da10	
^{96}Rb−^{88}Rb$_{1.091}$		30887.7	3.6	30888	4	0.1	1	100	100	^{96}Rb	JY1	1.0	07Ra23	
^{96}Zr ^{35}Cl−^{94}Zr ^{37}Cl		4929	3	4915.21	0.22	−1.1	U				H13	4.0	63Ba20	
^{96}Mo ^{35}Cl−^{94}Mo ^{37}Cl		2539	2	2541.29	0.13	0.3	U				H11	4.0	63Bi12	
^{96}Pd−^{94}Mo$_{1.021}$		15123.4	4.5				2				JY1	1.0	08We10	
^{96}Sr−^{97}Zr$_{.990}$		9868	10	9865	9	−0.3	1	83	83	^{96}Sr	JY1	1.0	06Ha03	
^{96}Y−^{97}Zr$_{.990}$		4053.7	6.8	4055	7	0.2	1	92	92	^{96}Y	JY1	1.0	07Ha32	
^{96}Y^m−^{97}Zr$_{.990}$		5708.1	6.7				2				JY1	1.0	07Ha32	
^{96}Mo−^{97}Mo$_{.990}$		−2280.5	5.8	−2281.96	0.17	−0.3	U				JY1	1.0	06Ka48	
^{96}Zr−^{96}Nb		176.02	0.13	176.03	0.11	0.1	1	68	63	^{96}Nb	JY1	1.0	16Al03	
^{96}Zr−^{96}Mo		3602.919	0.092	3602.85	0.08	−0.8	1	75	46	^{96}Mo	JY1	1.0	16Al03	
^{96}Nb−^{96}Mo		3426.80	0.17	3426.82	0.11	0.1	1	46	37	^{96}Nb	JY1	1.0	16Al03	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.		Lab	F	Reference	
^{96}Ru$-^{96}$Mo		2914.14	0.13	2914.14	0.13	0.0	1	100	100	^{96}Ru	SH1	1.0	11El04	
^{96}Mo$-^{95}$Mo		−1161	12	−1162.67	0.05	−0.1	U				M15	2.5	63Ri07	
^{93}Rb$-^{96}$Rb$_{.554}$ ^{89}Rb$_{.448}$		−2210	27	−2022	8	2.8	U				P21	2.5	82Au01	
^{95}Rb$-^{96}$Rb$_{.848}$ ^{89}Rb$_{.152}$		−1590	30	−1443	20	2.0	U				P21	2.5	82Au01	
^{94}Rb$-^{96}$Rb$_{.699}$ ^{89}Rb$_{.302}$		−1250	30	−999	4	3.3	B				P21	2.5	82Au01	Y
^{94}Rb$-^{96}$Rb$_{.588}$ ^{91}Rb$_{.413}$		−380	25	−378	4	0.0	U				P21	2.5	82Au01	
^{95}Rb$-^{96}$Rb$_{.742}$ ^{92}Rb$_{.258}$		−1116	27	−1075	20	0.6	U				P21	2.5	82Au01	
		−1143	16			1.7	1	26	26	^{95}Rb	P31	2.5	86Au02	
^{96}Zr(d,α)^{94}Y		7609	20	7623	6	0.7	1	10	10	^{94}Y	Grn		74Gi09	
^{96}Zr(p,t)^{94}Zr		−5825	10	−5830.36	0.20	−0.5	U				Oak		71Ba43	
^{96}Ru(p,t)^{94}Ru		−11165	10	−11158	3	0.7	U				Oak		71Ba01	
^{96}Zr(t,α)^{95}Y		8294	20	8295	7	0.0	1	11	11	^{95}Y	LAl		83Fl06	
^{96}Zr(p,d)^{95}Zr		−5440	20	−5625.7	0.9	−9.3	B				Bld		67St24	
		−5630	10			0.4	U				Oak		71Ba43	
^{96}Zr(d,t)^{95}Zr		−1603	20	−1593.0	0.9	0.5	U				Pit		64Co11	
		−1595.8	2.8			1.0	U				SPa		79Bo37	
^{96}Mo(t,α)^{95}Nb		10524	20	10516.3	0.5	−0.4	U				LAl		83Fl06	
^{95}Mo(n,γ)^{96}Mo		9154.2	0.5	9154.33	0.05	0.3	U						70He27	
		9154.32	0.05			0.3	1	96	67	^{95}Mo	MMn		91Is02	Z
		9153.90	0.20			2.2	U				Bdn		06Fi.A	
^{96}Mo(d,t)^{95}Mo		−2923	20	−2897.11	0.05	1.3	U				Pit		64Co11	
^{96}Ru(p,d)^{95}Ru		−8470	10	−8469	10	0.1	1	90	90	^{95}Ru	Oak		71Ba01	
^{96}Ag(εp)^{95}Rh		6540	90				2						03Ba39	*
^{96}Rb(β^-)^{96}Sr		10800	220	11570	9	3.5	B						79Pe17	
		11303	250			1.1	o				Gsn		80De02	
		11547	100			0.2	U				Trs		82Br23	
		11553	45			0.4	U				Gsn		84Bl.A	
		11590	80			−0.3	U				Bwg		87Gr.A	
		11709	40			−3.5	B				Gsn		92Pr03	*
^{96}Sr(β^-)^{96}Y		5332	30	5412	10	2.7	F						79Pe17	*
		5413	22			−0.1	–				Gsn		80De02	*
		5345	50			1.3	U				Bwg		87Gr.A	
		5354	40			1.4	–						90Ma03	
	ave.	5399	19			0.6	1	25	17	^{96}Sr			average	
^{96}Y(β^-)^{96}Zr		7120	50	7103	6	−0.3	U				Gsn		80De02	*
		7030	70			1.0	U				Bwg		87Gr.A	
		7067	30			1.2	U						90Ma03	*
^{96}Y^m(β^-)^{96}Zr		8030	150	8643	6	4.1	C				Bwg		87Gr.A	
		8600	200			0.2	U						88St.A	
		8237	21			19.3	C				Bwg		92Gr.A	
^{96}Nb(β^-)^{96}Mo		3186.8	3.2	3192.06	0.11	1.6	U						68An03	*
^{96}Mo(p,n)^{96}Tc		−3760	10	−3756	5	0.4	2						74Do09	
		−3754	6			−0.3	2						78Ke10	
^{96}Rh(β^+)^{96}Ru		6472	200	6393	10	−0.4	U						75Gu01	*
^{96}Ru(p,n)^{96}Rh		−7175	10				2						70As08	Z
^{96}Pd(β^+)^{96}Rh		3450	150	3504	11	0.4	U						85Ry02	*
*^{96}Rb−u		F : possibly isomeric mixture											92Al.B	**
*^{96}Tc−u		$M-A$=–85860(28) keV for mixture gs+m at 34.23 keV											Nub16b	**
*^{96}Ag(εp)^{95}Rh		Original 6430(60) corrected by –110 keV for mixture of two β-decaying ^{96}Ag											03Ba39	**
*		states, to two isomeric states in ^{95}Rh											03Ba39	**
*^{96}Rb(β^-)^{96}Sr		E_{β^-}=10894(40) to 2$^+$ level at 814.93 keV											Ens08a	**
*^{96}Sr(β^-)^{96}Y		E_{β^-}=4400(30) to 1$^+$ level at 931.70 keV, and other E_{β^-}											Ens08a	**
*^{96}Sr(β^-)^{96}Y		F : all other results of reference are strongly conflicting											79Pe17	**
*^{96}Sr(β^-)^{96}Y		Original error 20 corrected in reference											94Ha.A	**
*		Q_{β^-}=5362(10) given by same group, not used											84Bl.A	**
*^{96}Y(β^-)^{96}Zr		Q_{β^-}=7079(15) given by same group, not used											84Bl.A	**
*^{96}Y(β^-)^{96}Zr		E_{β^-}=5326(36) to 2$^+$ level at 1750.497 keV, and other E_{β^-}											Ens08a	**
*^{96}Nb(β^-)^{96}Mo		E_{β^-}=748.4(3.1) to 5$^+$ level at 2438.477 keV											Ens08a	**
*^{96}Rh(β^+)^{96}Ru		E_{β^+}=3300(200) to 6$^+$ level at 2149.74 keV											Ens08a	**
*^{96}Pd(β^+)^{96}Rh		p$^+$ =0.257(0.03) to 1$^+$ level at 1274.78 keV											Ens08a	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{97}Kr$-^{86}$Kr$_{1.128}$		49920	140				2			MA9	1.0	10Na13	
^{97}Rb$-$u		$-$62512	64	$-$62822.9	2.1	$-$1.9	U			Pb1	2.5	89Al33	
^{97}Rb$-^{88}$Rb$_{1.102}$		34908.0	5.7	34907.3	2.1	$-$0.1	1	13	13 ^{97}Rb	JY1	1.0	07Ra23	
^{97}Rb$-^{85}$Rb$_{1.141}$		37824.9	2.2	37825.0	2.1	0.1	1	87	87 ^{97}Rb	TT1	1.0	12Si10	*
^{97}Sr$-^{85}$Rb$_{1.141}$		27022.9	3.9	27023	4	$-$0.1	1	87	87 ^{97}Sr	TT1	1.0	12Si10	*
^{97}Sr$-$u		$-$73599	99	$-$73625	4	$-$0.1	U			GT2	2.5	08Kn.A	
^{97}Mo$-^{85}$Rb$_{1.141}$		6666.9	1.2	6664.82	0.18	$-$1.7	U			JY1	1.0	12Ka13	
^{97}Mo$-^{87}$Rb$_{1.115}$		7280.86	0.39	7280.61	0.18	$-$0.6	1	21	21 ^{97}Mo	MS1	1.0	15Gu09	
C_5 H_5 O_2-^{97}Mo		122937.6	2.3	122937.50	0.18	0.0	U			M15	2.5	63Ri07	
^{97}Mo$-$u		$-$93982.95	0.36	$-$93983.10	0.18	$-$0.4	1	24	24 ^{97}Mo	MS1	1.0	15Gu09	
^{97}Ru$-$u		$-$92471	30	$-$92454.2	3.0	0.6	U			GS2	1.0	05Li24	
^{97}Pd$-^{85}$Rb$_{1.141}$		17119.9	5.2				2			JY1	1.0	09El08	
^{97}Mo ^{35}Cl$-^{95}$Mo ^{37}Cl		3138	2	3129.57	0.19	$-$1.1	U			H11	4.0	63Bi12	
^{97}Sr$-^{97}$Zr		15416	10	15417	4	0.1	1	13	13 ^{97}Sr	JY1	1.0	06Ha03	
^{97}Y$-^{97}$Zr		7322.9	7.2				2			JY1	1.0	07Ha32	*
^{97}Mo$-^{96}$Mo		1346	12	1342.13	0.18	$-$0.1	U			M15	2.5	63Ri07	
^{94}Rb$-^{97}$Rb$_{.485}$ ^{91}Rb$_{.516}$		$-$21	25	$-$65	5	$-$0.7	U			P21	2.5	82Au01	Y
^{96}Rb$-^{97}$Rb$_{.792}$ ^{92}Rb$_{.209}$		650	30	620	4	$-$0.4	U			P21	2.5	82Au01	
^{95}Rb$-^{97}$Rb$_{.490}$ ^{93}Rb$_{.511}$		$-$165	25	$-$108	21	0.9	1	11	10 ^{95}Rb	P21	2.5	82Au01	
^{96}Rb$-^{97}$Rb$_{.742}$ ^{93}Rb$_{.258}$		848	19	803	4	$-$1.0	U			P31	2.5	86Au02	
^{96}Zr(n,γ)^{97}Zr		5574	5	5575.1	0.4	0.2	U					77Ba33	
		5575.1	0.4			0.1	1	99	99 ^{97}Zr	Bdn		06Fi.A	
^{96}Zr(d,p)^{97}Zr		3338	20	3350.6	0.4	0.6	U			Pit		64Co11	
^{96}Mo(n,γ)^{97}Mo		6821.1	1.0	6821.13	0.16	0.0	U					73De39	
		6820	2			0.6	U					77Ri04	
		6821.15	0.25			$-$0.1	–			MMn		91Is02	Z
		6821.5	0.4			$-$0.9	–			Bdn		06Fi.A	
^{96}Mo(d,p)^{97}Mo		4582	20	4596.57	0.16	0.7	U			Pit		64Co11	
^{96}Mo(n,γ)^{97}Mo	ave.	6821.25	0.21	6821.13	0.16	$-$0.5	1	59	44 ^{97}Mo			average	
^{96}Mo(^{3}He,d)^{97}Tc		229	8	225	4	$-$0.5	–			ANL		74Co27	
		220	8			0.6	–			Pit		74Co27	
	ave.	225	6			0.1	1	53	53 ^{97}Tc			average	
^{96}Ru(d,p)^{97}Ru		5886	3	5886.9	2.8	0.3	2			Can		77Ho02	
		5892	7			$-$0.7	2			ANL		77Me04	
^{97}Rb(β^-)^{97}Sr		10020	50	10062	4	0.8	U			Gsn		80De02	
		10450	30			$-$12.9	C			Gsn		84Bl.A	
		10440	60			$-$6.3	C			Bwg		87Gr.A	
		10462	40			$-$10.0	B			Gsn		92Pr03	
^{97}Sr(β^-)^{97}Y		7452	40	7540	8	2.2	U			Gsn		84Bl.A	
		7420	80			1.5	o			Bwg		87Gr.A	
		7480	18			3.3	C			Bwg		92Gr.A	
^{97}Y(β^-)^{97}Zr		6702	25	6821	7	4.8	C			Gsn		84Bl.A	
		6640	70			2.6	o			Bwg		87Gr.A	*
		6689	13			10.2	C			Bwg		92Gr.A	*
^{97}Zr(β^-)^{97}Nb		2657.3	6.	2663	4	1.0	1	50	50 ^{97}Nb			74Ra.A	*
^{97}Nb(β^-)^{97}Mo		1933.1	6.	1939	4	1.0	1	50	50 ^{97}Nb			74Ra.A	*
^{97}Mo(p,n)^{97}Tc		$-$1128	9	$-$1103	4	2.8	B			Oak		70Ki01	
		$-$1102	6			$-$0.1	1	47	47 ^{97}Tc	ANL		74Co27	
^{97}Ru(β^+)^{97}Tc		1150	100	1104	5	$-$0.5	U					70Ho01	*
^{97}Rh(β^+)^{97}Ru		3533	50	3520	40	$-$0.2	3					62Ba28	*
		3513	50			0.2	3					62Ch21	*
^{97}Pd(β^+)^{97}Rh		4790	300	4790	40	0.0	U					80Go11	*
^{97}Ag(β^+)^{97}Pd		6980	110				3					99Hu10	

*^{97}Rb$-^{85}$Rb$_{1.141}$	D_M=37825.7(2.2) μu $M-A$=–58518.5(2.1)keV corrected for e$^-$ binding=–703eV	12Si10	**
*^{97}Sr$-^{85}$Rb$_{1.141}$	D_M=27023.5(3.9) μu $M-A$=–68580.7(3.7)keV corrected for e$^-$ binding=–553eV	12Si10	**
*^{97}Y$-^{97}$Zr	D_M=8039.5(7.2) μu for ^{97}Y^m at 667.52(0.23) keV; $M-A$=–75453.9(6.7) keV	Nub16b	**
*^{97}Y(β^-)^{97}Zr	E_{β^-}=6645(70); and 7280(150) from ^{97}Y^m at 667.52 keV	Nub16b	**
*^{97}Y(β^-)^{97}Zr	E_{β^-}=6688(13); and 7361(26) from ^{97}Y^m at 667.52 keV	Nub16b	**
*^{97}Zr(β^-)^{97}Nb	E_{β^-}=1914(2) to 1/2$^-$ level at 743.35 keV; error increased	Ens104	**
*^{97}Nb(β^-)^{97}Mo	E_{β^-}=1275(2) to 7/2$^+$ level at 658.13 keV; error increased	Ens104	**
*^{97}Ru(β^+)^{97}Tc	p$^+$ <0.0001 (see fig 1), decay to 7/2$^+$ level at 970.03 keV	Ens104	**
*^{97}Rh(β^+)^{97}Ru	$E_{\beta+}$=2090(50) 2070(50) respectively, to 7/2$^+$ level at 421.54 keV	Ens104	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.		Lab	F	Reference	
$*^{97}$Pd(β^+)^{97}Rh	E_{β^+}=3500(300) to 7/2$^+$ level at 265.36 keV												Ens104	**
^{98}Rb$-^{85}$Rb$_{1.153}$		43331	32	43339	17	0.2	1	29	29	^{98}Rb	TT1	1.0	12Si10	*
^{98}Rb$-$u		−58359	29	−58368	17	−0.3	–				MA8	1.0	13Ma81	
		−58370	29			0.1	–				TT1	1.0	16Kl04	*
	ave.	−58365	21			−0.2	1	71	71	^{98}Rb			average	
^{98}Rb$^m-$u		−58289	22				2				TT1	1.0	12Si10	*
^{98}Sr$-^{85}$Rb$_{1.153}$		30396.7	4.3	30398	3	0.4	–				TT1	1.0	12Si10	*
		30405.3	7.2			−1.0	–				TT1	1.0	16Kl04	*
	ave.	30399	4			−0.2	1	88	88	^{98}Sr			average	
^{98}Zr$-$u		−87247	43	−87265	9	−0.4	U				JY0	1.0	04Ri12	
^{98}Mo$-^{85}$Rb$_{1.153}$		7104.1	5.7	7110.04	0.19	1.0	U				MA8	1.0	11He10	
		7111.6	1.3			−1.2	U				JY1	1.0	12Ka13	
^{98}Mo$-^{87}$Rb$_{1.126}$		7665.96	0.64	7666.33	0.19	0.6	U				MS1	1.0	15Gu09	
C_5 H_6 O_2-^{98}Mo		131375.4	2.8	131375.82	0.19	0.1	U				M15	2.5	63Ri07	
^{98}Mo$-$u		−94596.21	0.53	−94596.39	0.19	−0.3	1	12	12	^{98}Mo	MS1	1.0	15Gu09	
C_7 $H_{14}-^{98}$Ru		204263.5	2.9	204264	7	0.0	1	92	92	^{98}Ru	M16	2.5	63Da10	
^{98}Rh$-$u		−89302	46	−89292	13	0.2	U				GS2	1.0	05Li24	*
^{98}Pd$-^{85}$Rb$_{1.153}$		14404.5	5.1	14405	5	0.1	1	100	100	^{98}Pd	JY1	1.0	09El08	
^{98}Ag$-^{85}$Rb$_{1.153}$		23283	40	23270	40	−0.4	1	78	78	^{98}Ag	MA8	1.0	11He10	
^{98}Mo ^{35}Cl$-^{96}$Mo ^{37}Cl		3690	2	3678.94	0.20	−1.4	U				H11	4.0	63Bi12	
^{98}Sr$-^{97}$Zr$_{1.010}$		18620	10	18625	3	0.5	1	12	12	^{98}Sr	JY1	1.0	06Ha03	
^{98}Y$-^{97}$Zr$_{1.010}$		12321.4	8.5				2				JY1	1.0	07Ha32	
^{98}Zr$-^{97}$Zr$_{1.010}$		2668	10	2668	9	0.0	1	82	82	^{98}Zr	JY1	1.0	06Ha03	
^{98}Mo$-^{97}$Mo$_{1.010}$		327.9	5.8	326.53	0.07	−0.2	U				JY1	1.0	06Ka48	
^{98}Mo$-^{97}$Mo		−614	12	−613.30	0.07	0.0	U				M15	2.5	63Ri07	
^{94}Rb$-^{98}$Rb$_{.411}$ ^{91}Rb$_{.590}$		−290	40	−347	8	−0.6	U				P21	2.5	82Au01	Y
^{97}Rb$-^{98}$Rb$_{.792}$ ^{93}Rb$_{.209}$		−250	60	−281	13	−0.2	U				P21	2.5	82Au01	
^{96}Rb$-^{98}$Rb$_{.490}$ ^{94}Rb$_{.511}$		330	30	322	9	−0.1	U				P21	2.5	82Au01	Y
^{97}Rb$-^{98}$Rb$_{.660}$ ^{95}Rb$_{.340}$		−300	50	−232	13	0.5	U				P21	2.5	82Au01	
		−232	27			0.0	U				P31	2.5	86Au02	
^{96}Zr(t,p)^{98}Zr		3508	20	3509	8	0.0	1	18	18	^{98}Zr	LAl		69Bl01	
^{96}Zr(^{3}He,p)^{98}Nb		5728	5				2				Phi		75Me13	
^{96}Ru(^{16}O,^{14}C)^{98}Pd		−12529	20	−12516	5	0.6	U				BNL		82Th01	
^{98}Mo(t,α)^{97}Nb		10019	20	10015	4	−0.2	U				LAl		83Fl06	
^{97}Mo(n,γ)^{98}Mo		8642.4	0.5	8642.60	0.06	0.4	U						71He10	
		8642.60	0.07			0.0	–				MMn		91Is02	Z
		8642.57	0.18			0.2	–				Bdn		06Fi.A	
^{98}Mo(d,t)^{97}Mo		−2379	20	−2385.37	0.06	−0.3	U				Pit		64Co11	
^{97}Mo(n,γ)^{98}Mo	ave.	8642.60	0.07	8642.60	0.06	0.0	1	98	87	^{98}Mo			average	
^{97}Mo(^{3}He,d)^{98}Tc		680	8	683	3	0.4	–				ANL		74Co27	
		686	10			−0.3	–				McM		76Ma16	
	ave.	682	6			0.1	1	29	29	^{98}Tc			average	
^{98}Rb(β^-)^{98}Sr		11200	110	12054	16	7.8	B						79Pe17	
		12343	150			−1.9	U				Trs		82Br23	
		12519	60			−7.8	C				Gsn		84Bl.A	
		12270	30			−7.2	C				McG		84Ia.A	
		12440	75			−5.1	C				Bwg		87Gr.A	
		12380	65			−5.0	B				Gsn		92Pr03	
^{98}Rb^m(β^-)^{98}Sr		12710	120	12127	21	−4.9	C				Bwg		87Gr.A	
^{98}Sr(β^-)^{98}Y		5730	40	5872	9	3.5	C						79Pe17	
		5821	10			5.1	C				Gsn		84Bl.A	
		5815	40			1.4	U				Bwg		87Gr.A	
^{98}Y(β^-)^{98}Zr		8974	100	8992	12	0.2	U						79Pe17	*
		8780	30			7.1	C				Gsn		84Bl.A	
		8840	55			2.8	C				Bwg		87Gr.A	
		8963	41			0.7	U						88Ma.A	
		8830	17			9.5	C				Bwg		92Gr.A	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
$^{98}Y^m(\beta^-)^{98}Zr$	9780	200	9233	27	−2.7	o			Bwg		87Gr.A	
	9233	27				2			Bwg		92Gr.A	
$^{98}Zr(\beta^-)^{98}Nb$	2300	200	2238	10	−0.3	U					76He10	
$^{98}Nb(\beta^-)^{98}Mo$	4300	200	4591	5	1.5	U					66Gu05	
	4300	200			1.5	U					67Hu07	
	4800	200			−1.0	U					76He10	
	4580	100			0.1	U			Bwg		78St02	
$^{98}Mo(p,n)^{98}Tc$	−2458	10	−2466	3	−0.8	1	11	11 ^{98}Tc	ANL		74Co27	
$^{98}Tc(\beta^-)^{98}Ru$	1795	22	1793	7	−0.1	1	11	8 ^{98}Ru			73Ok.A	*
$^{98}Rh(\beta^+)^{98}Ru$	5120	100	5050	10	−0.7	U					72Ba37	*
	5151	50			−2.0	U					94Ba06	*
$^{98}Ru(p,n)^{98}Rh$	−5832	10				2					70As08	Z
$^{98}Ag(\beta^+)^{98}Pd$	8420	150	8250	30	−1.1	U					79Ve.A	*
	8200	70			0.8	1	22	22 ^{98}Ag			00Hu17	
$^{98}Cd(\beta^+)^{98}Ag$	5330	140	5430	40	0.7	U					92Pl01	
$^{98}Cd(\varepsilon)^{98}Ag$	5430	40				2					01St.A	
$*^{98}Rb-^{85}Rb_{1.153}$	Original D_M=43394.0(3.7) μu $M-A$=–54317.7(3.4)keV corrected for gs+m mixture										16Kl04	**
$*^{98}Rb-^{85}Rb_{1.153}$	Original $M-A$=–54309.4(4.0) corrected for isom mixture E_x =80(30) R=0.65(0.15)										16Kl04	**
$*^{98}Rb-u$	Original $M-A$=–54319.5(5.5) corrected for isom mixture E_x =80(30) R=0.65(0.15)										16Kl04	**
$*^{98}Rb^m-u$	Data re-analysis										16Kl04	**
$*^{98}Sr-^{85}Rb_{1.153}$	D_M=30397.3(4.3) μu $M-A$=–66424.0(4.0)keV corrected for e$^-$ binding=–529eV										12Si10	**
$*^{98}Sr-^{85}Rb_{1.153}$	Former measured using 15$^+$ ion; latter with 10$^+$ ion										16Kl04	**
$*^{98}Rh-u$	$M-A$=–83154(30) keV for mixture gs+m at 60#50 keV										Nub16b	**
$*^{98}Y(\beta^-)^{98}Zr$	E_{β^-}=4810(100) to 1$^-$ level at 4164.60 keV										Ens035	**
$*^{98}Tc(\beta^-)^{98}Ru$	E_{β^-}=397(22) to 4$^+$ level at 1397.82 keV										Ens035	**
$*^{98}Rh(\beta^+)^{98}Ru$	E_{β^+}=3450(100) to 2$^+$ level at 652.44 keV, and others										Ens035	**
$*^{98}Rh(\beta^+)^{98}Ru$	E_{β^+}=3476(50) to 2$^+$ level at 652.44 keV										Ens035	**
$*^{98}Ag(\beta^+)^{98}Pd$	Q_{β^+}=6880(150) to 4$^+$ level at 1541.40 keV										Ens035	**
$^{99}Rb-^{85}Rb_{1.165}$	47885.1	4.8	47884	4	−0.2	2			MA8	1.0	13Ma81	
	47880	10			0.4	2			TT1	1.0	16Kl04	
$^{99}Sr-^{85}Rb_{1.165}$	35663	21	35645	5	−0.8	o			TT1	1.0	12Si10	*
	35644.5	7.0			0.1	1	53	53 ^{99}Sr	TT1	1.0	16Kl04	
$^{99}Zr-u$	−83323	19	−83329	11	−0.3	1	35	35 ^{99}Zr	JY0	1.0	04Ri12	
$C_7\ H_{15}-^{99}Ru$	211442.8	3.0	211445.2	0.4	0.3	U			M16	2.5	63Da10	
$^{99}Ag-^{85}Rb_{1.165}$	20401.0	8.5	20411	7	1.1	2			SH1	1.0	07Ma92	
	20427	11			−1.5	2			MA8	1.0	11He10	
$^{99}Cd-^{85}Rb_{1.165}$	27690.8	1.7				2			MA8	1.0	09Br09	
$^{99}Pd-^{96}Mo_{1.031}$	10052.8	5.5	10054	5	0.1	1	94	94 ^{99}Pd	JY1	1.0	09El08	
$^{99}Sr-^{97}Zr_{1.021}$	23794.1	7.4	23793	5	−0.1	1	47	47 ^{99}Sr	JY1	1.0	06Ha03	
$^{99}Y-^{97}Zr_{1.021}$	15066.8	7.1				2			JY1	1.0	07Ha32	
$^{99}Zr-^{97}Zr_{1.021}$	7580	14	7583	11	0.2	1	65	65 ^{99}Zr	JY1	1.0	06Ha03	
$^{99}Ru-^{98}Ru$	652	11	644	7	−0.3	U			M16	2.5	63Da10	
$^{97}Rb-^{99}Rb_{.653}\ ^{93}Rb_{.348}$	100	100	135	4	0.1	U			P21	2.5	82Au01	
$^{98}Rb-^{99}Rb_{.742}\ ^{95}Rb_{.258}$	690	180	563	17	−0.3	U			P21	2.5	82Au01	
$^{97}Rb-^{99}Rb_{.490}\ ^{95}Rb_{.511}$	350	60	201	11	−1.0	U			P31	2.5	86Au02	
$^{99}Ru(n,\alpha)^{96}Mo$	6822	5	6815.9	0.4	−1.2	U					01Wa50	
$^{96}Ru(^{16}O,^{13}C)^{99}Pd$	−11723	20	−11760	5	−1.8	U			BNL		82Th01	
$^{98}Mo(n,\gamma)^{99}Mo$	5927.7	1.	5925.44	0.15	−2.3	U					73De39	
	5927	1			−1.6	U					74Er.A	
	5924.6	0.6			1.4	U					76Ch02	
	5923	2			1.2	U					77Ri04	
	5925.42	0.15			0.2	1	100	99 ^{99}Mo	MMn		91Is02	Z
	5927.7	0.5			−4.5	C			Bdn		06Fi.A	
$^{98}Mo(d,p)^{99}Mo$	3687	20	3700.88	0.15	0.7	U			Pit		64Co11	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{98}Mo(^{3}He,d)^{99}Tc	1010	20	1007.4	0.9	−0.1	U			McM		77Ch06	
^{99}Tc(p,d)^{98}Tc	−6740	5	−6742	3	−0.5	–					76Sl06	
	−6755	9			1.4	–			Bld		77Em02	
ave.	−6744	4			0.3	1	59	57 ^{98}Tc			average	
^{99}Rb(β^-)^{99}Sr	11340	120	11400	6	0.5	U			McG		84Ia.A	
	10960	130			3.4	C			Bwg		87Gr.A	
^{99}Sr(β^-)^{99}Y	8030	80	8128	8	1.2	U			McG		84Ia.A	
	8360	75			−3.1	C			Bwg		87Gr.A	
^{99}Y(β^-)^{99}Zr	7605	60	6971	12	−10.6	C			Bwg		87Gr.A	
	7568	14			−42.7	C			Bwg		92Gr.A	
^{99}Zr(β^-)^{99}Nb	4550	35	4715	16	4.7	C			Bwg		87Gr.A	
	4559	15			10.4	C			Bwg		92Gr.A	
^{99}Nb(β^-)^{99}Mo	3740	200	3635	12	−0.5	U					70Ei02	*
^{99}Mo(β^-)^{99}Tc	1356.7	1.0	1357.8	0.9	1.1	1	79	78 ^{99}Tc			71Na01	*
^{99}Tc(β^-)^{99}Ru	292	3	297.5	0.9	1.8	U					51Ta05	
	290	4			1.9	U					52Fe16	
	293.5	2.0			2.0	1	22	20 ^{99}Tc			80Al02	*
^{99}Rh(β^+)^{99}Ru	2038	10	2044	7	0.6	–					52Sc11	*
	2053	10			−0.9	–					59To25	*
	2170	30			−4.2	B					74An23	*
ave.	2046	7			−0.2	1	90	89 ^{99}Rh			average	
^{99}Pd(β^+)^{99}Rh	3410	20	3399	8	−0.6	1	16	11 ^{99}Rh			69Ph01	*
^{99}Ag(β^+)^{99}Pd	5430	150	5470	8	0.3	U					81Hu03	
*^{99}Sr−^{85}Rb$_{1.165}$	Original D_M=35661.6(4.4) μu $M-A$=–62506.3(4.1)keV re-evaluated										16Kl04	**
*^{99}Nb(β^-)^{99}Mo	E_{β^-}=3500(200) to 7/2$^+$ level at 235.508 keV										Ens112	**
*^{99}Mo(β^-)^{99}Tc	E_{β^-}=1214(1) to 1/2$^-$ level at 142.6832 keV										Ens112	**
*^{99}Tc(β^-)^{99}Ru	E_{β^+}=434.8(2.6), 346.7(2.0) from ^{99}Tc^m at 142.6832 to ground state, 89.57 level										Ens112	**
*^{99}Rh(β^+)^{99}Ru	E_{β^+}=740(10) from ^{99}Rh^m at 64.5 to 340.90 7/2$^+$ level										Ens112	**
*^{99}Rh(β^+)^{99}Ru	E_{β^+}=1030(10), 710(10), 590(10), 420(20) keV										59To25	**
*	to ground state, 321.99 3/2$^+$, 442.59 3/2$^+$, 618.13 1/2$^+$ levels										Ens112	**
*^{99}Rh(β^+)^{99}Ru	Q_{β^+} larger than 2059.34 keV because that state populated via β decay										Ens112	**
*^{99}Rh(β^+)^{99}Ru	Ref. proposed that E_{β^+}=1030(10) keV decays to 89.57 3/2$^+$ level										74An23	**
*^{99}Rh(β^+)^{99}Ru	E_{β^+}=1100(50), 680(30) and 540(30) to 89.57, 442.59 and 618.13 levels										Ens112	**
*^{99}Pd(β^+)^{99}Rh	E_{β^+}=2180(20), 1930(20), 1510(20) keV										69Ph01	**
*	to 200.7 7/2$^+$, 464.4 (5/2,7/2)$^+$, 874.5 5/2$^+$ levels above (1/2$^-$) ground state										Ens112	**
^{100}Rb−^{85}Rb$_{1.176}$	54087	21				2			MA8	1.0	13Ma81	
	54150	140	54087	21	−0.5	U			TT1	1.0	16Kl04	
^{100}Sr−^{85}Rb$_{1.176}$	39520	12	39515	8	−0.4	1	41	41 ^{100}Sr	TT1	1.0	16Kl04	
^{100}Y−u	−72270	110	−72279	12	0.0	o			GT2	2.5	08Kn.A	*
	−72290	140			0.0	U			GT2	2.5	08Su19	*
^{100}Zr−u	−82016	18	−81995	9	1.2	1	24	24 ^{100}Zr	JY0	1.0	04Ri12	
^{100}Mo−^{85}Rb$_{1.176}$	11216	27	11203.2	0.3	−0.5	U			MA8	1.0	11He10	
	11205.5	1.4			−1.6	U			JY1	1.0	12Ka13	
^{100}Mo−^{87}Rb$_{1.149}$	11820.25	0.57	11819.6	0.3	−1.2	1	32	32 ^{100}Mo	MS1	1.0	15Gu09	
C_7 H_{16}−^{100}Mo	217730.3	4.2	217732.5	0.3	0.2	U			M15	2.5	63Ri07	
^{100}Mo−u	−92532.51	0.40	−92532.0	0.3	1.2	1	66	66 ^{100}Mo	MS1	1.0	15Gu09	
C_7 H_{16}−^{100}Ru	220983.8	3.7	220990.1	0.4	0.7	U			M16	2.5	63Da10	
^{100}Rh−u	−91855	46	−91886	19	−0.7	1	18	18 ^{100}Rh	GS2	1.0	05Li24	*
^{100}Ag−^{85}Rb$_{1.176}$	19849.9	7.1	19851	5	0.1	2			JY1	1.0	09El08	*
	19851.8	8.2			−0.1	2			MA8	1.0	11He10	*
^{100}Cd−u	−79636	214	−79651.2	1.8	−0.1	U			CS1	1.0	96Ch32	
^{100}Cd−^{85}Rb$_{1.176}$	24084.1	1.8	24084.1	1.8	0.0	1	100	100 ^{100}Cd	MA8	1.0	09Br09	
^{100}In−u	−69405	322	−69040	200	1.1	1	37	37 ^{100}In	CS1	1.0	96Ch32	
^{100}Sn−u	−62020	1020	−61500	320	0.5	U			CS1	1.0	96Ch32	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{100}Sr$-^{97}$Zr$_{1.031}$		27579	10	27583	8	0.4	1	59	59 ^{100}Sr	JY1	1.0	06Ha03	
^{100}Y$-^{97}$Zr$_{1.031}$		19524	12				2			JY1	1.0	07Ha32	
^{100}Y$^m-^{97}$Zr$_{1.031}$		19679	12				2			JY1	1.0	07Ha32	
^{100}Zr$-^{97}$Zr$_{1.031}$		9815	10	9808	9	−0.7	1	76	76 ^{100}Zr	JY1	1.0	06Ha03	
^{100}Nb$^m-^{97}$Zr$_{1.031}$		6472.6	2.1				2			JY1	1.0	07Ha32	
^{100}Mo ^{35}Cl$-^{98}$Mo ^{37}Cl		5019	2	5014.5	0.4	−0.6	U			H11	4.0	63Bi12	
^{100}Nb$-^{100}$Nb^m		−335.7	8.3				3			JY1	1.0	07Ha32	
^{100}Mo$-^{100}$Ru		3257.55	0.18	3257.52	0.18	−0.1	1	99	97 ^{100}Ru	JY1	1.0	08Ra09	
^{100}Ru$-^{99}$Ru		−1718	11	−1719.826	0.028	−0.1	U			M16	2.5	63Da10	
^{96}Ru(^{16}O,^{12}C)^{100}Pd		−5599	26	−5605	18	−0.2	1	46	46 ^{100}Pd	BNL		82Th01	
^{100}Mo(d,^{3}He)^{99}Nb		−5639	15	−5653	12	−0.9	2			Tex		74Bi08	
^{100}Mo(t,α)^{99}Nb		8642	20	8667	12	1.3	2			LAl		83Fl06	
^{100}Mo(d,t)^{99}Mo		−2038	20	−2037.0	0.4	0.0	U			Pit		64Co11	
^{99}Tc(n,γ)^{100}Tc		6764.4	1.				2					79Pi08	
		6765.20	0.04	6764.4	1.0	−20.0	C					04Fu.A	
^{99}Ru(n,γ)^{100}Ru		9673.2	0.7	9673.324	0.026	0.2	U					74Ri03	
		9672.65	0.06			11.2	B			ILn		88Co18	Z
		9673.39	0.05			−1.3	–			MMn		91Is02	Z
		9673.30	0.03			0.8	–			ILn		00Ge01	
		9673.41	0.19			−0.5	U			Bdn		06Fi.A	
	ave.	9673.324	0.026			0.0	1	100	98 ^{99}Ru			average	
^{100}Sr(β^-)^{100}Y		7460	140	7506	13	0.3	U			McG		84Ia.A	*
		7075	100			4.3	C			Bwg		87Gr.A	
^{100}Y(β^-)^{100}Zr		7920	100	9050	14	11.3	C			McG		84Ia.A	*
		9310	70			−3.7	C			Bwg		87Gr.A	
^{100}Zr(β^-)^{100}Nb		3335	25	3420	11	3.4	C			Bwg		87Gr.A	
^{100}Nb(β^-)^{100}Mo		6245	25	6396	8	6.0	C			Bwg		87Gr.A	
^{100}Nb^m(β^-)^{100}Mo		6745	75	6708.3	2.0	−0.5	U			Bwg		87Gr.A	
^{100}Mo(t,^{3}He)^{100}Nb^m		−6690	30	−6689.7	2.0	0.0	U			LAl		79Aj03	
^{100}Rh(β^+)^{100}Ru		3630	20	3636	18	0.3	1	82	82 ^{100}Rh			53Ma64	
^{100}Ag(β^+)^{100}Pd		7075	90	7075	18	0.0	U					79Ve.A	*
		7022	200			0.3	U					80Ha20	*
^{100}Cd(β^+)^{100}Ag		3890	70	3943	5	0.8	U					89Ry02	
^{100}In(β^+)^{100}Cd		10900	930	9880	180	−1.1	U			Lvp		95Sz01	*
		10080	230			−0.9	1	63	63 ^{100}In			02Pl03	
^{100}Sn(β^+)^{100}In		7390	660	7030	240	−0.5	o			GSI		97Su06	*
		7840	660			−1.2	o			GSI		02Fa13	*
		7030	240				2			GSI		12Hi07	*
*^{100}Y$-$u	$M-A$=–67245(93) keV for mixture gs+m at 144(16) keV											Nub16b	**
*^{100}Y$-$u	$M-A$=–67264(119) keV for mixture gs+m at 144(16) keV											Nub16b	**
*^{100}Rh$-$u	$M-A$=–85508(29) keV for mixture gs+m at 107.6 keV											Nub16b	**
*^{100}Ag$-^{85}$Rb$_{1.176}$	D_M=19858.2(5.2) μu for mixture gs+m at 15.52 keV; $M-A$=–78131.0(4.9) keV											Nub16b	**
*^{100}Ag$-^{85}$Rb$_{1.176}$	D_M=19860.2(6.6) μu for mixture gs+m at 15.52 keV; $M-A$=–78129.1(6.2) keV											Nub16b	**
*^{100}Sr(β^-)^{100}Y	E_{β^-}=7450(140) assumed by evaluator to 1$^+$ level at 10.70 keV											Ens082	**
*^{100}Y(β^-)^{100}Zr	Not unambiguously ground state transition											GAu	**
*^{100}Ag(β^+)^{100}Pd	From 5$^+$ ground state to high spin level at 2920.4 keV											79Ve.A	**
*^{100}Ag(β^+)^{100}Pd	E_{β^+}=5350(200) from ^{100}Ag^m 2$^+$ at 15.52 to 2$^+$ level at 665.50 keV											Ens082	**
*^{100}In(β^+)^{100}Cd	From lower and upper limits 9300–12500											GAu	**
*^{100}Sn(β^+)^{100}In	Q_{β^+}=7200(+800–500); also E_{β^+}=3400(+700–300) keV											97Su06	**
*^{100}Sn(β^+)^{100}In	E_{β^+}=3800(+700–300) to 2760(430) level											96Ki23	**
*^{100}Sn(β^+)^{100}In	E_{β^+}=3290(200) to 1$^+$ level at 2721+x, with x<80 keV											12Hi07	**
^{101}Sr$-^{85}$Rb$_{1.188}$		45410	22	45400	9	−0.5	2			MA8	1.0	16De.A	
		45398	10			0.2	2			TT1	1.0	16Kl04	
^{101}Zr$-$u		−78573	20	−78547	9	1.3	1	20	20 ^{101}Zr	JY0	1.0	04Ri12	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
C_8 $H_5-{}^{101}$Ru		133549.5	2.2	133552.1	0.4	0.5	U			M16	2.5	63Da10	
^{101}Rh−u		−93821	58	−93841	6	−0.3	U			GS2	1.0	05Li24	*
^{101}Pd−u		−91816	30	−91715	5	3.4	C			GS2	1.0	05Li24	
^{101}Ag$-{}^{85}$Rb$_{1.188}$		17470.5	7.2	17478	5	1.0	2			SH1	1.0	07Ma92	
		17485.6	7.5			−1.0	2			MA8	1.0	11He10	
^{101}Cd$-{}^{85}$Rb$_{1.188}$		23367	11	23380.0	1.6	1.2	U			SH1	1.0	07Ma92	
		23380.0	1.6				2			MA8	1.0	09Br09	
^{101}Pd$-{}^{96}$Mo$_{1.052}$		8567.4	5.1	8567	5	−0.1	1	93	93 ^{101}Pd	JY1	1.0	09El08	
^{101}Cd$-{}^{96}$Mo$_{1.052}$		18872.7	5.5	18868.4	1.6	−0.8	U			JY1	1.0	09El08	
^{101}Y$-{}^{97}$Zr$_{1.041}$		22847.5	7.6				2			JY1	1.0	07Ha32	
^{101}Zr$-{}^{97}$Zr$_{1.041}$		14153	10	14146	9	−0.7	1	80	80 ^{101}Zr	JY1	1.0	06Ha03	
^{101}Nb$-{}^{102}$Ru$_{.990}$		10009.6	4.0				2			JY1	1.0	07Ha32	
^{101}Ru$-{}^{100}$Ru		1368	11	1362.62	0.25	−0.2	U			M16	2.5	63Da10	
^{100}Mo(n,γ)^{101}Mo		5398.4	0.5	5398.24	0.07	−0.3	U			ILn		75Ka.A	
		5399.6	0.7			−1.9	U			ORn		79We07	Z
		5398.23	0.08			0.1	2			ILn		90Se17	Z
		5398.27	0.13			−0.2	2			Bdn		06Fi.A	
^{100}Mo(d,p)^{101}Mo		3161	6	3173.68	0.07	2.1	U					72Si25	
^{100}Ru(n,γ)^{101}Ru		6802.0	0.7	6802.04	0.24	0.1	–					82Ba69	
		6802.04	0.25			0.0	–			Bdn		06Fi.A	
^{100}Ru(d,p)^{101}Ru		4581	4	4577.48	0.24	−0.9	U					77Ho02	
^{100}Ru(n,γ)^{101}Ru	ave.	6802.04	0.24	6802.04	0.24	0.0	1	100	99 ^{101}Ru			average	
^{101}Sn(εp)^{100}Cd		6600	300				2					10St.A	
^{101}Rb(β^-)^{101}Sr		11810	110	12480#	200#	6.1	D			Bwg		92Ba28	*
^{101}Sr(β^-)^{101}Y		9505	80	9736	11	2.9	B			Bwg		92Ba28	
^{101}Y(β^-)^{101}Zr		8545	90	8105	11	−4.9	B			Bwg		92Ba28	
^{101}Zr(β^-)^{101}Nb		5520	45	5726	9	4.6	B			Bwg		87Gr18	
		5485	25			9.6	C			Bwg		92Gr.A	
^{101}Nb(β^-)^{101}Mo		4575	30	4628	4	1.8	U			Bwg		87Gr.A	
		4590	30			1.3	U			Bwg		87Gr18	
		4569	18			3.3	C			Bwg		92Gr.A	
^{101}Mo(β^-)^{101}Tc		2836	40	2825	24	−0.3	R					57Ok.A	*
^{101}Tc(β^-)^{101}Ru		1620	30	1614	24	−0.2	2					71Ar23	*
^{101}Pd(β^+)^{101}Rh		1980	4	1980	4	0.1	1	95	88 ^{101}Rh			71Ib01	*
^{101}Ag(β^+)^{101}Pd		4100	200	4098	7	0.0	U					72We.A	
		4350	200			−1.3	U					78Ha11	
		4180	150			−0.5	U					79Ve.A	*
^{101}Cd(β^+)^{101}Ag		5530	130	5498	5	−0.2	U					70Be.A	*
		5350	200			0.7	U					72We.A	
*^{101}Rh−u	$M-A$=–87315(29) keV for mixture gs+m at 157.32 keV											Nub16b	**
*^{101}Rb(β^-)^{101}Sr	Trends from Mass Surface TMS suggest ^{101}Rb 670 less bound											GAu	**
*^{101}Mo(β^-)^{101}Tc	E_{β^-}=2230(40) to (1/2$^+$,3/2$^+$) level at 606.47 keV											Ens06a	**
*^{101}Tc(β^-)^{101}Ru	E_{β^-}=1320(30) to 306.858 7/2$^+$ and 1070(30) to 545.115 7/2$^+$ levels											Ens06a	**
*^{101}Pd(β^+)^{101}Rh	E_{β^+}=776(4) to 7/2$^+$ level at 181.78 keV											Ens06a	**
*^{101}Ag(β^+)^{101}Pd	E_{β^+}=2895(150) to 7/2$^+$ level at 261.0 keV, and others											Ens06a	**
*^{101}Cd(β^+)^{101}Ag	Measured E_{β^+} may go to excited state											70Be.A	**
^{102}Sr$-{}^{85}$Rb$_{1.200}$		49857	72				2			MA8	1.0	16De.A	
^{102}Y$-{}^{120}$Sn$_{.850}$		17456.3	4.3				2			JY1	1.0	11Ha48	*
^{102}Zr−u		−76780	43	−76853	9	−1.7	U			JY0	1.0	04Ri12	
C_8 $H_6-{}^{102}$Ru		142604.8	3.2	142609.9	0.4	0.6	U			M16	2.5	63Da10	
C_8 $H_6-{}^{102}$Pd		141324	19	141318.1	0.6	−0.1	U			M16	2.5	63Da10	
		141346	18			−1.0	U			R12	1.5	83De51	
C_7 N $H_4-{}^{102}$Pd		128775	19	128742.1	0.6	−1.2	U			R12	1.5	83De51	
^{102}Pd−u		−94370.9	15.6	−94367.9	0.6	0.2	U			GS4	1.0	14Ya.A	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.		Lab	F	Reference	
^{102}Ag−u	−88315	30	−88295	9	0.7	U				GS2	1.0	05Li24	*
^{102}Cd−^{85}Rb$_{1.200}$	20320.9	7.3	20334.1	1.8	1.8	U				SH1	1.0	07Ma92	
	20334.2	1.9			0.0	1	88	88	^{102}Cd	MA8	1.0	09Br09	
^{102}In−^{85}Rb$_{1.200}$	29959	13	29958	5	−0.1	1	14	14	^{102}In	SH1	1.0	07Ma92	
^{102}Cd−^{96}Mo$_{1.063}$	15811.9	5.2	15812.5	1.8	0.1	1	12	12	^{102}Cd	JY1	1.0	09El08	
^{102}In−^{96}Mo$_{1.063}$	25436.5	5.3	25437	5	0.0	1	86	86	^{102}In	JY1	1.0	09El08	
^{102}Zr−^{97}Zr$_{1.052}$	16822.0	9.8	16820	9	−0.2	1	92	92	^{102}Zr	JY1	1.0	06Ha03	
^{102}Nb−^{97}Zr$_{1.052}$	11756.4	2.7	11756.5	2.7	0.0	1	99	99	^{102}Nb	JY1	1.0	07Ha32	
^{102}Mo−^{97}Zr$_{1.052}$	3961.0	9.8	3961	9	0.0	1	83	83	^{102}Mo	JY1	1.0	06Ha03	
^{102}Nb^m−^{102}Nb	100.2	7.9	101	8	0.1	1	95	94	^{102}Nb^m	JY1	1.0	07Ha32	
^{102}Pd−^{102}Ru	1291.76	0.39	1291.8	0.4	0.0	1	100	100	^{102}Pd	SH1	1.0	11Go23	
^{102}Ru−^{101}Ru	−1233	11	−1232.78	0.05	0.0	U				M16	2.5	63Da10	
^{100}Mo(t,p)^{102}Mo	5034	20	5034	8	0.0	1	17	17	^{102}Mo	LAl		72Ca10	
^{100}Mo(^{3}He,p)^{102}Tc	6054	20	6022	9	−1.6	1	21	21	^{102}Tc	Pri		82De03	
^{102}Pd(p,t)^{100}Pd	−10356	24	−10351	18	0.2	1	54	54	^{100}Pd	Win		74De31	*
^{101}Ru(n,γ)^{102}Ru	9220.4	0.9	9219.64	0.05	−0.8	U						74Ri03	
	9219.64	0.05			0.0	1	100	99	^{102}Ru	MMn		91Is02	Z
	9219.63	0.19			0.1	U				Bdn		06Fi.A	
^{102}In(εp)^{101}Ag	3420	310	3351	7	−0.2	o				Lvp		91Re.A	*
^{102}Sr(β^-)^{102}Y	8815	70	9010	70	2.8	B				Bwg		92Ba28	
^{102}Y(β^-)^{102}Zr	9850	70	10415	10	8.1	B				Bwg		92Ba28	
^{102}Zr(β^-)^{102}Nb^m	4605	30	4622	11	0.6	1	14	8	^{102}Zr	Bwg		87Gr18	
^{102}Nb(β^-)^{102}Mo	7300	50	7262	9	−0.8	o				Bwg		87Gr.A	
	7335	40			−1.8	U				Bwg		87Gr18	
^{102}Nb^m(β^-)^{102}Mo	7215	40	7356	11	3.5	C				Bwg		87Gr.A	
	7210	35			4.2	B				Bwg		87Gr18	
^{102}Tc(β^-)^{102}Ru	4420	100	4534	9	1.1	U						69Bl16	
^{102}Rh(β^+)^{102}Ru	2317	10	2323	6	0.6	2						61Hi06	
	2325	10			−0.2	2						63Bo17	
^{102}Ru(p,n)^{102}Rh	−3115	15	−3105	6	0.6	2						83Do11	
^{102}Rh(β^-)^{102}Pd	1150	6	1120	6	−5.0	B						61Hi06	
^{102}Ag(β^+)^{102}Pd	5800	200	5656	8	−0.7	U						67Ch05	
	5966	100			−3.1	B						67Ch05	*
	4910	140			5.3	C						70Be.A	*
	5350	200			1.5	U						72We.A	
	5880	110			−2.0	U						79Ve.A	
^{102}Cd(β^+)^{102}Ag	2554	57	2587	8	0.6	U						72We.A	
	2587	8				2				GSI		91Ke08	*
^{102}In(β^+)^{102}Cd	9250	380	8965	5	−0.8	U				Lvp		95Sz01	*
	8970	150			0.0	U				GSI		98Ka.A	
	8910	170			0.3	U				GSI		03Gi06	*
^{102}Sn(β^+)^{102}In	5780	70	5760	100	−0.3	o				GSI		01St.A	
	5760	100				2				GSI		02Fa13	
*^{102}Y−^{120}Sn$_{.850}$	Associated with low-spin isomer											11Ha48	**
*^{102}Ag−u	$M-A$=–82260(28) keV for mixture gs+m at 9.40 keV											Nub16b	**
*^{102}Pd(p,t)^{100}Pd	Original error 12; added systematic error 21 keV											GAu	**
*^{102}In(εp)^{101}Ag	Estimated using proton spectrum from 1450 to 3200 keV											GAu	**
*^{102}Ag(β^+)^{102}Pd	E_{β^+}=3340(100), 3070(130) from ^{102}Ag^m at 9.40 to 1534.48, 2017.8 levels											Ens098	**
*^{102}Ag(β^+)^{102}Pd	Q_{β^+}=4920(100) from ^{102}Ag^m at 9.40 keV											Nub16b	**
*^{102}Cd(β^+)^{102}Ag	E_{β^+}=1075(8) to 1$^+$ level at 490.44 keV											Ens098	**
*^{102}In(β^+)^{102}Cd	From 9900 keV upper and 8600 keV lower limits											GAu	**
*^{102}In(β^+)^{102}Cd	Good agreement with authors' earlier measurement, average=8950(120) keV											03Gi06	**
^{103}Y−u	−63060	183	−62757	12	1.1	o				GT1	1.5	04Ma.A	
	−62803	106			0.2	U				GT2	2.5	08Kn.A	
^{103}Y−^{120}Sn$_{.858}$	21154	12				2				JY1	1.0	11Ha48	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{103}Zr−u		−72765	64	−72803	10	−0.6	U			JY0	1.0	04Ri12	
C_8 H_7−^{103}Rh		149263.5	3.3	149281.2	2.5	2.1	U			M16	2.5	63Da10	
		149261	19			0.7	U			R12	1.5	83De51	
C_7 N H_5−^{103}Rh		136681	18	136705.1	2.5	0.9	U			R12	1.5	83De51	
^{103}Pd−u		−93894.8	14.5	−93889.2	1.0	0.4	U			GS4	1.0	14Ya.A	
^{103}Ag−u		−91091	52	−91039	4	1.0	U			GS2	1.0	05Li24	*
^{103}Ag−^{85}Rb$_{1.212}$		15875	14	15871	4	−0.3	U			SH1	1.0	07Ma92	
		15871.4	4.4				2			MA8	1.0	11He10	
^{103}Cd−^{85}Rb$_{1.212}$		20328	11	20327.8	1.9	0.0	U			SH1	1.0	07Ma92	
		20328.2	2.1			−0.2	1	86	86 ^{103}Cd	MA8	1.0	09Br09	
^{103}In−^{85}Rb$_{1.212}$		26785	11	26789	10	0.4	1	88	88 ^{103}In	SH1	1.0	07Ma92	
^{103}Cd−^{96}Mo$_{1.073}$		15699.2	5.2	15700.9	1.9	0.3	1	14	14 ^{103}Cd	JY1	1.0	09El08	
^{103}Zr−^{97}Zr$_{1.062}$		21760.5	9.9				2			JY1	1.0	06Ha03	
^{103}Mo−^{97}Zr$_{1.062}$		7648.4	9.9				2			JY1	1.0	06Ha03	
^{103}Nb−^{102}Ru$_{1.010}$		16069.7	4.2				2			JY1	1.0	07Ha32	
^{103}Cd−^{102}Cd		−1534	154	−1064.9	2.6	2.0	U			CR2	1.5	92Sh.A	*
^{103}Rh(p,t)^{101}Rh		−8275	17	−8280	6	−0.3	1	13	12 ^{101}Rh	Pri		64Th05	
^{102}Ru(n,γ)^{103}Ru		6232.2	0.3	6232.05	0.15	−0.5	–					82Ba69	Z
		6232.00	0.17			0.3	–			Bdn		06Fi.A	
^{102}Ru(d,p)^{103}Ru		4005	15	4007.49	0.15	0.2	U			ANL		71Fo01	
^{102}Ru(n,γ)^{103}Ru	ave.	6232.05	0.15	6232.05	0.15	0.0	1	100	99 ^{103}Ru			average	
^{103}Rh(γ,n)^{102}Rh		−9307	32	−9320	7	−0.4	U			Phi		60Ge01	
^{103}Rh(p,d)^{102}Rh		−7144	16	−7095	7	3.1	B			Pri		64Th05	
^{102}Pd(n,γ)^{103}Pd		7624.6	1.5	7625.3	0.8	0.5	2					70Bo29	
		7625.6	0.9			−0.3	2			Bdn		06Fi.A	
^{103}Zr(β^-)^{103}Nb		6945	85	7213	10	3.2	B			Bwg		87Gr18	
^{103}Nb(β^-)^{103}Mo		5535	35	5932	10	11.3	C			Bwg		87Gr.A	
		5530	30			13.4	B			Bwg		87Gr18	
^{103}Mo(β^-)^{103}Tc		3750	60	3643	13	−1.8	U			Bwg		87Gr18	
^{103}Tc(β^-)^{103}Ru		2615	45	2663	10	1.1	U			Bwg		87Gr.A	
^{103}Ru(β^-)^{103}Rh		764	4	764.5	2.3	0.1	–					58Ro09	*
		760	6			0.8	–					65Mu09	*
		762	5			0.5	–					70Pe04	*
		769	4			−1.1	–					82Oh04	
	ave.	764.6	2.3			0.0	1	98	98 ^{103}Rh			average	
^{103}Pd(ε)^{103}Rh		564	20	574.5	2.4	0.5	U					54Ri09	*
		543.0	0.8			39.4	B					86Be53	
^{103}Ag(β^+)^{103}Pd		2580	100	2654	4	0.7	U					62Pa05	*
		2700	100			−0.5	U					66Ja12	
		2320	50			6.7	B					69Ba02	
		2622	34			1.0	U			Dlf		88Bo28	*
^{103}Cd(β^+)^{103}Ag		4200	130	4151	4	−0.4	U					70Be.A	
		4250	200			−0.5	U					72We.A	
		4131	23			0.9	U			Dlf		88Bo28	*
^{103}In(β^+)^{103}Cd		5380	200	6019	10	3.2	B			Brk		83Wo04	
		6050	28			−1.1	1	12	12 ^{103}In	Dlf		88Bo28	*
		6040	60			−0.3	U					98Ka42	
^{103}Sn(β^+)^{103}In		7500	600	7660	70	0.3	o			GSI		04Mu32	
		7660	70				2			GSI		05Ka34	*

*^{103}Ag−u	$M-A$=–84784(29) keV for mixture gs+m at 134.45 keV	Nub16b	**
*^{103}Cd−^{102}Cd	From ^{102}Cd/^{103}Cd=0.99029800(150)	AHW	**
*^{103}Ru(β^-)^{103}Rh	E_{β^-}=227(4) to 5/2$^+$ level at 536.840 keV, and other E_{β^-}	Ens09a	**
*^{103}Ru(β^-)^{103}Rh	E_{β^-}=112(6) to 5/2$^+$ level at 650.064 keV, and other E_{β^-}	Ens09a	**
*^{103}Ru(β^-)^{103}Rh	E_{β^-}=225(5) to 5/2$^+$ level at 536.840 keV, and other E_{β^-}	Ens09a	**
*^{103}Pd(ε)^{103}Rh	IBE=500(20) to ^{103}Rh^m 7/2$^+$ at 39.753 keV	Nub16b	**
*^{103}Ag(β^+)^{103}Pd	E_{β^+}=1290(100) to 5/2$^+$ level at 266.861 keV, and other E_{β^+}	Ens09a	**
*^{103}Ag(β^+)^{103}Pd	E_{β^+}=1601(27), plus systematic error 20 keV estimated by evaluator	GAu	**
*^{103}Cd(β^+)^{103}Ag	E_{β^+}=3109(11), plus systematic error 20 keV estimated by evaluator	GAu	**
*^{103}In(β^+)^{103}Cd	E_{β^+}=4841(20), plus systematic error 20 keV estimated by evaluator	Ens09a	**
*^{103}Sn(β^+)^{103}In	Original 7640(70) recalibrated	05Ka34	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{104}Zr−u	−70661	54	−70558	10	1.9	U			JY0	1.0	04Ri12	
^{104}Nb−u	−77470	140	−77100.9	2.9	1.1	U			GT2	2.5	08Kn.A	*
C_8 H_8−^{104}Ru	157171.5	3.4	157174.9	2.7	0.4	1	10	10 ^{104}Ru	M16	2.5	63Da10	
C_8 H_8−^{104}Pd	158612	10	158569.9	1.4	−1.7	U			M16	2.5	63Da10	
	158599	12			−1.6	U			R12	1.5	83De51	
C_7 N H_6−^{104}Pd	146013	8	145993.8	1.4	−1.6	U			R12	1.5	83De51	
C_6 ^{13}C N H_5−^{104}Pd	141552	20	141523.6	1.4	−0.9	U			R12	1.5	83De51	
^{104}Pd−u	−95938	30	−95969.6	1.4	−1.1	U			GS2	1.0	05Li24	
^{104}Ag−u	−91410	30	−91376	5	1.1	U			GS2	1.0	05Li24	*
^{104}Cd−u	−90147	30	−90143.8	1.8	0.1	U			GS2	1.0	05Li24	
^{104}Cd−^{85}Rb$_{1.224}$	17813.7	5.5	17825.6	1.8	2.2	U			SH1	1.0	07Ma92	
	17825.5	1.9			0.0	1	89	89 ^{104}Cd	MA8	1.0	09Br09	
^{104}In−^{85}Rb$_{1.224}$	26183.9	6.2				2			SH1	1.0	07Ma92	
	26140.3	29.6	26184	6	1.5	U			JY1	1.0	09El08	*
^{104}Sn−^{87}Rb$_{1.195}$	31636.9	6.4	31634	6	−0.4	1	93	93 ^{104}Sn	JY1	1.0	09El07	
^{104}Cd−^{96}Mo$_{1.083}$	13094.2	5.5	13093.4	1.8	−0.1	1	11	11 ^{104}Cd	JY1	1.0	09El08	
^{104}Zr−^{97}Zr$_{1.072}$	24896	10				2			JY1	1.0	06Ha03	
^{104}Nb−^{97}Zr$_{1.072}$	18352.8	2.9				2			JY1	1.0	07Ha32	*
^{104}Mo−^{97}Zr$_{1.072}$	9194.0	9.7	9194	10	0.0	1	97	97 ^{104}Mo	JY1	1.0	06Ha03	
^{104}In−^{103}In	−1241	231	−1664	12	−1.2	U			CR2	1.5	91Sh19	*
^{104}Pd−^{102}Pd	−1617	30	−1601.7	1.5	0.3	U			R12	1.5	83De51	
^{104}Ru(d,α)^{102}Tc	7180	10	7188	9	0.8	1	80	79 ^{102}Tc	Pri		82De03	
^{102}Ru(t,p)^{104}Ru	6648	30	6650.1	2.5	0.1	U			LAl		72Ca10	
^{104}Ru(d,^{3}He)^{103}Tc	−5289	10	−5287	9	0.2	2			VUn		83De20	
^{104}Ru(t,α)^{103}Tc	9048	30	9033	9	−0.5	2			LAl		81Fl02	
^{104}Ru(d,t)^{103}Ru−^{148}Gd()^{147}Gd	85	3	83.8	2.4	−0.4	1	65	58 ^{104}Ru	Jul		86Ru04	*
^{103}Rh(n,γ)^{104}Rh	6998.96	0.10	6998.96	0.08	0.0	2			MMn		81Ke03	Z
	6998.95	0.14			0.0	2			Bdn		06Fi.A	
^{103}Rh(d,p)^{104}Rh	4786	10	4774.39	0.08	−1.2	U			MIT		64Sp12	
^{104}Pd(d,t)^{103}Pd	−3762	25	−3752.0	1.6	0.4	U			Pit		64Co11	
^{104}Sb(p)^{103}Sn	510	100				3					94Pa12	*
^{104}Nb^m(IT)^{104}Nb	215	120				3			Bwg		87Gr18	*
^{104}Nb(β^-)^{104}Mo	8105	90	8531	9	4.7	B			Bwg		87Gr18	
^{104}Nb^m(β^-)^{104}Mo	8320	80	8750	120	5.3	B			Bwg		87Gr18	*
^{104}Mo(β^-)^{104}Tc	4800	200	2153	24	−13.2	B					64Te02	
	2155	40			0.0	–			Bwg		87Gr18	
	2160	40			−0.2	–			Jyv		94Jo.A	
ave.	2158	28			−0.1	1	73	70 ^{104}Tc			average	
^{104}Tc(β^-)^{104}Ru	5620	70	5592	25	−0.4	–					78Su03	
	5590	60			0.0	–			Bwg		87Gr18	
ave.	5600	50			−0.2	1	30	30 ^{104}Tc			average	
^{104}Rh(β^-)^{104}Pd	2440	30	2435.8	2.7	−0.1	U					55Bu.A	
^{104}Ag(β^+)^{104}Pd	4276	15	4279	4	0.2	U					60Nu02	*
	4350	200			−0.4	U					72We.A	
	4306	31			−0.9	U			Dlf		88Bo28	*
^{104}Pd(p,n)^{104}Ag	−5061	4				3					79De44	
^{104}Cd(β^+)^{104}Ag	1587	60	1148	5	−7.3	B					70Mu17	*
	1403	26			−9.8	B			GSI		79Pl06	*
^{104}In(β^+)^{104}Cd	7100	200	7786	6	3.4	B					78Hu06	*
	7260	250			2.1	U			Brk		83Wo04	*
	7800	250			−0.1	U			Dlf		88Bo28	
	7890	120			−0.9	U			Dlf		90Re08	
	7880	100			−0.9	U			GSI		98Ka.A	
^{104}Sn(β^+)^{104}In	4550	300	4556	8	0.0	U					88Ba10	*
	4515	60			0.7	U			GSI		91Ke11	

*^{104}Nb−u	D_M=–77350(100) μu for mixture gs+m at 220(120); $M-A$=–72051(93) keV	Nub16b	**
*^{104}Ag−u	$M-A$=–85144(28) keV for mixture gs+m at 6.90 keV	Nub16b	**
*^{104}In−^{85}Rb$_{1.224}$	D_M=26190.5(5.5) μu for mixture gs+m at 93.48 keV; $M-A$=–76176.5(5.1) keV	Nub16b	**
*^{104}Nb−^{97}Zr$_{1.072}$	Only long-lived state is measured	07Ri01	**
*^{104}In−^{103}In	From ^{103}In/^{104}In=0.99038900(222)	AHW	**
*^{104}Ru(d,t)^{103}Ru−^{148}Gd()^{147}Gd	Q =82(3) to 5/2$^+$ level at 2.81 keV	Ens09a	**
*^{104}Sb(p)^{103}Sn	Below 550 keV; value and error estimated by evaluator	94Pa12	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item			
$*^{104}$Nb^m(IT)^{104}Nb	From difference in Q_{β^-}	GAu	**
$*^{104}$Nb^m(β^-)^{104}Mo	Better use the difference of the two Q_{β^-} 's	GAu	**
$*^{104}$Ag(β^+)^{104}Pd	E_{β^+}=2705(15) from ^{104}Ag^m at 6.90 to 2$^+$ level at 555.81 keV	Ens079	**
$*^{104}$Ag(β^+)^{104}Pd	E_{β^+}=2012(71) to 4$^+$ level at 1323.59 keV	Ens079	**
*	and E_{β^+}=2729(24) from ^{104}Ag^m at 6.90 to 2$^+$ level at 555.81 keV	Ens079	**
*	plus systematic error 20 keV estimated by evaluator	GAu	**
$*^{104}$Cd(β^+)^{104}Ag	p$^+$ =0.011(0.003) 0.0019(0.0005) respectively, to 1$^+$ level at 90.6 keV; recalculated E_{β^+}	Ens079	**
$*^{104}$In(β^+)^{104}Cd	E_{β^+}=4600(200) 4750(250) respectively, to 4$^+$ level at 1492.1 keV	Ens079	**
$*^{104}$Sn(β^+)^{104}In	p$^+$ =0.71(0.07) to 1139.25 level	Ens079	**

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{105}Y−u		−55041	574				2			GT3	2.5	16Kn03	
^{105}Rh−u		−94378	53	−94312.2	2.7	1.2	U			GS2	1.0	05Li24	*
C_8 H_9−^{105}Pd		165357	14	165345.8	1.2	−0.3	U			M16	2.5	63Da10	
		165360	9			−1.1	U			R12	1.5	83De51	
C_7 N H_7−^{105}Pd		152773	18	152769.7	1.2	−0.1	U			R12	1.5	83De51	
C_6 ^{13}C N H_6−^{105}Pd		148309	26	148299.5	1.2	−0.2	U			R12	1.5	83De51	
C_7 O H_5−^{105}Pd		128970	18	128960.3	1.2	−0.4	U			R12	1.5	83De51	
^{105}Ag−u		−93534	31	−93474	5	1.9	U			GS2	1.0	05Li24	*
^{105}Cd−^{96}Mo$_{1.094}$		13748.5	5.4	13749.7	1.5	0.2	U			JY1	1.0	09El08	
^{105}Cd−^{85}Rb$_{1.235}$		18403.4	1.5	18403.6	1.5	0.1	1	99	99 ^{105}Cd	MA8	1.0	09Br09	
^{105}In−^{85}Rb$_{1.235}$		23442	11				2			SH1	1.0	07Ma92	
^{105}Sn−^{85}Rb$_{1.235}$		30204.1	7.1	30208	4	0.6	1	36	36 ^{105}Sn	SH1	1.0	07Ma92	
^{105}Sn−^{87}Rb$_{1.207}$		30890.0	5.6	30888	4	−0.4	1	58	58 ^{105}Sn	JY1	1.0	09El07	
^{105}Zr−^{97}Zr$_{1.082}$		30359	13				2			JY1	1.0	06Ha03	
^{105}Mo−^{97}Zr$_{1.082}$		13319.4	9.8	13319	10	0.0	1	98	98 ^{105}Mo	JY1	1.0	06Ha03	
^{105}Nb−^{102}Ru$_{1.029}$		23376.4	4.3				2			JY1	1.0	07Ha32	
^{105}Pd−^{104}Pd		1049	35	1049.1	0.8	0.0	U			R12	1.5	83De51	
^{105}In−^{104}In		−3618	144	−3712	13	−0.4	U			CR2	1.5	91Sh19	*
^{105}Te(α)^{101}Sn		5079	50	5069	3	−0.2	U					06Se08	*
		5061.1	5.			1.6	o					06Li41	*
		5069.2	3.				3					10Da17	*
^{104}Ru(n,γ)^{105}Ru		5909.9	0.5	5910.10	0.11	0.4	–					74Hr01	
		5910.1	0.2			0.0	–					78Gu14	
		5910.11	0.14			−0.1	–			Bdn		06Fi.A	
^{104}Ru(d,p)^{105}Ru		3684	15	3685.53	0.11	0.1	U			ANL		71Fo01	
		3684.5	1.0			1.0	U			Mun		76Ma49	
^{104}Ru(n,γ)^{105}Ru	ave.	5910.10	0.11	5910.10	0.11	0.0	1	100	69 ^{105}Ru			average	
^{104}Pd(n,γ)^{105}Pd		7094.1	0.7				2					70Bo29	
^{104}Pd(d,p)^{105}Pd		4867	20	4869.5	0.7	0.1	U			Pit		64Co11	
^{105}Pd(d,t)^{104}Pd		−851	30	−836.9	0.7	0.5	U			Pit		64Co11	
^{105}Sb(p)^{104}Sn		482.6	15.	323	22	−10.7	F			Bkp		94Ti03	*
^{105}Nb(β^-)^{105}Mo		6485	70	7422	10	13.4	B			Bwg		87Gr18	
^{105}Mo(β^-)^{105}Tc		4950	45	4950	40	0.1	1	61	59 ^{105}Tc	Bwg		87Gr18	
^{105}Tc(β^-)^{105}Ru		3640	55	3640	40	0.1	1	41	41 ^{105}Tc	Bwg		87Gr18	
^{105}Ru(β^-)^{105}Rh		1916	4	1916.8	2.9	0.2	1	51	25 ^{105}Rh			67Sc01	
^{105}Rh(β^-)^{105}Pd		570	5	566.6	2.3	−0.7	–					51Du03	
		560	5			1.3	–					56La24	
		568	4			−0.3	–					64Ka23	
	ave.	566.3	2.6			0.1	1	78	75 ^{105}Rh			average	
^{105}Ag(ε)^{105}Pd		1347	25	1347	5	0.0	U					67Pi03	
		1310	25			1.5	U					67Sc26	*
^{105}Cd(β^+)^{105}Ag		2738	5	2737	4	−0.2	–					53Jo20	*
		2600	200			0.7	U					72We.A	
		2742	11			−0.5	–					86Bo28	*
	ave.	2739	5			−0.4	1	92	91 ^{105}Ag			average	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{105}In(β^+)^{105}Cd	5140	200	4693	10	−2.2	U			Brk		83Wo04	
	4849	13			−12.0	B					86Bo28	*
^{105}Sn(β^+)^{105}In	6230	80	6303	11	0.9	U			GSI		06Ka74	
*^{105}Rh−u	$M-A$=–87847(32) keV for mixture gs+m at 129.782 keV										Nub16b	**
*^{105}Ag−u	$M-A$=–87113(28) keV for mixture gs+m at 25.479 keV										Nub16c	**
*^{105}In−^{104}In	From ^{104}In/^{105}In=0.99050293(139)										AHW	**
*^{105}Te(α)^{101}Sn	E_α=4720(50), 4703(5) to 7/2$^+$ level at 171.7 keV (same group as next)										Ens07a	**
*^{105}Te(α)^{101}Sn	E_α=4711(3) to 7/2$^+$ level at 171.7 keV; also E_α=4880(20) to ground state										Ens07a	**
*^{105}Sb(p)^{104}Sn	F : expected 150 protons, no proton peak observed										05Li47	**
*^{105}Ag(ε)^{105}Pd	L/K=0.152(0.002) $\to$ Q =222(12+theor.error) to 3/2$^-$ level at 1087.96 keV										Ens05b	**
*^{105}Cd(β^+)^{105}Ag	E_{β^+}=1691(5) to ^{105}Ag^m at 25.479 keV										Nub16b	**
*^{105}Cd(β^+)^{105}Ag	E_{β^+}=1695(11) to ^{105}Ag^m at 25.479 keV										Nub16b	**
*^{105}In(β^+)^{105}Cd	E_{β^+}=3696(13) to 7/2$^+$ level at 131.11 keV										Ens05b	**
^{106}Zr−u	−62674	322	−62860	470	−0.4	o			GT1	1.5	04Ma.A	
	−62856	186				2			GT3	2.5	16Kn03	
^{106}Nb−u	−70843	258	−71072	4	−0.6	U			GT1	1.5	04Ma.A	
^{106}Mo−^{97}Zr$_{1.093}$	15589.8	9.8				2			JY1	1.0	06Ha03	
C_8 H_{10}−^{106}Pd	174764.0	4.3	174770.0	1.2	0.6	U			M16	2.5	63Da10	
	174751	32			0.4	U			R12	1.5	83De51	
	174766	8			0.3	U			R12	1.5	83De51	
C_7 ^{13}C H_9−^{106}Pd	170285	32	170299.8	1.2	0.3	U			R12	1.5	83De51	
	170298	30			0.0	U			R12	1.5	83De51	
C_7 N H_8−^{106}Pd	162186	18	162194.0	1.2	0.3	U			R12	1.5	83De51	
C_7 O H_6−^{106}Pd	138378	20	138384.5	1.2	0.2	U			R12	1.5	83De51	
^{106}Pd−u	−96495	30	−96519.7	1.2	−0.8	U			GS2	1.0	05Li24	
	−96521.0	1.9			0.5	–			TG1	1.5	12Sm01	
	−96524.9	4.7			0.7	–			TG1	1.5	12Sm01	
ave.	−96521.5	2.6			0.7	1	20	20 ^{106}Pd			average	
^{106}Ag−u	−93318	44	−93336	3	−0.4	U			GS2	1.0	05Li24	*
C_8 H_{10}−^{106}Cd	171789.3	2.7	171790.5	1.2	0.2	U			M16	2.5	63Da10	
	171841	17			−2.0	U			R12	1.5	83De51	
C_7 N H_8−^{106}Cd	159210	15	159214.5	1.2	0.2	U			R12	1.5	83De51	
^{106}Cd−u	−93540.6	1.7	−93540.2	1.2	0.2	–			TG1	1.5	12Sm01	
	−93545.7	3.47			1.1	–			TG1	1.5	12Sm01	
ave.	−93541.6	2.3			0.6	1	27	27 ^{106}Cd			average	
^{106}Cd−^{85}Rb$_{1.247}$	16459.8	1.8	16458.0	1.2	−1.0	1	43	43 ^{106}Cd	MA8	1.0	09Br09	
^{106}In−u	−86516	32	−86536	13	−0.6	U			GS2	1.0	05Li24	*
^{106}Sn−^{85}Rb$_{1.247}$	26959.4	8.7	26956	5	−0.4	1	39	39 ^{106}Sn	SH1	1.0	07Ma92	
^{106}Sn−^{87}Rb$_{1.218}$	27578.0	7.6	27576	5	−0.3	1	52	52 ^{106}Sn	JY1	1.0	09El07	
^{106}Sb−^{87}Rb$_{1.218}$	39256.1	8.0				2			JY1	1.0	09El07	
^{106}Nb−^{102}Ru$_{1.039}$	28318.2	4.4				2			JY1	1.0	07Ha32	
^{106}Tc−^{102}Ru$_{1.039}$	13780.7	4.7	13747	13	−7.1	F			JY1	1.0	07Ha20	*
^{106}Ru−^{105}Ru$_{1.010}$	511.8	9.1	505	6	−0.7	1	42	37 ^{106}Ru	JY1	1.0	07Ha20	
^{106}Cd−^{106}Pd	2979.50	0.11	2979.50	0.11	0.0	1	100	70 ^{106}Pd	SH1	1.0	11Go23	
	2979.08	0.60			0.5	U			TG1	1.5	12Sm01	
^{106}Pd−^{105}Pd	−1608	25	−1599.2	0.3	0.2	U			R12	1.5	83De51	
^{106}Pd−^{104}Pd	−508	32	−550.1	0.8	−0.9	U			R12	1.5	83De51	
^{106}Te(α)^{102}Sn	4323.5	30.	4290	9	−1.1	U					81Sc17	
	4290.2	9.				3					94Pa11	
	4323.5	30.			−1.1	U					02Ma19	
	4261.0	62.4			0.5	U					16Ca33	
^{106}Cd(^{3}He,^{6}He)^{103}Cd	−9173	17	−9141.4	2.1	1.9	U			MSU		78Pa11	*
^{104}Ru(t,p)^{106}Ru	5892	20	5888	5	−0.2	U			LAl		72Ca10	
^{104}Pd(^{3}He,p)^{106}Ag	5153	6	5189.5	2.9	6.1	F			Bld		75An07	*

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{106}Cd(p,t)^{104}Cd		−10802	15	−10824.6	2.0	−1.5	U			MSU		82Cr01	
		−10829	12			0.4	U			Pri		83De03	
		−10819	12			−0.5	U			Ors		84Ro.A	
^{105}Pd(n,γ)^{106}Pd		9562.8	1.1	9560.96	0.28	−1.7	U					70Bo29	
		9560.5	0.4			1.1	–			BNn		87Fo20	*
		9561.4	0.4			−1.1	–			Bdn		06Fi.A	
^{105}Pd(d,p)^{106}Pd		7349	30	7336.39	0.28	−0.4	U			Pit		64Co11	
^{106}Pd(d,t)^{105}Pd		−3311	25	−3303.73	0.28	0.3	U			Pit		64Co11	
^{105}Pd(n,γ)^{106}Pd	ave.	9560.95	0.28	9560.96	0.28	0.0	1	100	96 ^{105}Pd			average	
^{105}Pd(^{3}He,d)^{106}Ag		322	8	320.0	2.8	−0.3	1	12	12 ^{106}Ag	Bld		75An07	
^{106}Cd(d,t)^{105}Cd		−4661	50	−4612.4	1.8	1.0	U					73De16	
^{106}Cd(^{3}He,α)^{105}Cd		9728	25	9708.0	1.8	−0.8	U			Man		75Ch21	
^{106}Mo(β^-)^{106}Tc		3510	45	3642	15	2.9	U			Bwg		87Gr18	
		3520	17			7.2	C			Bwg		92Gr.A	
		3520	17			7.2	C			Jyv		94Jo.A	
^{106}Tc(β^-)^{106}Ru		6545	45	6547	11	0.0	o			Bwg		87Gr18	
		6547	11				2			Bwg		92Gr.A	
^{106}Ru(β^-)^{106}Rh		39.2	0.3	39.40	0.21	0.7	–					50Ag01	
		39.6	0.3			−0.7	–					58Gr07	
	ave.	39.40	0.21			0.0	1	100	63 ^{106}Ru			average	
^{106}Rh(β^-)^{106}Pd		3530	10	3545	5	1.5	–					52Al06	
		3550	10			−0.5	–					58Gr07	
		3550	20			−0.3	–					60Se05	
	ave.	3541	7			0.6	1	64	63 ^{106}Rh			average	
^{106}Rh^m(β^-)^{106}Pd		3677	10				2					66De11	*
^{106}Ag(β^+)^{106}Pd		2980	20	2965.1	2.8	−0.7	U					53Be42	
		3011	72			−0.6	U					86Bo28	
^{106}Ag(ε)^{106}Pd		2961	4			1.0	–					78Ge01	*
^{106}Pd(p,n)^{106}Ag		−3754	13	−3747.5	2.8	0.5	U			Oak		64Jo11	
		−3756	5			1.7	–					79De44	
^{106}Ag(ε)^{106}Pd	ave.	2966	3	2965.1	2.8	−0.3	1	81	81 ^{106}Ag			average	
^{106}In(β^+)^{106}Cd		6516	30	6524	12	0.3	2					66Ca09	*
		6507	29			0.6	2					86Bo28	*
^{106}Cd(p,n)^{106}In		−7312.9	15.	−7306	12	0.4	2			ANL		84Fi05	*
^{106}Sn(β^+)^{106}In		3195	60	3254	13	1.0	U			GSI		79Pl06	*
		3200	100			0.5	U					88Ba10	
*^{106}Ag−u	$M-A$=–86880(32) keV for mixture gs+m at 89.66 keV											Nub16b	**
*^{106}In−u	$M-A$=–80575(29) keV for mixture gs+m at 28.6 keV											Nub16b	**
*^{106}Tc−^{102}Ru$_{1.039}$	F : unidentified impurities in the trap											07Ha20	**
*^{106}Cd(^{3}He,^{6}He)^{103}Cd	First excited state at 187.89 keV yields Q =–9146 keV											GAu	**
*^{104}Pd(^{3}He,p)^{106}Ag	F : withdrawn by authors											AHW	**
*^{105}Pd(n,γ)^{106}Pd	Calculated from 13 γ energies in 2 keV n-capture											AHW	**
*	to levels in ^{106}Pd; corrected for recoil											Ens086	**
*^{106}Rh^m(β^-)^{106}Pd	E_{β^-}=920(10) to 5$^+$ level at 2757.06 keV											Ens086	**
*^{106}Ag(ε)^{106}Pd	L/K=0.203(0.003) gives Q_{β^+}=99(4), recalculated Q											AHW	**
*	from ^{106}Ag^m 6$^+$ at 89.66 keV to 5$^+$ level at 2951.84 keV											Ens086	**
*^{106}In(β^+)^{106}Cd	E_{β^+}=4890(30) from ^{106}In^m 2$^+$ at 28.6 to 2$^+$ level at 632.64 keV											Ens086	**
*^{106}In(β^+)^{106}Cd	E_{β^+}=2965(30) to 6$^+$ level at 2491.66 keV and 4908(29) from											Ens086	**
*	^{106}In^m (2)$^+$ at 28.6 to 2$^+$ level at 632.64 keV											Ens086	**
*^{106}Cd(p,n)^{106}In	T=7535(15) to 2$^+$ level at 151.1 keV											Ens086	**
*^{106}Sn(β^+)^{106}In	p$^+$ =0.253(0.021) to 1$^+$ level at 893.0 keV											Ens086	**
^{107}Zr−u		−58379	482				2			GT3	2.5	16Kn03	
^{107}Nb−u		−68326	279	−68410	9	−0.2	U			GT1	1.5	04Ma.A	
^{107}Mo−^{97}Zr$_{1.103}$		20326.7	9.9				2			JY1	1.0	06Ha03	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{107}Pd−u	−95013	95	−94871.9	1.3	1.5	U			GS2	1.0	05Li24	*
C_8 H_{11}−^{107}Ag	180986.4	3.1	180983.8	2.6	−0.3	1	11	11 ^{107}Ag	M16	2.5	63Da10	
	180994	17			−0.4	U			R12	1.5	83De51	
C_7 N H_9−^{107}Ag	168415	8	168407.8	2.6	−0.6	U			R12	1.5	83De51	
C_7 O H_7−^{107}Ag	144595	18	144598.3	2.6	0.1	U			R12	1.5	83De51	
C_6 ^{13}C O H_6−^{107}Ag	140131	16	140128.1	2.6	−0.1	U			R12	1.5	83De51	
C_6 N O H_5−^{107}Ag	132025	16	132022.3	2.6	−0.1	U			R12	1.5	83De51	
^{107}Cd−u	−93410	30	−93387.9	1.8	0.7	U			GS2	1.0	05Li24	
^{107}Cd−^{85}Rb$_{1.259}$	17668.7	1.9	17668.8	1.8	0.1	1	88	88 ^{107}Cd	MA8	1.0	09Br09	
^{107}In−u	−89710	30	−89710	12	0.0	U			GS2	1.0	05Li24	
^{107}Sn−^{87}Rb$_{1.230}$	27421.6	5.7				2			JY1	1.0	09El07	
^{107}Sb−^{87}Rb$_{1.230}$	35866.2	5.8	35859	4	−1.3	1	59	59 ^{107}Sb	JY1	1.0	09El07	
^{107}Sb−^{133}Cs$_{.805}$	251.8	9.7	262	4	1.0	1	21	21 ^{107}Sb	SH1	1.0	07Ma92	
^{107}Nb−^{102}Ru$_{1.049}$	31936.7	8.6				2			JY1	1.0	07Ha32	
^{107}Tc−^{105}Ru$_{1.019}$	9465.8	8.9				2			JY1	1.0	07Ha20	
^{107}Ru−^{105}Ru$_{1.019}$	3977.2	8.9				2			JY1	1.0	07Ha20	
^{107}Sn−^{106}Sn	−1148	86	−1244	8	−0.7	U			CR2	1.5	92Sh.A	*
^{107}Te(α)^{103}Sn	3982.2	15.	4008	5	1.7	3					79Sc22	
	4011.3	5.			−0.6	3					91He21	
^{107}Ag(p,t)^{105}Ag	−9015	15	−8997	5	1.2	1	11	9 ^{105}Ag	Min		75Ku14	*
^{106}Pd(n,γ)^{107}Pd	6536.4	0.5	6536.4	0.5	0.1	1	99	94 ^{107}Pd	Bdn		06Fi.A	
^{107}Ag(γ,n)^{106}Ag	−9353	34	−9536	4	−5.4	B			Phi		60Ge01	
^{107}Ag(p,d)^{106}Ag	−7305	11	−7311	4	−0.5	1	10	7 ^{106}Ag	Bld		75An07	
^{107}Mo(β^-)^{107}Tc	6160	60	6198	13	0.6	U			Bwg		89Gr23	
^{107}Tc(β^-)^{107}Ru	4820	85	5113	12	3.4	B			Bwg		89Gr23	
^{107}Ru(β^-)^{107}Rh	3140	300	3001	15	−0.5	U					62Pi02	*
	2900	135			0.7	U			Bwg		89Gr23	
^{107}Rh(β^-)^{107}Pd	1510	40	1509	12	0.0	U					62Pi02	*
^{107}Pd(β^-)^{107}Ag	33	3	34.0	2.3	0.3	1	60	53 ^{107}Ag			49Pa.B	
^{107}Cd(β^+)^{107}Ag	1417	4	1416.4	2.6	−0.1	1	41	30 ^{107}Ag			62La10	*
^{107}In(β^+)^{107}Cd	3426	11				2					86Bo28	*
*^{107}Pd−u	$M-A$=–88397(62) keV for mixture gs+n at 214.6 keV										Nub16b	**
*^{107}Sn−^{106}Sn	From ^{107}Sn/^{106}Sn=1.00943053(81)										AHW	**
*^{107}Ag(p,t)^{105}Ag	Recalibrated with (p,t) results on ^{104}Pd, ^{105}Pd, ^{106}Pd and ^{108}Pd										AHW	**
*^{107}Ru(β^-)^{107}Rh	E_{β^-}=2100(300) to (5/2$^+$,7/2$^+$) level at 1041.950 keV										Ens085	**
*^{107}Rh(β^-)^{107}Pd	E_{β^-}=840(40) to 5/2$^+$ level at 670.06 keV										Ens085	**
*^{107}Cd(β^+)^{107}Ag	E_{β^+}=302(4) to ^{107}Ag^m at 93.125 keV										Nub16b	**
*^{107}In(β^+)^{107}Cd	E_{β^+}=2199(11) to 5/2$^+$ level at 204.98 keV										Ens085	**
^{108}Nb−u	−64413	440	−63925	9	0.7	o			GT1	1.5	04Ma.A	
	−63945	112			0.1	U			GT2	2.5	08Kn.A	
^{108}Nb−^{120}Sn$_{.900}$	24093.3	8.8				2			JY1	1.0	11Ha48	
^{108}Mo−^{97}Zr$_{1.113}$	23144.8	9.9				2			JY1	1.0	06Ha03	
^{108}Mo−u	−76039	215	−75960	10	0.2	U			GT1	1.5	04Ma.A	
^{108}Rh−^{120}Sn$_{.900}$	−3267	15				2			JY1	1.0	07Ha20	
^{108}Rh^m−^{120}Sn$_{.900}$	−3144	13				2			JY1	1.0	07Ha20	
C_8 H_{12}−^{108}Pd	190014	6	190008.6	1.2	−0.4	U			M16	2.5	63Da10	
	190005	19			0.1	U			R12	1.5	83De51	
C_7 ^{13}C H_{11}−^{108}Pd	185532	30	185538.4	1.2	0.1	U			R12	1.5	83De51	
C_7 N H_{10}−^{108}Pd	177422	17	177432.5	1.2	0.4	U			R12	1.5	83De51	
C_6 ^{13}C N H_9−^{108}Pd	172943	18	172962.3	1.2	0.7	U			R12	1.5	83De51	
C_7 O H_8−^{108}Pd	153611	17	153623.1	1.2	0.5	U			R12	1.5	83De51	
C_6 N O H_6−^{108}Pd	141031	16	141047.0	1.2	0.7	U			R12	1.5	83De51	
^{108}Pd−u	−96109.6	1.3	−96108.2	1.2	0.7	–			TG1	1.5	12Sm01	
	−96108.1	4.7			0.0	–			TG1	1.5	12Sm01	
ave.	−96109.5	1.9			0.7	1	40	40 ^{108}Pd			average	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{108}Ag−u		−93973	50	−94049.7	2.6	−1.5	U			GS2	1.0	05Li24	*
^{108}Ag−^{133}Cs$_{.812}$		−17218	84	−17276.7	2.6	−0.7	U			MA8	1.0	08Br.A	*
C_8 H_{12}−^{108}Cd		189715.6	2.9	189716.8	1.2	0.2	U			M16	2.5	63Da10	
		189695	16			0.9	U			R12	1.5	83De51	
C_7 N H_{10}−^{108}Cd		177140	30	177140.7	1.2	0.0	U			R12	1.5	83De51	
C_6 ^{13}C N H_9−^{108}Cd		172653	15	172670.5	1.2	0.8	U			R12	1.5	83De51	
C_6 N O H_6−^{108}Cd		140746	15	140755.2	1.2	0.4	U			R12	1.5	83De51	
^{108}Cd−^{85}Rb$_{1.271}$		16298.5	2.3	16298.8	1.2	0.1	1	27	27 ^{108}Cd	MA8	1.0	09Br09	
^{108}Cd−u		−95818.3	1.7	−95816.4	1.2	0.7	–			TG1	1.5	12Sm01	
		−95817.1	4.87			0.1	–			TG1	1.5	12Sm01	
	ave.	−95818.2	2.4			0.7	1	25	25 ^{108}Cd			average	
^{108}In−u		−90277	31	−90306	9	−0.9	U			GS2	1.0	05Li24	*
^{108}Sn−u		−88102	32	−88106	6	−0.1	U			GS2	1.0	05Li24	
^{108}Sn−^{87}Rb$_{1.241}$		24599.8	5.9	24601	6	0.2	1	96	96 ^{108}Sn	JY1	1.0	09El07	
^{108}Sb−^{87}Rb$_{1.241}$		34933.7	5.9				2			JY1	1.0	09El07	
^{108}Te−^{87}Rb$_{1.241}$		42085.3	6.0	42087	6	0.4	1	94	94 ^{108}Te	JY1	1.0	09El07	
^{108}Tc−^{105}Ru$_{1.029}$		13423.4	9.0				2			JY1	1.0	07Ha20	
^{108}Ru−^{105}Ru$_{1.029}$		5115.7	8.9				2			JY1	1.0	07Ha20	
^{108}Pd−^{108}Cd		−292.05	0.59	−291.8	0.8	0.3	1	87	46 ^{108}Cd	TG1	1.5	12Sm01	
^{108}Sn−^{107}Sn		−3650	76	−3819	8	−1.5	U			CR2	1.5	92Sh.A	*
^{108}Pd−^{106}Pd		425	40	411.5	1.7	−0.2	U			R12	1.5	83De51	
^{108}Cd−^{106}Cd		−2232	32	−2276.2	1.7	−0.9	U			R12	1.5	83De51	
^{108}Te(α)^{104}Sn		3406.4	30.	3420	8	0.5	U					65Ma12	
		3448.0	20.			−1.3	1	13	7 ^{104}Sn			81Sc17	
		3444.9	4.			−6.1	B					91He21	
		3406.4	25.			0.6	U					91Pa05	
^{108}I(α)^{104}Sb		4034.7	25.	4100	50	1.3	F					91Pa05	*
		4099.1	5.				4					94Pa12	
^{108}Pd(d,^{3}He)^{107}Rh		−4456	12				2			Grn		86Ka43	
^{108}Pd(d,t)^{107}Pd		−2977	30	−2965.7	1.6	0.4	U			Pit		64Co11	
^{107}Ag(n,γ)^{108}Ag		7269.6	0.6	7271.41	0.17	3.0	B			ILn		85Ma54	Z
		7271.41	0.17				2			Bdn		06Fi.A	
^{107}Ag(d,p)^{108}Ag		5051	7	5046.84	0.17	−0.6	U			MIT		67Sp09	
^{108}Mo(β^-)^{108}Tc		5135	60	5167	13	0.5	U			Bwg		92Gr.A	
		5120	40			1.2	o					94Jo.A	
		5100	60			1.1	U					95Jo02	
^{108}Tc(β^-)^{108}Ru		7720	50	7739	12	0.4	U			Bwg		89Gr23	
^{108}Ru(β^-)^{108}Rh		1315	100	1370	16	0.6	U					62Pi02	*
		1420	185			−0.3	U			Bwg		89Gr23	
		1380	80			−0.1	o			Jyv		92Jo05	
		1350	60			0.3	U			Jyv		94Jo.A	
^{108}Rh(β^-)^{108}Pd		4500	600	4492	14	0.0	U					62Pi02	
		4505	105			−0.1	U			Bwg		89Gr23	
^{108}Rh^m(β^-)^{108}Pd		4434	50	4607	12	3.5	B					69Pi08	*
		4510	100			1.0	U					84Bh02	*
^{108}Ag(β^+)^{108}Pd		1902	25	1917.4	2.6	0.6	U					62Fr07	
^{108}Pd(p,n)^{108}Ag		−2675	100	−2699.8	2.6	−0.2	U			Oak		64Jo11	
^{108}Ag(β^-)^{108}Cd		1650	40	1645.7	2.6	−0.1	U					60Wa10	
^{108}In(β^+)^{108}Cd		5124	50	5133	9	0.2	U					62Ka23	*
		5125	14			0.5	–					86Bo28	*
^{108}Cd(p,n)^{108}In		−5927	12	−5915	9	1.0	–			ANL		84Fi05	*
^{108}In(β^+)^{108}Cd	ave.	5136	9	5133	9	−0.4	1	89	89 ^{108}In			average	
^{108}Sn(β^+)^{108}In		2078	25	2050	10	−1.1	1	15	11 ^{108}In	GSI		79Pl06	*

*^{108}Ag−u	$M-A$=–87480(34) keV for mixture gs+m at 109.466 keV	Nub16b	**
*^{108}Ag−^{133}Cs$_{.812}$	D_M=–17159(77) μu for mixture gs+m at 109.466 keV; $M-A$=–87497(72) keV	Nub16b	**
*^{108}In−u	$M-A$=–84078(28) keV for mixture gs+m at 29.75 keV	Nub16b	**
*^{108}Sn−^{107}Sn	From ^{107}Sn/^{108}Sn=0.99076701(70)	AHW	**
*^{108}I(α)^{104}Sb	F : Same authors say: Consistent with new value, if recalibrated	94Pa12	**
*^{108}Ru(β^-)^{108}Rh	E_{β^-}=1150(100) to 1$^+$ level at 164.98 keV	Ens08a	**
*^{108}Rh^m(β^-)^{108}Pd	E_{β^-}=1570(50) to (4$^+$,5$^+$,6$^+$) level at 2863.70 keV	Ens08a	**
*^{108}Rh^m(β^-)^{108}Pd	E_{β^-}=1970(100) to 4$^+$ level at 2540.2 keV	Ens08a	**
*^{108}In(β^+)^{108}Cd	E_{β^+}=1290(80) to 6$^+$ level at 2807.81 keV, and E_{β^+}=3500(50) from ^{108}In^m	Ens08a	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
*	at 29.75 to 2^+ level at 632.986 keV										Nub16b	**
*^{108}In(β^+)^{108}Cd	E_{β^+}=1887(28) to 4^+ level at 2239.35 keV, and E_{β^+}=3494(14) from ^{108}In^m										Ens08a	**
*	at 29.75 to 2^+ level at 632.986 keV										Nub16b	**
*^{108}Cd(p,n)^{108}In	Q(not T, PrvCom Fi)=–6191(8), –6244(9), errors statistical only,										AHW	**
*	to 3^+ levels at respectively, 198.36 and 266.06 keV										Ens08a	**
*^{108}Sn(β^+)^{108}In	p^+ =35(6)$\times10^{-4}$ to 1^+ level at 698.85 keV										Ens08a	**
^{109}Nb$-$u	$-$60784	376	$-$60860	280	$-$0.1	o			GT1	1.5	04Ma.A	
	$-$60859	185				2			GT1	1.5	16Kn03	
^{109}Mo$-^{97}$Zr$_{1.124}$	28515	12				2			JY1	1.0	06Ha03	
^{109}Mo$-$u	$-$71552	247	$-$71569	12	0.0	U			GT1	1.5	04Ma.A	
^{109}Rh$-^{120}$Sn$_{.908}$	$-$2463.6	7.2	$-$2450	4	1.9	1	37	36 ^{109}Rh	JY1	1.0	07Ha20	
C_8 $H_{13}-^{109}$Ag	196972.1	3.8	196969.6	1.4	$-$0.3	U			M16	2.5	63Da10	
	196972	6			$-$0.3	U			R12	1.5	83De51	
C_6 ^{13}C O H_8-^{109}Ag	156110	16	156113.9	1.4	0.2	U			R12	1.5	83De51	
C_6 N O H_7-^{109}Ag	148006	16	148008.1	1.4	0.1	U			R12	1.5	83De51	
^{109}Ag$-^{133}$Cs$_{.820}$	$-$17766	83	$-$17714.8	1.4	0.6	U			MA8	1.0	08Br.A	*
^{109}Cd$-^{85}$Rb$_{1.282}$	18072.9	1.9	18072.3	1.6	$-$0.3	1	75	75 ^{109}Cd	MA8	1.0	09Br09	
^{109}Sn$-$u	$-$88747	30	$-$88707	9	1.3	U			GS2	1.0	05Li24	
^{109}Sb$-^{87}$Rb$_{1.253}$	31937.9	5.9	31938	6	0.0	1	92	92 ^{109}Sb	JY1	1.0	09El07	
^{109}Sb$-^{133}$Cs$_{.820}$	$-$4360	19	$-$4329	6	1.6	U			SH1	1.0	07Ma92	
^{109}Te$-^{87}$Rb$_{1.253}$	41101.6	6.4	41101	5	0.0	1	54	54 ^{109}Te	JY1	1.0	09El07	
^{109}Te$-^{133}$Cs$_{.820}$	4835.6	8.3	4834	5	$-$0.2	1	32	32 ^{109}Te	SH1	1.0	07Ma92	
^{109}Tc$-^{105}$Ru$_{1.038}$	16014.3	10.0				2			JY1	1.0	07Ha20	
^{109}Ru$-^{105}$Ru$_{1.038}$	9083.9	9.2				2			JY1	1.0	07Ha20	
^{109}Ag$-^{107}$Ag	$-$335	28	$-$335.8	2.9	0.0	U			R12	1.5	83De51	
^{109}Te(α)^{105}Sn	3197.6	30.	3198	6	0.0	U					65Ma12	
	3197.6	15.			0.0	1	13	7 ^{109}Te			79Sc22	
	3225.6	4.			$-$7.0	C					91He21	
^{109}I(α)^{105}Sb	3918.1	20.8				3			ORa		07Ma35	
^{109}Xe(α)^{105}Te	4217.0	7.3				4					06Li41	*
^{109}Ag(p,t)^{107}Ag	$-$7995	15	$-$7973.6	2.7	1.4	U			Min		75Ku14	*
^{108}Pd(n,γ)^{109}Pd	6153.8	0.3	6153.59	0.15	$-$0.7	–			ILn		80Ca02	Z
	6153.54	0.17			0.3	–			Bdn		06Fi.A	
^{108}Pd(d,p)^{109}Pd	3936	30	3929.02	0.15	$-$0.2	U			Pit		64Co11	
^{108}Pd(n,γ)^{109}Pd	ave. 6153.60	0.15	6153.59	0.15	$-$0.1	1	100	81 ^{109}Pd			average	
^{109}Ag(γ,n)^{108}Ag	$-$9196	26	$-$9184.0	2.7	0.5	U			Phi		60Ge01	
^{109}Ag(d,t)^{108}Ag	$-$2947	30	$-$2926.8	2.7	0.7	U			Pit		64Co11	
^{108}Cd(^{3}He,d)^{109}In$-^{110}$Cd()^{111}In	$-$806.5	2.6	$-$807.0	2.5	$-$0.2	1	91	70 ^{109}In			80Ta07	
^{109}Te(εp)^{108}Sn	7140	60	7066	7	$-$1.2	U					73Bo20	
^{109}I(p)^{108}Te	819	5	820	4	0.2	o					84Fa04	
	819.6	2.0			0.3	o					92He.A	
	820.2	4.0				2					95Ho26	
^{109}Tc(β^-)^{109}Ru	6315	70	6456	13	2.0	U			Bwg		89Gr23	
^{109}Ru(β^-)^{109}Rh	4160	65	4261	10	1.6	U			Bwg		89Gr23	
^{109}Rh(β^-)^{109}Pd	2577	50	2607	4	0.6	U					78Ka10	*
^{109}Pd(β^-)^{109}Ag	1116	2	1112.9	1.4	$-$1.5	1	49	30 ^{109}Ag			62Br15	*
^{109}Cd(ε)^{109}Ag	182	3	215.1	1.8	11.0	C					68Go.A	*
	214	3			0.4	1	35	22 ^{109}Cd			Averag	*
^{109}In(β^+)^{109}Cd	2015	8	2015	4	0.0	–					62No06	*
	2030	15			$-$1.0	–					71Ba08	*
	ave. 2018	7			$-$0.5	1	33	30 ^{109}In			average	
^{109}Sn(β^+)^{109}In	4120	50	3859	9	$-$5.2	B					70Sh05	
^{109}Sb(β^+)^{109}Sn	6380	16	6379	9	0.0	1	30	22 ^{109}Sn			82Jo03	*
*^{109}Ag$-^{133}$Cs$_{.820}$	D_M=–17719(78) μu for mixture gs+m at 88.0341 keV; $M-A$=–88723(73) keV										Nub16b	**
*^{109}Xe(α)^{105}Te	Also E_α=3918(9) keV to 150(13) level										06Li41	**
*^{109}Ag(p,t)^{107}Ag	Recalibrated with (p,t) results on ^{104}Pd, ^{105}Pd, ^{106}Pd and ^{108}Pd										AHW	**
*^{109}Rh(β^-)^{109}Pd	E_{β^-}=2250(50) to $5/2^+$ level at 326.869 keV										Ens062	**
*^{109}Pd(β^-)^{109}Ag	E_{β^-}=1028(2) to ^{109}Ag^m at 88.0341 keV										Nub16b	**
*^{109}Cd(ε)^{109}Ag	IBE=68(3) gives 94(3) to ^{109}Ag^m at 88.0341 keV										Nub16b	**
*^{109}Cd(ε)^{109}Ag	From average LM/K=0.2265(0.0026) $\rightarrow$ Q_{β^+}=126(3); recalculated Q										AHW	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
*	to ^{109}Ag^m at 88.0341 keV										Nub16b	**
*	LMN/K=0.228(0.003)										65Le06	**
*	L/K=0.195(0.005) $\rightarrow$ LMN/K=0.258(0.006) $\rightarrow$ Q_{β^+}=109(5) not used										65Le06	**
*	LMN/K=0.226(0.003)										70Go39	**
*^{109}In(β^+)^{109}Cd	E_{β^+}=790(8) 805(15) respectively, to 7/2$^+$ level at 203.30 keV										Ens062	**
*^{109}Sb(β^+)^{109}Sn	E_{β^+}=4416(21) to 3/2$^+$ level at 925.6 keV, and other E_{β^+}										Ens062	**
^{110}Nb$-$u	$-$56157	360				2			GT3	2.5	16Kn03	
^{110}Mo$-^{97}$Zr$_{1.134}$	31685	26				2			JY1	1.0	06Ha03	
^{110}Mo$-$u	$-$69544	268	$-$69289	26	0.6	U			GT1	1.5	04Ma.A	
^{110}Ru$-$u	$-$85897	78	$-$85961	10	$-$0.8	U			JY0	1.0	03Ko.A	
^{110}Rh$-$u	$-$88835	130	$-$88920	19	$-$0.7	U			JY0	1.0	03Ko.A	*
^{110}Rh$-^{120}$Sn$_{.917}$	815	110	761	19	$-$0.5	U			JY1	1.0	07Ha20	*
C$_8$ H$_{14}-^{110}$Pd	204389	9	204377.6	0.7	$-$0.5	U			M16	2.5	63Da10	
	204380	20			$-$0.1	U			R12	1.5	83De51	
C$_7$ ^{13}C H$_{13}-^{110}$Pd	199913	20	199907.4	0.7	$-$0.2	U			R12	1.5	83De51	
C$_6$ N O H$_8-^{110}$Pd	155418	17	155416.0	0.7	$-$0.1	U			R12	1.5	83De51	
C$_5$ ^{13}C N O H$_7-^{110}$Pd	150946	17	150945.8	0.7	0.0	U			R12	1.5	83De51	
C$_6$ O$_2$ H$_6-^{110}$Pd	131609	18	131606.6	0.7	$-$0.1	U			R12	1.5	83De51	
^{110}Pd$-$u	$-$94829.7	1.5	$-$94827.1	0.7	1.7	–			MA8	1.0	12Fi01	
	$-$94829.5	1.7			0.9	–			TG1	1.5	12Sm01	
	$-$94830.9	3.0			0.8	–			TG1	1.5	12Sm01	
ave.	$-$94829.7	1.2			2.1	1	28	28 ^{110}Pd			average	
C$_8$ H$_{14}-^{110}$Cd	206548.4	4.6	206543.0	0.4	$-$0.5	U			M16	2.5	63Da10	
	206550	45			$-$0.1	U			R12	1.5	83De51	
	206569	13			$-$1.3	U			R12	1.5	83De51	
C$_7$ ^{13}C H$_{13}-^{110}$Cd	202093	14	202072.8	0.4	$-$1.0	U			R12	1.5	83De51	
	202053	28			0.5	U			R12	1.5	83De51	
C$_7$ O H$_{10}-^{110}$Cd	170156	16	170157.5	0.4	0.1	U			R12	1.5	83De51	
C$_6$ N O H$_8-^{110}$Cd	157614	17	157581.4	0.4	$-$1.3	U			R12	1.5	83De51	
C$_5$ ^{13}C N O H$_7-^{110}$Cd	153131	17	153111.2	0.4	$-$0.8	U			R12	1.5	83De51	
C$_6$ O$_2$ H$_6-^{110}$Cd	133801	18	133772.0	0.4	$-$1.1	U			R12	1.5	83De51	
C$_9$ H$_2-^{110}$Cd	112661	19	112642.6	0.4	$-$0.6	U			R12	1.5	83De51	
^{110}Cd$-$u	$-$96993.6	1.5	$-$96992.5	0.4	0.7	–			MA8	1.0	12Fi01	
	$-$96997.0	1.5			2.0	–			TG1	1.5	12Sm01	
	$-$96992.2	2.4			$-$0.1	–			TG1	1.5	12Sm01	
ave.	$-$96994.4	1.2			1.6	1	12	12 ^{110}Cd			average	
^{110}In$-$u	$-$92898	36	$-$92829	12	1.9	U			GS2	1.0	05Li24	*
^{110}Sn$-$u	$-$92189	30	$-$92155	15	1.1	2			GS2	1.0	05Li24	
^{110}Sb$-^{87}$Rb$_{1.264}$	31650.1	6.4				2			JY1	1.0	09El07	
^{110}Te$-^{133}$Cs$_{.827}$	643.8	7.7	649	7	0.7	1	84	84 ^{110}Te	SH1	1.0	07Ma92	
^{110}Tc$-^{105}$Ru$_{1.048}$	20424.0	9.8				2			JY1	1.0	07Ha20	
^{110}Ru$-^{105}$Ru$_{1.048}$	10719.5	9.3	10721	9	0.2	1	97	97 ^{110}Ru	JY1	1.0	07Ha20	
^{110}Cd ^{35}Cl$-^{108}$Cd ^{37}Cl	1764	5	1774.0	1.3	0.5	U			H11	4.0	63Bi12	
^{110}Pd$-^{110}$Cd	2166.24	0.69	2165.4	0.6	$-$1.2	–			MA8	1.0	12Fi01	
	2166.2	1.3			$-$0.4	–			TG1	1.5	12Sm01	
ave.	2166.2	0.7			$-$1.3	1	80	71 ^{110}Pd			average	
^{110}Pd$-^{108}$Pd	1288	35	1281.1	1.3	$-$0.1	U			R12	1.5	83De51	
^{110}Cd$-^{108}$Cd	$-$1219	34	$-$1176.1	1.3	0.8	U			R12	1.5	83De51	
^{110}Te(α)^{106}Sn	2723.2	15.6	2699	8	$-$1.6	1	25	16 ^{110}Te			81Sc17	
^{110}I(α)^{106}Sb	3574.2	10.	3580	50	0.2	3					81Sc17	
	3586.7	5.			$-$0.1	3					91He21	
^{110}Xe(α)^{106}Te	3878.3	30.	3872	9	$-$0.2	4					81Sc17	
	3886.6	15.			$-$0.9	4					92He.A	
	3871.0	30.			0.0	4					02Ma19	
	3857.5	19.7			0.7	4			Jya		07Sa36	
	3860.7	20.8			0.6	4					16Ca33	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{110}Pd(p,t)^{108}Pd		−6495	15	−6467.5	1.3	1.8	U			Min		75Ku14	*
^{110}Pd(d,^{3}He)^{109}Rh		−5134	5	−5127	4	1.4	1	65	64 ^{109}Rh	VUn		87Ka29	
^{110}Pd(t,α)^{109}Rh		9206	25	9193	4	−0.5	U			LAl		82Fl09	
^{109}Ag(n,γ)^{110}Ag		6809.2	0.1	6809.19	0.10	−0.1	1	100	57 ^{109}Ag			81Bo.B	
		6808.20	0.16			6.2	C			Bdn		06Fi.A	
^{109}Ag(d,p)^{110}Ag		4590	5	4584.63	0.10	−1.1	U			MIT		64Sp12	
^{110}Cd(d,t)^{109}Cd		−3664	30	−3657.7	1.6	0.2	U			Pit		64Ro17	
^{110}Tc(β^-)^{110}Ru		6680	120	9038	13	19.7	C			Jyv		89Jo.A	
		9021	55			0.3	U			Jyv		00Kr.A	
^{110}Ru(β^-)^{110}Rh		2810	50	2756	19	−1.1	1	15	12 ^{110}Rh	Jyv		91Jo11	*
^{110}Rh(β^-)^{110}Pd		5500	500	5502	18	0.0	U					63Ka21	
		5400	100			1.0	U					70Pi01	*
		5510	19			−0.4	1	88	88 ^{110}Rh	Bwg		00Kr.A	
^{110}Ag(β^-)^{110}Cd		2891.4	3.0	2890.7	1.3	−0.2	–					63Da03	*
		2892.9	2.0			−1.1	–					67Mo12	*
	ave.	2892.4	1.7			−1.1	1	59	57 ^{110}Ag			average	
^{110}In(β^+)^{110}Cd		3928	20	3878	12	−2.5	2					51Mc11	*
		3868	20			0.5	2					53Bl44	*
		3838	20			2.0	2					62Ka08	*
^{110}Sb(β^+)^{110}Sn		8750	200	8392	15	−1.8	U					72Mi26	*
		9085	100			−6.9	B					72Si28	*

*^{110}Rh−u	$M-A$=–82639(73) keV for mixture gs+m at 220#(150#) keV	Nub16b	**
*^{110}Rh−^{120}Sn$_{.917}$	D_M=933.3(7.2) μu for mixture gs+m at 220#(150#) keV; $M-A$=–82668.1(6.8) keV	Nub16b	**
*^{110}In−u	$M-A$=–86503(28) keV for mixture gs+m at 62.08 keV	Nub16b	**
*^{110}Pd(p,t)^{108}Pd	Recalibrated with (p,t) results on ^{104}Pd, ^{105}Pd, ^{106}Pd and ^{108}Pd	AHW	**
*^{110}Ru(β^-)^{110}Rh	E_{β^-}=2700(50) to 1$^+$ level at 112.19 keV	Ens126	**
*^{110}Rh(β^-)^{110}Pd	E_{β^-}=2600(100) to (4$^+$) levels at 2790.64 and 2805.03 keV	Ens126	**
*^{110}Ag(β^-)^{110}Cd	E_{β^-}=529(3) from ^{110}Ag^n at 117.59 to 6$^+$ level at 2479.9339 keV	Ens126	**
*^{110}Ag(β^-)^{110}Cd	E_{β^-}=2891(4); and 531(2) from ^{110}Ag^n at 117.59 to 6$^+$ level at 2479.9339 keV	Ens126	**
*^{110}In(β^+)^{110}Cd	E_{β^+}=2310(20) 2250(20) 2220(20) respectively, from ^{110}In^m at 62.08(0.04) keV	Nub16b	**
*	to 2$^+$ level at 657.7623 keV	Ens126	**
*^{110}Sb(β^+)^{110}Sn	E_{β^+}=6500(200) 6850(100) respectively, to 2$^+$ level at 1211.72; and other E_{β^+}	Ens126	**

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{111}Mo−u	−64348	279	−64348	14	0.0	U			GT1	1.5	04Ma.A	
^{111}Ru−u	−82302	79	−82432	10	−1.7	U			JY0	1.0	03Ko.A	
^{111}Rh−u	−88282	79	−88357	7	−1.0	U			JY0	1.0	03Ko.A	
^{111}Rh−^{120}Sn$_{.925}$	2105.8	7.3				2			JY1	1.0	07Ha20	
^{111}Ag−u	−94741	51	−94703.2	1.6	0.7	U			GS2	1.0	05Li24	*
C_8 H_{15}−^{111}Cd	213184.4	3.9	213191.7	0.4	0.8	U			M16	2.5	63Da10	
	213197	40			−0.1	U			R12	1.5	83De51	
C_7 ^{13}C H_{14}−^{111}Cd	208719	19	208721.5	0.4	0.1	U			R12	1.5	83De51	
C_7 O H_{11}−^{111}Cd	176814	16	176806.2	0.4	−0.3	U			R12	1.5	83De51	
C_9 H_3−^{111}Cd	119317	18	119291.3	0.4	−1.0	U			R12	1.5	83De51	
C_8 N H−^{111}Cd	106723	17	106715.3	0.4	−0.3	U			R12	1.5	83De51	
^{111}Cd−u	−95774	30	−95816.2	0.4	−1.4	U			GS2	1.0	05Li24	*
^{111}Sb−u	−86837	30	−86782	10	1.8	U			GS2	1.0	05Li24	
^{111}Sb−^{133}Cs$_{.835}$	−7834.2	9.5				2			SH1	1.0	07Ma92	
^{111}Te−^{133}Cs$_{.835}$	−51.8	6.9				2			SH1	1.0	07Ma92	
^{111}I−^{87}Rb$_{1.276}$	46150.4	6.1	46155	5	0.7	1	70	70 ^{111}I	JY1	1.0	09El07	
^{111}I−^{133}Cs$_{.835}$	9197	19	9217	5	1.0	U			SH1	1.0	07Ma92	
^{111}Tc−^{105}Ru$_{1.057}$	23412	11				2			JY1	1.0	07Ha20	
^{111}Ru−^{105}Ru$_{1.057}$	15080.6	10.0				2			JY1	1.0	07Ha20	
^{110}Cd H−^{111}Cd	6638	18	6648.73	0.18	0.4	U			R12	1.5	83De51	
^{111}Mo−^{111}Tc	9753.0	7.3				3			JY1	1.0	11Ha48	*
^{111}Cd−^{110}Cd	1180	11	1176.31	0.18	−0.1	U			M16	2.5	63Da10	
	1208	34			−0.6	U			R12	1.5	83De51	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{111}Cd H$-^{110}$Cd		8994	35	9001.34	0.18	0.1	U			R12	1.5	83De51	
^{111}I(α)^{107}Sb		3270.1	10.	3275	5	0.4	–					79Sc22	
		3293.0	10.			−1.8	–					92He.A	
	ave.	3281	7			−0.9	1	50	30 ^{111}I			average	
^{111}Xe(α)^{107}Te		3693.3	25.	3720	50	0.5	4					79Sc22	
		3714.1	30.			0.1	4					81Sc17	
		3723.5	10.			−0.1	4					91He21	
^{110}Pd(n,γ)^{111}Pd		5726.3	0.4				2			Bdn		06Fi.A	
^{110}Cd(n,γ)^{111}Cd		6980	100	6975.60	0.17	0.0	U					61Ja21	
		6975.5	0.5			0.2	–					86Ba72	
		6975.9	0.2			−1.5	–					90Ne.B	
		6975.1	0.4			1.2	–			Bdn		06Fi.A	
^{111}Cd(γ,n)^{110}Cd		−6975	3	−6975.60	0.17	−0.2	U			McM		79Ba06	
^{110}Cd(d,p)^{111}Cd		4740	30	4751.03	0.17	0.4	U			Pit		64Ro17	
		4750.68	0.88			0.4	U			Rez		90Pi05	*
^{111}Cd(d,t)^{110}Cd		−745	30	−718.37	0.17	0.9	U			Pit		64Co11	
^{110}Cd(n,γ)^{111}Cd	ave.	6975.71	0.17	6975.60	0.17	−0.7	1	97	77 ^{110}Cd			average	
^{111}Te(εp)^{110}Sn		5070	70	4966	15	−1.5	U					68Ba53	
^{111}Tc(β^-)^{111}Ru		7480	80	7761	14	3.5	B			Jyv		96Kl.A	
		7449	80			3.9	B			Jyv		00Kr.A	
^{111}Ru(β^-)^{111}Rh		5039	50	5519	12	9.6	C			Jyv		00Kr.A	
^{111}Rh(β^-)^{111}Pd		3640	50	3681	7	0.8	U			Jyv		00Kr.A	
		3650	33			1.0	U			Bwg		00Kr.A	
^{111}Pd(β^-)^{111}Ag		2210	100	2229.6	1.6	0.2	U					52Mc34	*
		2190	50			0.8	U					57Kn.A	*
		2160	100			0.7	U					60Pr07	*
^{111}Ag(β^-)^{111}Cd		1028	3	1036.8	1.4	2.9	B					67Le06	
		1035	2			0.9	2					71Na02	
		1038.6	2.			−0.9	2					77Re12	
^{111}Cd(p,n)^{111}In		−1635	20	−1643	3	−0.4	U			Oak		74Ki02	
^{111}Sn(β^+)^{111}In		2530	30	2453	6	−2.6	U					51Mc11	
^{111}Sb(β^+)^{111}Sn		4470	50	5102	10	12.6	B					72Si28	*
*^{111}Ag−u	$M-A$=–88221(44) keV for mixture gs+m at 59.82 keV											Nub16b	**
*^{111}Cd−u	$M-A$=–88817(28) keV for ^{111}Cd^m 11/2$^-$ at 396.214 keV											Nub16b	**
*^{111}Mo−^{111}Tc	Taken as low-spin isomer (see also ^{102}Y and ^{114}Tc doublets in same work)											GAu	**
*^{110}Cd(d,p)^{111}Cd	Estimated systematic error 0.5 added to statistical error 0.73 keV											AHW	**
*^{111}Pd(β^-)^{111}Ag	Q_{β^-}=2150(100) 2130(50) 2100(100) respectively, to ^{111}Ag^m at 59.82 keV											Nub16b	**
*^{111}Sb(β^+)^{111}Sn	E_{β^+}=3290(50) to 5/2$^+$ level at 154.48 keV											Ens095	**
^{112}Tc$-^{102}$Ru$_{1.098}$		34976.0	5.9				2			JY1	1.0	07Ha20	
^{112}Ru−u		−81033	78	−81193	10	−2.1	U			JY0	1.0	03Ko.A	
^{112}Rh−u		−85506	119	−85600	50	−0.8	1	16	16 ^{112}Rh	JY0	1.0	03Ko.A	*
^{112}Ag$-^{133}$Cs$_{.842}$		−13342.0	2.6				2			MA8	1.0	10Br02	
C$_8$ H$_{16}-^{112}$Cd		222445.3	3.9	222436.63	0.27	−0.9	U			M16	2.5	63Da10	
C$_7$ O H$_{12}-^{112}$Cd		186063	16	186051.12	0.27	−0.5	U			R12	1.5	83De51	
C$_9$ H$_4-^{112}$Cd		128541	19	128536.25	0.27	−0.2	U			R12	1.5	83De51	
		128550	10			−0.9	U			R12	1.5	83De51	
C$_8$ N H$_2-^{112}$Cd		115979	14	115960.19	0.27	−0.9	U			R12	1.5	83De51	
^{112}In−u		−94366	58	−94461	5	−1.6	U			GS2	1.0	05Li24	*
C$_8$ H$_{16}-^{112}$Sn		220384	9	220375.6	0.3	−0.4	U			M16	2.5	63Da10	
		220385	8			−0.8	U			R13	1.5	83De51	
^{112}Sn$-^{86}$Kr$_{1.302}$		21210.3	2.5	21209.8	0.3	−0.2	U			JY1	1.0	11Ha48	
^{112}Sb−u		−87597	30	−87600	19	−0.1	2			GS2	1.0	05Li24	
^{112}Te$-^{133}$Cs$_{.842}$		−3662.7	9.0				2			SH1	1.0	07Ma92	
^{112}I$-^{133}$Cs$_{.842}$		7614	11				2			SH1	1.0	07Ma92	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{112}Rh$-^{120}$Sn$_{.933}$	5640	110	5650	50	0.1	1	19	19 ^{112}Rh	JY1	1.0	07Ha20	*
^{112}Pd$-^{120}$Sn$_{.933}$	−1423.7	7.4	−1424	7	−0.1	1	89	89 ^{112}Pd	JY1	1.0	07Ha20	
^{112}Sn$-^{120}$Sn$_{.933}$	−3930.2	1.9	−3929.5	0.9	0.4	1	24	22 ^{120}Sn	JY1	1.0	11Ha48	
^{112}Ru$-^{105}$Ru$_{1.067}$	17242.5	9.9				2			JY1	1.0	07Ha20	
^{112}Cd ^{35}Cl$-^{110}$Cd ^{37}Cl	2701	2	2706.5	0.3	0.7	U			H11	4.0	63Bi12	
^{111}Cd H$-^{112}$Cd	9255	20	9244.9	0.3	−0.3	U			R12	1.5	83De51	
^{112}Sn$-^{112}$Cd	2061.01	0.17	2060.99	0.17	−0.1	1	99	97 ^{112}Sn	JY1	1.0	09Ra11	
^{112}Cd$-^{110}$Cd H	−8060	40	−8068.6	0.3	−0.1	U			R12	1.5	83De51	
^{112}Cd$-^{111}$Cd	−1419	11	−1419.9	0.3	0.0	U			M16	2.5	63Da10	
	−1410	42			−0.2	U			R12	1.5	83De51	
^{112}Cd$-^{110}$Cd	−238	39	−243.6	0.3	−0.1	U			R12	1.5	83De51	
^{112}Cd H$-^{111}$Cd	6402	35	6405.2	0.3	0.1	U			R12	1.5	83De51	
^{112}I(α)^{108}Sb	2986.9	31.1	2957	12	−0.6	U					81Sc17	
^{112}Xe(α)^{108}Te	3329.1	20.	3330	6	0.1	2					81Sc17	
	3308.4	15.6			1.4	2					92He.A	
	3335.4	7.			−0.7	2					94Pa11	
^{112}Sn(^{3}He,^{6}He)^{109}Sn	−8686	9	−8686	8	0.0	1	78	78 ^{109}Sn	MSU		78Pa11	
^{110}Pd(t,p)^{112}Pd	5659	20	5651	7	−0.4	1	11	11 ^{112}Pd	LAl		72Ca10	
^{112}Cd(^{14}C,^{16}O)^{110}Pd	5543	29	5512.9	0.6	−1.0	U			LAl		84Co19	
^{110}Cd(t,p)^{112}Cd	7888	20	7887.7	0.3	0.0	U			Ald		67Hi01	
^{112}Cd(p,t)^{110}Cd	−7891	5	−7887.7	0.3	0.7	U			Min		73Oo01	
^{112}Sn(p,t)^{110}Sn	−10485	15	−10474	14	0.7	R			Roc		70Fl08	
^{111}Cd(n,γ)^{112}Cd	9460	50	9393.93	0.28	−1.3	U					61Ja21	
	9394.3	0.3			−1.2	1	89	81 ^{111}Cd	ILn		93Dr.A	
^{112}Cd(γ,n)^{111}Cd	−9403	5	−9393.93	0.28	1.8	U			McM		79Ba06	
^{111}Cd(d,p)^{112}Cd	7183	30	7169.36	0.28	−0.5	U			Pit		64Co11	
	7170	10			−0.1	U			Yal		67Ba15	
	7171	5			−0.3	U			MIT		67Sp09	
^{112}Cd(d,t)^{111}Cd	−3129	30	−3136.70	0.28	−0.3	U			Pit		64Ro17	
^{112}Sn(d,^{3}He)^{111}In	−2050	50	−2059	3	−0.2	U			Sac		69Co03	
^{112}Sn(p,d)^{111}Sn	−8574	15	−8563	5	0.7	2			Har		70Ca01	
^{112}Sn(d,t)^{111}Sn	−4529.0	5.7	−4531	5	−0.3	2			SPa		75Be09	
^{112}Cs(p)^{111}Xe	814.3	7.	816	4	0.3	5					94Pa12	
	817.3	5.			−0.2	5					12Wa10	
^{112}Tc(β^-)^{112}Ru	6060	130	10372	11	33.2	C			Jyv		89Jo.A	
	9484	100			8.9	C			Jyv		00Kr.A	
^{112}Ru(β^-)^{112}Rh	4520	80	4100	50	−5.2	B			Jyv		91Jo11	*
^{112}Rh(β^-)^{112}Pd	6200	500	6590	40	0.8	U			Jyv		88Ay02	
	6573	54			0.3	1	66	66 ^{112}Rh	Bwg		00Kr.A	
^{112}Rh^m(β^-)^{112}Pd	6929	56				2			Bwg		00Kr.A	
^{112}Pd(β^-)^{112}Ag	299	20	262	7	−1.8	U					55Nu11	*
^{112}Ag(β^-)^{112}Cd	4057	20	3991.1	2.4	−3.3	C					57Je.A	*
	3940	40			1.3	U					62In01	*
^{112}In(β^+)^{112}Cd	2582	20	2585	4	0.1	U					62Ru05	
^{112}Cd(p,n)^{112}In	−3399.3	20.	−3367	4	1.6	U			Oak		64Jo11	
	−3376	6			1.5	1	50	50 ^{112}In	Tky		80Ad04	
^{112}In(β^-)^{112}Sn	656	6	665	4	1.5	1	50	50 ^{112}In			53Bl44	
^{112}Sb(β^+)^{112}Sn	7530	100	7056	18	−4.7	B					72Mi27	*
	7029	50			0.5	R					72Si28	*
	7062	26			−0.2	R					82Jo03	*
^{112}Sn(p,n)^{112}Sb	−7995	55	−7838	18	2.8	U			VUn		76Ka19	
*^{112}Rh$-$u	Average of 2 values; $M-A$=–79479(36) keV for mixture gs+m at 340(70) keV										Nub16b	**
*^{112}In$-$u	$M-A$=–87823(30) keV for mixture gs+m at 156.592 keV										Nub16b	**
*^{112}Rh$-^{120}$Sn$_{.933}$	D_M=5822.6(7.4) μu for mixture gs+m at 340(70) keV; $M-A$=–79571.2(7.0) keV										Nub16b	**
*^{112}Ru(β^-)^{112}Rh	E_{β^-}=4190(80) to 1^+ level at 327.03 keV										Ens14c	**
*^{112}Pd(β^-)^{112}Ag	E_{β^-}=280(20) to (1^+) level at 18.5 keV										Ens14c	**
*^{112}Ag(β^-)^{112}Cd	E_{β^-}=3440(20) to 2^+ level at 617.518 keV										Ens14c	**
*^{112}Ag(β^-)^{112}Cd	E_{β^-}=3350(20) to 2^+ level at 617.518 keV; error increased by evaluator										Ens14c	**
*^{112}Sb(β^+)^{112}Sn	E_{β^+}=5200(100) 4750(50) 4783(26) respectively, to 2^+ level at 1256.69 keV										Ens14c	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{113}Mo−u		−57317	337	−56350#	320#	1.1	D			GT3	2.5	16Kn03	*
^{113}Tc−u		−67633	268	−67431	4	0.5	o			GT1	1.5	04Ma.A	
		−67502	106			0.3	U			GT2	2.5	08Kn.A	
^{113}Tc−^{129}Xe$_{.876}$		15981.0	3.6				2			JY1	1.0	11Ha48	
^{113}Ru−u		−77031	93	−77150	40	−1.3	–			JY0	1.0	03Ko.A	*
		−77240	110			0.3	o			GT2	2.5	08Kn.A	
		−77295	140			0.4	–			GT2	2.5	08Su19	
	ave.	−77050	90			−1.2	1	19	19 ^{113}Ru			average	
^{113}Rh−u		−84464	83	−84560	8	−1.2	U			JY0	1.0	03Ko.A	
C_9 H_5−^{113}Cd		134721.1	3.9	134717.06	0.26	−0.4	U			M16	2.5	63Da10	
		134727	19			−0.3	U			R12	1.5	83De51	
		134728	5			−1.5	U			R12	1.5	83De51	
C_7 O H_{13}−^{113}Cd		192250	16	192231.94	0.26	−0.8	U			R12	1.5	83De51	
C_6 ^{13}C O H_{12}−^{113}Cd		187772	17	187761.74	0.26	−0.4	U			R12	1.5	83De51	
C_8 N H_3−^{113}Cd		122161	19	122141.00	0.26	−0.7	U			R12	1.5	83De51	
^{113}Cd−u		−95506	93	−95591.90	0.26	−0.9	U			GS2	1.0	05Li24	*
C_9 H_5−^{113}In		135015	9	135064.71	0.20	2.2	U			M16	2.5	63Da10	
		135087	6			−2.5	U			R12	1.5	83De51	
C_8 N H_3−^{113}In		122506	14	122488.65	0.20	−0.8	U			R12	1.5	83De51	
^{113}In−u		−95969	126	−95939.55	0.20	0.2	U			GS2	1.0	05Li24	*
^{113}Sn−u		−94796	39	−94824.2	1.7	−0.7	U			GS2	1.0	05Li24	*
^{113}Sb−u		−90635	30	−90625	18	0.3	R			GS2	1.0	05Li24	
^{113}Te−u		−84109	30				2			GS2	1.0	05Li24	
^{113}I−^{133}Cs$_{.850}$		4015.9	8.6				2			SH1	1.0	07Ma92	
^{113}Xe−^{133}Cs$_{.850}$		13585.5	8.1	13588	7	0.2	1	82	82 ^{113}Xe	SH1	1.0	07Ma92	
^{113}Ru−^{105}Ru$_{1.076}$		22087	44	22110	40	0.6	1	81	81 ^{113}Ru	JY1	1.0	07Ha20	*
^{113}Rh−^{120}Sn$_{.942}$		7565.4	7.6				2			JY1	1.0	07Ha20	
^{113}Pd−^{120}Sn$_{.942}$		2387.1	7.4				2			JY1	1.0	07Ha20	
^{113}Cd ^{35}Cl−^{111}Cd ^{37}Cl		3174	2	3174.4	0.4	0.1	U			H11	4.0	63Bi12	
^{112}Cd H−^{113}Cd		6164	20	6180.82	0.23	0.6	U			R12	1.5	83De51	
^{113}Cd−^{112}Cd$_{1.009}$		2519.36	0.29	2519.33	0.23	−0.1	1	65	35 ^{112}Cd	MS1	1.0	16Ga24	
^{113}In−^{112}Cd$_{1.009}$		2171.26	0.32	2171.68	0.26	1.3	1	65	48 ^{112}Cd	MS1	1.0	16Ga24	
^{113}Cd−^{111}Cd H		−7623	42	−7600.7	0.4	0.4	U			R12	1.5	83De51	
^{113}Cd−^{112}Cd		1642	11	1644.21	0.23	0.1	U			M16	2.5	63Da10	
		1620	40			0.4	U			R12	1.5	83De51	
^{113}In−^{112}Cd		1297	45	1296.56	0.26	0.0	U			R12	1.5	83De51	
^{113}Cd−^{110}Cd H		−6412	32	−6424.4	0.4	−0.3	U			R12	1.5	83De51	
^{113}Cd−^{111}Cd		242	35	224.3	0.4	−0.3	U			R12	1.5	83De51	
^{113}Cd H−^{112}Cd		9467	35	9469.25	0.23	0.0	U			R12	1.5	83De51	
^{113}I(α)^{109}Sb		2706.0	41.5	2707	10	0.0	U					81Sc17	
^{113}Xe(α)^{109}Te		3094.8	15.	3087	8	−0.5	1	24	18 ^{113}Xe			79Sc22	
^{111}Cd(t,p)^{113}Cd		7456	20	7451.9	0.3	−0.2	U			Ald		67Hi01	
^{113}Cd(p,t)^{111}Cd		−7456	5	−7451.9	0.3	0.8	U			Min		73Oo01	
^{113}In(p,t)^{111}In−^{115}In()^{113}In		−810	10	−806	3	0.4	1	12	12 ^{111}In	Roc		74Ma09	
^{113}In(p,t)^{111}In−^{112}Cd()^{110}Cd		−746.3	4.1	−748	3	−0.5	1	69	69 ^{111}In	SPa		80Ta07	
^{112}Cd(n,γ)^{113}Cd		6550	100	6539.74	0.22	−0.1	U					61Ja21	
		6542.0	0.2			−11.3	C					90Ne.A	
^{112}Cd(d,p)^{113}Cd		4318	30	4315.18	0.22	−0.1	U			Pit		64Ro17	
		4315.56	0.64			−0.6	1	11	6 ^{112}Cd	Rez		90Pi05	*
^{113}Cd(d,t)^{112}Cd		−254	30	−282.51	0.22	−1.0	U			Pit		64Co11	
^{113}In(d,t)^{112}In		−3180	25	−3191	4	−0.4	U			Pit		67Hj03	
^{112}Sn(n,γ)^{113}Sn		7741.9	2.3	7744.4	1.6	1.1	–			ORn		75Sl.A	
^{112}Sn(d,p)^{113}Sn		5504	25	5519.8	1.6	0.6	U			Pit		64Co11	
		5518.2	3.2			0.5	–			SPa		75Be09	
^{112}Sn(n,γ)^{113}Sn	ave.	7742.2	1.9	7744.4	1.6	1.2	1	70	69 ^{113}Sn			average	
^{112}Sn(^{3}He,d)^{113}Sb		−2400	40	−2443	17	−1.1	R			Sac		68Co22	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{113}Xe(εp)^{112}Te	7920	150	8075	11	1.0	o					82Pl05	
	8300	150			−1.5	U					05Ja10	
^{113}Cs(p)^{112}Xe	967	4	972.8	2.2	1.5	o					84Fa04	*
	982.7	4.			−2.5	3					92He.A	
	967.6	6.			0.9	3					94Pa12	
	968.6	3.			1.4	3					95Ho26	
^{113}Ru(β^-)^{113}Rh	6480	50	6900	40	8.4	C			Jyv		00Kr.A	
^{113}Rh(β^-)^{113}Pd	5008	50	4824	10	−3.7	C			Jyv		00Kr.A	
^{113}Pd(β^-)^{113}Ag	3360	150	3436	18	0.5	U					75Br.A	
	3340	35			2.7	B			Stu		90Fo07	
^{113}Ag(β^-)^{113}Cd	2010	20	2016	17	0.3	2					57Je.A	
	2070	150			−0.4	U					70Ma47	*
	2031	30			−0.5	2			Stu		90Fo07	*
^{113}Cd(β^-)^{113}In	326.4	15.	323.83	0.27	−0.2	U					51Ca43	*
	316.4	30.			0.2	U					54De13	*
	320	10			0.4	U			CIT		88Mi13	
	344.9	21.0			−1.0	U					07Be61	
	322.2	0.9			1.8	U					09Da03	
^{113}Sn(β^+)^{113}In	1034.6	5.0	1039.0	1.6	0.9	–					93Li10	*
^{113}In(p,n)^{113}Sn	−1809	6	−1821.3	1.6	−2.1	–			Oak		73Ra13	
^{113}Sn(β^+)^{113}In	ave. 1031	4	1039.0	1.6	2.0	1	17	17 ^{113}Sn			average	
^{113}Sb(β^+)^{113}Sn	3934	30	3911	17	−0.8	2					61Se08	*
	3945	50			−0.7	2					69Ki16	*
^{113}Te(β^+)^{113}Sb	5520	300	6070	30	1.8	U					74Bu21	
	5720	200			1.7	U					74Ch17	
*^{113}Mo−u	Trends from Mass Surface TMS suggest ^{113}Mo 900 less bound										GAu	**
*^{113}Ru−u	$M-A$=–71689(77) keV for mixture gs+m at 130(18) keV										Nub16b	**
*^{113}Ru−u	$M-A$=–71882(93) keV for mixture gs+m at 130(18) keV										Nub16b	**
*^{113}Ru−u	$M-A$=–71931(120) keV for mixture gs+m at 130(18) keV										Nub16b	**
*^{113}Cd−u	$M-A$=–88832(41) keV for mixture gs+m at 263.54 keV										Nub16b	**
*^{113}In−u	$M-A$=–89199(30) keV for mixture gs+m at 391.699 keV										Nub16b	**
*^{113}Sn−u	$M-A$=–88263(29) keV for mixture gs+m at 77.389 keV										Nub16b	**
*^{113}Ru−^{105}Ru$_{1.076}$	D_M=22157(12) μu for mixture gs+m at 130(18) keV; $M-A$=–71822(12) keV										Nub16b	**
*^{112}Cd(d,p)^{113}Cd	Estimated systematic error 0.5 added to statistical error 0.40										AHW	**
*^{113}Cs(p)^{112}Xe	E_p from another GSI work; superseded by 95Ho26										87Gi07	**
*^{113}Ag(β^-)^{113}Cd	E_{β^-}=1530(150) from ^{113}Ag^m at 43.50 to 5/2$^+$ level at 583.962 keV										Ens106	**
*^{113}Ag(β^-)^{113}Cd	Q_{β^-}=2075(30) from ^{113}Ag^m at 43.50 keV										Nub16b	**
*^{113}Cd(β^-)^{113}In	Q_{β^-}=590(15) 580(30) respectively, from ^{113}Cd^m at 263.54 keV										Nub16b	**
*^{113}Sn(β^+)^{113}In	Q_{β^+}=642.9(5.0) to 1/2$^-$ level at 391.699 keV										Ens106	**
*^{113}Sb(β^+)^{113}Sn	E_{β^+}=2420(20) 2430(50) respectively, to 3/2$^+$ level at 498.06 keV,										Ens106	**
*	plus 6% to 5/2$^+$ at 409.83 keV										Ens106	**
^{114}Tc−u	−62459	365	−62910	470	−0.8	o			GT1	1.5	04Ma.A	
	−62910	186				2			GT3	2.5	16Kn03	
^{114}Ru−^{105}Ru$_{1.086}$	24805	13	24802	5	−0.2	U			JY1	1.0	07Ha20	
^{114}Ru−u	−75642	236	−75386	4	0.7	U			GT1	1.5	04Ma.A	
^{114}Rh−u	−81193	120	−81280	80	−0.7	1	41	41 ^{114}Rh	JY0	1.0	03Ko.A	*
^{114}Ag−^{133}Cs$_{.857}$	−10149.3	4.9				2			MA8	1.0	10Br02	
C_8 H_{18}−^{114}Cd	237487.6	4.	237485.59	0.30	−0.2	U			M16	2.5	63Da10	
C_6 O_2 H_{10}−^{114}Cd	164713	15	164714.57	0.30	0.1	U			R12	1.5	83De51	
	164711	15			0.2	U			R12	1.5	83De51	
C_9 H_6−^{114}Cd	143591	5	143585.20	0.30	−0.8	U			R12	1.5	83De51	
	143586	8			−0.1	U			R12	1.5	83De51	
C_8 ^{13}C H_5−^{114}Cd	139117	17	139115.01	0.30	−0.1	U			R12	1.5	83De51	
C_8 N H_4−^{114}Cd	131017	12	131009.14	0.30	−0.4	U			R12	1.5	83De51	
	131009	20			0.0	U			R12	1.5	83De51	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{114}Cd$-^{133}$Cs$_{.857}$	−15611.4	4.2	−15607.34	0.30	1.0	U			MA8	1.0	10Br02	
^{114}In$-$u	−94986	68	−95083.6	0.3	−1.4	U			GS2	1.0	05Li24	*
C$_8$ H$_{18}-^{114}$Sn	238092	10	238070.45	0.03	−0.9	U			M16	2.5	63Da10	
	238066	8			0.4	U			R13	1.5	83De51	
^{114}Sb$-$u	−90731	30	−90711	23	0.7	1	61	61 ^{114}Sb	GS2	1.0	05Li24	
^{114}Te$-$u	−87911	30				2			GS2	1.0	05Li24	
^{114}Xe$-^{133}$Cs$_{.857}$	9008	12				2			MA6	1.0	04Di18	
^{114}Ru$-^{120}$Sn$_{.950}$	17522.0	3.7				2			JY1	1.0	11Ha48	
^{114}Rh$-^{120}$Sn$_{.950}$	11570	100	11630	80	0.6	1	59	59 ^{114}Rh	JY1	1.0	07Ha20	*
^{114}Pd$-^{120}$Sn$_{.950}$	3277.0	7.4				2			JY1	1.0	07Ha20	
^{114}Cd ^{35}Cl$-^{112}$Cd ^{37}Cl	3546	3	3551.22	0.28	0.4	U			H11	4.0	63Bi12	
	3547	3			0.6	U			H20	2.5	66Ma05	
	3548.5	1.0			1.1	U			H26	2.5	73Me28	
^{113}Cd H$-^{114}$Cd	8859	18	8868.14	0.15	0.3	U			R12	1.5	83De51	
^{114}Tc$^m-^{114}$Ru	12651	13				3			JY1	1.0	11Ha48	*
^{114}Cd$-^{112}$Cd H	−7225	33	−7223.93	0.27	0.0	U			R12	1.5	83De51	
^{114}Cd$-^{113}$Cd	−1040	11	−1043.11	0.15	−0.1	U			M16	2.5	63Da10	
	−1032	33			−0.2	U			R12	1.5	83De51	
^{114}Cd$-^{113}$In	−679	45	−695.5	0.3	−0.2	U			R12	1.5	83De51	
^{114}Cd$-^{111}$Cd H	−8651	35	−8643.8	0.4	0.1	U			R12	1.5	83De51	
^{114}Cd$-^{112}$Cd	587	33	601.11	0.27	0.3	U			R12	1.5	83De51	
^{114}Cd H$-^{113}$Cd	6821	35	6781.92	0.15	−0.7	U			R12	1.5	83De51	
^{114}Ba$(\gamma,^{12}$C$)^{102}$Sn	18110	780	19029	23	1.2	U					95Gu01	
^{114}Cs$(\alpha)^{110}$I	3343.5	30.	3360	50	0.3	o			GSa		80Ro04	
	3357.0	30.				4			GSa		81Sc17	
^{114}Ba$(\alpha)^{110}$Xe	3534.2	40.	3592	19	1.4	5					02Ma19	
	3606.8	20.			−0.7	5					16Ca33	
^{112}Cd(t,p)^{114}Cd	7105	20	7100.91	0.25	−0.2	U			Ald		67Hi01	
^{114}Cd(p,t)^{112}Cd	−7106	5	−7100.91	0.25	1.0	U			Min		73Oo01	
^{112}Sn(t,p)^{114}Sn	9579	15	9565.51	0.30	−0.9	U			Ald		69Bj01	
^{114}Sn(p,t)^{112}Sn	−9582	15	−9565.51	0.30	1.1	U			Roc		70Fl08	
^{113}Cd$(n,\gamma)^{114}$Cd	9042.76	0.20	9042.97	0.14	1.0	–			ILn		79Br25	Z
	9043.18	0.19			−1.1	–			Bdn		06Fi.A	
^{114}Cd$(\gamma,n)^{113}$Cd	−9050	4	−9042.97	0.14	1.8	U			McM		79Ba06	
^{113}Cd(d,p)^{114}Cd	6817	30	6818.40	0.14	0.0	U			Pit		64Co11	
	6822	8			−0.5	U			MIT		67Co15	
^{114}Cd(d,t)^{113}Cd	−2801	30	−2785.74	0.14	0.5	U			Pit		64Ro17	
^{113}Cd$(n,\gamma)^{114}$Cd ave.	9042.98	0.14	9042.97	0.14	−0.1	1	98	93 ^{114}Cd			average	
^{113}In$(n,\gamma)^{114}$In	7274.0	1.2	7274.00	0.25	0.0	U					75Ra07	Z
	7273.83	0.27			0.6	1	88	82 ^{114}In	Bdn		06Fi.A	
^{113}In(d,p)^{114}In	5082	25	5049.44	0.25	−1.3	U			Pit		67Hj03	
^{114}Sn(d,^{3}He)^{113}In	−2980	50	−2988.10	0.19	−0.2	U			Sac		69Co03	
^{114}Sn(p,d)^{113}Sn	−8101	15	−8078.3	1.6	1.5	U			Har		70Ca01	
^{114}Sn(d,t)^{113}Sn	−4052	20	−4045.7	1.6	0.3	U			Pit		64Co11	
	−4043.7	4.2			−0.5	1	14	14 ^{113}Sn	SPa		75Be09	
^{114}Cs$(\varepsilon p)^{113}$I	8730	150	9150	70	2.8	B					82Pl05	
^{114}Ru$(\beta^-)^{114}$Rh	6100	200	5490	70	−3.1	B			Jyv		92Jo05	*
	6120	200			−3.2	C			Jyv		94Jo.A	
^{114}Rh$(\beta^-)^{114}$Pd	6500	500	7780	70	2.6	U			Jyv		88Ay02	
	7392	53			7.3	C			Jyv		00Kr.A	
^{114}Pd$(\beta^-)^{114}$Ag	1450	100	1440	8	−0.1	U					75Br.A	
	1450	100			−0.1	o			Jyv		89Ay.A	
	1450	100			−0.1	o			Jyv		89Ko22	
	1414	30			0.9	U			Stu		90Fo07	
	1451	25			−0.4	U			Jyv		94Jo.A	
^{114}Ag$(\beta^-)^{114}$Cd	4850	150	5084	5	1.6	U					71Ro19	
	4900	260			0.7	U					72Wa06	
	5160	110			−0.7	o			Stu		84Lu02	
	5018	35			1.9	U			Stu		90Fo07	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.		Lab	F	Reference	
^{114}In(β^+)^{114}Cd		1422	25	1445.1	0.4	0.9	U						56Gr35	
		1417	20			1.4	U						57Dz64	
^{114}In(β^-)^{114}Sn		1987	2	1989.9	0.3	1.5	U						61Da01	
		1989	1			0.9	–						61Ni02	
		1980	2			5.0	B						64An12	
		1988.5	1.0			1.4	–						68Ze04	
	ave.	1988.8	0.7			1.7	1	18	18	^{114}In			average	
^{114}Sb(β^+)^{114}Sn		5690	100	6063	22	3.7	C						69Bu.A	*
		6370	100			−3.1	B						72Mi27	*
^{114}Sn(p,n)^{114}Sb		−6875	35	−6845	22	0.8	1	39	39	^{114}Sb	VUn		76Ka19	
*^{114}Rh−u	Average of 2 values; $M-A$=–75531(60) keV for mixture gs+m at 200#150 keV												Nub16b	**
*^{114}In−u	$M-A$=–88384(31) keV for mixture gs+m at 190.2682 keV												Nub16b	**
*^{114}Rh−^{120}Sn$_{.950}$	D_M=11678.0(7.8) μu for mixture gs+m at 200#150 keV; $M-A$=–75665.6(7.3) keV												Nub16b	**
*^{114}Tc^m−^{114}Ru	Mixture of two isomeric states with stronger component of low-spin state												11Ri01	**
*	however, estimates from TMS suggest this is ^{114}Tc^m												GAu	**
*^{114}Ru(β^-)^{114}Rh	E_{β^-}=5910(120) doublet to (2)$^+$ level at 127.0, 1$^+$ at 255.2 keV												Ens123	**
*^{114}Sb(β^+)^{114}Sn	E_{β^+}=3365(50) to 2$^+$ at 1299.907, original error doubled see ^{114}Sn(p,n)												Ens123	**
*^{114}Sb(β^+)^{114}Sn	E_{β^+}=4050(100) to 2$^+$ at 1299.907 level, see ^{112}Sb(β^+)												Ens123	**
^{115}Tc−u		−60462	339				2				GT3	2.5	16Kn03	
^{115}Rh−u		−79664	85	−79689	8	−0.3	U				JY0	1.0	03Ko.A	
^{115}Ag−^{133}Cs$_{.865}$		−9439	24	−9449	20	−0.4	1	67	67	^{115}Ag	MA8	1.0	10Br02	*
C_9 H_7−^{115}In		150910	8	150896.452	0.012	−0.7	U				M16	2.5	63Da10	
		150932	16			−1.5	U				R12	1.5	83De51	
C_6 O_2 H_{11}−^{115}In		172055	16	172025.820	0.012	−1.2	U				R12	1.5	83De51	
C_8 N H_5−^{115}In		138355	13	138320.392	0.012	−1.8	U				R12	1.5	83De51	
^{115}In−u		−96095	30	−96121.226	0.013	−0.9	U				GS2	1.0	05Li24	
C_9 H_7−^{115}Sn		151411	8	151430.528	0.016	1.0	U				M16	2.5	63Da10	
		151440	8			−0.8	U				R13	1.5	83De51	
^{115}Sb−u		−93402	30	−93402	17	0.0	2				GS2	1.0	05Li24	
^{115}Te−u		−88098	30				2				GS2	1.0	05Li24	*
^{115}I−u		−81952	31				2				GS2	1.0	05Li24	
^{115}Xe−^{133}Cs$_{.865}$		8078	13				2				MA6	1.0	04Di18	
^{115}Ru−^{120}Sn$_{.958}$		22633	95				2				JY1	1.0	07Ha20	*
^{115}Rh−^{120}Sn$_{.958}$		14001.6	7.8				2				JY1	1.0	07Ha20	
^{115}Pd−^{120}Sn$_{.958}$		7347	15	7349	15	0.2	1	94	94	^{115}Pd	JY1	1.0	07Ha20	*
^{115}Sn−^{120}Sn$_{.958}$		−2963.9	2.0	−2964.7	0.9	−0.4	1	21	21	^{120}Sn	JY1	1.0	11Ha48	
^{113}Cd−^{115}In$_{.983}$		−1104.76	0.34	−1104.74	0.26	0.1	1	59	59	^{113}Cd	MS1	1.0	16Ga24	
^{113}In−^{115}In$_{.983}$		−1452.08	0.23	−1452.39	0.20	−1.3	1	77	77	^{113}In	MS1	1.0	16Ga24	
^{115}In−^{115}Sn		534.0768	0.0104	534.077	0.010	0.0	1	100	100	^{115}Sn	FS1	1.0	09Mo23	
		534.28	0.18			−1.1	U				JY1	1.0	09Wi10	
^{115}In−^{114}Cd		483	45	513.78	0.30	0.5	U				R12	1.5	83De51	
^{115}Sn−^{114}Sn		573	11	564.565	0.027	−0.3	U				M16	2.5	63Da10	
^{115}In−^{113}In		−200	28	−181.67	0.20	0.4	U				R12	1.5	83De51	
^{115}In−^{129}Xe		−902.0845	0.0111	−902.085	0.011	0.0	1	100	100	^{115}In	FS1	1.0	09Mo23	
^{115}Sn−^{129}Xe		−1436.1613	0.0130	−1436.162	0.015	0.0	o				FS1	1.0	09Mo23	*
^{113}Cd(t,p)^{115}Cd		6702	20	6702.0	0.6	0.0	U				Ald		67Hi01	
^{114}Cd(n,γ)^{115}Cd		6160	100	6140.9	0.6	−0.2	U						61Ja21	
^{114}Cd(d,p)^{115}Cd		3923	30	3916.3	0.6	−0.2	U				Pit		64Ro17	
		3929	20			−0.6	U				Oak		64Si18	
		3916.30	0.59			0.0	1	100	100	^{115}Cd	Rez		90Pi05	*
^{114}Cd(^{3}He,d)^{115}In		1320	15	1316.91	0.28	−0.2	U						70Th.A	
^{115}In(γ,n)^{114}In		−9025	29	−9037.9	0.3	−0.4	U				Phi		60Ge01	
		−9039	5			0.2	U				McM		79Ba06	
^{115}In(d,t)^{114}In		−2789	30	−2780.6	0.3	0.3	U				Pit		64Co11	
		−2766	25			−0.6	U				Pit		67Hj03	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{114}Sn(n,γ)^{115}Sn	7545.5	2.0	7545.429	0.025	0.0	U			ORn		78Ra16	Z
	7545.427	0.025			0.1	1	100	100 ^{114}Sn			16Ur03	
^{114}Sn(d,p)^{115}Sn	5329	25	5320.863	0.025	−0.3	U			Pit		64Co11	
	5320.6	3.4			0.1	U			SPa		75Be09	
^{115}Sn(d,t)^{114}Sn	−1304	30	−1288.200	0.025	0.5	U			Pit		64Co11	
^{115}Xe(εp)^{114}Te	6200	130	5940	30	−2.0	U					72Ho18	
^{115}Ru(β^-)^{115}Rh	7780	100	8040	90	2.6	C			Jyv		00Kr.A	
^{115}Rh(β^-)^{115}Pd	6000	500	6197	15	0.4	U			Jyv		88Ay01	
	6566	50			−7.4	C			Jyv		00Kr.A	
^{115}Pd(β^-)^{115}Ag	4584	50	4556	22	−0.6	1	19	12 ^{115}Ag	Stu		90Fo07	
^{115}Ag(β^-)^{115}Cd	3180	100	3102	18	−0.8	U					64Ba36	*
	3118	100			−0.2	U					78Ma18	*
	3091	40			0.3	1	21	21 ^{115}Ag			90Fo07	*
^{115}Cd(β^-)^{115}In	1460	4	1451.9	0.7	−2.0	U					74Bo26	*
	1431	5			4.2	B					75Bo29	*
	1440	2			5.9	B					76Ra16	*
^{115}In(β^-)^{115}Sn	494	20	497.489	0.010	0.2	U					49Be53	*
	630	30			−4.4	B					50Ma76	
	625	70			−1.8	U					61Be15	
	494	30			0.1	U					62Se03	*
	480	30			0.6	U					62Wa15	
	495	20			0.1	U					72Mu02	
	482	15			1.0	U					78Pf01	*
^{115}Sb(β^+)^{115}Sn	3030	20	3030	16	0.0	R					61Se08	*
*^{115}Ag−^{133}Cs$_{.865}$	D_M=–9416.7(9.2) μu for ground state or ^{115}Ag^m at 41.16 keV; $M-A$=–84952.9(8.6) keV										Nub16b	**
*^{115}Te−u	$M-A$=–82058(28) keV for mixture gs+m at 10(7) keV										Nub16b	**
*^{115}Ru−^{120}Sn$_{.958}$	D_M=22767.3(7.3) μu for mixture gs+m at 250#(100#); $M-A$=–66064.8(6.9) keV										Nub16b	**
*^{115}Pd−^{120}Sn$_{.958}$	D_M=7348(15), 7442(15) μu for ground state, 89.21 isomer										Nub16b	**
*^{115}Sn−^{129}Xe	Used are the equations for the ^{115}In−^{129}Xe and ^{115}In−^{115}Sn doublets										GAu	**
*^{114}Cd(d,p)^{115}Cd	Estimated systematic error 0.5 added to statistical error 0.32 keV										AHW	**
*^{115}Ag(β^-)^{115}Cd	E_{β^-}=2950(100) to (3/2)$^+$ level at 229.1 keV, and other E_{β^-}										Ens12a	**
*^{115}Ag(β^-)^{115}Cd	E_{β^-}=721(100) to (23/2$^-$) level at 2397.2 keV, and other E_{β^-}										Ens12a	**
*^{115}Ag(β^-)^{115}Cd	Q_{β^-}=3132(40) from ^{115}Ag^m at 41.16 keV										Nub16b	**
*^{115}Cd(β^-)^{115}In	E_{β^-}=593(2), 636(2) to 1/2$^+$ level at 864.139, 3/2$^+$ at 828.588 keV										Ens12a	**
*^{115}Cd(β^-)^{115}In	E_{β^-}=320(5), 679(6) from ^{115}Cd^m 181.0 to 13/2$^+$ 1290.592, 7/2$^+$ 933.780										Ens12a	**
*^{115}Cd(β^-)^{115}In	Q_{β^-}=1621(2) from ^{115}Cd^m at 181.0 keV										Nub16b	**
*^{115}In(β^-)^{115}Sn	Q_{β^-}=830(20) from ^{115}In^m at 336.244 keV										Nub16b	**
*^{115}In(β^-)^{115}Sn	Q_{β^-}=830(30) from ^{115}In^m at 336.244 keV										Nub16b	**
*^{115}In(β^-)^{115}Sn	Q_{β^-} is larger than first excitation energy 497.334(0.023) in ^{115}Sn										05Ca03	**
*^{115}Sb(β^+)^{115}Sn	E_{β^+}=1510(20) to 3/2$^+$ level at 497.334 keV										Ens12a	**
^{116}Ru−^{129}Xe$_{.899}$	16821.2	4.0				2			JY1	1.0	11Ha48	
^{116}Rh−u	−75936	140	−75940	80	0.0	–			JY0	1.0	03Ko.A	*
	−75960	140			0.1	–			GT2	2.5	08Kn.A	*
ave.	−75940	130			0.0	1	37	37 ^{116}Rh			average	
^{116}Ag−^{133}Cs$_{.872}$	−6167.3	3.5				2			MA8	1.0	10Br02	
C_9 H_8−^{116}Cd	157837.4	2.9	157837.03	0.17	−0.1	U			M16	2.5	63Da10	
	157851	5			−1.9	U			R12	1.5	83De51	
	157846	22			−0.3	U			R12	1.5	83De51	
C_6 O_2 H_{12}−^{116}Cd	178982	15	178966.40	0.17	−0.7	U			R12	1.5	83De51	
C_8 ^{13}C H_7−^{116}Cd	153376	8	153366.83	0.17	−0.8	U			R12	1.5	83De51	
	153382	22			−0.5	U			R12	1.5	83De51	
C_8 N H_6−^{116}Cd	145262	17	145260.97	0.17	0.0	U			R12	1.5	83De51	
C_9 H_8−^{116}Sn	160861	8	160857.43	0.10	−0.2	U			M16	2.5	63Da10	
	160857	8			0.0	U			R13	1.5	83De51	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{116}Sb−u		−93128	129	−93207	6	−0.6	U			GS2	1.0	05Li24	*
^{116}Te−u		−91540	30				2			GS2	1.0	05Li24	
^{116}Xe−^{133}Cs$_{.872}$		4027	14				2			MA6	1.0	04Di18	
^{116}Rh−^{120}Sn$_{.967}$		18633	100	18630	80	0.0	1	63	63 ^{116}Rh	JY1	1.0	07Ha20	*
^{116}Pd−^{120}Sn$_{.967}$		8868.0	7.6				2			JY1	1.0	07Ha20	
^{116}Cd ^{35}Cl−^{114}Cd ^{37}Cl		4353	3	4348.4	0.3	−0.4	U			H11	4.0	63Bi12	
		4344	2			0.9	U			H20	2.5	66Ma05	
		4348.7	1.2			−0.1	o			H26	2.5	73Me28	
		4347.46	0.44			0.8	1	10	7 ^{114}Cd	H49	2.5	10Mc04	
^{116}Cd−^{116}Sn		3020.42	0.14	3020.41	0.14	−0.1	1	99	98 ^{116}Cd	JY1	1.0	11Ra24	
^{116}Cd−^{114}Cd H		−6452	32	−6426.8	0.3	0.5	U			R12	1.5	83De51	
^{116}Sn−^{115}Sn		−1602	11	−1601.87	0.10	0.0	U			M16	2.5	63Da10	
^{116}Cd−^{113}Cd H		−7458	32	−7469.9	0.3	−0.2	U			R12	1.5	83De51	
^{116}Cd−^{114}Cd		1370	32	1398.2	0.3	0.6	U			R12	1.5	83De51	
^{116}Cs($\varepsilon\alpha$)^{112}Te		12300	400	13100#	100#	2.0	D					77Bo28	
		12400	900			0.8	D					76Jo.A	*
^{116}Cd(^{14}C,^{16}O)^{114}Pd		2497	29	2535	7	1.3	U			LAl		84Co19	
^{114}Cd(t,p)^{116}Cd		6362	20	6358.4	0.3	−0.2	U			Ald		67Hi01	
^{116}Cd(p,t)^{114}Cd		−6363	5	−6358.4	0.3	0.9	U			Min		73Oo01	
^{116}Sn(p,t)^{114}Sn		−8619	15	−8627.09	0.10	−0.5	U			Roc		70Fl08	
^{116}Cd(γ,n)^{115}Cd		−8702	4	−8699.3	0.7	0.7	U			McM		79Ba06	
^{116}Cd(d,t)^{115}Cd		−2458	30	−2442.1	0.7	0.5	U			Pit		64Ro17	
^{115}In(n,γ)^{116}In		6783.8	1.2	6784.72	0.22	0.8	U					72Ra39	Z
		6784.4	1.1			0.3	U					74Co35	
		6784.72	0.22				2			Bdn		06Fi.A	
^{115}In(d,p)^{116}In		4494	25	4560.15	0.22	2.6	U			Pit		64Co11	
		4580	30			−0.7	U			Pit		67Hj03	
^{116}Sn(d,^{3}He)^{115}In		−3740	50	−3785.12	0.10	−0.9	U			Sac		69Co03	
^{115}Sn(n,γ)^{116}Sn		9562.2	1.5	9563.45	0.09	0.8	U					72Mc08	
		9563.5	0.5			−0.1	U					84Ga.B	
		9563.41	0.11			0.4	–			ORn		91Ra01	Z
		9563.55	0.19			−0.5	–			Bdn		06Fi.A	
^{115}Sn(d,p)^{116}Sn		7358	30	7338.89	0.09	−0.6	U			Pit		64Co11	
^{116}Sn(p,d)^{115}Sn		−7344	15	−7338.89	0.09	0.3	U			Har		70Ca01	
^{116}Sn(d,t)^{115}Sn		−3309	20	−3306.22	0.09	0.1	U			Pit		64Co11	
		−3305.0	2.5			−0.5	U			SPa		75Be09	
^{115}Sn(n,γ)^{116}Sn	ave.	9563.45	0.10	9563.45	0.09	0.1	1	99	99 ^{116}Sn			average	
^{115}Sn(^{3}He,d)^{116}Sb−^{120}Sn()^{121}Sb		−1722	10	−1714	5	0.8	1	30	25 ^{116}Sb	VUn		78Ka12	
^{116}Cs(εp)^{115}I		6350	300	7010#	100#	2.2	U					78Da07	*
^{116}Rh(β^-)^{116}Pd		8000	500	9100	70	2.2	U			Jyv		88Ay02	
^{116}Pd(β^-)^{116}Ag		2615	100	2711	8	1.0	U					75Br.A	
		2620	100			0.9	o			Jyv		89Ay.A	
		2607	30			3.5	B			Stu		90Fo07	
		2620	100			0.9	U			Jyv		94Jo.A	
^{116}Ag(β^-)^{116}Cd		6062	130	6170	3	0.8	o			Stu		82Al29	*
		5800	200			1.8	U					82Br10	
		6194	50			−0.5	U			Stu		90Fo07	*
^{116}In(β^-)^{116}Sn		3290	60	3276.22	0.24	−0.2	U					54Bo39	
^{116}Sb(β^+)^{116}Sn		4586	100	4704	5	1.2	U					61Fi05	*
		4606	50			2.0	U					68Ki07	*
^{116}Sn(p,n)^{116}Sb		−5515	40	−5486	5	0.7	U			VUn		76Ka19	
		−5483.2	6.			−0.5	1	75	75 ^{116}Sb	Oak		77Jo03	
^{116}Sb^{n}(β^+)^{116}Sn		5090	40				2					60Je03	*
^{116}Te(β^+)^{116}Sb		1554	100	1553	28	0.0	U					61Fi05	*
^{116}I(β^+)^{116}Te		7760	130	7780	100	0.1	R					70Be.A	
		7710	200			0.3	R					76Go02	
^{116}Xe(β^+)^{116}I		4340	200	4450	100	0.5	3					76Go02	

*^{116}Rh−u	$M-A$=–70634(96) keV for mixture gs+m at 200#150 keV	Nub16b	**
*^{116}Rh−u	$M-A$=–70662(93) keV for mixture gs+m at 200#150 keV	Nub16b	**
*^{116}Sb−u	$M-A$=–86553(34) keV for mixture gs+n at 390(40) keV	Nub16b	**
*^{116}Rh−^{120}Sn$_{.967}$	D_M=18740.7(8.4) μu for mixture gs+m at 200#150 keV ; $M-A$=–70635.5(7.9) keV	Nub16b	**
*^{116}Cs($\varepsilon\alpha$)^{112}Te	Q =12500(900) from ^{116}Cs^{m} estimated at 100#60 keV	Nub16b	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
$*^{116}$Cs($\varepsilon\alpha$)^{112}Te	Trends from Mass Surface TMS suggest ^{116}Cs 780 less bound											GAu	**
$*^{116}$Cs(εp)^{115}I	Q =6450(300) from ^{116}Cs^{m} at estimated 100#60 keV											Nub16b	**
$*^{116}$Ag(β^-)^{116}Cd	Q_{β^-}=6110(130) from ^{116}Ag^{m} at 47.90 keV											Nub16b	**
$*^{116}$Ag(β^-)^{116}Cd	Q_{β^-}=6199(100); and 6241(50) from ^{116}Ag^{m} at 47.90 keV											Nub16b	**
$*^{116}$Sb(β^+)^{116}Sn	E_{β^+}=2270(100) 2290(50) respectively, to 2$^+$ level at 1293.560 keV											Ens104	**
$*^{116}$Sb^{n}(β^+)^{116}Sn	E_{β^+}=1160(40) to 7$^-$ level at 2908.85 keV											Ens104	**
$*^{116}$Te(β^+)^{116}Sb	E_{β^+}=440(100) to 1$^+$ level at 93.99 keV											Ens104	**
^{117}Ru−u		−63897	419	−63870	470	0.1	o			GT1	1.5	04Ma.A	
		−63865	186				2			GT3	2.5	16Kn03	
^{117}Rh−u		−73903	408	−73964	10	−0.1	U			GT1	1.5	04Ma.A	
^{117}Ag−^{133}Cs$_{.880}$		−5029	16	−5024	15	0.3	1	83	83 ^{117}Ag	MA8	1.0	10Br02	*
C$_9$ H$_9$−^{117}Sn		167486	12	167471.3	0.5	−0.5	U			M16	2.5	63Da10	
		167471	8			0.0	U			R13	1.5	83De51	
C ^{35}Cl$_3$−^{117}Sn		3596	2	3604.1	0.5	1.0	U			H14	4.0	62Ba24	
^{117}Te−u		−91318	30	−91354	14	−1.2	–			GS2	1.0	05Li24	
		−91359	30			0.2	–			GS2	1.0	05Li24	*
	ave.	−91339	21			−0.7	1	46	46 ^{117}Te			average	
^{117}I−u		−86350	30	−86352	28	−0.1	1	88	88 ^{117}I	GS2	1.0	05Li24	
^{117}Xe−u		−79647	30	−79641	11	0.2	R			GS2	1.0	05Li24	
^{117}Xe−^{133}Cs$_{.880}$		3562	12	3561	11	−0.1	2			MA6	1.0	04Di18	
^{117}Cs−^{133}Cs$_{.880}$		11819	67				2			MA4	1.0	99Am05	*
^{117}Rh−^{120}Sn$_{.975}$		21388.8	9.5				2			JY1	1.0	07Ha20	
^{117}Pd−^{120}Sn$_{.975}$		13309.4	7.9	13308	8	−0.2	1	96	96 ^{117}Pd	JY1	1.0	07Ha20	
^{117}Sn−^{116}Sn		1219	11	1211.2	0.5	−0.3	U			M16	2.5	63Da10	
^{116}Cd(d,p)^{117}Cd		3538	30	3552.7	1.0	0.5	U			Pit		64Ro17	
		3550	20			0.1	U			Oak		64Si18	
		3552.66	1.0				2			Rez		90Pi05	*
^{116}Sn(n,γ)^{117}Sn		6943.5	2.0	6943.1	0.5	−0.2	U					75Bh01	Z
		6943.3	1.5			−0.1	U			ORn		78Ra16	Z
		6942.9	0.5			0.4	–			Bdn		06Fi.A	
^{116}Sn(d,p)^{117}Sn		4721.0	1.8	4718.5	0.5	−1.4	–			SPa		75Be09	
^{116}Sn(n,γ)^{117}Sn	ave.	6943.1	0.5	6943.1	0.5	0.0	1	97	97 ^{117}Sn			average	
^{116}Sn(^{3}He,d)^{117}Sb		−1091	10	−1091	8	0.0	1	71	71 ^{117}Sb	VUn		78Ka12	*
^{117}Xe(εp)^{116}Te		4100	200	3795	30	−1.5	U					72Ho18	
^{117}Ba(εp)^{116}Xe		7900	300	8300	250	1.3	F					78Bo20	*
		8300	250				3			GSI		05Ja06	
^{117}La(p)^{116}Ba		789.8	6.	820	3	5.0	B					01So02	*
		813.0	5.			1.4	o			Arp		01Ma69	
		820.1	3.				3			Arp		11Li28	
^{117}Pd(β^-)^{117}Ag		5735	32	5758	15	0.7	1	21	17 ^{117}Ag	Jyv		00Kr.A	
^{117}Ag(β^-)^{117}Cd		4160	50	4236	14	1.5	U			Stu		82Al29	*
^{117}Cd(β^-)^{117}In		2535	20	2525	5	−0.5	U					75Ta06	*
^{117}In(β^-)^{117}Sn		1456.6	5.	1455	5	−0.4	1	94	94 ^{117}In			55Mc17	*
^{117}Sb(β^+)^{117}Sn		1751	40	1758	8	0.2	U					64Ba46	*
^{117}Sn(p,n)^{117}Sb		−2525	20	−2541	8	−0.8	1	18	18 ^{117}Sb	Oak		71Ke21	
^{117}Te(β^+)^{117}Sb		3552	20	3544	13	−0.4	–					62Kh05	*
		3492	30			1.7	–					67Be46	*
	ave.	3534	17			0.6	1	62	51 ^{117}Te			average	
^{117}I(β^+)^{117}Te		4680	100	4659	29	−0.2	–					69La33	*
		4610	110			0.4	–					70Be.A	*
	ave.	4650	70			0.1	1	15	12 ^{117}I			average	
^{117}Xe(β^+)^{117}I		6270	300	6251	28	−0.1	U					85Le10	*
^{117}Cs^{x}(IT)^{117}Cs		50	50				3					AHW	
$*^{117}$Ag−^{133}Cs$_{.880}$	D_M=–5013.3(4.0) μu for ground state or ^{117}Ag^{m} at 28.6 keV; $M-A$=–82172.3(3.7) keV											Nub16b	**
$*^{117}$Te−u	$M-A$=–84804(28) keV for ^{117}Te^{m} 11/2$^-$ at 296.1 keV											Nub16b	**
$*^{117}$Cs−^{133}Cs$_{.880}$	D_M=11900(21) μu for mixture gs+m at 150#80 keV; $M-A$=–66418(19) keV											Nub16b	**
$*^{116}$Cd(d,p)^{117}Cd	Estimated systematic error 0.5 added to statistical error 0.85 keV											AHW	**
$*^{116}$Sn(^{3}He,d)^{117}Sb	$Q-Q$(^{120}Sn(^{3}He,d))= 1373(10,Ka), Q(120)=282.1(2.0) keV											AHW	**
$*^{117}$Ba(εp)^{116}Xe	F : disagrees with next and with TMS=8480#											GAu	**
$*^{117}$La(p)^{116}Ba	Reports also an isomer ^{117}La^{m} E_p=933(10) Q_p=941.1 keV T=10(5) ms,											01So02	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
$*$	not observed in reference using similar set-up and far greater statistics										11Li28	$**$
$*^{117}$Ag(β^-)^{117}Cd	Q_{β^-}=4260(110); and 4170(50) from ^{117}Ag^m at 28.6 keV										Nub16b	$**$
$*^{117}$Cd(β^-)^{117}In	Q_{β^-}=2220(20) to ^{117}In^m at 315.303 keV										Nub16b	$**$
$*^{117}$In(β^-)^{117}Sn	E_{β^-}=740(10) to 7/2$^+$ level at 711.54; and 1772(5), 1616(5) from										Ens111	$**$
$*$	^{117}In^m at 315.303 to 1/2$^+$ ground state, 3/2$^+$ level at 158.56 keV										Nub16b	$**$
$*^{117}$Sb(β^+)^{117}Sn	E_{β^+}=570(40) to 3/2$^+$ level at 158.562 keV										Ens111	$**$
$*^{117}$Te(β^+)^{117}Sb	E_{β^+}=1810(20) 1750(30) respectively, to 1/2$^+$ level at 719.7 keV										Ens111	$**$
$*^{117}$I(β^+)^{117}Te	E_{β^+}=3500(50), 3250(50) to 5/2$^+$ level at 274.4, (3/2)$^+$ at 325.9 keV										Ens111	$**$
$*^{117}$I(β^+)^{117}Te	Q_{β^+}=4310(100) assumed to 5/2$^+$ level at 274.4, (3/2)$^+$ at 325.9 keV										Ens111	$**$
$*^{117}$Xe(β^+)^{117}I	May be lower limit										AHW	$**$
^{118}Ru$-$u	$-$61879	196	$-$61470#	220#	0.8	D			GT3	2.5	16Kn03	$*$
^{118}Rh$-$u	$-$69598	290	$-$69660	26	$-$0.1	U			GT1	1.5	04Ma.A	
^{118}Pd$-^{129}$Xe$_{.915}$	6193.6	4.3	6192.4	2.7	$-$0.3	1	39	39 ^{118}Pd	JY1	1.0	11Ha48	
^{118}Ag$-^{133}$Cs$_{.887}$	$-$1540.4	2.7				2			MA8	1.0	10Br02	$*$
C$_9$ H$_{10}-^{118}$Sn	176645	7	176643.7	0.5	$-$0.1	U			M16	2.5	63Da10	
	176637	8			0.6	U			R13	1.5	83De51	
^{118}Te$-$u	$-$94162	30	$-$94146	20	0.5	R			GS2	1.0	05Li24	
^{118}I$-$u	$-$86932	30	$-$86926	21	0.2	2			GS2	1.0	05Li24	
	$-$86920	30			$-$0.2	2			GS2	1.0	05Li24	$*$
^{118}Xe$-$u	$-$83785	30	$-$83821	11	$-$1.2	R			GS2	1.0	05Li24	
^{118}Xe$-^{133}$Cs$_{.887}$	37	12	43	11	0.5	2			MA6	1.0	04Di18	
^{118}Cs$^x-^{133}$Cs$_{.887}$	10424	16	10429	13	0.3	o			MA1	1.0	90St25	
	10429	13				2			MA1	1.0	99Am05	
^{118}Rh$-^{120}$Sn$_{.983}$	26476	26				2			JY1	1.0	07Ha20	
^{118}Pd$-^{120}$Sn$_{.983}$	15199.7	7.9	15202.4	2.6	0.3	–			JY1	1.0	07Ha20	
	15202.1	3.6			0.1	–			JY1	1.0	11Ha48	
ave.	15202	3			0.2	1	64	61 ^{118}Pd			average	
^{118}Sn ^{35}Cl$-^{116}$Sn ^{37}Cl	2814	2	2813.9	0.5	0.0	U			H15	4.0	62Ba23	
^{118}Sn$-^{117}$Sn	$-$1338	11	$-$1347.41	0.14	$-$0.3	U			M16	2.5	63Da10	
^{117}Cs$^x-^{118}$Cs$^x_{.496}$ ^{116}Cs$_{.504}$	$-$1160	400	$-$1250#	100#	$-$0.1	U			P32	2.5	86Au02	
^{118}Cs($\varepsilon\alpha$)^{114}Te	10600	200	11050	30	2.3	U					77Bo28	
	10750	200			1.5	U					78Da07	$*$
^{116}Cd(t,p)^{118}Cd	5650	20				2			Ald		67Hi01	
^{116}Sn(t,p)^{118}Sn	7769	15	7787.7	0.5	1.2	U			Ald		68Bj02	
^{118}Sn(p,t)^{116}Sn	$-$7790	10	$-$7787.7	0.5	0.2	U			Roc		70Fl08	
^{118}Sn(d,^{3}He)^{117}In	$-$4440	40	$-$4505	5	$-$1.6	U			Sac		69Co03	
	$-$4481	15			$-$1.6	U			MSU		71We01	
^{117}Sn(n,γ)^{118}Sn	9326.5	2.	9326.42	0.13	0.0	U					70Or.A	
	9324.8	2.1			0.8	U			ORn		75Sl.A	
	9326.42	0.13			0.0	1	100	97 ^{118}Sn			02Bo11	
	9327.9	1.1			$-$1.3	U			Bdn		06Fi.A	
^{117}Sn(d,p)^{118}Sn	7090	12	7101.85	0.13	1.0	U			Tal		64No06	
^{118}Sn(p,d)^{117}Sn	$-$7097	15	$-$7101.85	0.13	$-$0.3	U			Har		70Ca01	
^{118}Cs(εp)^{117}I	4700	300	4738	29	0.1	U					78Da07	
^{118}Pd(β^-)^{118}Ag	4100	200	4165	4	0.3	U			Jyv		89Ko22	$*$
^{118}Ag(β^-)^{118}Cd	7122	100	7148	20	0.3	U			Stu		82Al29	$*$
	7110	470			0.1	U			Stu		82Al29	$*$
	7155	76			$-$0.1	U					95Ap.A	
^{118}In(β^-)^{118}Sn	4200	400	4425	8	0.6	U					61Gl02	
	4200	300			0.7	U					64Ka10	
	4310	100			1.1	U					87Ga.A	
^{118}In^m(β^-)^{118}Sn	4270	100	4530#	50#	2.5	D					64Ka10	$*$
^{118}Sb(β^+)^{118}Sn	3610	50	3656.6	3.0	0.9	U					61Fi05	
^{118}Sn(p,n)^{118}Sb	$-$4477.7	5.7	$-$4439.0	3.0	6.8	F			Tkm		63Ok01	$*$
	$-$4439.0	3.				2			Oak		77Jo03	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.		Lab	F	Reference	
^{118}Sb^n(β^+)^{118}Sn		3907	5				2						61Bo13	*
^{118}I(β^+)^{118}Te		7080	150	6726	27	−2.4	U						68La18	*
		7068	100			−3.4	C						70Be.A	*
^{118}Xe(β^+)^{118}I		3720	110	2892	22	−7.5	F						70Be.A	*
^{118}Cs(β^+)^{118}Xe		9300	1000	9670	16	0.4	U						76Da.C	
^{118}Cs^x(IT)^{118}Cs		5	4				3						82Au01	*
*^{118}Ru−u	Trends from Mass Surface TMS suggest ^{118}Ru 380 less bound												GAu	**
*^{118}Ag−^{133}Cs$_{.887}$	D_M=–1403.5(2.7) μu for ^{118}Ag^n at 127.63(0.10) keV; $M-A$=–79426.3(2.5) keV												Nub16b	**
*^{118}I−u	$M-A$=–80775(28) keV for ^{118}I^m 7$^-$ at 188.8 keV												Nub16b	**
*^{118}Cs($\varepsilon\alpha$)^{114}Te	As read from Fig. 2 (p.401)												GAu	**
*^{118}Pd(β^-)^{118}Ag	Original value 4000(200) corrected for new branching ratios												93Ja03	**
*^{118}Ag(β^-)^{118}Cd	E_{β^-}=4330(240), 3960(170), 3810(150) reinterpreted as feeding												95Ap.A	**
*	(1) level at 2788.72, (1) at 3224.32, (2,3,4) at 3265.77 keV												Ens959	**
*^{118}Ag(β^-)^{118}Cd	E_{β^-}=3990(720), 3910(630) reinterpreted as ^{118}Ag^n at 127.63(0.10) keV												95Ap.A	**
*	to (2,3,4) level at 3181.73, 3381.8 keV												Ens959	**
*^{118}In^m(β^-)^{118}Sn	E_{β^-}=2000(100) to 4$^+$ level at 2280.342 level, and other E_{β^-}												Ens959	**
*^{118}In^m(β^-)^{118}Sn	Trends from Mass Surface TMS suggest ^{118}In^m 255 less bound												GAu	**
*^{118}Sn(p,n)^{118}Sb	F : see note added in proof to reference												77Jo03	**
*^{118}Sb^n(β^+)^{118}Sn	p$^+$ =16(1)×10^{-4} to 7$^-$ level at 2574.91 keV, recalculated Q												Ens959	**
*^{118}I(β^+)^{118}Te	E_{β^+}=5450(150) to 2$^+$ level at 605.70 keV												Ens959	**
*^{118}I(β^+)^{118}Te	E_{β^+}=5440(100) to 2$^+$ level at 605.70 keV												Ens959	**
*^{118}Xe(β^+)^{118}I	F : probably contaminated by isobars												GAu	**
*^{118}Cs^x(IT)^{118}Cs	Original 24(19) corrected for new estimated IT=100(60)#												Nub16b	**
^{119}Rh−u		−67698	268	−67443	10	0.6	U				GT1	1.5	04Ma.A	
^{119}Rh−^{129}Xe$_{.922}$		20349	10				2				JY1	1.0	11Ha48	
^{119}Pd−u		−76844	208	−76660	9	0.6	U				GT1	1.5	04Ma.A	
^{119}Ag−^{133}Cs$_{.895}$		188	16	191	16	0.2	1	97	97	^{119}Ag	MA8	1.0	10Br02	*
C$_9$ H$_{11}$−^{119}Sn		182778	7	182764.1	0.8	−0.8	U				M16	2.5	63Da10	
		182762	8			0.2	U				R13	1.5	83De51	
^{119}I−u		−89926	30				2				GS2	1.0	05Li24	
^{119}Xe−u		−84601	30	−84589	11	0.4	R				GS2	1.0	05Li24	
^{119}Xe−^{133}Cs$_{.895}$		33	12	31	11	−0.1	2				MA6	1.0	04Di18	
^{119}Cs−u		−77532	57	−77623	15	−1.6	U				GS2	1.0	05Li24	*
^{119}Cs^x−^{133}Cs$_{.895}$		7011	16	7015	9	0.3	o				MA1	1.0	90St25	
		7018	13			−0.2	2				MA1	1.0	99Am05	
		7012	13			0.2	2				MA4	1.0	99Am05	
^{119}Sn ^{35}Cl−^{117}Sn ^{37}Cl		3306	2	3307.3	0.6	0.2	U				H15	4.0	62Ba23	
^{119}Pd−^{120}Sn$_{.992}$		20356.2	8.8				2				JY1	1.0	07Ha20	
^{119}Sn−^{118}Sn		1709	12	1704.6	0.6	−0.1	U				M16	2.5	63Da10	
^{119}I−^{118}I		−2747	155	−3000	40	−1.1	U				CR2	1.5	92Sh.A	*
^{119}I−^{117}I		−3570	155	−3570	40	0.0	U				CR2	1.5	92Sh.A	*
^{118}Cs^x−^{119}Cs$^x_{.661}$ ^{116}Cs$_{.339}$		530	80	410#	40#	−0.6	U				P32	2.5	86Au02	
^{118}Cs^x−^{119}Cs$^x_{.496}$ ^{117}Cs$^x_{.504}$		870	50	940	40	0.5	U				P22	2.5	82Au01	
		980	40			−0.4	U				P32	2.5	86Au02	
^{119}Sn(t,α)^{118}In−^{118}Sn()^{117}In		−127	6	−127	6	0.0	1	100	100	^{118}In	McM		85Pi03	
^{118}Sn(n,γ)^{119}Sn		6484.6	1.5	6483.5	0.5	−0.7	–				ORn		78Ra16	
		6483.3	0.6			0.3	–				Bdn		06Fi.A	
^{118}Sn(d,p)^{119}Sn		4238	12	4258.9	0.5	1.7	U				MIT		67Sp09	
^{118}Sn(n,γ)^{119}Sn	ave.	6483.5	0.6	6483.5	0.5	0.0	1	96	93	^{119}Sn			average	
^{118}Sn(^{3}He,d)^{119}Sb		−388	10	−383	8	0.5	1	59	59	^{119}Sb	VUn		78Ka12	*
^{119}Ba(εp)^{118}Xe		6200	200				3						78Bo20	*
^{119}Ag(β^-)^{119}Cd		5350	40	5330	40	−0.5	1	81	78	^{119}Cd	Stu		82Al29	
^{119}Cd(β^-)^{119}In		3797	80	3720	40	−0.9	1	23	22	^{119}Cd	Stu		82Al29	*
^{119}In(β^-)^{119}Sn		2387	100	2366	7	−0.2	U						60Yu01	*
		2413	200			−0.2	U						61Gl06	*
^{119}Sb(ε)^{119}Sn		579	20	591	8	0.6	–						57Ol05	*
^{119}Sn(p,n)^{119}Sb		−1369	15	−1373	8	−0.3	–				Oak		71Ke21	
^{119}Sb(ε)^{119}Sn	ave.	584	12	591	8	0.6	1	41	41	^{119}Sb			average	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{119}Te(β^+)^{119}Sb	2293	2				2					60Ko12	*
^{119}I(β^+)^{119}Te	3630	100	3416	29	−2.1	U					69La33	*
	3370	100			0.5	U					70Be.A	
^{119}Xe(β^+)^{119}I	4990	120	4971	30	−0.2	U					70Be.A	
^{119}Cs(β^+)^{119}Xe	6260	290	6489	17	0.8	U					83Pa.A	*
^{119}Cs^x(IT)^{119}Cs	16	11				3					82Au01	*
*^{119}Ag−^{133}Cs$_{.895}$	D_M=198.4(5.7) μu for ground state or ^{119}Ag^m at 20#20 keV; $M-A$=–78638.7(5.3) keV										Nub16b	**
*^{119}Cs−u	$M-A$=–72195(48) keV for mixture gs+m at 50#30 keV										Nub16b	**
*^{119}I−^{118}I	From ^{118}I/^{119}I=0.99161584(117), originally D_M=–3039(139) μu, revised by										GAu	**
*	authors: –2849(139) μu for ^{118}I gs+m mixture at 188.8 keV										Nub16b	**
*^{119}I−^{117}I	From ^{117}I/^{119}I=0.98321059(130)										GAu	**
*^{118}Sn(^{3}He,d)^{119}Sb	$Q-Q$(^{120}Sn(^{3}He,d)^{121}Sb)=–673(10), Q(120)=285.1(2.1) keV										AHW	**
*^{119}Ba(εp)^{118}Xe	Trends from Mass Surface TMS suggest ^{119}Ba 180 less bound										GAu	**
*^{119}Cd(β^-)^{119}In	Q_{β^-}=3800(90); and 3940(80) from ^{119}Cd^m at 146.54 keV										Nub16b	**
*^{119}In(β^-)^{119}Sn	E_{β^-}=1600(100) to 7/2$^+$ level at 787.01 keV										Ens09a	**
*^{119}In(β^-)^{119}Sn	E_{β^-}=2700(200) from ^{119}In^m at 311.37(0.03) to 3/2$^+$ level at 23.871 keV										Ens09a	**
*^{119}Sb(ε)^{119}Sn	IBE=526(20) to 3/2$^+$ level at 23.871 keV										Ens09a	**
*^{119}Te(β^+)^{119}Sb	E_{β^+}=627(2) to 1/2$^+$ level at 644.03 keV										Ens09a	**
*^{119}I(β^+)^{119}Te	E_{β^+}=2350(100) to 3/2$^+$ level at 257.484 keV										Ens09a	**
*^{119}Cs(β^+)^{119}Xe	E_{β^+}=4980(290) to 9/2$^+$ level at 257.84 keV										Ens09a	**
*^{119}Cs^x(IT)^{119}Cs	Original 33(22) corrected for new estimated IT=50(30)#										GAu	**
^{120}Pd−^{129}Xe$_{.930}$	13107.0	4.4	13105.1	2.5	−0.4	1	31	31 ^{120}Pd	JY1	1.0	11Ha48	
^{120}Ag−^{133}Cs$_{.902}$	4067.1	4.8				2			MA8	1.0	10Br02	
	4086	12	4067	5	−1.6	o			MA8	1.0	10Br02	
^{120}Cd−^{133}Cs$_{.902}$	−4849.6	4.0				2			MA8	1.0	10Br02	
C$_9$ H$_{12}$−^{120}Sn	191709	11	191698.5	1.0	−0.4	U			M16	2.5	63Da10	
	191705	8			−0.5	U			R13	1.5	83De51	
^{13}C ^{35}Cl$_2$ ^{37}Cl−^{120}Sn	4758	3	4760.9	1.0	0.2	U			H14	4.0	62Ba24	
^{120}Sb−u	−94796	76	−94920	8	−1.6	U			GS2	1.0	05Li24	*
C$_9$ H$_{12}$−^{120}Te	189879	9	189841	3	−1.7	U			M16	2.5	63Da10	
	189868	8			−2.3	U			R13	1.5	83De51	
^{120}I−u	−90222	104	−89913	16	3.0	C			GS2	1.0	05Li24	*
^{120}Xe−u	−88231	30	−88216	13	0.5	R			GS2	1.0	05Li24	
^{120}Xe−^{133}Cs$_{.902}$	−2930	14	−2933	13	−0.2	2			MA6	1.0	04Di18	
^{120}Cs−u	−79342	54	−79323	11	0.4	U			GS2	1.0	05Li24	*
^{120}Cs^x−^{133}Cs$_{.902}$	5947	16	5965	10	1.1	o			MA1	1.0	90St25	
	5956	12			0.7	2			MA1	1.0	99Am05	
	5983	17			−1.1	2			MA4	1.0	99Am05	
^{120}Sn ^{35}Cl−^{118}Sn ^{37}Cl	3546	2	3545.4	1.1	−0.1	U			H15	4.0	62Ba23	
^{120}Pd−^{120}Sn	22317.1	9.7	22349.4	2.4	3.3	B			JY1	1.0	07Ha20	
	22348.6	2.8			0.3	1	72	69 ^{120}Pd	JY1	1.0	11Ha48	
^{120}Te−^{120}Sn	1842.2	1.7	1858	3	9.1	B			CP1	1.0	09Sc19	
	1839.7	1.7			10.6	B			CP1	1.0	09Sc19	
^{120}Sn−^{119}Sn	−1113	11	−1109.3	1.2	0.1	U			M16	2.5	63Da10	
^{118}Cs^x−^{120}Cs$^x_{.328}$ ^{117}Cs$^x_{.672}$	460	120	480	60	0.1	U			P22	2.5	82Au01	
^{119}Cs^x−^{120}Cs$^x_{.661}$ ^{117}Cs$^x_{.339}$	−940	50	−928	29	0.1	U			P22	2.5	82Au01	
^{119}Cs^x−^{120}Cs$^x_{.496}$ ^{118}Cs$^x_{.504}$	−1220	30	−1167	11	0.7	U			P22	2.5	82Au01	
	−1180	60			0.1	U			P32	2.5	86Au02	
	−1200	30			0.4	U			P32	2.5	86Au02	
	−1270	50			0.8	F			P32	2.5	86Au02	*
^{120}Cs($\varepsilon\alpha$)^{116}Te	9200	300	8955	30	−0.8	U					76Jo.A	
^{118}Sn(t,p)^{120}Sn	7107	15	7106.4	1.0	0.0	U			Ald		68Bj02	
^{120}Sn(p,t)^{118}Sn	−7109	10	−7106.4	1.0	0.3	U			Roc		70Fl08	
^{120}Te(p,t)^{118}Te	−9343	24	−9332	18	0.4	2			Win		74De31	*

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{120}Sn(d,^{3}He)^{119}In	−5160	40	−5195	7	−0.9	U			Sac		69Co03	
	−5169	20			−1.3	1	13	13 ^{119}In	MSU		71We01	
^{120}Sn(t,α)^{119}In−^{118}Sn()^{117}In	−692	6	−689	6	0.5	1	92	86 ^{119}In	McM		85Pi03	
^{119}Sn(d,p)^{120}Sn	6890	12	6880.1	1.1	−0.8	U			Tal		64No06	
^{120}Sn(p,d)^{119}Sn	−6889	15	−6880.1	1.1	0.6	U			Har		70Ca01	
^{120}Sn(d,t)^{119}Sn	−2847.0	2.5	−2847.4	1.1	−0.2	1	19	12 ^{120}Sn	SPa		75Be09	
^{120}Pd(β^-)^{120}Ag	5500	100	5371	5	−1.3	U			Jyv		94Jo.A	
^{120}Ag(β^-)^{120}Cd	8200	100	8306	6	1.1	U			Stu		82Al29	
	8450	100			−1.4	U					95Ap.A	
^{120}In(β^-)^{120}Sn	5300	170	5370	40	0.4	U			Stu		78Al18	
	5370	40				2					87Ga.A	
^{120}In^m(β^-)^{120}Sn	5280	200	5420#	50#	0.7	D					64Ka10	*
	5340	170			0.5	D			Stu		78Al18	*
^{120}Sb(β^+)^{120}Sn	2720	20	2681	7	−2.0	U					50Bl92	
	2770	30			−3.0	B					69Ki15	
^{120}Sn(p,n)^{120}Sb	−3462.9	7.1				2			Tkm		63Ok01	
^{120}I(β^+)^{120}Te	5615	15				2					70Ga32	*
	5608	150	5615	15	0.0	U					68La18	*
^{120}Xe(β^+)^{120}I	1960	40	1581	19	−9.5	B					74Mu10	*
^{120}Cs(β^+)^{120}Xe	7300	500	8284	15	2.0	U					76Ba.A	*
	7800	1000			0.5	U					76Da.C	*
	7380	230			3.9	C					83Pa.A	*
	8210	200			0.4	U			IRS		93Al03	
^{120}Cs^x(IT)^{120}Cs	5	4				3					82Au01	*
^{120}Ba(β^+)^{120}Cs	5000	300				4					92Xu04	
*^{120}Sb−u	$M-A$=–88302(50) keV for mixture gs+m at 0#100 keV										Nub16b	**
*^{120}I−u	$M-A$=–83881(28) keV for mixture gs+n at 320(15) keV										Nub16b	**
*^{120}Cs−u	$M-A$=–73856(29) keV for mixture gs+m at 100#60 keV										Nub16b	**
*^{119}Cs^x−^{120}Cs$^x_{.496}$ ^{118}C	F : rejection based on line-shape analysis										86Au02	**
*^{120}Te(p,t)^{118}Te	Original error 12; added systematic error 21 keV										GAu	**
*^{120}In^m(β^-)^{120}Sn	E_{β^-}=3100(200),2200(200) to 4$^+$ levels at 2194.299,3057.946 keV										Ens029	**
*^{120}In^m(β^-)^{120}Sn	E_{β^-}=3100(170) to 4$^+$ level at 2194.299 keV, and other E_{β^-}										Ens029	**
*^{120}In^m(β^-)^{120}Sn	Trends from Mass Surface TMS suggest ^{120}In^m 105 less bound										GAu	**
*^{120}I(β^+)^{120}Te	E_{β^+}=4595(15), 4030(20) to ground state, 2$^+$ level at 560.438 keV										Ens029	**
*^{120}I(β^+)^{120}Te	E_{β^+}=3130(150) from ^{120}I^n at 320(15) to 6$^+$ level at 1776.23 keV										Ens029	**
*^{120}Xe(β^+)^{120}I	p$^+$ =0.07(0.01) to 1$^+$ level at 25.1 keV, recalculated Q										Ens029	**
*^{120}Cs(β^+)^{120}Xe	E_{β^+}=6000(500) 6500(1000) 6040(230), respectively, to 2$^+$ level at 322.61 keV										Ens029	**
*^{120}Cs^x(IT)^{120}Cs	Original 24(19) corrected for new estimated IT=100(60)#										Nub16b	**
^{121}Rh−u	−60387	266				2			GT3	2.5	16Kn03	
^{121}Pd−u	−71820	311	−71050	4	1.7	U			GT1	1.5	04Ma.A	
^{121}Ag−^{133}Cs$_{.910}$	6164	13				2			MA8	1.0	10Br02	*
	6170	17	6164	13	−0.4	o			MA8	1.0	10Br02	*
^{121}Cd−^{130}Xe$_{.931}$	2796.2	3.0	2796.5	2.1	0.1	2			JY1	1.0	12Ha25	
	2796.7	2.9			−0.1	2			JY1	1.0	13Ka08	*
C$_9$ H$_{13}$−^{121}Sb	197910.5	3.7	197915.3	2.8	0.5	U			M16	2.5	63Da10	
	197910	8			0.4	U			R13	1.5	83De51	
^{121}Sb−C ^{35}Cl ^{37}Cl$_2$	3162	3	3152.2	2.8	−0.8	U			H14	4.0	62Ba24	
^{121}Sb−u	−96180	30	−96189.9	2.8	−0.3	U			GS2	1.0	05Li24	
^{121}I−u	−92609	30	−92595	6	0.5	U			GS2	1.0	05Li24	
^{121}Xe−u	−88562	30	−88547	11	0.5	R			GS2	1.0	05Li24	
^{121}Xe−^{133}Cs$_{.910}$	−2495	13	−2508	11	−1.0	–			MA6	1.0	04Di18	
	ave. −2499	12			−0.7	1	85	85 ^{121}Xe			average	
^{121}Cs−^{133}Cs$_{.910}$	3247	25	3266	15	0.8	o			MA1	1.0	90St25	*
	3248	25			0.7	1	38	38 ^{121}Cs	MA1	1.0	99Am05	*

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{121}Cs−u		−82821	38	−82773	15	1.3	1	16	16 ^{121}Cs	GS2	1.0	05Li24	*
^{121}Pd−^{129}Xe$_{.938}$		18265.9	3.6				2			JY1	1.0	11Ha48	*
^{121}Sb ^{35}Cl−^{119}Sn ^{37}Cl		3452	2	3449.0	2.9	−0.4	U			H14	4.0	62Ba24	
^{119}Cs^x−^{121}Cs$^x_{.328}$ ^{118}Cs$^x_{.672}$		−1080	30	−1047	13	0.4	U			P22	2.5	82Au01	
^{120}Cs^x−^{121}Cs$^x_{.661}$ ^{118}Cs$^x_{.339}$		280	30	240	15	−0.5	U			P22	2.5	82Au01	
^{120}Cs^x−^{121}Cs$^x_{.496}$ ^{119}Cs$^x_{.504}$		790	30	770	13	−0.3	U			P22	2.5	82Au01	
		860	50			−0.7	U			P32	2.5	86Au02	
		813	14			−1.2	U			P32	2.5	86Au02	
^{120}Sn(n,γ)^{121}Sn		6170.3	2.	6170.2	0.3	0.0	U					76Ca24	
		6170.5	0.7			−0.4	–					81Ba53	
		6170.1	0.4			0.3	–			Bdn		06Fi.A	
^{120}Sn(d,p)^{121}Sn		3946.2	1.7	3945.6	0.3	−0.3	–			SPa		75Be09	
^{120}Sn(n,γ)^{121}Sn	ave.	6170.2	0.3	6170.2	0.3	0.0	1	99	97 ^{121}Sn			average	
^{121}Sb(γ,n)^{120}Sb		−9310	60	−9254	8	0.9	U			Phi		60Ge01	
		−9240	25			−0.6	U			McM		79Ba06	
^{120}Te(^{3}He,d)^{121}I		−1320.5	4.4	−1321	4	−0.1	1	99	99 ^{121}I	Hei		78Sz09	
^{121}Ba(εp)^{120}Xe		4200	300	4140	140	−0.2	R					78Bo20	
^{121}Pr(p)^{120}Ce		837	50	890	10	1.1	F					90Bo39	*
		889.6	10.				3			Arp		05Ro19	*
^{121}Ag(β$^-$)^{121}Cd		6400	120	6671	12	2.3	U			Stu		82Al29	
^{121}Cd(β$^-$)^{121}In		4780	80	4762	27	−0.2	U			Stu		82Al29	*
^{121}In(β$^-$)^{121}Sn		3426	200	3361	27	−0.3	U					60Yu01	*
		3406	50			−0.9	R			Stu		78Al18	*
^{121}Sn(β$^-$)^{121}Sb		383	5	403.1	2.7	4.0	B					49Du15	
		383.4	3.			6.6	B					68Sn01	*
^{121}Te(β$^+$)^{121}Sb		1080	30	1055	26	−0.8	1	74	74 ^{121}Te			75Me23	*
^{121}I(β$^+$)^{121}Te		2364	50	2294	26	−1.4	1	27	26 ^{121}Te			53Fi.A	*
		2384	100			−0.9	U					65Bu03	*
^{121}Xe(β$^+$)^{121}I		3790	100	3770	12	−0.2	U					60Mo.A	
		4160	140			−2.8	U					70Be.A	
^{121}Cs(β$^+$)^{121}Xe		5650	490	5379	14	−0.6	U					75We23	
		5400	20			−1.1	–					81So06	
		5210	220			0.8	U					83Pa.A	*
		5300	100			0.8	U			IRS		93Al03	*
		5400	40			−0.5	–			JAE		96Os04	*
	ave.	5400	18			−1.2	1	61	46 ^{121}Cs			average	
^{121}Cs^x(IT)^{121}Cs		46	8				2					GAu	
^{121}Ba(β$^+$)^{121}Cs		6340	160	6360	140	0.1	2			JAE		96Os04	

*^{121}Ag−^{133}Cs$_{.910}$	D_M=6175.1(5.0) μu for ground state or ^{121}Ag^m at 20#20 keV; $M-A$=–74392.5(4.7) keV	Nub16b	**
*^{121}Ag−^{133}Cs$_{.910}$	D_M=6180(12) μu for ground state or ^{121}Ag^m at 20#20 keV; $M-A$=–74388(11) keV	Nub16b	**
*^{121}Cd−^{130}Xe$_{.931}$	D_M=3027.4(2.9) μu for ^{121}Cd^m at 214.86(0.15) keV; $M-A$=–80858.7(2.7) keV	Nub16b	**
*^{121}Cs−^{133}Cs$_{.910}$	D_M=3284(16) μu for mixture gs+m at 68.5 keV	Nub16b	**
*^{121}Cs−^{133}Cs$_{.910}$	D_M=3285(13) μu for mixture gs+m at 68.5 keV; $M-A$=–77084(12) keV	Nub16b	**
*^{121}Cs−u	$M-A$=–77113(29) keV for mixture gs+m at 68.5 keV	Nub16b	**
*^{121}Pd−^{129}Xe$_{.938}$	Taken as low-spin isomer (see also ^{102}Y and ^{114}Tc doublets in same paper)	GAu	**
*^{121}Pr(p)^{120}Ce	F : misassigned according to reference	05Ro19	**
*^{121}Pr(p)^{120}Ce	E_p=882(10); in publication Q_p=900(10) keV	WgM10c	**
*^{121}Cd(β$^-$)^{121}In	Q_{β^-}=4890(150); and 4960(80) from ^{121}Cd^m at 214.86 keV	Nub16b	**
*^{121}In(β$^-$)^{121}Sn	E_{β^-}=3700(200) from ^{121}In^m at 313.68(0.07) to ground state and 1/2$^+$ level at 60.34 keV	Ens106	**
*^{121}In(β$^-$)^{121}Sn	E_{β^-}=2480(50) to 7/2$^+$ level at 925.59 keV	Ens106	**
*^{121}Sn(β$^-$)^{121}Sb	E_{β^-}=383(3); and 354(5) from ^{121}Sn^m at 6.31 to 7/2$^+$ level at 37.1298 keV	Ens106	**
*^{121}Te(β$^+$)^{121}Sb	p$^+$ =0.024(0.011) gives Q_{β^+}=315(30), recalculated Q_{β^+}	AHW	**
*	from ^{121}Te^m at 293.974 to 7/2$^+$ level at 37.1298 keV	Ens106	**
*^{121}I(β$^+$)^{121}Te	E_{β^+}=1130(50) 1150(100) respectively, to 3/2$^+$ level at 212.191 keV	Ens106	**
*^{121}Cs(β$^+$)^{121}Xe	E_{β^+}=3730(220) to 7/2$^+$ level at 459.59 keV	Ens106	**
*^{121}Cs(β$^+$)^{121}Xe	Q_{β^+}=5370(100) 5470(40) respectively, from ^{121}Cs^m at 68.5 keV	Ens106	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{122}Pd−u		−69308	397	−69368	21	−0.1	U			GT1	1.5	04Ma.A	
^{122}Ag−u		−76280	110	−76340	40	−0.2	o			GT2	2.5	08Kn.A	∗
		−76340	130			0.0	U			GT2	2.5	08Su19	∗
^{122}Ag−^{133}Cs$_{.917}$		10365	41				2			MA8	1.0	10Br02	∗
^{122}Cd−^{133}Cs$_{.917}$		155.1	4.7	159.6	2.5	1.0	1	28	28 ^{122}Cd	MA8	1.0	10Br02	
C$_8$ H$_{12}$ N−^{122}Sn		193541	8	193530.4	2.6	−0.5	U			M16	2.5	63Da10	
		193558	8			−2.3	U			R13	1.5	83De51	
C$_8$ H$_{12}$ N−^{122}Te		193925	9	193931.0	1.6	0.3	U			M16	2.5	63Da10	
		193926	8			0.4	U			R13	1.5	83De51	
^{122}Xe−u		−91637	30	−91632	12	0.2	R			GS2	1.0	05Li24	
^{122}Xe−^{133}Cs$_{.917}$		−4931	13	−4932	12	−0.1	2			MA6	1.0	04Di18	
^{122}Cs−^{133}Cs$_{.917}$		2812	48	2810	40	−0.1	o			MA1	1.0	90St25	∗
		2805	48			0.1	1	57	57 ^{122}Cs	MA1	1.0	99Am05	∗
^{122}Cs−u		−83887	55	−83890	40	−0.1	1	43	43 ^{122}Cs	GS2	1.0	05Li24	∗
^{122}Cs^n−^{133}Cs$_{.917}$		2952	16	2959	10	0.4	o			MA1	1.0	90St25	
		2961	12			−0.2	2			MA1	1.0	99Am05	
		2955	17			0.2	2			MA4	1.0	99Am05	
^{122}Ba−u		−80096	30				2			GS2	1.0	05Li24	
^{122}Cd−^{130}Xe$_{.938}$		3969.0	2.9	3967.3	2.5	−0.6	1	72	72 ^{122}Cd	JY1	1.0	12Ha25	
^{122}Pd−^{129}Xe$_{.946}$		20709	21				2			JY1	1.0	11Ha48	
^{122}Sn ^{35}Cl−^{120}Sn ^{37}Cl		4196	2	4192.2	2.5	−0.5	U			H15	4.0	62Ba23	
^{119}Cs^x−^{122}Cs$^x_{.244}$ ^{118}Cs$^x_{.756}$		−1600	80	−1511	15	0.4	U			P32	2.5	86Au02	
^{120}Cs^x−^{122}Cs$^x_{.492}$ ^{118}Cs$^x_{.508}$		−724	27	−694	20	0.4	U			P32	2.5	86Au02	
^{120}Cs^x−^{122}Cs$^x_{.328}$ ^{119}Cs$^x_{.672}$		350	50	321	16	−0.2	U			P22	2.5	82Au01	
		360	17			−0.9	U			P32	2.5	86Au02	
^{121}Cs^x−^{122}Cs$^x_{.496}$ ^{120}Cs$^x_{.504}$		−1100	40	−1066	24	0.3	U			P32	2.5	86Au02	
		−1169	15			2.7	U			P32	2.5	86Au02	
^{122}Sn(p,t)^{120}Sn		−6504	15	−6503.8	2.3	0.0	U			Roc		70Fl08	
^{122}Te(p,t)^{120}Te		−8560	24	−8607.3	2.7	−2.0	U			Win		74De31	∗
^{122}Te(p,t)^{120}Te−^{132}Ba()^{130}Ba		227.0	0.2	227.00	0.20	0.0	1	100	80 ^{120}Te			08Su14	
^{122}Te(p,t)^{120}Te−^{144}Sm()^{142}Sm		2032.6	0.4	2032.6	0.4	0.0	1	100	79 ^{142}Sm			09Bu.A	
^{122}Sn(d,^{3}He)^{121}In		−5910	50	−5901	27	0.2	2			Sac		69Co03	
		−5861	43			−0.9	2			MSU		71We01	
^{122}Sn(p,d)^{121}Sn		−6587	15	−6590.8	2.3	−0.3	U			Har		70Ca01	
^{122}Sn(d,t)^{121}Sn		−2558.8	3.0	−2558.2	2.3	0.2	1	60	57 ^{122}Sn	SPa		75Be09	
^{121}Sb(n,γ)^{122}Sb		6806.4	0.3	6806.37	0.13	−0.1	–					72Sh.A	Z
		6806.36	0.15			0.0	–			Bdn		06Fi.A	
	ave.	6806.37	0.13			0.0	1	100	95 ^{121}Sb			average	
^{122}In(β^-)^{122}Sn		6440	200	6370	50	−0.4	U					71Ta07	∗
		6510	230			−0.6	U			Stu		78Al18	
^{122}Sn(t,^{3}He)^{122}In		−6350	50				2			LAl		78Aj01	
^{122}In^n(β^-)^{122}Sn		6736	200	6660	130	−0.4	2					71Ta07	∗
		6590	180			0.4	2			Stu		78Al18	
^{122}Sb(β^+)^{122}Sn		1587	25	1606	3	0.8	U					58Pe17	
^{122}Sb(β^-)^{122}Te		1970	5	1979.1	2.1	1.8	–					55Fa33	
		1980	3			−0.3	–					68Hs02	
	ave.	1977.4	2.6			0.7	1	68	67 ^{122}Sb			average	
^{122}I(β^+)^{122}Te		4140	40	4234	5	2.4	U					54Ma75	
		4140	40			2.4	U					60Mo.A	
		4234	5				2					77Re.A	
^{122}Cs(β^+)^{122}Xe		7150	700	7210	40	0.1	U					75We23	∗
		7050	180			0.9	U					83Pa.A	∗
		7000	150			1.4	U			IRS		93Al03	
		7080	50			2.6	B			JAE		96Os04	
^{122}Cs^n(β^+)^{122}Xe		6950	250	7350	14	1.6	U					83Pa.A	∗
		7300	150			0.3	U			IRS		93Al03	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.		Lab	F	Reference	
^{122}Cs^x(IT)^{122}Cs		14	7				2						82Au01	*
*^{122}Ag−u		$M-A$=–71014(94) keV for mixture gs+m at 80#(50#) keV											Nub16b	**
*^{122}Ag−u		$M-A$=–71065(120) keV for mixture gs+m at 80#(50#) keV											Nub16b	**
*^{122}Ag−^{133}Cs$_{.917}$		D_M=10408(18) μu for mixture gs+m at 80#(50#) keV; $M-A$=–71066(17) keV											Nub16b	**
*^{122}Cs−^{133}Cs$_{.917}$		D_M=2887(12) μu for mixture gs+n at 140(30) keV											Nub16b	**
*^{122}Cs−^{133}Cs$_{.917}$		D_M=2880(12) μu for mixture gs+n at 140(30) keV; $M-A$=–78078(12) keV											Nub16b	**
*^{122}Cs−u		$M-A$=–78070(28) keV for mixture gs+m at 140(30) keV											Nub16b	**
*^{122}Te(p,t)^{120}Te		Original error 12; added systematic error 21 keV											GAu	**
*^{122}In(β^-)^{122}Sn		E_{β^-}=5300(200) to 2$^+$ level at 1140.51 keV											Ens074	**
*^{122}In^n(β^-)^{122}Sn		E_{β^-}=4400(200) to 4$^+$ level at 2331.09 keV											Ens074	**
*^{122}Cs(β^+)^{122}Xe		E_{β^+}=5800(700) 5690(180) respectively, to 2$^+$ level at 331.28 keV											Ens074	**
*^{122}Cs^n(β^+)^{122}Xe		E_{β^+}=3710(250) to 8$^+$ level at 2217.69 keV											Ens074	**
*^{122}Cs^x(IT)^{122}Cs		Original was 45(33); revised using ^{122}Cs^n=140(30) keV											Nub16b	**
^{123}Pd−u		−64423	290	−64870	850	−1.0	o				GT1	1.5	04Ma.A	
		−64874	339				2				GT3	2.5	16Kn03	
^{123}Ag−u		−74729	215	−74660	30	0.2	o				GT1	1.5	04Ma.A	
		−74479	130			−0.6	U				GT2	2.5	08Su19	*
^{123}Ag−^{133}Cs$_{.925}$		12700	120	12790	30	0.8	U				MA8	1.0	10Br02	
		12794	33				2				MA8	1.0	10Br02	*
^{123}Cd−^{133}Cs$_{.925}$		4491	52	4349.4	2.9	−2.7	U				MA8	1.0	10Br02	*
C$_8$ H$_{13}$ N−^{123}Sb		200580.0	3.3	200585.4	1.6	0.7	U				M16	2.5	63Da10	
		200615	8			−2.5	U				R13	1.5	83De51	
C$_8$ H$_{13}$ N−^{123}Te		200538	16	200529.7	1.6	−0.2	U				M16	2.5	63Da10	
		200515	8			1.2	U				R13	1.5	83De51	
^{123}Te−u		−95615	83	−95730.3	1.6	−1.4	U				GS2	1.0	05Li24	*
^{123}I−u		−94444	30	−94411	4	1.1	U				GS2	1.0	05Li24	
^{123}Xe−^{133}Cs$_{.925}$		−4048	13	−4061	10	−1.0	1	62	62	^{123}Xe	MA6	1.0	04Di18	
^{123}Cs−u		−87007	57	−87004	13	0.1	U				GS2	1.0	05Li24	*
^{123}Cs−^{133}Cs$_{.925}$		447	17	453	13	0.4	o				MA1	1.0	90St25	
		453	13				2				MA1	1.0	99Am05	
^{123}Ba−^{133}Cs$_{.925}$		6238	13				2				MA5	1.0	00Be42	
^{123}Ba−u		−81327	30	−81219	13	3.6	C				GS2	1.0	05Li24	
^{123}Cd−^{130}Xe$_{.946}$		8172.5	2.9	8172.6	2.9	0.0	1	100	100	^{123}Cd	JY1	1.0	12Ha25	
^{123}Cd^m−^{130}Xe$_{.946}$		8326.5	3.3				2				JY1	1.0	13Ka08	
^{123}Sb ^{35}Cl−^{121}Sb ^{37}Cl		3343	2	3354.0	2.3	1.4	U				H14	4.0	62Ba24	
^{123}Te−^{123}Sb		55.729	0.071	55.73	0.07	0.0	1	100	96	^{123}Sb	SH2	1.0	16Fi07	
^{119}Cs^x−^{123}Cs$^x_{.193}$ ^{118}Cs$^x_{.807}$		−1480	60	−1447	13	0.2	U				P32	2.5	86Au02	
^{123}Te(n,α)^{120}Sn		7564	30	7572.6	1.7	0.3	U				ILL		75Em04	
^{121}Sb(t,p)^{123}Sb		7295	20	7284.6	2.1	−0.5	U				Ald		67Hi01	
^{122}Sn(n,γ)^{123}Sn		5948	3	5946.2	1.2	−0.6	–						75Bh01	
		5945.8	1.5			0.2	–						77Ca09	
^{122}Sn(d,p)^{123}Sn		3726	12	3721.6	1.2	−0.4	U				Tal		64Ne10	
		3716	11			0.5	U						72Ca33	
		3721.8	2.6			−0.1	–				SPa		75Be09	
^{122}Sn(n,γ)^{123}Sn	ave.	5946.3	1.2	5946.2	1.2	−0.1	1	94	51	^{123}Sn			average	
^{123}Sb(γ,n)^{122}Sb		−8980	50	−8960.0	2.1	0.4	U				Phi		60Ge01	
		−8966	4			1.5	1	28	28	^{122}Sb	McM		79Ba06	
^{122}Te(n,γ)^{123}Te		6937	5	6929.01	0.08	−1.6	U						68Ch.A	
		6929.1	0.5			−0.2	U						91Ho08	
		6928.97	0.09			0.5	–						00Bo24	
		6929.16	0.17			−0.9	–				Bdn		06Fi.A	
^{122}Te(d,p)^{123}Te		4706	6	4704.45	0.08	−0.3	U				MIT		75Li22	
^{122}Te(n,γ)^{123}Te	ave.	6929.01	0.08	6929.01	0.08	0.0	1	100	98	^{122}Te			average	
^{122}Te(^{3}He,d)^{123}I		−574.2	3.5	−575	3	−0.3	1	97	96	^{123}I	Hei		78Sz04	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{123}Cd(β^-)^{123}In		6033	35	6016	20	−0.5	1	32	32 ^{123}In	Stu		87Sp09	*
^{123}In(β^-)^{123}Sn		4400	30	4386	20	−0.5	1	44	43 ^{123}In	Stu		87Sp09	*
^{123}Sn(β^-)^{123}Sb		1395	10	1407.9	2.7	1.3	–					49Du15	*
		1420	10			−1.2	–					50Ke11	
		1399	20			0.4	U					66Au04	*
	ave.	1408	7			0.1	1	14	11 ^{123}Sn			average	
^{123}I(β^+)^{123}Te		1260	7	1228	3	−4.5	C					86Ag.A	
^{123}Xe(β^+)^{123}I		2720	100	2695	10	−0.2	U					54Ma75	
		2676	15			1.3	1	42	38 ^{123}Xe			60Mo.A	*
^{123}Cs(β^+)^{123}Xe		4110	310	4205	15	0.3	U					75We23	*
		4000	140			1.5	U					81So06	*
		4050	180			0.9	U					83Pa.A	*
		4200	100			0.1	U			IRS		93Al03	
		4110	30			3.2	B			JAE		96Os04	
^{123}Cs^x(IT)^{123}Cs		7	4				3					82Au01	*
^{123}Ba(β^+)^{123}Cs		5330	100	5389	17	0.6	U			JAE		96Os04	
*^{123}Ag−u		Isomer should be expected, but ^{123}Ag^m at 20#(20#) keV, correction negligible										GAu	**
*^{123}Ag−^{133}Cs$_{.925}$		D_M=12805(30) μu for mixture gs+m at 20#(20#) keV; $M-A$=–69538(28)										Nub16b	**
*^{123}Cd−^{133}Cs$_{.925}$		D_M=4568(26) μu for mixture gs+m at 143(4) keV; $M-A$=–77210(25)										Nub16b	**
*^{123}Te−u		$M-A$=–88941(30) keV for mixture gs+m at 247.47 keV										Nub16b	**
*^{123}Cs−u		$M-A$=–80968(28) keV for mixture gs+m at 156.27 keV										Nub16b	**
*^{123}Cd(β^-)^{123}In		Q =3590(51) 3464(41) 3547(36) from ground state to 2393 2529 2541 levels										89Hu03	**
*^{123}In(β^-)^{123}Sn		Q_{β^-}=4410(31); and 4645(72) from ^{123}In^m at 327.21 keV										Nub16b	**
*^{123}Sn(β^-)^{123}Sb		E_{β^-}=1260(10) from ^{123}Sn^m at 24.6 to 5/2$^+$ level at 160.33 keV										Ens04a	**
*^{123}Sn(β^-)^{123}Sb		E_{β^-}=310(20) to 9/2$^+$ level at 1088.64 keV										Ens04a	**
*^{123}Xe(β^+)^{123}I		E_{β^+}=1505(15) to 1/2$^+$ level at 148.92 keV										Ens04a	**
*^{123}Cs(β^+)^{123}Xe		E_{β^+}=2990(310) to 3/2$^+$ level at 97.30 keV										Ens04a	**
*^{123}Cs(β^+)^{123}Xe		E_{β^+}=2370(140) to (1/2,3/2)$^+$ level at 596.65 keV, and other E_{β^+}										Ens04a	**
*^{123}Cs(β^+)^{123}Xe		E_{β^+}=2930(180) to 3/2$^+$ level at 97.30 keV										Ens04a	**
*^{123}Cs^x(IT)^{123}Cs		Based on ^{123}Cs^m(IT)=156.27 and isomeric ratio R<0.1										Nub16b	**
^{124}Pd−u		−64617	399	−62680#	320#	1.9	D			GT3	2.5	16Kn03	*
^{124}Ag−^{133}Cs$_{.932}$		17050	270				2			MA8	1.0	10Br02	*
^{124}Cd−^{133}Cs$_{.932}$		5781	10	5776	3	−0.5	1	10	10 ^{124}Cd	MA8	1.0	10Br02	
C$_7$ ^{13}C H$_{13}$ N−^{124}Sn		202886	8	202877.6	1.1	−0.4	U			M16	2.5	63Da10	
		202891	8			−1.1	U			R13	1.5	83De51	
^{124}Sn−^{13}C ^{37}Cl$_3$		4210.47	0.71	4214.1	1.1	2.0	1	38	37 ^{124}Sn	H39	2.5	84Ha20	
^{124}Sn−^{133}Cs$_{.932}$		−6598	21	−6604.5	1.1	−0.3	U			MA8	1.0	05Si34	
^{124}Te−^{13}C ^{37}Cl$_3$		1754.63	1.26	1754.5	1.6	0.0	1	26	26 ^{124}Te	H39	2.5	84Ha20	
^{124}Te−^{54}Fe ^{35}Cl$_2$		25501.65	2.56	25503.4	1.7	0.3	U			H39	2.5	84Ha20	
C$_7$ ^{13}C H$_{13}$ N−^{124}Te		205336	13	205337.2	1.6	0.0	U			M16	2.5	63Da10	
		205325	8			1.0	U			R13	1.5	83De51	
^{124}I−u		−93786	30	−93791.0	2.6	−0.2	U			GS2	1.0	05Li24	
^{124}Xe−^{13}C ^{37}Cl$_3$		4831.15	1.58	4829.0	1.9	−0.5	1	24	24 ^{124}Xe	H39	2.5	84Ha20	
^{124}Xe−^{54}Fe ^{35}Cl$_2$		28575.78	0.99	28577.9	1.9	0.9	1	60	59 ^{124}Xe	H39	2.5	84Ha20	
^{124}Xe−^{133}Cs$_{.932}$		−5986	13	−5989.6	1.9	−0.3	U			MA6	1.0	04Di18	
^{124}Cs−^{133}Cs$_{.932}$		361	16	377	9	1.0	o			MA1	1.0	90St25	
		370	13			0.5	R			MA1	1.0	99Am05	
		361	15			1.0	R			MA8	1.0	05Gu37	
^{124}Cs−u		−87696	30	−87742	9	−1.5	2			GS2	1.0	05Li24	
		−87693	30			−1.6	2			GS2	1.0	05Li24	*
^{124}Ba−^{133}Cs$_{.932}$		3212	15	3212	13	0.0	2			MA1	1.0	99Am05	
^{124}Ba−u		−84905	30	−84906	13	0.0	R			GS2	1.0	05Li24	
^{124}La−u		−75464	71	−75430	60	0.5	2			GS2	1.0	05Li24	*
^{124}Cd−^{130}Xe$_{.954}$		9708.9	3.4	9709	3	0.2	1	89	89 ^{124}Cd	JY1	1.0	12Ha25	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{124}Sn$-^{129}$Xe$_{.961}$		−3214.3	2.1	−3217.7	1.1	−1.6	1	27	27 ^{124}Sn	JY1	1.0	11Ha48	
^{124}Sn$-^{120}$Sn$_{1.033}$		6305.1	2.1	6302.2	1.3	−1.4	1	36	20 ^{124}Sn	JY1	1.0	11Ha48	
^{124}Sn ^{35}Cl$-^{122}$Sn ^{37}Cl		4784	2	4782.8	2.6	−0.1	U			H15	4.0	62Ba23	
^{124}Te ^{35}Cl$-^{122}$Te ^{37}Cl		2728	2	2723.74	0.15	−0.5	U			H16	4.0	63Ba47	
^{124}Sn$-^{124}$Te		2458.51	0.89	2459.6	1.6	0.5	1	53	41 ^{124}Te	H39	2.5	84Ha20	
^{124}Xe$-^{124}$Te		3076.00	1.78	3074.5	2.3	−0.3	1	27	16 ^{124}Xe	H39	2.5	84Ha20	
^{124}Sn$-^{122}$Sn		1838	22	1832.7	2.6	−0.1	U			M16	2.5	63Da10	
^{120}Cs$^x-^{124}$Cs$^x_{.194}$ ^{119}Cs$^x_{.807}$		310	30	304	12	−0.1	U			P22	2.5	82Au01	
^{121}Cs$^x-^{124}$Cs$^x_{.244}$ ^{120}Cs$^x_{.756}$		−1360	30	−1265	19	1.3	U			P22	2.5	82Au01	
^{123}Cs$^x-^{124}$Cs$^x_{.744}$ ^{120}Cs$^x_{.256}$		−1390	30	−1337	21	0.7	U			P22	2.5	82Au01	
^{124}Sn(d,^{6}Li)^{120}Cd		−5216	24	−5228	4	−0.5	U					79Ja21	
^{124}Sn(^{3}He,^{7}Be)^{120}Cd		−5098	30	−5115	4	−0.6	U			MSU		76St11	
^{124}Sn(^{18}O,^{20}Ne)^{122}Cd		−1266	39	−1362.7	2.5	−2.5	U					97Gu32	*
^{122}Sn(t,p)^{124}Sn		5931	15	5953.7	2.4	1.5	U			Roc		70Fl05	
^{124}Sn(p,t)^{122}Sn		−5956	10	−5953.7	2.4	0.2	U					64Al29	
^{124}Sn(d,^{3}He)^{123}In		−6610	50	−6599	20	0.2	–			Sac		69Co03	
		−6572	66			−0.4	–			MSU		71We01	
	ave.	−6600	40			−0.1	1	25	25 ^{123}In			average	
^{124}Sn(p,d)^{123}Sn		−6279	15	−6264.8	2.4	0.9	U			Har		70Ca01	
^{124}Sn(d,t)^{123}Sn		−2260	35	−2232.1	2.4	0.8	U			Pit		64Co11	
		−2233.4	3.7			0.4	1	42	38 ^{123}Sn	SPa		75Be09	
^{123}Sb(n,γ)^{124}Sb		6467.55	0.10	6467.50	0.06	−0.5	2					73Sh.A	Z
		6467.40	0.10			1.0	2					81Su.A	Z
		6467.58	0.14			−0.6	2			Bdn		06Fi.A	
^{123}Te(n,γ)^{124}Te		9425	2	9424.48	0.09	−0.3	U					69Bu05	
		9423.7	1.5			0.5	U					70Or.A	
		9424.05	0.30			1.4	–			Ltn		95Ge06	Z
		9423.89	0.20			3.0	C			Bdn		06Fi.A	
		9424.53	0.10			−0.5	–					06Vo09	
	ave.	9424.48	0.09			0.0	1	100	94 ^{123}Te			average	
^{124}Cd(β^-)^{124}In		4166	39	4170	30	0.1	1	61	61 ^{124}In	Stu		87Sp09	
^{124}In(β^-)^{124}Sn		7180	50	7360	30	3.7	B			Stu		78Al18	
		7360	49			0.1	1	39	39 ^{124}In	Stu		87Sp09	
^{124}Sn(t,^{3}He)^{124}In		−7590	50	−7350	30	4.9	B			LAl		78Aj01	
^{124}In^m(β^-)^{124}Sn		7370	210	7340	50	−0.1	o			Stu		78Al18	
		7341	51				2			Stu		87Sp09	
^{124}Sb(β^-)^{124}Te		2907.7	5.	2905.07	0.13	−0.5	U					65Hs02	*
		2903.7	4.			0.3	U					66Ca10	*
		2904.7	2.			0.2	U					69Na05	*
^{124}I(β^+)^{124}Te		3157	4	3159.6	1.9	0.6	2					71Bo01	*
		3160.3	2.1			−0.3	2					92Wo03	
^{124}Cs(β^+)^{124}Xe		5920	460	5930	8	0.0	U					75We23	
		5900	90			0.3	U			IRS		93Al03	
		5910	30			0.7	U			JAE		96Os04	
^{124}Cs^x(IT)^{124}Cs		30	20				3					AHW	*
^{124}La(β^+)^{124}Ba		8930	110	8830	60	−0.9	R			JAE		98Ko66	

*^{124}Pd$-$u	Trends from Mass Surface TMS suggest ^{124}Pd 1800 less bound	WgM168	**
*^{124}Ag$-^{133}$Cs$_{.932}$	D_M=17050(270) μu for mixture gs+m at 0#(100#); $M-A$=–66200(250) keV	Nub16b	**
*^{124}Cs$-$u	$M-A$=–81223(28) keV for ^{124}Cs^m at 462.63 keV	Nub16b	**
*^{124}La$-$u	$M-A$=–70244(32) keV for mixture gs+m at 100#100 keV	Nub16b	**
*^{124}Sn(^{18}O,^{20}Ne)^{122}Cd	Original Q =–1250(39) calibrated with ^{120}Cd=–83973(19) keV	GAu	**
*^{124}Sb(β^-)^{124}Te	E_{β^-}=2305(5) 2301(4) 2302(2) respectively, to 2^+ level at 602.7271 keV	Ens087	**
*^{124}I(β^+)^{124}Te	Original error increased, see ^{84}Rb(β^+)	AHW	**
*^{124}Cs^x(IT)^{124}Cs	Based on ^{124}Cs^m(IT)=462.63 keV	Nub16b	**
*^{124}Cs^x(IT)^{124}Cs	Isomeric ratio assumed <0.1 as for ^{118}Cs, ^{120}Cs, ^{122}Cs	AHW	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.		Lab	F	Reference	
^{125}Ag−u		−68954	429	−69270	470	−0.5	o				GT1	1.5	04Ma.A	
		−69265	186				2				GT3	2.5	16Kn03	
^{125}Cd−u		−78770	120	−78742	3	0.1	o				GT2	2.5	08Kn.A	*
		−78780	140			0.1	U				GT2	2.5	08Su19	*
C$_7$ H$_6$ ^{35}Cl−^{125}Te		111363	6	111373.0	1.6	0.7	U				M16	2.5	63Da10	
		111368	8			0.4	U				R13	1.5	83De51	
^{125}I−u		−95374	30	−95370.7	1.6	0.1	U				GS2	1.0	05Li24	
^{125}Cs−u		−90280	30	−90272	8	0.3	U				GS2	1.0	05Li24	
^{125}Ba−u		−85569	30	−85528	12	1.4	R				GS2	1.0	05Li24	
^{125}La−u		−79191	30	−79184	28	0.2	1	87	87	^{125}La	GS2	1.0	05Li24	
^{125}Cd−^{133}Cs$_{.940}$		10133	13	10133	3	0.0	U				TT1	1.0	16La.A	
^{125}Cd^m−^{133}Cs$_{.940}$		10334	13	10333	3	−0.1	U				TT1	1.0	16La.A	
^{125}Cs−^{133}Cs$_{.940}$		−1392	17	−1397	8	−0.3	o				MA1	1.0	90St25	
		−1382	14			−1.1	–				MA1	1.0	99Am05	
		−1386	14			−0.8	–				MA4	1.0	99Am05	
	ave.	−1384	10			−1.3	1	71	71	^{125}Cs			average	
^{125}Ba−^{133}Cs$_{.940}$		3356	13	3347	12	−0.7	–				MA5	1.0	00Be42	
	ave.	3348	12			−0.1	1	98	98	^{125}Ba			average	
^{125}Cd−^{130}Xe$_{.962}$		14081.6	3.1	14082	3	0.0	1	100	100	^{125}Cd	JY1	1.0	12Ha25	
^{125}Cd^m−^{130}Xe$_{.962}$		14281.6	3.4				2				JY1	1.0	13Ka08	
^{125}Te ^{35}Cl−^{123}Te ^{37}Cl		3090	2	3110.26	0.13	2.5	U				H16	4.0	63Ba47	
^{122}Cs^x−^{125}Cs$_{.244}$ ^{121}Cs$^x_{.756}$		715	23	640	40	−1.3	U				P32	2.5	86Au02	
^{123}Sb(t,p)^{125}Sb		6696	20	6693.0	2.1	−0.1	U				Ald		67Hi01	
^{124}Sn(n,γ)^{125}Sn		5733.1	1.5	5733.50	0.20	0.3	U						77Ca09	Z
		5733.1	0.6			0.7	U						81Ba53	
		5733.5	0.2			0.0	1	100	100	^{125}Sn			11To04	
^{124}Sn(d,p)^{125}Sn		3530	30	3508.93	0.20	−0.7	U				Pit		64Co11	
		3506	12			0.2	U				Tal		64Ne10	
		3515	11			−0.6	U						72Ca33	
		3509.4	3.6			−0.1	U				SPa		75Be09	
^{124}Te(n,γ)^{125}Te		6569.0	1.0	6568.970	0.030	0.0	U						71Gr.A	
		6568.97	0.03			0.0	1	100	83	^{125}Te	Prn		99Ho01	
		6569.39	0.19			−2.2	U				Bdn		06Fi.A	
^{125}Te(γ,n)^{124}Te		−6560	60	−6568.970	0.030	−0.1	U				Phi		60Ge01	
^{124}Te(d,p)^{125}Te		4344	8	4344.40	0.03	0.1	U				MIT		69Gr24	
^{124}Te(^{3}He,d)^{125}I		115.1	3.0	107.38	0.07	−2.6	U				Hei		78Sz04	
^{124}Te(α,t)^{125}I		−14203	7	−14213.01	0.07	−1.4	U				Hei		78Sz04	
^{124}Xe(n,γ)^{125}Xe		7603.3	0.4	7603.3	0.4	−0.1	1	100	99	^{125}Xe			82Ka.A	
^{125}Cd(β^-)^{125}In		7122	62	7129	27	0.1	1	19	19	^{125}In	Stu		87Sp09	*
^{125}Cd^m(β^-)^{125}In		7172	35	7315	27	4.1	B				Stu		87Sp09	*
^{125}In(β^-)^{125}Sn		5418	30	5420	27	0.1	1	81	81	^{125}In	Stu		87Sp09	*
^{125}Sn(β^-)^{125}Sb		2330	10	2359.9	2.6	3.0	B						50Ha58	
		2370	20			−0.5	U						50Ke11	
		2335	40			0.6	U						64De02	*
^{125}Sb(β^-)^{125}Te		767.7	3.	766.7	2.1	−0.3	2						64Ma30	*
		765.7	3.			0.3	2						66Ma49	*
^{125}I(ε)^{125}Te		184	7	185.77	0.06	0.3	U						64Le05	*
		185	8			0.1	U						66Sm05	*
		177.2	2.			4.3	C						68Go.A	*
		186.1	0.3			−1.1	U						86Bo46	
		179.3	2.0			3.2	B						90Li14	*
		185.77	0.06				2						94Hi04	
^{125}Xe(ε)^{125}I		1735	40	1643.8	2.2	−2.3	U						69Lu09	*
^{125}Cs(β^+)^{125}Xe		3072	20	3105	8	1.7	–						54Ma54	
		3082	20			1.2	–						75We23	
		3100	100			0.1	U				IRS		93Al03	
	ave.	3077	14			2.0	1	31	29	^{125}Cs			average	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{125}Ba(β^+)^{125}Cs	4560	250	4419	13	−0.6	U					68Da09	*
	4380	50			0.8	U			JAE		96Os04	
^{125}La(β^+)^{125}Ba	5950	70	5909	28	−0.6	1	16	13 ^{125}La	JAE		98Ko66	
*^{125}Cd−u	$M-A$=–73274(93) keV for mixture gs+m at 186(4) keV										Nub16b	**
*^{125}Cd−u	$M-A$=–73287(120) keV for mixture gs+m at 186(4) keV										Nub16b	**
*^{125}Cd(β^-)^{125}In	E_{β^-}=4625(62) to (1/2$^+$,3/2$^+$) level at 2497.43 keV										Ens112	**
*^{125}Cd^m(β^-)^{125}In	E_{β^-}=5009(109), 4581(126), 4533(39) to 2101.40, 2640.29, 2641.26 levels										Ens112	**
*^{125}In(β^-)^{125}Sn	Q_{β^-}=5443(31); and 5730(43) from ^{125}In^m at 360.12 keV										Nub16b	**
*^{125}Sn(β^-)^{125}Sb	E_{β^-}=2030(40) from ^{125}Sn^m at 27.50(0.14) to 5/2$^+$ level at 332.06 keV										Ens112	**
*^{125}Sb(β^-)^{125}Te	E_{β^-}=623(3) 621(3) respectively, to 1/2$^-$ level at 144.775 keV										Ens112	**
*^{125}I(ε)^{125}Te	LMK=0.254(0.003) 0.253(0.005) IBE=110(2) 150.6(0.3) respectively, all to										AHW	**
*	3/2$^+$ level at 35.4925 keV. Q(LMK) recalculated, error mainly theory										Ens112	**
*^{125}I(ε)^{125}Te	IBE=112.0(2.0)(1s)+31.8 to 3/2$^+$ level at 35.4925 keV										Ens112	**
*^{125}Xe(ε)^{125}I	E_{β^+}=470(40) to 3/2$^+$ at 188.416 and 1/2$^+$ at 243.382 keV, ratio 1:2										Ens112	**
*^{125}Ba(β^+)^{125}Cs	E_{β^+}=3450(250) to (5/2$^+$) level at 84.82 level										Ens112	**
^{126}Ag−u	−65926	329	−65140#	220#	1.0	D			GT3	2.5	16Kn03	*
C_{10} H_6−^{126}Te	143623	9	143639.3	1.6	0.7	U			M16	2.5	63Da10	
	143640	8			−0.1	U			R13	1.5	83De51	
^{126}Xe−u	−95647	30	−95703	4	−1.9	U			GS2	1.0	05Li24	
^{126}Ba−u	−88745	30	−88750	13	−0.2	R			GS2	1.0	05Li24	
^{126}La−u	−80503	232	−80490	100	0.1	2			GS2	1.0	05Li24	*
^{126}Ce−u	−76029	30				2			GS2	1.0	05Li24	
^{126}Xe−^{134}Xe$_{.940}$	−6772.8	2.9	−6773	4	0.0	o			MA8	1.0	05He.A	
	−6773.2	3.8			0.1	1	98	98 ^{126}Xe	MA8	1.0	06He29	
^{126}Cd−^{133}Cs$_{.947}$	11966.5	4.5	11966.1	2.7	−0.1	1	35	35 ^{126}Cd	MA8	1.0	10Br02	
	11956	15			0.7	U			MA8	1.0	10Br02	
	11958	13			0.6	U			TT1	1.0	16La.A	
^{126}Cs−^{133}Cs$_{.947}$	−1027	17	−1017	11	0.6	o			MA1	1.0	90St25	
	−1011	13			−0.5	1	74	74 ^{126}Cs	MA1	1.0	99Am05	
^{126}Ba−^{133}Cs$_{.947}$	786	15	787	13	0.1	2			MA1	1.0	99Am05	
^{126}Cd−^{130}Xe$_{.969}$	15928.6	3.3	15928.6	2.7	0.0	1	65	65 ^{126}Cd	JY1	1.0	12Ha25	
^{126}Te ^{35}Cl−^{124}Te ^{37}Cl	3432	2	3443.91	0.11	1.5	U			H16	4.0	63Ba47	
	3441.28	1.54			1.1	U			H43	1.5	90Dy04	
^{123}Cs^x−^{126}Cs$_{.390}$ ^{121}Cs$^x_{.610}$	−1160	30	−1135	17	0.3	U			P22	2.5	82Au01	
^{124}Cs^x−^{126}Cs$_{.590}$ ^{121}Cs$^x_{.410}$	−340	30	−341	23	0.0	U			P22	2.5	82Au01	
^{124}Cs^x−^{126}Cs$_{.492}$ ^{122}Cs$^x_{.508}$	−570	30	−510	28	0.8	U			P22	2.5	82Au01	
^{124}Cs^x−^{126}Cs$_{.328}$ ^{123}Cs$^x_{.672}$	390	30	422	24	0.4	U			P22	2.5	82Au01	
^{125}Cs−^{126}Cs$_{.496}$ ^{124}Cs$^x_{.504}$	−1130	30	−1072	14	0.8	U			P22	2.5	82Au01	
^{124}Sn(t,p)^{126}Sn	5445	15	5442	10	−0.2	–			Ald		69Bj01	
	5444	15			−0.1	–			Roc		70Fl05	
ave.	5444	11			−0.2	1	96	96 ^{126}Sn			average	
^{125}Te(n,γ)^{126}Te	9113.7	0.4	9113.69	0.08	0.0	U					77Ko.A	
	9113.69	0.08			0.0	1	100	83 ^{126}Te			03Vo03	
^{126}Te(γ,n)^{125}Te	−8840	120	−9113.69	0.08	−2.3	U			Phi		60Ge01	
^{125}Te(d,p)^{126}Te	6892	6	6889.13	0.08	−0.5	U			MIT		71Gr01	
^{126}Cd(β^-)^{126}In	5486	36	5516	27	0.8	1	56	56 ^{126}In	Stu		87Sp09	
^{126}In(β^-)^{126}Sn	8207	39	8242	27	0.9	1	48	44 ^{126}In	Stu		87Sp09	
^{126}In^m(β^-)^{126}Sn	8309	51				2			Stu		87Sp09	
^{126}Sn(β^-)^{126}Sb	378	30				2					71Or04	*
^{126}Sb(β^-)^{126}Te	3667	150	3670	30	0.0	U					71Or04	*
^{126}I(β^+)^{126}Te	2151	5	2154	4	0.6	1	54	52 ^{126}I			59Ha27	
^{126}I(β^-)^{126}Xe	1258	5	1236	5	−4.5	B					55Ko14	*
^{126}Cs(β^+)^{126}Xe	4670	140	4796	11	0.9	U					75We23	*
	4810	100			−0.1	U					76Pa11	*
	4830	40			−0.8	U			JAE		92Os07	
	4730	100			0.7	U			IRS		93Al03	
	4780	20			0.8	1	28	26 ^{126}Cs	JAE		96Os04	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{126}La(β^+)^{126}Ba		7700	100	7700	90	0.0	R			JAE		98Ko66	
^{126}La^m(β^+)^{126}Ba		7910	400				3			JAE		98Ko66	
*^{126}Ag−u		Trends from Mass Surface TMS suggest ^{126}Ag 730 less bound										WgM168	**
*^{126}La−u		$M-A$=–74883(28) keV for mixture gs+m at 210(410) keV										Nub16b	**
*^{126}Sn(β^-)^{126}Sb		E_{β^-}=250(30) to 2$^+$ level at 127.9 keV										Ens031	**
*^{126}Sb(β^-)^{126}Te		E_{β^-}=1900(150) from mixture ground state and ^{126}Sb^m at 17.7 to 6$^+$ level at 1776.19 keV										Ens031	**
*^{126}I(β^-)^{126}Xe		E_{β^-}=865(5) to 2$^+$ level at 388.631 keV, and other E_{β^-}										Ens031	**
*^{126}Cs(β^+)^{126}Xe		E_{β^+}=3260(140) 3400(100) respectively, to 2$^+$ level at 388.631 keV										Ens031	**
C_{10} H_7−^{127}I		150297	6	150303	4	0.4	U			M16	2.5	63Da10	
		150305.3	3.4			−0.2	1	21	21 ^{127}I	M16	2.5	63Da10	
		150322	8			−1.6	U			R13	1.5	83De51	
^{127}Cs−u		−92571	30	−92583	6	−0.4	U			GS2	1.0	05Li24	
^{127}Ba−u		−88923	39	−88909	12	0.4	R			GS2	1.0	05Li24	*
^{127}La−u		−83640	30	−83625	28	0.5	1	87	87 ^{127}La	GS2	1.0	05Li24	*
^{127}Ce−u		−77273	31				2			GS2	1.0	05Li24	*
^{127}Cd−^{133}Cs$_{.955}$		16490	13				2			TT1	1.0	16La.A	
^{127}Cd^m−^{133}Cs$_{.955}$		16799	11	16786	9	−1.2	1	61	61 ^{127}Cd^m	TT1	1.0	16La.A	
^{127}Sn ^{34}S−^{133}Cs$_{1.211}$		−7237	12	−7245	11	−0.7	1	81	81 ^{127}Sn	MA8	1.0	08Dw01	*
^{127}Cs−^{133}Cs$_{.955}$		−2303	17	−2289	6	0.8	o			MA1	1.0	90St25	
		−2287	13			−0.2	–			MA1	1.0	99Am05	
		−2293.3	7.7			0.5	–			MA8	1.0	05Gu37	
	ave.	−2292	7			0.4	1	82	82 ^{127}Cs			average	
^{127}Ba−^{133}Cs$_{.955}$		1389	13	1385	12	−0.3	–			MA5	1.0	00Be42	
	ave.	1387	12			−0.2	1	98	98 ^{127}Ba			average	
^{127}Cd^m−^{130}Xe$_{.977}$		20741	14	20764	9	1.6	1	38	38 ^{127}Cd^m	JY1	1.0	12Ha25	*
^{125}Cs−^{127}Cs$_{.591}$ ^{122}Cs$^x_{.410}$		−1098	18	−1086	16	0.3	U			P32	2.5	86Au02	
^{126}Te(n,γ)^{127}Te		6289	3	6287.65	0.18	−0.5	U					72Mu.A	
		6287.8	0.4			−0.4	–			Bdn		06Fi.A	
		6287.6	0.2			0.2	–			Prn		05Ho15	
^{126}Te(d,p)^{127}Te		4044	8	4063.08	0.18	2.4	U			MIT		68Gr16	
^{126}Te(n,γ)^{127}Te	ave.	6287.64	0.18	6287.65	0.18	0.0	1	100	98 ^{127}Te			average	
^{127}I(γ,n)^{126}I		−9135	22	−9143.9	2.7	−0.4	U			Phi		60Ge01	
		−9145	3			0.4	1	83	48 ^{126}I	MMn		86Ts04	
^{127}Cd^m(β^-)^{127}In		8468	63	8425	22	−0.7	1	13	11 ^{127}In	Stu		87Sp09	*
^{127}In(β^-)^{127}Sn		6514	31	6575	19	2.0	o			Stu		87Sp09	*
		6579	20			−0.2	1	91	89 ^{127}In	Stu		04Ga24	*
^{127}In^n(β^-)^{127}Sn		8442	56				2			Stu		04Ga24	
^{127}Sn(β^-)^{127}Sb		3201	24	3229	11	1.2	1	21	17 ^{127}Sn	Stu		77Lu06	*
^{127}Sb(β^-)^{127}Te		1581	5	1582	5	0.2	1	97	96 ^{127}Sb			67Ra13	*
^{127}Te(β^-)^{127}I		683	10	702	4	1.9	–					55Da37	
		695	10			0.7	–					56Kn20	
	ave.	689	7			1.9	1	26	24 ^{127}I			average	
^{127}Xe(ε)^{127}I		663.3	2.2	662.3	2.0	−0.4	–					68Sc14	
^{127}I(^{3}He,t)^{127}Xe		−676	6	−680.9	2.0	−0.8	–			Pri		89Ch01	
^{127}Xe(ε)^{127}I	ave.	662.6	2.1	662.3	2.0	−0.1	1	98	91 ^{127}Xe			average	
^{127}Cs(β^+)^{127}Xe		2115	25	2081	6	−1.3	–					54Ma54	*
		2076	20			0.3	–					67Sp08	*
		2089	20			−0.4	–					75We23	*
	ave.	2090	12			−0.7	1	27	18 ^{127}Cs			average	
^{127}Ba(β^+)^{127}Cs		3450	100	3422	13	−0.3	U					76Be11	*
^{127}La(β^+)^{127}Ba		5010	70	4922	28	−1.3	1	16	13 ^{127}La	JAE		98Ko66	
*^{127}Ba−u		$M-A$=–82791(28) keV for mixture gs+m at 80.32 keV										Nub16b	**
*^{127}La−u		$M-A$=–77903(28) keV for mixture gs+m at 14.2 keV										Nub16b	**
*^{127}Ce−u		$M-A$=–71976(29) keV for mixture gs+m at 7.3 keV										Nub16b	**
*^{127}Sn ^{34}S−^{133}Cs$_{1.211}$		D_M=–7234.3(11.6) μu for mixture gs+m at 5.07(0.06) keV										Nub16b	**
*^{127}Cd^m−^{130}Xe$_{.977}$		Re-assigned to ^{127}Cd^m by the evaluator										GAu	**
*^{127}Cd^m(β^-)^{127}In		Also E_{β^-}=7910(200) to ^{127}In^m at 408.9 keV										Nub16b	**
*^{127}Cd^m(β^-)^{127}In		Re-assigned to ^{127}Cd^m by the evaluator										GAu	**
*^{127}In(β^-)^{127}Sn		Also E_{β^-}=6976(64) from ^{127}In^m at 408.9 keV										Nub16b	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item					
$*^{127}$In(β^-)^{127}Sn	Also E_{β^-}=6999(63) from ^{127}In^m at 408.9 keV	Nub16b	**
$*^{127}$Sn(β^-)^{127}Sb	Q_{β^-}=3206(24) from ^{127}Sn^m at 5.07 keV	Nub16b	**
$*^{127}$Sb(β^-)^{127}Te	E_{β^-}=1493(5) to 11/2$^-$ level at 88.23 keV, and other E_{β^-}	Ens118	**
$*^{127}$Cs(β^+)^{127}Xe	E_{β^+}=1063(10), 685(25) to mixture gs+124.751 and 1/2$^+$ level at 411.965 keV	Ens118	**
$*^{127}$Cs(β^+)^{127}Xe	E_{β^+}=1068(20), 910(30), 650(30) to ground state, 3/2$^+$ at 124.751, 1/2$^+$ at 411.965	Ens118	**
$*^{127}$Cs(β^+)^{127}Xe	E_{β^+}=1040(20), 650(20) to mixture gs+124.751 and 1/2$^+$ level at 411.965 keV	Ens118	**
$*^{127}$Ba(β^+)^{127}Cs	E_{β^+}=2230(100) to 3/2$^+$ level at 180.92 keV, and other E_{β^+}	Ens118	**

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{128}Sn−u		−89512	25	−89493	19	0.8	1	58	58 ^{128}Sn	GS3	1.0	12Ch19	
C$_{10}$ H$_8$−^{128}Te		158112	9	158138.9	0.9	1.2	U			M16	2.5	63Da10	
		158141.2	7.			−0.1	U			C3	2.5	70Ke05	
		158151	8			−1.0	U			R13	1.5	83De51	
C$_{10}$ H$_8$−^{128}Xe		159068.2	4.2	159069.3	1.1	0.1	U			M16	2.5	63Da10	
		159069.7	0.7			−0.3	1	42	42 ^{128}Xe	C3	2.5	70Ke05	
^{128}Cs−u		−92181	30	−92251	6	−2.3	U			GS2	1.0	05Li24	
^{128}Ba−u		−91663	30	−91658	6	0.2	R			GS2	1.0	05Li24	
^{128}La−u		−84436	69	−84410	60	0.4	2			GS2	1.0	05Li24	*
^{128}Ce−u		−81089	30				2			GS2	1.0	05Li24	
^{128}Pr−u		−71209	32				2			GS2	1.0	05Li24	
^{128}Cd−^{133}Cs$_{.962}$		18759	11	18768	8	0.8	1	50	50 ^{128}Cd	MA8	1.0	10Br02	
^{128}Sn ^{34}S−^{133}Cs$_{1.218}$		−6396	14	−6466	19	−5.0	F			MA8	1.0	08Dw01	*
^{128}Cs−^{133}Cs$_{.962}$		−1306	17	−1296	6	0.6	o			MA1	1.0	90St25	
		−1293	13			−0.2	1	20	20 ^{128}Cs	MA1	1.0	99Am05	
^{128}Ba−^{133}Cs$_{.962}$		−720	13	−702	6	1.4	–			MA1	1.0	99Am05	
	ave.	−718	12			1.3	1	22	22 ^{128}Ba			average	
^{128}Cd−^{130}Xe$_{.985}$		22865	11	22856	8	−0.8	1	50	50 ^{128}Cd	JY1	1.0	12Ha25	
^{128}Te ^{35}Cl−^{126}Te ^{37}Cl		4106	2	4100.6	1.8	−0.7	U			H16	4.0	63Ba47	
		4102.3	1.8			−0.4	1	16	12 ^{126}Te	C3	2.5	70Ke05	
^{128}Te−^{128}Xe		931.26	1.20	930.3	1.0	−0.5	–			H43	1.5	90Dy04	
		929.6	1.4			0.5	–			CP1	1.0	09Sc19	
	ave.	930.2	1.1			0.1	1	77	56 ^{128}Xe			average	
^{128}Xe−^{126}Xe		−774	45	−766	4	0.1	U			M16	2.5	63Da10	
^{126}Cs−^{128}Cs$_{.656}$ ^{122}Cs$^x_{.344}$		−1130	30	−1103	16	0.4	U			P22	2.5	82Au01	
^{124}Cs^x−^{128}Cs$_{.323}$ ^{122}Cs$^x_{.678}$		−1070	30	−970	30	1.3	U			P22	2.5	82Au01	
^{126}Cs−^{128}Cs$_{.591}$ ^{123}Cs$^x_{.410}$		−350	30	−340	12	0.1	U			P22	2.5	82Au01	
^{124}Cs^x−^{128}Cs$_{.194}$ ^{123}Cs$^x_{.807}$		370	50	366	24	0.0	U			P22	2.5	82Au01	
^{125}Cs−^{128}Cs$_{.244}$ ^{124}Cs$^x_{.756}$		−1440	30	−1354	18	1.1	U			P22	2.5	82Au01	
^{126}Cs−^{128}Cs$_{.492}$ ^{124}Cs$^x_{.508}$		−610	30	−568	15	0.6	U			P22	2.5	82Au01	
^{127}Cs−^{128}Cs$_{.661}$ ^{125}Cs$_{.339}$		−965	16	−934	7	0.8	U			P32	2.5	86Au02	
^{127}Cs−^{128}Cs$_{.496}$ ^{126}Cs$_{.504}$		−1160	30	−1105	8	0.7	U			P22	2.5	82Au01	
^{128}Te(γ,n)^{127}Te		−8410	120	−8783.4	1.7	−3.1	B			Phi		60Ge01	
^{127}I(n,γ)^{128}I		6825.7	0.5	6826.13	0.05	0.9	U					71Sc07	
		6826.12	0.05			0.2	–			MMn		90Is03	Z
		6826.22	0.14			−0.6	–			Bdn		06Fi.A	
	ave.	6826.13	0.05			0.0	1	100	87 ^{128}I			average	
^{128}Cd(β^-)^{128}In		7070	290	6900	150	−0.6	1	28	28 ^{128}In	Stu		87Sp09	
^{128}In(β^-)^{128}Sn		9280	180	9220	150	−0.4	1	72	72 ^{128}In	Stu		78Al18	*
		8984	37			6.3	F			Stu		87Sp09	*
		8950	103			2.6	F			Gsn		90St13	*
^{128}In^m(β^-)^{128}Sn		9390	220	9298	28	−0.4	o			Stu		78Al18	*
		9306	30			−0.3	2			Stu		87Sp09	*
		9230	90			0.8	2			Gsn		90St13	*
^{128}Sn(β^-)^{128}Sb^m		1265	30	1258	12	−0.2	–					76Nu01	*
		1290	40			−0.8	–			Stu		77Lu06	*
		1260	15			−0.1	–			Gsn		90St13	*
	ave.	1264	13			−0.4	1	87	45 ^{128}Sb^m			average	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{128}Sb^m(IT)^{128}Sb	10	7				2					AHW	*
^{128}Sb(β^-)^{128}Te	4640	100	4363	19	−2.8	U					71Ki15	*
^{128}Sb^m(β^-)^{128}Te	4391	40	4373	18	−0.4	–			Stu		77Lu06	*
	4395	30			−0.7	–			Gsn		90St13	*
ave.	4394	24			−0.8	1	55	55 ^{128}Sb^m			average	
^{128}I(β^+)^{128}Te	1277	13	1255	4	−1.7	U					61La16	
^{128}I(β^-)^{128}Xe	2116	10	2122	4	0.6	1	14	13 ^{128}I			56Be18	*
^{128}Cs(β^+)^{128}Xe	3855	90	3929	5	0.8	U					75We23	*
	3928	6			0.1	1	80	80 ^{128}Cs			76Cr.B	
	3907	40			0.5	o			IRS		83Al06	
	3930	100			0.0	U			IRS		93Al03	
^{128}La(β^+)^{128}Ba	6650	400	6750	50	0.3	U					66Li04	*
	6820	100			−0.7	R			JAE		98Ko66	*
*^{128}La−u	$M-A$=–78601(28) keV for mixture gs+m at 100#100 keV										Nub16b	**
*^{128}Sn ^{34}S−^{133}Cs$_{1.218}$	F : authors say “possible contamination, measurement abandoned”										GAu	**
*^{128}In(β^-)^{128}Sn	E_{β^-}=4980(180) to (2)$^+$ level at 4297.70 keV										Ens15a	**
*^{128}In(β^-)^{128}Sn	E_{β^-}=5464(37) to (2)$^+$ at 3519.86; others 6986(170), 7857(109) to 2104.07,										Ens15a	**
*	1168.82; different equipment/method than in previous; low E_{β^-} not seen										FGK126	**
*^{128}In(β^-)^{128}Sn	E_{β^-}=4650(120), 5440(200) to 4297, 3520 levels and others										FGK126	**
*^{128}In(β^-)^{128}Sn	F : above 2 items conflict with 1st one and with trends in Ex of 8$^-$ isomer										GAu	**
*^{128}In^m(β^-)^{128}Sn	E_{β^-}=5430(220) to 3958 level										FGK126	**
*^{128}In^m(β^-)^{128}Sn	E_{β^-}=5239(40), 5350(44) to 4066, 3958 level										FGK126	**
*^{128}In^m(β^-)^{128}Sn	E_{β^-}=5160(170), 5250(130) to 4066, 3958 levels										FGK126	**
*^{128}Sn(β^-)^{128}Sb^m	E_{β^-}=630(30) 655(40) 625(15), to 1$^+$ level 635.2 above ^{128}Sb^m at 10(7) keV										Ens15a	**
*^{128}Sb^m(IT)^{128}Sb	From 3.6% IT for M3 transition										Ens15a	**
*^{128}Sb(β^-)^{128}Te	E_{β^-}=2300(100) to (7)$^-$ level at 2337.68 keV										Ens15a	**
*^{128}Sb^m(β^-)^{128}Te	E_{β^-}=2580(40) 2585(30) respectively, to 6$^+$ level at 1811.13 keV										Ens15a	**
*^{128}I(β^-)^{128}Xe	E_{β^-}=2120(10) and E_{β^-}=1665(15) to ground state and 2$^+$ level at 442.911 keV										Ens15a	**
*^{128}Cs(β^+)^{128}Xe	E_{β^+}=2390(90) to 2$^+$ level at 442.911 keV										Ens15a	**
*^{128}La(β^+)^{128}Ba	E_{β^+}=3200(400) 3370(100) respectively, to (4$^-$,5$^+$) level at 2425.45 keV										Ens15a	**
^{129}Cd−u	−67789	186	−67696	18	0.2	U			GT3	2.5	16Kn02	
^{129}Sn−u	−86521	31	−86518	19	0.1	1	36	36 ^{129}Sn	MA8	1.0	05Si34	*
^{129}Xe−^{120}Sn$_{1.075}$	9913.3	2.4	9913.9	1.0	0.2	1	19	19 ^{120}Sn	JY1	1.0	11Ha48	
C$_{10}$ H$_9$−^{129}Xe	165643.6	3.6	165644.431	0.006	0.1	U			M16	2.5	63Da10	
^{129}Xe−u	−95228.7	5.4	−95219.141	0.006	0.7	U			ACC	2.5	90Me08	
^{129}Xe−C$_2$ ^{35}Cl$_3$	−1777.98	0.68	−1777.23	0.11	0.7	U			H47	1.5	94Hy01	
^{129}Xe$_2$−^{86}Kr$_3$	77729.8547	0.0250	77729.839	0.014	−0.6	1	30	15 ^{86}Kr	FS1	1.0	05Sh38	*
^{129}La−u	−87300	30	−87306	23	−0.2	1	58	58 ^{129}La	GS2	1.0	05Li24	
^{129}Ce−u	−81898	30				2			GS2	1.0	05Li24	
^{129}Pr−u	−74905	32				2			GS2	1.0	05Li24	*
^{129}Xe−^{134}Xe$_{.963}$	−4114.7	3.8	−4112.633	0.009	0.5	o			MA8	1.0	05He.A	
	−4119.3	5.1			1.3	U			MA8	1.0	06He29	
^{129}Cd−^{133}Cs$_{.970}$	24016	18				2			MA8	1.0	15At03	
^{129}Cs−^{133}Cs$_{.970}$	−2234	18	−2223	5	0.6	o			MA1	1.0	90St25	
	−2216	14			−0.5	1	12	12 ^{129}Cs	MA1	1.0	99Am05	
^{129}In−^{130}Xe$_{.992}$	17523.9	2.9	17524.2	2.9	0.1	1	99	99 ^{129}In	JY1	1.0	12Ha25	
^{129}In^m−^{130}Xe$_{.992}$	18016.5	3.5	18016	3	−0.1	1	99	99 ^{129}In^m	JY1	1.0	13Ka08	
C$_{10}$ H$_{10}$−^{129}Xe	173469.4660	0.0147	173469.463	0.006	−0.2	1	15	15 ^{129}Xe	FS1	1.0	09Re03	
^{129}Xe−^{128}Xe	1247	12	1249.9	1.1	0.1	U			M16	2.5	63Da10	
C$_3$ O$_6$−^{129}Xe	64706.8420	0.0255	64706.859	0.006	0.7	o			FS1	1.0	05Sh38	*
	64706.8516	0.0181			0.4	1	10	10 ^{129}Xe	FS1	1.0	09Re03	
^{129}Xe$_2$−^{84}Kr$_3$	75068.5115	0.0405	75068.532	0.014	0.5	1	12	7 ^{84}Kr	FS1	1.0	05Sh38	*
^{128}Cs−^{129}Cs$_{.661}$ ^{126}Cs$_{.339}$	510	30	500	7	−0.1	U			P22	2.5	82Au01	
^{128}Te(n,γ)^{129}Te	6085	3	6082.41	0.08	−0.9	U					72Mu.A	
	6082.42	0.09			−0.1	–			Prn		03Wi02	
	6082.36	0.19			0.3	–			Bdn		06Fi.A	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{128}Te(d,p)^{129}Te		3857	10	3857.84	0.08	0.1	U			MIT		67Mo22	
^{128}Te(n,γ)^{129}Te	ave.	6082.41	0.08	6082.41	0.08	0.0	1	100	98 ^{129}Te			average	
^{129}Nd(εp)^{128}Ce		5300	300	5930#	200#	2.1	D					78Bo.A	$*$
^{129}In(β^-)^{129}Sn		7655	32	7753	17	3.1	B			Stu		87Sp09	
		7780	26			-1.0	1	44	44 ^{129}Sn	Stu		04Ga24	$*$
^{129}In^m(β^-)^{129}Sn		8033	66	8211	17	2.7	B			Stu		87Sp09	
		8149	38			1.6	1	21	21 ^{129}Sn	Stu		04Ga24	
^{129}In^p(β^-)^{129}Sn		9410	50				2			Stu		04Ga24	
^{129}Sn(β^-)^{129}Sb		3996	120	4038	27	0.4	U			Stu		77Lu06	$*$
^{129}Sb(β^-)^{129}Te		2345	30	2375	21	1.0	2					70Oh05	$*$
^{129}Te(β^-)^{129}I		1453	28	1502	3	1.8	U					56Gr10	$*$
		1485	10			1.7	U					64De10	$*$
		1503	4			-0.2	1	62	60 ^{129}I			68Go34	$*$
^{129}I(β^-)^{129}Xe		190	5	189	3	-0.2	1	40	40 ^{129}I			54De17	$*$
^{129}Cs(β^+)^{129}Xe		1197	5	1197	5	0.0	1	83	83 ^{129}Cs			76Ma35	
^{129}Ba(β^+)^{129}Cs		2446	15	2436	11	-0.7	1	50	45 ^{129}Ba			61Ar05	$*$
^{129}La(β^+)^{129}Ba		3720	50	3739	22	0.4	–					79Br05	$*$
		3740	40			0.0	–			JAE		98Ko66	
	ave.	3730	30			0.2	1	48	42 ^{129}La			average	
^{129}Ce(β^+)^{129}La		5600	200	5040	40	-2.8	U			IRS		93Al03	
$*^{129}$Sn$-$u	$M-A$=–80576(27) keV for mixture gs+m at 35.15 keV											Nub16b	$**$
$*^{129}$Xe$_2-^{86}$Kr$_3$	Corrected in reference of same group											09Re03	$**$
$*^{129}$Pr$-$u	Isomer at 382.57 with estimated T=1# ms not considered											Nub16b	$**$
$*$C$_3$ O$_6-^{129}$Xe	Corrected in reference of same group											09Re03	$**$
$*^{129}$Xe$_2-^{84}$Kr$_3$	Corrected in reference of same group											09Re03	$**$
$*^{129}$Nd(εp)^{128}Ce	Trends from Mass Surface TMS suggest ^{129}Nd 630 less bound											GAu	$**$
$*^{129}$In(β^-)^{129}Sn	E_{β^-}=7780(26), 9410(50) from ground state, 1688.0(0.5) levels											03Ge04	$**$
$*^{129}$Sn(β^-)^{129}Sb	E_{β^-}=3350(120) to (5/2$^+$) level at 645.14 keV											Ens148	$**$
$*^{129}$Sb(β^-)^{129}Te	E_{β^-}=1800(30) to 5/2$^+$ level at 544.585 keV, and other E_{β^-}											Ens148	$**$
$*^{129}$Te(β^-)^{129}I	E_{β^-}=1453(5) to 5/2$^+$ level at 27.793 keV and 1530(5) from ^{129}Te^m											Ens148	$**$
$*$	at 105.51 to ground state (Birge=8.0: arithmetic average used)											Nub16b	$**$
$*^{129}$Te(β^-)^{129}I	E_{β^-}=1452(10) to 5/2$^+$ level at 27.793 keV and 1595(10) from ^{129}Te^m at 105.51											Ens148	$**$
$*^{129}$Te(β^-)^{129}I	E_{β^-}=1476(4) to 5/2$^+$ level at 27.793 keV and 1607(7) from ^{129}Te^m at 105.51											Ens148	$**$
$*^{129}$I(β^-)^{129}Xe	E_{β^-}=150(5) to 3/2$^+$ level at 39.5774 keV											Ens148	$**$
$*^{129}$Ba(β^+)^{129}Cs	E_{β^+}=1425(15); and 1243(35), 975(60) from ^{129}Ba^m at 8.42(0.06) keV											Nub16b	$**$
$*$	to 7/2$^+$ level at 188.91, (9/2)$^+$ at 426.47 keV											Ens148	$**$
$*^{129}$La(β^+)^{129}Ba	E_{β^+}=2420(50) to 1/2$^+$ level at 278.57 keV, and other E_{β^+}											Ens148	$**$
^{130}Cd$-$u		-66700	441	-65612	24	1.0	U			GT3	2.5	16Kn02	
C$_9$ H$_8$ N$-^{130}$Te		159446	10	159451.515	0.012	0.2	U			M16	2.5	63Da10	
^{13}C C$_8$ N H$_7-^{130}$Te		154990.6	7.	154981.318	0.012	-0.5	U			C3	2.5	70Ke05	
C$_9$ H$_8$ N$-^{130}$Te		159449	8	159451.515	0.012	0.2	U			R13	1.5	83De51	
C$_{10}$ H$_{10}-^{130}$Xe		174743.6	4.2	174740.973	0.010	-0.3	U			M16	2.5	63Da10	
^{13}C C$_8$ N H$_7-^{130}$Xe		157695.4	0.7	157694.716	0.010	-0.4	U			C3	2.5	70Ke05	
^{130}Xe$-$C ^{13}C ^{35}Cl$_3$		-6407.63	1.21	-6403.57	0.11	2.2	U			H47	1.5	94Hy01	
^{130}Cs$-$u		-93181	60	-93291	9	-1.8	U			GS2	1.0	05Li24	$*$
C$_{10}$ H$_{10}-^{130}$Ba		171926	68	171929.4	2.7	0.0	U			R07	1.5	68De17	
^{130}Ba$-^{85}$Rb$_{1.529}$		41195.8	3.4	41194.4	2.7	-0.4	1	65	65 ^{130}Ba	MA8	1.0	05Gu37	
^{130}La$-$u		-87635	30	-87631	28	0.1	2			GS2	1.0	05Li24	
^{130}Ce$-$u		-85264	30				2			GS2	1.0	05Li24	
^{130}Pr$-$u		-76410	69				2			GS2	1.0	05Li24	$*$
^{130}Nd$-$u		-71494	30				2			GS2	1.0	05Li24	
^{130}Xe$-^{134}$Xe$_{.970}$		-4726.6	5.6	-4721.891	0.012	0.8	o			MA8	1.0	05He.A	
		-4724.8	7.0			0.4	U			MA8	1.0	06He29	
^{130}Cd$-^{133}$Cs$_{.977}$		26761	24				2			MA8	1.0	15At03	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{130}In$-^{133}$Cs$_{.977}$		17384	130	17350	40	−0.3	U			CP1	1.0	13Va12	*
^{130}Sn$-^{133}$Cs$_{.977}$		6346	17	6348.0	2.0	0.1	U			MA8	1.0	05Si34	
		6344	12			0.3	U			MA8	1.0	05Si34	*
		6349.5	3.9			−0.4	1	27	27 ^{130}Sn	CP1	1.0	13Va12	
^{130}Xe$-^{133}$Cs$_{.977}$		−4114	13	−4117.217	0.011	−0.2	U			MA6	1.0	04Di18	
^{130}Cs$-^{133}$Cs$_{.977}$		−928	17	−917	9	0.6	o			MA1	1.0	90St25	
		−916	13			−0.1	1	48	48 ^{130}Cs	MA1	1.0	99Am05	
^{130}Nd ^{19}F$-^{133}$Cs$_{1.120}$		32902	130	32800	30	−0.8	U			MA5	1.0	00Be42	*
^{130}Te ^{35}Cl$-^{128}$Te ^{37}Cl		4715	2	4711.5	0.9	−0.4	o			H16	4.0	63Ba47	
		4711.7	1.8			0.0	U			C3	2.5	70Ke05	
		4711.57	0.72			0.0	1	74	74 ^{128}Te	H43	1.5	90Dy04	
^{130}Xe$-^{129}$Xe$_{1.008}$		−509.78	0.34	−509.755	0.009	0.1	U			CP1	1.0	09Sc19	
		−509.96	0.26			0.8	U			SH2	1.0	13El01	*
		−509.02	0.94			−0.8	U			SH1	1.0	13El01	*
^{130}Sn$-^{130}$Xe		10463.9	3.6	10465.2	2.0	0.4	–			JY1	1.0	12Ha25	
		10465.4	3.1			−0.1	–			JY1	1.0	13Ka08	*
	ave.	10464.8	2.3			0.2	1	73	73 ^{130}Sn			average	
^{130}Te$-^{130}$Xe		2706.2	7.	2713.398	0.012	0.4	U			C3	2.5	70Ke05	
		2712.98	3.02			0.1	U			H43	1.5	90Dy04	
		2713.416	0.034			−0.5	–			FS1	1.0	09Re07	
		2713.402	0.026			−0.2	–			FS1	1.0	09Re07	*
		2713.402	0.014			−0.3	o			FS1	1.0	09Re07	*
		2712.86	0.34			1.6	U			CP1	1.0	09Sc19	
		2712.82	0.25			2.3	U			JY1	1.0	11Ra24	
	ave.	2713.407	0.021			−0.4	1	35	22 ^{130}Te			average	
^{130}Te$-^{129}$Xe		1441.885	0.012	1441.888	0.011	0.3	1	78	78 ^{130}Te	FS1	1.0	09Re07	
^{130}Xe$-^{129}$Xe		−1277	12	−1271.510	0.009	0.2	U			M16	2.5	63Da10	
		−1271.517	0.012			0.6	1	52	50 ^{130}Xe	FS1	1.0	09Re07	
^{129}Cs$-^{130}$Cs$^x_{.794}$ ^{125}Cs$_{.206}$		−1270	40	−1200	14	0.7	U			P22	2.5	82Au01	
^{130}Ba(p,t)^{128}Ba		−9482	32	−9543.9	2.8	−1.9	U			Win		74De31	*
^{130}Ba(p,t)^{128}Ba$-^{144}$Sm()^{142}Sm		1095.9	1.0	1096.0	1.0	0.1	1	99	78 ^{128}Ba			09Pa25	
^{130}Te(d,^{3}He)^{129}Sb		−4550	30	−4519	21	1.0	R			Oak		68Au04	
^{129}I(n,γ)^{130}I		6500.33	0.04				2			ILn		89Sa11	Z
^{129}Xe(n,γ)^{130}Xe		9255.3	1.0	9255.721	0.008	0.4	U					71Gr28	Z
		9256.1	0.8			−0.5	U					74Ge05	Z
		9255.57	0.30			0.5	U			Bdn		06Fi.A	
^{129}Xe(^{3}He,d)^{130}Cs		5	20	−1	8	−0.3	1	17	17 ^{130}Cs	ChR		81Ha08	
^{130}Ba(d,t)^{129}Ba		−4001	15	−4012	11	−0.8	1	50	48 ^{129}Ba	Tal		74Gr22	
^{130}Eu(p)^{129}Sm		1028.0	15.0				3			Arp		04Da04	
^{130}Cd(β^-)^{130}In		8350	160	8770	40	2.6	B			Bwg		03Di06	*
^{130}In(β^-)^{130}Sn		10249	38				2			Stu		87Sp09	
		9880	90	10250	40	4.1	B			Gsn		90St13	
^{130}In^m(β^-)^{130}Sn		10300	37				2			Stu		87Sp09	
		10170	170	10300	40	0.8	U			Gsn		90St13	
^{130}In^n(β^-)^{130}Sn		10650	49				2			Stu		87Sp09	
		9880	200	10650	50	3.8	B			Gsn		90St13	
^{130}Sn(β^-)^{130}Sb		2195	35	2153	14	−1.2	–			Stu		77Lu06	*
		2080	40			1.8	–					77Nu01	*
		2149	18			0.2	–			Gsn		90St13	*
	ave.	2148	15			0.4	1	90	90 ^{130}Sb			average	
^{130}Sb(β^-)^{130}Te		5046	100	5067	14	0.2	U					71Ki15	*
		5015	100			0.5	U			Stu		77Lu06	*
		4990	70			1.1	U			Gsn		90St13	*
		5015	45			1.2	1	10	10 ^{130}Sb	Stu		95Me16	*
^{130}I(β^-)^{130}Xe		2983	10	2944	3	−3.9	B					65Da01	*
		2964	50			−0.4	U					70Qa03	*
^{130}Cs(β^+)^{130}Xe		2992	20	2981	8	−0.6	–					52Sm41	
		2972	20			0.4	–					75We23	
	ave.	2982	14			−0.1	1	35	35 ^{130}Cs			average	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{130}Cs^x(IT)^{130}Cs	27	15				2					AHW	*
^{130}Cs(β^-)^{130}Ba	442	50	362	9	−1.6	U					52Sm41	*
^{130}La(β^+)^{130}Ba	5660	70	5634	26	−0.4	R			JAE		98Ko66	
*^{130}Cs−u	$M-A$=–86716(30) keV for mixture gs+m at 163.25 keV										Nub16b	**
*^{130}Pr−u	$M-A$=–71125(29) keV for mixture gs+m at 100#100 keV										Nub16b	**
*^{130}In−^{133}Cs$_{.977}$	$M-A$=–69652(20) keV for mixture gs+n at 400(60) keV										Nub16b	**
*	assuming no 8$^-$# isomer										GAu	**
*^{130}Sn−^{133}Cs$_{.977}$	D_M=8434(12) μu for ^{130}Sn^m at 1946.88 keV; $M-A$=–78189(11) keV										Nub16b	**
*^{130}Nd ^{19}F−^{133}Cs$_{1.120}$	Tentative result, low statistics										00Be42	**
*^{130}Xe−^{129}Xe$_{1.008}$	Respectively for PI−ICR and Ramsey ToF−ICR techniques										13El01	**
*^{130}Sn−^{130}Xe	D_M=12555.5(3.1) μu for ^{130}Sn^m at 1946.88 keV; $M-A$=–78185.1(2.9) keV										Nub16b	**
*^{130}Te−^{130}Xe	First item 1 ion; second item 2 ions - considered independent										GAu	**
*^{130}Te−^{130}Xe	Combination of ^{130}Xe−^{129}Xe and ^{130}Te−^{129}Xe										GAu	**
*^{130}Ba(p,t)^{128}Ba	Not resolved peak. Original uncertainty 16 increased to 24 keV and										GAu	**
*	added systematic error 21 keV										GAu	**
*^{130}Cd(β^-)^{130}In	E_{β^-}=6224(+165–157) to 1$^+$ level at 2120.2 keV										Ens086	**
*^{130}Sn(β^-)^{130}Sb	E_{β^-}=1490(90), 1150(35) to 1$^+$ levels at 702.32, 1047.67 keV										Ens017	**
*^{130}Sn(β^-)^{130}Sb	E_{β^-}=1280(80), 1060(40) to 1$^+$ levels at 702.32, 1047.67 keV										Ens017	**
*^{130}Sn(β^-)^{130}Sb	E_{β^-}=1415(30), 1112(18) to 1$^+$ levels at 702.32, 1047.67 keV										Ens017	**
*	and a 3σ conflicting 3955(50) from ^{130}Sn^m at 1946.88 keV										Nub16b	**
*^{130}Sb(β^-)^{130}Te	E_{β^-}=2900(100) to ^{130}Te^m at 2146.41 keV										Nub16b	**
*^{130}Sb(β^-)^{130}Te	Q =5020(100) from ^{130}Sb^m at 4.80 keV										Nub16b	**
*^{130}Sb(β^-)^{130}Te	Also 4960(25) from ^{130}Sb^m at 4.80, in disagreement										Nub16b	**
*^{130}Sb(β^-)^{130}Te	Derived from given average=5008(38) with 90St13=4990(70) keV										GAu	**
*^{130}I(β^-)^{130}Xe	E_{β^-}=1702(10) 1042(10) 618(10) to 4$^+$ 1204.614, 6$^+$ 1944.140, 5$^+$ 2362.073										Ens017	**
*^{130}I(β^-)^{130}Xe	E_{β^-}=2480(50), 1850(80) from ^{130}I^m at 39.9525 to 2$^+$ levels at 536.068,										GAu	**
*	and 1122.112 keV										Ens017	**
*^{130}Cs^x(IT)^{130}Cs	Combining isomer ratio of reference										82Au01	**
*	with ^{130}Cs^m(IT)=163.25 keV										Nub16b	**
*^{130}Cs(β^-)^{130}Ba	Value given without associated error										AHW	**
^{131}Cd−u	−59671	1023	−59280	110	0.2	U			GT3	2.5	16Kn02	
	−59280	110				2			MR1	1.0	15At03	
^{131}Sn−u	−82958	26	−82947	4	0.4	U			MA8	1.0	05Si34	*
	−82950	130			0.0	U			GT2	2.5	08Su19	*
^{131}Sb−u	−88170	530	−88010.7	2.2	0.1	U			GT2	2.5	08Kn.A	*
C$_{10}$ H$_{11}$−^{131}Xe	180991.6	3.0	180991.218	0.009	−0.1	U			M16	2.5	63Da10	
^{131}Xe−u	−94925.5	5.7	−94915.864	0.009	0.7	U			ACC	2.5	90Me08	
^{131}Xe−C$_2$ ^{35}Cl$_2$ ^{37}Cl	1472.65	0.80	1476.16	0.09	2.9	B			H47	1.5	94Hy01	
^{131}Ba−u	−92955	66	−93058.8	2.8	−1.6	U			GS2	1.0	05Li24	*
^{131}La−u	−89930	30				2			GS2	1.0	05Li24	
^{131}Ce−u	−85579	36	−85570	40	0.2	1	96	96 ^{131}Ce	GS2	1.0	05Li24	*
^{131}Pr−u	−79741	56	−79770	50	−0.4	1	81	81 ^{131}Pr	GS2	1.0	05Li24	*
^{131}Nd−u	−72753	30	−72752	30	0.0	1	97	97 ^{131}Nd	GS2	1.0	05Li24	
^{131}In−^{133}Cs$_{.985}$	20262	37	20101.9	2.9	−4.3	C			CP1	1.0	13Va12	*
^{131}Sn ^{34}S−^{133}Cs$_{1.241}$	2253	11	2254	4	0.1	–			MA8	1.0	08Dw01	*
^{131}Sn−^{133}Cs$_{.985}$	10188.2	4.7	10183	4	−1.1	–			CP1	1.0	13Va12	
^{131}Sn ^{34}S−^{133}Cs$_{1.241}$ ave.	2259	4	2254	4	−1.0	1	81	81 ^{131}Sn			average	
^{131}Sb−^{133}Cs$_{.985}$	5114	11	5119.2	2.2	0.5	U			CP1	1.0	13Va12	
^{131}Xe−^{129}Xe$_{1.016}$	1826.7855	0.0096	1826.787	0.008	0.1	1	66	62 ^{131}Xe	FS1	1.0	13Ho22	
^{131}Cs−^{133}Cs$_{.985}$	−1429	18	−1405	5	1.3	o			MA1	1.0	90St25	
	−1419	14			1.0	1	15	15 ^{131}Cs	MA1	1.0	99Am05	
^{131}Ba−^{133}Cs$_{.985}$	72	14	71.0	2.8	−0.1	U			MA5	1.0	00Be42	
^{131}In−^{130}Xe$_{1.008}$	24234.7	2.9				2			JY1	1.0	12Ha25	
^{131}In^m−^{130}Xe$_{1.008}$	24626.8	7.7				2			JY1	1.0	13Ka08	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{131}Sn$-^{132}$Xe$_{.992}$		12134	21	12131	4	−0.1	U			JY1	1.0	12Ha25	*
^{131}Sb$-^{130}$Xe$_{1.008}$		9250.7	2.3	9251.9	2.2	0.5	1	95	95 ^{131}Sb	JY1	1.0	12Ha25	
^{131}Xe$-^{132}$Xe$_{.992}$		162.283	0.030	162.288	0.008	0.2	–			SH1	1.0	14Ne15	
		162.292	0.014			−0.3	–			FS1	1.0	13Ho22	
	ave.	162.290	0.013			−0.2	1	40	38 ^{131}Xe			average	
^{131}Xe$-^{130}$Xe		1574	11	1574.787	0.011	0.0	U			M16	2.5	63Da10	
^{128}Cs$-^{131}$Cs$_{.391}$ ^{126}Cs$_{.610}$		−100	30	−47	9	0.7	U			P22	2.5	82Au01	
^{128}Cs$-^{131}$Cs$_{.244}$ ^{127}Cs$_{.756}$		783	21	752	7	−0.6	F			P33	2.5	86Au02	*
^{129}Cs$-^{131}$Cs$_{.328}$ ^{128}Cs$_{.672}$		−1030	30	−870	6	2.1	U			P22	2.5	82Au01	
^{130}Te(n,γ)^{131}Te		5929.7	0.5	5929.38	0.06	−0.6	U					77Ko.A	
		5929.5	0.4			−0.3	U					80Ho29	Z
		5929.38	0.06				2			Prn		03To08	
		5930.16	0.19			−4.1	C			Bdn		06Fi.A	
^{130}Te(d,p)^{131}Te		3703	6	3704.81	0.06	0.3	U			MIT		67Gr21	
^{130}Ba(n,γ)^{131}Ba		7493.5	0.3	7493.50	0.30	0.0	1	100	95 ^{131}Ba			82Ka.A	
^{130}Ba(d,p)^{131}Ba		5269	15	5268.94	0.30	0.0	U			ANL		70Vo04	
^{131}Nd(εp)^{130}Ce		4600	400	4370	40	−0.6	U					78Bo.A	
^{131}Eu(p)^{130}Sm		957.4	8.	947	5	−1.3	3					98Da03	
		939.2	7.			1.1	3					99So17	
^{131}In(β^-)^{131}Sn		8820	200	9240	5	2.1	U					80De35	
		8930	150			2.1	o			Stu		84Fo19	
		9184	33			1.7	o			Stu		88Fo05	
		9165	30			2.5	o			Stu		95Me16	
		9174	22			3.0	B			Stu		99Fo01	
		9222	18			1.0	U			Stu		04Fo06	
^{131}In^m(β^-)^{131}Sn		9230	220	9605	8	1.7	o			Stu		84Fo19	
		9547	46			1.3	o			Stu		88Fo05	
		9480	70			1.8	o			Stu		95Me16	
		9524	26			3.1	B			Stu		04Fo06	
^{131}In^n(β^-)^{131}Sn		13000	500	12990	90	0.0	o			Stu		84Fo19	
		13450	163			−2.8	B			Stu		88Fo05	
		13230	80			−3.1	B			Stu		95Me16	
		12986	86				2			Stu		04Fo06	
^{131}Sn(β^-)^{131}Sb		4582	120	4717	4	1.1	o			Bwg		79Ke02	*
		4640	20			3.8	B			Stu		84Fo19	*
		4610	110			1.0	U			Bwg		87Gr.A	*
		4689	14			2.0	o			Stu		95Me16	
		4688	14			2.1	o			Stu		99Fo01	
		4701	8			2.0	1	25	19 ^{131}Sn	Stu		04Fo06	*
^{131}Sb(β^-)^{131}Te		3190	70	3229.6	2.1	0.6	o			Stu		77Lu06	
		3217	20			0.6	o			Stu		95Me16	
		3200	26			1.1	U			Stu		99Fo01	
^{131}Te(β^-)^{131}I		2275	10	2231.7	0.6	−4.3	B					61Be20	*
		2278	15			−3.1	B					65De22	*
^{131}I(β^-)^{131}Xe		971.0	0.7	970.8	0.6	−0.2	2					51Ve05	*
		970.4	1.2			0.4	2					52Ro16	*
^{131}Cs(ε)^{131}Xe		355	10	355	5	0.0	–					54Sa22	
		355	10			0.0	–					56Ho66	
		360	15			−0.3	–					57Mi63	
	ave.	356	6			−0.2	1	60	60 ^{131}Cs			average	
^{131}Ba(β^+)^{131}Cs		1370	16	1375	5	0.3	–					76Ge14	*
		1371	12			0.3	–					78Va04	*
	ave.	1371	10			0.5	1	30	25 ^{131}Cs			average	
^{131}La(β^+)^{131}Ba		2960	100	2914	28	−0.5	U					60Cr01	
^{131}Ce(β^+)^{131}La		4020	400	4060	40	0.1	U					66No05	*
^{131}Pr(β^+)^{131}Ce		5250	150	5410	60	1.1	1	14	9 ^{131}Pr	IRS		93Al03	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.		Lab	F	Reference	
^{131}Nd(β^+)^{131}Pr		6560	150	6530	50	−0.2	1	13	9	^{131}Pr	IRS		93Al03	
∗^{131}Sn−u		$M-A$=–77242(15) keV for mixture gs+m at 65.1 keV											Nub16b	∗∗
∗		next ^{131}Sn ^{34}S−^{133}Cs$_{1.241}$ also from 1.4 GeV p on UC target											GAu	∗∗
∗^{131}Sn−u		$M-A$=–77238(120) keV for mixture gs+m at 65.1 keV											Nub16b	∗∗
∗^{131}Sb−u		$M-A$=–81291(96) keV for mixture gs+m at 1676.06 keV											Nub16b	∗∗
∗^{131}Ba−u		$M-A$=–86494(30) keV for mixture gs+m at 187.995 keV											Nub16b	∗∗
∗^{131}Ce−u		$M-A$=–79685(28) keV for mixture gs+m at 63.09 keV											Nub16b	∗∗
∗^{131}Pr−u		$M-A$=–74202(28) keV for mixture gs+m at 152.4 keV											Nub16b	∗∗
∗^{131}In−^{133}Cs$_{.985}$		Freq. ratio mistyped, derived from mass excess in col.3 Table 1 of paper											GAu	∗∗
∗^{131}Sn ^{34}S−^{133}Cs$_{1.241}$		D_M=2300.3(3.6) μu for mixture ^{131}Sn gs+m at 65.1 keV with R=0.65(0.15)											Nub16b	∗∗
∗^{131}Sn−^{132}Xe$_{.992}$		D_M=12168.7(3.4) μu for mixture gs+m at 65.1 keV; $M-A$=–77229.6(3.2) keV											Nub16b	∗∗
∗		identical to result given in reference											13Ka08	∗∗
∗^{128}Cs−^{131}Cs$_{.244}$ ^{127}Cs.		F : rejection based on line-shape analysis											86Au02	∗∗
∗^{131}Sn(β^-)^{131}Sb		E_{β^-}=3870(120), 2620(180) from ^{131}Sn^m at 65.1 keV											Nub16b	∗∗
∗		to (5/2$^+$) level at 798.494, (13/2$^-$) at 1980.39 keV											Ens06c	∗∗
∗^{131}Sn(β^-)^{131}Sb		Q_{β^-}=4638(20); and 4796(80) from ^{131}Sn^m at 65.1 keV											Nub16b	∗∗
∗^{131}Sn(β^-)^{131}Sb		Q_{β^-}=4600(110); and 4680(120) from ^{131}Sn^m at 65.1 keV											Nub16b	∗∗
∗^{131}Sn(β^-)^{131}Sb		Q_{β^-}=4698(11); and 4767(8)from ^{131}Sn^m at 65.1 keV											Nub16b	∗∗
∗^{131}Te(β^-)^{131}I		Q_{β^-}=2457(10) 2460(15) respectively, from ^{131}Te^m at 182.258 keV											Nub16b	∗∗
∗^{131}I(β^-)^{131}Xe		E_{β^-}=606.5(0.7) 605.9(1.2) respectively, to 5/2$^+$ level at 364.490 keV											Ens06c	∗∗
∗^{131}Ba(β^+)^{131}Cs		p$^+$ =22(11)×10^{-6} to 3/2$^+$ level at 216.086, recalculated p$^+$ and Q											Ens06c	∗∗
∗^{131}Ba(β^+)^{131}Cs		L/K=0.165(0.001) to 3/2$^+$ level at 1047.682 keV											Ens06c	∗∗
∗^{131}Ce(β^+)^{131}La		E_{β^+}=2800(400) to 7/2$^+$ level at 195.68 keV											Ens06c	∗∗
^{132}Sb−u		−85850	150	−85492.0	2.6	1.0	U				GT2	2.5	08Su19	∗
C$_{10}$ H$_{12}$−^{132}Xe		189740.8	3.3	189745.300	0.006	0.5	U				M16	2.5	63Da10	
^{132}Xe−u		−95856.2	4.0	−95844.913	0.006	1.1	U				ACC	2.5	90Me08	
^{132}Xe−C ^{13}C ^{35}Cl$_2$ ^{37}Cl		−2803.73	1.40	−2807.72	0.09	−1.9	U				H47	1.5	94Hy01	
^{132}Xe−C$_3$ O$_6$		−65332.6117	0.0248	−65332.631	0.006	−0.8	o				FS1	1.0	05Sh38	∗
		−65332.6238	0.0140			−0.5	1	16	15	^{132}Xe	FS1	1.0	09Re03	
C$_{10}$ H$_{12}$−^{132}Ba		188863	70	188839.3	1.1	−0.2	U				R07	1.5	68De17	
		188821	88			0.1	U				R07	1.5	68De17	
^{132}La−u		−89874	67	−89880	40	−0.1	1	34	34	^{132}La	GS2	1.0	05Li24	∗
^{132}Ce−u		−88542	30	−88536	22	0.2	1	54	54	^{132}Ce	GS2	1.0	05Li24	
^{132}Ce O−^{142}Sm$_{1.042}$		−5258	32	−5265	22	−0.2	1	47	46	^{132}Ce	MA7	1.0	01Bo59	∗
^{132}Pr−u		−80760	31				2				GS2	1.0	05Li24	∗
^{132}Nd−u		−76690	30	−76679	26	0.4	2				GS2	1.0	05Li24	
^{132}Xe−^{129}Xe$_{1.023}$		1564.20	0.32	1564.268	0.004	0.2	U				CP1	1.0	09Sc19	
		1565.4	1.0			−1.1	U				CP1	1.0	09Sc19	
^{132}Sb−^{130}Xe$_{1.015}$		12445.7	2.9	12446.0	2.6	0.1	1	83	83	^{132}Sb	JY1	1.0	12Ha25	
^{132}Te−^{130}Xe$_{1.015}$		6482.9	4.3	6485	4	0.4	1	76	76	^{132}Te	JY1	1.0	12Ha25	
^{132}Sn−^{133}Cs$_{.992}$		11621	19	11615.6	2.1	−0.3	U				MA8	1.0	05Si34	
		11613.1	2.9			0.8	–				CP1	1.0	13Va12	
^{132}Sn ^{34}S−^{133}Cs$_{1.248}$		3686.3	7.7	3686.9	2.1	0.1	–				MA8	1.0	08Dw01	
^{132}Sn−^{133}Cs$_{.992}$	ave.	11613.3	2.7	11615.6	2.1	0.8	1	61	61	^{132}Sn			average	
^{132}Sb−^{133}Cs$_{.992}$		8301.3	6.5	8299.7	2.6	−0.3	1	17	17	^{132}Sb	CP1	1.0	13Va12	
^{132}Cs−^{133}Cs$_{.992}$		223	18	229.4	1.1	0.4	o				MA1	1.0	90St25	
		232	14			−0.2	U				MA1	1.0	99Am05	
		246.9	5.9			−3.0	C				MA8	1.0	09Bo.A	
		230.8	1.3			−1.1	1	73	73	^{132}Cs	MA8	1.0	15At.A	
^{132}Nd−^{133}Cs$_{.992}$		17147	52	17113	26	−0.7	R				MA5	1.0	00Be42	
^{132}Sn−^{132}Xe		13672.3	3.4	13668.8	2.1	−1.0	1	39	39	^{132}Sn	JY1	1.0	12Ha25	
^{132}Xe−^{131}Xe		−930	11	−929.049	0.008	0.0	U				M16	2.5	63Da10	
^{132}Xe−C$_{10}$ H$_{10}$		−174095.2367	0.0095	−174095.235	0.006	0.1	1	34	33	^{132}Xe	FS1	1.0	09Re03	
^{132}Xe−^{130}Xe		645.724	0.014	645.738	0.009	1.0	1	40	38	^{130}Xe	FS1	1.0	09Re07	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{132}Ba$-^{130}$Ba		-1241	4	-1259.8	2.9	-1.9	U			M17	2.5	66Be10	
		-1253	68			-0.1	U			R07	1.5	68De17	
^{132}Xe$-^{129}$Xe		-625.7755	0.0156	-625.772	0.004	0.2	o			FS1	1.0	05Sh38	*
		-625.7703	0.0119			-0.1	–			FS1	1.0	09Re03	*
		-625.7732	0.0125			0.1	–			FS1	1.0	09Re03	*
		-625.771	0.013			-0.1	–			FS1	1.0	09Re07	
		-625.7771	0.0083			0.6	–			FS1	1.0	10Mo30	
	ave.	-625.774	0.005			0.4	1	48	28 ^{129}Xe			average	
^{132}Xe$_2-^{84}$Kr$_3$		73816.9775	0.0594	73816.988	0.014	0.2	U			FS1	1.0	05Sh38	*
^{132}Xe$_2-^{86}$Kr$_3$		76478.3099	0.0412	76478.295	0.014	-0.4	1	11	6 ^{86}Kr	FS1	1.0	05Sh38	*
^{14}N$_{10}-^{132}$Xe		126584.9632	0.0168	126584.958	0.006	-0.3	1	11	10 ^{132}Xe	FS1	1.0	09Re03	
^{131}Cs$-^{132}$Cs$_{.794}$ ^{127}Cs$_{.206}$		-1118	16	-1094	5	0.6	F			P33	2.5	86Au02	*
^{131}Cs$-^{132}$Cs$_{.744}$ ^{128}Cs$_{.256}$		-1200	30	-1219	5	-0.2	U			P22	2.5	82Au01	
^{130}Cs$^x-^{132}$Cs$_{.492}$ ^{128}Cs$_{.508}$		-210	40	-340	17	-1.3	U			P22	2.5	82Au01	
^{131}Xe(n,γ)^{132}Xe		8936.3	1.0	8936.721	0.007	0.4	U					71Ge05	
		8935	2			0.9	U					71Gr28	
		8936.65	0.22			0.3	U			Bdn		06Fi.A	
^{132}In(β^-)^{132}Sn		13600	400	14140	60	1.3	U					86Bj01	
		14135	60				2			Stu		95Me16	
^{132}Sn(β^-)^{132}Sb		3080	40	3089	3	0.2	o			Stu		77Al09	
		3103	10			-1.4	o			Stu		95Me16	
		3115	10			-2.6	U			Stu		99Fo01	
^{132}Sb(β^-)^{132}Te		5530	70	5553	4	0.3	o			Stu		77Al09	
		5486	24			2.8	U			Stu		95Me16	
		5491	20			3.1	B			Stu		99Fo01	
^{132}Te(β^-)^{132}I		493	4	515	3	5.6	B					65Iv01	*
		517	4			-0.4	1	76	52 ^{132}I	Stu		99Fo01	*
^{132}I(β^-)^{132}Xe		3596	15	3575	4	-1.4	–					61De17	*
		3558	15			1.2	–					65Jo13	*
		3580	7			-0.6	–			Stu		99Fo01	
	ave.	3579	6			-0.6	1	48	48 ^{132}I			average	
^{132}I^m(β^-)^{132}Xe		3685	10				2					74Di03	*
^{132}Cs(β^+)^{132}Xe		2090	25	2126.3	1.0	1.5	U					63Ta05	*
		2127.7	6.			-0.2	U					87De33	*
^{132}La(β^+)^{132}Ba		4820	100	4710	40	-1.1	–					60Wa03	
		4680	50			0.6	–					67Fr02	
	ave.	4710	40			0.1	1	66	66 ^{132}La			average	
*^{132}Sb$-$u	$M-A$=–79870(124) keV for mixture gs+m at 200(30) keV											Nub16b	**
*^{132}Xe$-$C$_3$ O$_6$	Corrected in reference of same group											09Re03	**
*^{132}La$-$u	$M-A$=–83623(30) keV for mixture gs+m at 188.20 keV											Nub16b	**
*^{132}Ce O$-^{142}$Sm$_{1.042}$	Original error (22 keV) increased by 23 for BaF contamination in trap											GAu	**
*^{132}Pr$-$u	$M-A$=–75213(28) keV for mixture gs+m at 30#30 keV											Nub16b	**
*^{132}Xe$-^{129}$Xe	Corrected in reference of same group											09Re03	**
*^{132}Xe$-^{129}$Xe	First item 5$^+$ ions; second item 3$^+$ ions - considered to be independent											09Re03	**
*^{132}Xe$_2-^{84}$Kr$_3$	Corrected in reference of same group											09Re03	**
*^{132}Xe$_2-^{86}$Kr$_3$	Corrected in reference of same group											09Re03	**
*^{131}Cs$-^{132}$Cs$_{.794}$ ^{127}Cs.	F : Rejection based on line-shape analysis											86Au02	**
*^{132}Te(β^-)^{132}I	E_{β^-}=215(4) 239(4) respectively, to 1$^+$ level at 277.86 keV											Ens054	**
*^{132}I(β^-)^{132}Xe	E_{β^-}=2156(15) 2118(15) respectively, to 4$^+$ level at 1440.323 keV											Ens054	**
*^{132}I^m(β^-)^{132}Xe	E_{β^-}=1465(10) to 7$^-$ level at 2214.01 level, and other E_{β^-}											Ens054	**
*^{132}Cs(β^+)^{132}Xe	E_{β^+}=400(25) to 2$^+$ level at 667.715 keV											Ens054	**
*^{132}Cs(β^+)^{132}Xe	p$^+$ =0.0042(0.0001) gives E_{β^+}=438(6) recalculated Q											AHW	**
*	to 2$^+$ level at 667.715 keV											Ens054	**
^{133}Sb$-$u		-84766	100	-84728	3	0.2	o			GT2	2.5	08Kn.A	
		-84795	129			0.2	U			GT2	2.5	08Su19	
		-84702	25			-1.0	U			GS3	1.0	12Ch19	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
$C_{10}\,H_{13}-{}^{133}Cs$	196266	64	196273.458	0.009	0.1	U			R07	1.5	68De17	
	196279	25			−0.1	U			R07	1.5	68De17	
$C_9\,{}^{13}C\,H_{12}-{}^{133}Cs$	191796	34	191803.261	0.009	0.1	U			R07	1.5	68De17	
$C_8\,O\,N\,H_7-{}^{133}Cs$	147321	25	147311.889	0.009	−0.2	U			R07	1.5	68De17	
$C_7\,{}^{13}C\,N\,O\,H_6-{}^{133}Cs$	142835	31	142841.692	0.009	0.1	U			R07	1.5	68De17	
${}^{133}Cs-{}^{85}Rb_{1.565}$	43500	13	43501.027	0.011	0.1	U			MA5	1.0	00Be42	
	43499.3	1.6			1.1	U			MA8	1.0	07Ke09	
	43500.9	6.7			0.0	U			MA8	1.0	02Ke.A	
	43500.1	6.7			0.1	U			MA8	1.0	09Na.A	
	43470	47			0.7	U			MA9	1.0	09Na.A	
	43501.2	1.7			−0.1	U			MA8	1.0	11He10	
${}^{133}Cs-u$	−94548.41	0.41	−94548.039	0.009	0.9	U			ST2	1.0	99Ca46	*
${}^{133}La-u$	−91810	120	−91780	30	0.2	U			GS1	1.0	00Ra23	
	−91782	30				2			GS2	1.0	05Li24	
${}^{133}Ce-u$	−88471	32	−88480	18	−0.3	2			GS2	1.0	05Li24	*
${}^{133}Ce\,O-{}^{142}Sm_{1.049}$	−4618	21	−4615	18	0.2	R			MA7	1.0	01Bo59	*
${}^{133}Pr-u$	−83663	30	−83669	13	−0.2	R			GS2	1.0	05Li24	
${}^{133}Nd-u$	−77652	50				2			GS2	1.0	05Li24	*
${}^{133}Pm-u$	−70218	54				2			GS2	1.0	05Li24	*
${}^{133}Sb-{}^{136}Xe_{.978}$	6022	10	6016	3	−0.6	1	11	11 ${}^{133}Sb$	CP1	1.0	12Va02	
${}^{133}Sb-{}^{130}Xe_{1.023}$	13984.7	4.0	13982	3	−0.7	1	70	70 ${}^{133}Sb$	JY1	1.0	12Ha25	
${}^{133}Te-{}^{130}Xe_{1.023}$	9672.1	2.3	9673.3	2.2	0.5	1	93	93 ${}^{133}Te$	JY1	1.0	12Ha25	
${}^{133}Sn-{}^{134}Xe_{.993}$	17856.5	2.4	17858.5	2.0	0.8	1	73	73 ${}^{133}Sn$	JY1	1.0	12Ha25	
${}^{133}Sn\,{}^{34}S-{}^{133}Cs_{1.256}$	10562	25	10533.1	2.0	−1.2	U			MA8	1.0	08Dw01	
${}^{133}Sn-{}^{133}Cs$	18467.0	3.9	18461.8	2.0	−1.3	1	27	27 ${}^{133}Sn$	CP1	1.0	13Va12	
${}^{133}Sb-{}^{133}Cs$	9818	13	9820	3	0.2	U			CP1	1.0	13Va12	
${}^{133}Te-{}^{133}Cs_{1.000}$	5551.4	6.9	5511.4	2.2	−5.8	B			CP1	1.0	13Va12	
${}^{131}I-{}^{133}Cs$	2375.4	6.9				2			CP1	1.0	13Va12	
${}^{133}Pr-{}^{133}Cs$	10877	15	10879	13	0.1	2			MA5	1.0	00Be42	
${}^{133}Cs-C_3\,O_6$	−64035.786	0.026	−64035.757	0.009	1.1	1	11	11 ${}^{133}Cs$	MI2	1.0	99Br47	
${}^{133}Cs-C_{10}\,H_{12}$	−188448.445	0.057	−188448.426	0.009	0.3	U			MI2	1.0	99Br47	
${}^{133}Cs-{}^{132}Xe$	1296.8803	0.0103	1296.874	0.007	−0.6	1	50	45 ${}^{133}Cs$	FS1	1.0	10Mo30	
${}^{133}Cs-{}^{129}Xe$	671.1007	0.0103	671.102	0.007	0.1	1	50	44 ${}^{133}Cs$	FS1	1.0	10Mo30	
${}^{133}Cs(\gamma,n){}^{132}Cs$	−8988	33	−8989.6	1.0	0.0	U			Phi		60Ge01	
	−8986	2			−1.8	1	27	27 ${}^{132}Cs$	MMn		85Ts02	
${}^{132}Ba(n,\gamma){}^{133}Ba$	7189.91	0.36	7189.9	0.4	0.0	1	100	98 ${}^{132}Ba$	MMn		90Is07	Z
${}^{132}Ba(d,p){}^{133}Ba$	4977	15	4965.3	0.4	−0.8	U			ANL		70Vo04	
${}^{133}Sn(\beta^-){}^{133}Sb$	7830	70	8050	4	3.1	B			Stu		83Bl16	*
	8013	50			0.7	o			Stu		92Sp.A	*
	7990	25			2.4	U			Stu		95Me16	
${}^{133}Sb(\beta^-){}^{133}Te$	3966	50	4014	4	1.0	o			Stu		70Ru.A	*
	4003	10			1.1	o			Stu		95Me16	
	4002	7			1.7	1	25	18 ${}^{133}Sb$	Stu		99Fo01	
${}^{133}Te(\beta^-){}^{133}I$	2960	100	2921	7	−0.4	U					68Mc09	
	2876	100			0.5	U					68Pa03	*
	3392	100			−4.7	C			Stu		70Ru.A	*
	2890	15			2.1	o			Stu		95Me16	
	2942	24			−0.9	U			Stu		99Fo01	
${}^{133}I(\beta^-){}^{133}Xe$	1800	50	1785	7	−0.3	U					59Ho97	*
	1760	30			0.8	U					66Ei01	*
	1757	4			7.1	B			Stu		99Fo01	
${}^{133}Xe(\beta^-){}^{133}Cs$	428.0	4.	427.4	2.4	−0.2	2					52Be55	*
	427.0	3.			0.1	2					61Er04	*
	424	11			0.3	U			Stu		99Fo01	
${}^{133}Ba(\varepsilon){}^{133}Cs$	517.3	1.0	517.3	1.0	0.0	1	98	98 ${}^{133}Ba$			67Sc10	*
	498	5			3.9	F					68Mc06	*
	486	2			15.7	F					69Bo49	*
	521	5			−0.7	U					69To14	*

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.		Lab	F	Reference	
^{133}La(β^+)^{133}Ba	2230	200	2059	28	−0.9	U						50Na09	*
*^{133}Cs−u	As revised in reference. Original: –94548.20(0.28) μu											02Bf02	**
*^{133}Ce−u	$M-A$=–82392(28) keV for mixture gs+m at 37.2 keV											Nub16b	**
*^{133}Ce O−^{142}Sm$_{1.049}$	D_M=–4599(16) μu for mixture gs+m at 37.2 keV; $M-A$=–87150(16) keV											Nub16b	**
*^{133}Nd−u	$M-A$=–72268(28) keV for mixture gs+m at 127.97 keV											Nub16b	**
*^{133}Pm−u	$M-A$=–65342(33) keV for mixture gs+m at 129.7 keV											Nub16b	**
*^{133}Sn(β^-)^{133}Sb	E_{β^-}=6870(70) to 5/2$^+$ level at 962.30 keV											Ens114	**
*^{133}Sn(β^-)^{133}Sb	Private commmunication to reference											92Ch09	**
*^{133}Sb(β^-)^{133}Te	E_{β^-}=1210(50) to (5/2$^+$) level at 2755.51 keV; re-evaluated											Ens114	**
*^{133}Te(β^-)^{133}I	Q_{β^-}=3210(100) from ^{133}Te^m at 334.26 keV											Nub16b	**
*	reported as belonging to ground state, reinterpreted											AHW	**
*^{133}Te(β^-)^{133}I	E_{β^-}=850(100) to (3/2$^+$,5/2$^+$) level at 2541.74 keV											Ens114	**
*^{133}I(β^-)^{133}Xe	E_{β^-}=1270(50) 1230(30) respectively, to 5/2$^+$ level at 529.872 keV											Ens114	**
*^{133}Xe(β^-)^{133}Cs	E_{β^-}=347(4) 346(3) respectively, to 5/2$^+$ level at 80.9979 keV											Ens114	**
*^{133}Ba(ε)^{133}Cs	From L/K=0.371(0.007) to 1/2$^+$ level at 437.0113; recalculated Q											Ens114	**
*	and L/K=0.221(0.005) to 3/2$^+$ level at 383.8491 keV: Q =521(5) keV											Ens114	**
*^{133}Ba(ε)^{133}Cs	F : badly resolved L−peak											Ens114	**
*^{133}Ba(ε)^{133}Cs	L/K=0.67(0.15) LM/K=1.11(0.05) 0.45(0.04) respectively, to 1/2$^+$ 437.0113 keV											Ens114	**
*^{133}La(β^+)^{133}Ba	E_{β^+}=1200(200) to 3/2$^+$ level at 12.327 keV											Ens114	**
^{134}Te−u	−88844	130	−88603.6	2.9	0.7	U				GT2	2.5	08Su19	
C$_{10}$ H$_{14}$−^{134}Xe	204155.5	3.2	204157.417	0.010	0.2	U				M16	2.5	63Da10	
^{134}Xe−u	−94634.4	5.4	−94606.966	0.010	2.0	U				ACC	2.5	90Me08	
^{134}Xe−C ^{13}C ^{35}Cl ^{37}Cl$_2$	1381.76	0.60	1380.33	0.12	−1.6	U				H47	1.5	94Hy01	
C$_{10}$ H$_{14}$−^{134}Ba	205025	20	205042.1	0.3	0.3	U				M17	2.5	66Be10	
	205010	46			0.5	U				R07	1.5	68De17	
C$_{11}$ H$_2$−^{134}Ba	111125	48	111141.7	0.3	0.2	U				R07	1.5	68De17	
C$_8$ N O H$_8$−^{134}Ba	156063	78	156080.5	0.3	0.1	U				R07	1.5	68De17	
C$_{12}$ H$_6$−^{134}Ba O	147531	64	147527.2	0.3	0.0	U				R07	1.5	68De17	
^{134}La−u	−91456	34	−91486	21	−0.9	2				GS2	1.0	05Li24	
^{134}Ce−u	−91190	130	−91072	22	0.9	U				GS1	1.0	00Ra23	
	−91056	30			−0.5	2				GS2	1.0	05Li24	
^{134}Ce O−^{142}Sm$_{1.056}$	−6631	32	−6613	22	0.6	R				MA7	1.0	01Bo59	*
^{134}Pr−u	−84285	37	−84303	22	−0.5	2				GS2	1.0	05Li24	*
^{134}Nd−u	−81234	30	−81210	13	0.8	R				GS2	1.0	05Li24	
^{134}Pm−u	−71647	62				2				GS2	1.0	05Li24	*
^{134}Sb−^{130}Xe$_{1.031}$	20016.8	2.2	20017.5	1.8	0.3	2				JY1	1.0	12Ha25	
	20019.2	3.3			−0.5	2				JY1	1.0	13Ka08	*
^{134}Te−^{130}Xe$_{1.031}$	10877.1	3.5	10878.2	2.9	0.3	1	71	71	^{134}Te	JY1	1.0	12Ha25	
^{134}Sb−^{136}Xe$_{.985}$	11906	36	11929.4	1.8	0.7	U				CP1	1.0	12Va02	*
^{134}Te−^{136}Xe$_{.985}$	2791.4	6.5	2790.1	2.9	−0.2	1	21	21	^{134}Te	CP1	1.0	12Va02	
^{134}Xe−^{132}Xe$_{1.015}$	2675.6193	0.0084	2675.619	0.008	0.0	1	100	100	^{134}Xe	FS1	1.0	13Ho22	
^{134}Sn ^{34}S−^{133}Cs$_{1.263}$	16080	160	15962	3	−0.7	U				MA8	1.0	08Dw01	
^{134}Sn−^{133}Cs$_{1.008}$	23974	17	23985	3	0.6	U				CP1	1.0	13Va12	
^{134}Sb−^{133}Cs$_{1.008}$	15850	11	15840.1	1.8	−0.9	U				CP1	1.0	13Va12	
^{134}I−^{133}Cs$_{1.008}$	5083.0	6.8	5080	5	−0.4	1	59	59	^{134}I	CP1	1.0	13Va12	
^{134}Cs−^{133}Cs$_{1.008}$	2025	18	2022.929	0.015	−0.1	o				MA1	1.0	90St25	
	2033	14			−0.7	U				MA1	1.0	99Am05	
^{134}Pr−^{133}Cs$_{1.008}$	10992	27	11001	22	0.3	R				MA5	1.0	00Be42	*
^{134}Nd−^{133}Cs$_{1.008}$	14100	14	14095	13	−0.4	2				MA5	1.0	00Be42	
^{134}Sn−^{134}Xe	23287.4	3.4				2				JY1	1.0	12Ha25	
^{134}Ba−C$_{10}$ H$_{13}$	−197229	20	−197217.0	0.3	0.2	U				M17	2.5	66Be10	
^{134}Ba−^{132}Ba	−553	4	−552.7	1.2	0.0	U				M17	2.5	66Be10	
	−550	121			0.0	U				R07	1.5	68De17	
^{131}Cs−^{134}Cs$_{.244}$ ^{130}Cs$^x_{.756}$	−1313	50	−1182	14	1.1	U				P22	2.5	82Au01	*
^{133}Cs(n,γ)^{134}Cs	6891.540	0.017	6891.540	0.014	0.0	–				MMn		84Ke11	Z
	6891.540	0.027			0.0	–				ILn		87Bo24	Z
	6891.39	0.14			1.1	U				Bdn		06Fi.A	
ave.	6891.540	0.014			0.0	1	100	100	^{134}Cs			average	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{134}Sn(β^-)^{134}Sb	7370	90	7587	4	2.4	U			Stu		95Me16	
^{134}Sb(β^-)^{134}Te	8306	210	8513	3	1.0	o			Stu		72Ke21	*
	7960	240			2.3	o			Stu		77Lu06	*
	8310	80			2.5	U			Bwg		79Ke02	*
	8390	45			2.7	U			Stu		95Me16	
^{134}Te(β^-)^{134}I	1560	90	1510	5	−0.6	U			Stu		77Lu06	*
	1550	30			−1.3	U			Stu		95Me16	
	1513	7			−0.5	1	50	41 ^{134}I	Stu		99Fo01	
^{134}I(β^-)^{134}Xe	4170	60	4082	5	−1.5	U					61Jo08	*
	4175	15			−6.2	B			Stu		95Me16	
	4052	8			3.8	B			Stu		99Fo01	
^{134}Cs(β^-)^{134}Ba	2058.6	0.4	2058.7	0.3	0.2	1	58	58 ^{134}Ba			68Hs01	*
^{134}La(β^+)^{134}Ba	3772	50	3731	20	−0.8	R					65Bi12	
	3692	30			1.3	R					73Al20	
^{134}Ce(ε)^{134}La	500	200	386	29	−0.6	U					76Gr09	*
^{134}Pr(β^+)^{134}Ce	6190	90	6305	29	1.3	U			Dbn		95Ve08	*
^{134}Nd(β^+)^{134}Pr	2770	150	2882	24	0.7	U					77Ko.B	
^{134}Pm(β^+)^{134}Nd	9170	200	8910	60	−1.3	U			Dbn		95Ve08	*
*^{134}Ce O−^{142}Sm$_{1.056}$	Original error (22 keV) increased by 23 for BaF contamination in trap										GAu	**
*^{134}Pr−u	$M-A$=–78477(28) keV for mixture gs+m at 68(1) keV										Nub16b	**
*^{134}Pm−u	$M-A$=–66739(30) keV for mixture gs+m at 0#100 keV										Nub16b	**
*^{134}Sb−^{130}Xe$_{1.031}$	D_M=20318.7(3.1) μu for ^{134}Sb^m at 279(1) keV; $M-A$=–73740.0(2.9) keV										Nub16b	**
*^{134}Sb−^{136}Xe$_{.985}$	D_M=12206(36) μu for ^{134}Sb^m at 279(1) keV; $M-A$=–73762(33) keV										Nub16b	**
*	assuming high spin is favored, as for ^{136}I^m										GAu	**
*^{134}Pr−^{133}Cs$_{1.008}$	Most certainly gs. Mixture with isomer not completely excluded										00Be42	**
*^{134}Pr−^{133}Cs$_{1.008}$	D_M=11029(16) μu for mixture gs+m at 68(1) keV; $M-A$=–78503(15) keV										Nub16b	**
*^{131}Cs−^{134}Cs$_{.244}$ ^{130}Cs^x	D_M=–1330(50) keV for mixture gs+m at 138.7441 keV										Nub171	**
*^{134}Sb(β^-)^{134}Te	E_{β^-}=8400(300), and 6800(300) from ^{134}Sb^m at 279(1) to ^{134}Te^m at 1691.34										Nub16b	**
*^{134}Sb(β^-)^{134}Te	E_{β^-}=5840(240) from ^{134}Sb^m at 279(1) to (6)$^+$ level at 2397.70 keV										Ens04a	**
*^{134}Sb(β^-)^{134}Te	E_{β^-}=8420(120), and 6710(210),6980(210),6070(150) from ^{134}Sb^m at 279(1)										Nub16b	**
*	to 6$^+$ levels at 1691.34, 1691.34, 2397.70 keV										Ens04a	**
*^{134}Te(β^-)^{134}I	E_{β^-}=730(110) 610(160) to 1$^+$ levels at 846.688 923.432 keV										Ens04a	**
*^{134}I(β^-)^{134}Xe	E_{β^-}=2410(60) 1680(60) 1250(60) to 4$^+$ levels at 1731.17 2588.46 2867.38 keV										Ens04a	**
*^{134}Cs(β^-)^{134}Ba	E_{β^-}=658.0(0.4) to 4$^+$ level at 1400.590 keV										Ens04a	**
*^{134}Ce(ε)^{134}La	LK=0.798(0.04); also Q_{β^+} >375 keV										76Gr09	**
*^{134}Pr(β^+)^{134}Ce	E_{β^+}=4120(90) to 4$^+$ level at 1048.68 keV										Ens04a	**
*^{134}Pm(β^+)^{134}Nd	E_{β^+}=7360(200) to 4$^+$ level at 788.92 keV										Ens04a	**
^{135}Sb−u	−74932	103	−74815.6	2.8	0.5	o			GT2	2.5	08Kn.A	
	−74943	130			0.4	U			GT2	2.5	08Su19	
^{135}Te−u	−83643	106	−83445.3	1.8	0.7	U			GT2	2.5	08Kn.A	
	−83441	132			0.0	U			GT2	2.5	08Su19	
C$_8$ N O H$_9$−^{135}Ba	162731	48	162725.3	0.3	−0.1	U			R07	1.5	68De17	
C$_{11}$ H$_3$−^{135}Ba	117822	77	117786.5	0.3	−0.3	U			R07	1.5	68De17	
C$_{12}$ H$_7$−^{135}Ba O	154160	46	154172.0	0.3	0.2	U			R07	1.5	68De17	
^{135}Ce−u	−90779	30	−90839	11	−2.0	1	13	13 ^{135}Ce	GS2	1.0	05Li24	*
^{135}Pr−u	−86897	30	−86888	13	0.3	R			GS2	1.0	05Li24	
^{135}Nd−u	−81800	130	−81819	21	−0.1	o			GS1	1.0	00Ra23	
	−81811	36			−0.2	R			GS2	1.0	05Li24	*
^{135}Pm−u	−75204	81				2			GS2	1.0	05Li24	*
^{135}Sm−u	−67480	166				2			GS2	1.0	05Li24	*
^{135}Sn−^{130}Xe$_{1.038}$	35065.9	3.3				2			JY1	1.0	12Ha25	
^{135}Sb−^{130}Xe$_{1.038}$	25342.4	3.1	25341.7	2.8	−0.2	1	84	84 ^{135}Sb	JY1	1.0	12Ha25	
^{135}Te−^{130}Xe$_{1.038}$	16713.0	2.9	16712.0	1.8	−0.3	1	41	41 ^{135}Te	JY1	1.0	12Ha25	
^{135}Sn−^{133}Cs$_{1.015}$	30927	37	30875	3	−1.4	U			CP1	1.0	13Va12	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{135}Sb$-^{133}$Cs$_{1.015}$		21146.8	7.0	21150.6	2.8	0.5	1	16	16 ^{135}Sb	CP1	1.0	13Va12	
^{135}Te$-^{133}$Cs$_{1.015}$		12520.3	2.4	12521.0	1.8	0.3	1	59	59 ^{135}Te	CP1	1.0	13Va12	
^{135}I$-^{133}$Cs$_{1.015}$		6026.6	2.3	6025.6	2.2	−0.4	1	93	93 ^{135}I	CP1	1.0	13Va12	
^{135}Cs$-^{133}$Cs$_{1.015}$		1958	18	1943.5	1.1	−0.8	o			MA1	1.0	90St25	
		1957	14			−1.0	U			MA1	1.0	99Am05	
^{135}Pr$-^{133}$Cs$_{1.015}$		9080	14	9078	13	−0.1	2			MA5	1.0	00Be42	
^{135}Nd$-^{133}$Cs$_{1.015}$		14144	25	14148	21	0.1	2			MA5	1.0	00Be42	*
^{135}Te$-^{136}$Xe$_{.993}$		8686	10	8690.7	1.8	0.5	U			CP1	1.0	12Va02	
^{135}I$-^{136}$Xe$_{.993}$		2186.3	8.3	2195.4	2.2	1.1	U			CP1	1.0	12Va02	
^{135}Ba$-$C$_{10}$ H$_{14}$		−203860	20	−203861.8	0.3	0.0	U			M17	2.5	66Be10	
^{135}Ba$-^{134}$Ba		1177	2	1180.21	0.11	0.6	U			M17	2.5	66Be10	
		1161	70			0.2	U			R07	1.5	68De17	
		1168	78			0.1	U			R07	1.5	68De17	
^{134}Cs(n,γ)^{135}Cs		8762	1	8761.8	1.0	−0.2	1	98	98 ^{135}Cs	ILn		92Ul.A	
^{134}Ba(n,γ)^{135}Ba		6973.2	0.4	6971.96	0.10	−3.1	C			BNn		77Ko.A	
		6972.17	0.18			−1.2	–			MMn		90Is07	Z
		6971.84	0.17			0.7	–			Ltn		93Bo01	Z
		6973.24	0.22			−5.8	B			BNn		93Ch21	
		6971.87	0.18			0.5	–			Bdn		06Fi.A	
^{134}Ba(d,p)^{135}Ba		4746	15	4747.40	0.10	0.1	U			ANL		70Vo04	
^{134}Ba(n,γ)^{135}Ba	ave.	6971.96	0.10	6971.96	0.10	0.1	1	97	55 ^{135}Ba			average	
^{135}Tb(p)^{134}Gd		1188	7				3			Arp		04Wo07	
^{135}Sb(β^-)^{135}Te		8120	50	8038	3	−1.6	U			Stu		89Ho08	
^{135}Te(β^-)^{135}I		5950	240	6050.4	2.7	0.4	o			Stu		77Lu06	
		5950	100			1.0	o			Bwg		79Ke02	*
		5970	200			0.4	U					85Sa15	*
		5960	100			0.9	U			Bwg		87Gr.A	
		5888	13			12.5	B			Stu		07Fo02	
^{135}I(β^-)^{135}Xe		2780	80	2634	4	−1.8	U					70Ma19	
		2590	50			0.9	U			Stu		76Lu04	*
		2627	6			1.2	1	42	34 ^{135}Xe	Stu		99Fo01	
^{135}Xe(β^-)^{135}Cs		1155	10	1168	4	1.3	–					52Be55	*
		1167	5			0.3	–			Stu		99Fo01	*
	ave.	1165	4			0.9	1	68	66 ^{135}Xe			average	
^{135}Cs(β^-)^{135}Ba		205	5	268.9	1.0	12.8	B					53Li01	
^{135}La(β^+)^{135}Ba		1200	10	1207	9	0.7	1	89	89 ^{135}La			71Ba18	*
^{135}Ce(β^+)^{135}La		2027	5	2027	5	0.0	–					76Ga.A	*
		2016	13			0.9	–					81Sa09	*
	ave.	2026	5			0.3	1	98	87 ^{135}Ce			average	
^{135}Pr(β^+)^{135}Ce		3720	150	3680	16	−0.3	U					54Ha68	*
^{135}Pm^m(β^+)^{135}Nd		6040	150	6390#	50#	2.3	D			Dbn		95Ve08	*

*^{135}Ce$-$u	$M-A$=–84114(28) keV for ^{135}Ce^m at 445.81 keV	Nub16b	**
*^{135}Nd$-$u	$M-A$=–76174(28) keV for mixture gs+m at 64.95 keV	Nub16b	**
*^{135}Pm$-$u	$M-A$=–69952(28) keV for mixture gs+m at 200#80 keV	Nub16b	**
*^{135}Sm$-$u	$M-A$=–62857(38) keV for mixture gs+m at 0#300 keV	Nub16b	**
*^{135}Nd$-^{133}$Cs$_{1.015}$	D_M=14179(14) μu for gs+m mixture at 64.95 keV; $M-A$=–76185(13) keV	Nub16b	**
*^{135}Te(β^-)^{135}I	E_{β^-}=5120(120) to 5/2$^-$ level at 870.52 keV and other E_{β^-}	Ens083	**
*^{135}Te(β^-)^{135}I	E_{β^-}=5370(100) to 5/2$^+$ level at 603.68 keV	Ens083	**
*^{135}I(β^-)^{135}Xe	E_{β^-}=1320(50) to 5/2$^+$ level at 1260.416 keV, and other E_{β^-}	Ens083	**
*^{135}Xe(β^-)^{135}Cs	E_{β^-}=905(10) 917(5) respectively, to 5/2$^+$ level at 249.767 keV	Ens083	**
*^{135}La(β^+)^{135}Ba	p$^+$ =7(1)$\times 10^{-5}$, from reanalysis	AHW	**
*^{135}La(β^+)^{135}Ba	But 65Mo05 says p$^+$ <0.002% (2$\times 10^{-5}$) or E_{β^+} <125 keV	65Mo05	**
*^{135}Ce(β^+)^{135}La	E_{β^+}=705(5) 694(13) respectively, to 1/2$^+$ level at 300.052 keV	Ens083	**
*^{135}Pr(β^+)^{135}Ce	E_{β^+}=2500(100) to levels (5/2$^+$) 296.11 and 3/2($^+$) 82.67 keV, roughly equal	Ens083	**
*^{135}Pm^m(β^+)^{135}Nd	E_{β^+}=4920(150) to mixture ground state and (11/2$^-$) level at 198.5 keV	Ens083	**
*^{135}Pm^m(β^+)^{135}Nd	Trends from Mass Surface TMS suggest ^{135}Pm^m 350 less bound (see Nubase)	GAu	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.		Lab	F	Reference	
^{136}Te−u		−79945	25	−79898.8	2.4	1.8	U				GS3	1.0	12Ch19	
^{136}Xe−^{120}Sn$_{1.133}$		18019.8	3.1	18019.8	1.1	0.0	U				JY1	1.0	11Ha48	
C$_{10}$ H$_{16}$−^{136}Xe		217982.	3.9	217986.039	0.007	0.4	U				M16	2.5	63Da10	
^{136}Xe−u		−92793.6	9.0	−92785.524	0.007	0.4	U				ACC	2.5	90Me08	
^{136}Xe−^{28}Si$_4$ D$_{12}$		−169712.9828	0.0162	−169713.001	0.007	−1.1	1	20	18	^{136}Xe	FS1	1.0	07Re03	
C$_{11}$ H$_4$−^{136}Ba		126737	56	126724.2	0.3	−0.2	U				R07	1.5	68De17	
C$_8$ N O H$_{10}$−^{136}Ba		171635	56	171663.0	0.3	0.3	U				R07	1.5	68De17	
C$_{12}$ H$_8$−^{136}Ba O		163094	40	163109.7	0.3	0.3	U				R07	1.5	68De17	
^{136}La−u		−92394	88	−92370	60	0.3	2				GS2	1.0	05Li24	*
C$_{10}$ H$_{16}$−^{136}Ce		218128	50	218071.1	0.4	−0.3	U				R05	4.0	65De13	
C$_{12}$ H$_8$−^{136}Ce O		160563	36	160556.2	0.4	0.0	U				R05	4.0	65De13	
^{136}Nd−u		−85044	30	−85024	13	0.7	R				GS2	1.0	05Li24	
^{136}Pm−u		−76378	79	−76400	70	−0.3	2				GS2	1.0	05Li24	*
^{136}Sm−u		−71768	30	−71724	13	1.5	R				GS2	1.0	05Li24	
^{136}Sb−^{130}Xe$_{1.046}$		31675.1	6.8	31678	6	0.5	1	85	85	^{136}Sb	JY1	1.0	12Ha25	
^{136}Te−^{130}Xe$_{1.046}$		21029.9	3.1	21030.4	2.4	0.2	1	62	62	^{136}Te	JY1	1.0	12Ha25	
^{136}Sb−^{133}Cs$_{1.023}$		27489	16	27472	6	−1.1	1	15	15	^{136}Sb	CP1	1.0	13Va12	
^{136}Te−^{133}Cs$_{1.023}$		16827.7	6.8	16823.8	2.4	−0.6	1	13	13	^{136}Te	CP1	1.0	13Va12	
^{136}Xe−^{133}Cs$_{1.023}$		3936.5	1.9	3937.121	0.011	0.3	U				MA8	1.0	09Ne11	
^{136}Cs−^{133}Cs$_{1.023}$		4007	18	4034.2	2.0	1.5	o				MA1	1.0	90St25	
		4021	14			0.9	U				MA1	1.0	99Am05	
^{136}Pr−^{133}Cs$_{1.023}$		9418	15	9400	12	−1.2	1	67	67	^{136}Pr	MA5	1.0	00Be42	
^{136}Nd−^{133}Cs$_{1.023}$		11703	14	11699	13	−0.3	2				MA5	1.0	00Be42	
^{136}Pm^m−^{133}Cs$_{1.023}$		20429	100				2				MA5	1.0	00Be42	*
^{136}Sm−^{133}Cs$_{1.023}$		25009	15	24998	13	−0.7	2				MA5	1.0	00Be42	
^{136}Xe−^{134}Xe$_{1.015}$		3245.8	3.8	3240.546	0.012	−1.4	o				MA8	1.0	05He.A	
		3244.3	4.0			−0.9	U				MA8	1.0	06He29	
^{136}Te−^{136}Xe		12887.9	5.0	12886.7	2.4	−0.2	1	24	24	^{136}Te	CP1	1.0	12Va02	
^{136}I^m−^{136}Xe		7611.2	4.9				2				CP1	1.0	12Va02	*
^{136}Xe−^{136}Ba		2639.6	0.6	2638.5	0.3	−0.7	–				H49	2.5	10Mc04	
		2638.62	0.52			−0.2	–				JY1	1.0	11Ko03	
	ave.	2638.7	0.5			−0.4	1	45	45	^{136}Ba			average	
^{136}Ce−^{136}Ba		2553.46	0.29	2553.48	0.29	0.1	1	100	100	^{136}Ce	JY1	1.0	11Ko03	
^{136}Xe−^{13}C$_3$ O$_6$		−72337.7553	0.0109	−72337.747	0.007	0.8	–				FS1	1.0	07Re03	
		−72337.7464	0.0109			0.0	–				FS1	1.0	07Re03	
	ave.	−72337.751	0.008			0.5	1	82	82	^{136}Xe			average	
^{136}Ba−^{135}Ba		−1115	3	−1112.65	0.04	0.3	U				M17	2.5	66Be10	
		−1119	50			0.1	U				R07	1.5	68De17	
		−1074	50			−0.5	U				R07	1.5	68De17	
^{136}Ba−^{134}Ba		67	5	67.56	0.12	0.0	U				M17	2.5	66Be10	
		69	128			0.0	U				R07	1.5	68De17	
		72	78			0.0	U				R07	1.5	68De17	
N$_{10}$−^{136}Xe		123525.5778	0.0235	123525.568	0.007	−0.4	U				FS1	1.0	07Re03	
^{136}Te(β^-n)^{135}I		1285	50	1283	3	0.0	U						84Kr.B	
^{136}Xe(d,^{3}He)^{135}I		−4438	30	−4445.5	2.1	−0.3	U				Oak		71Wi04	
^{136}Xe(d,t)^{135}Xe		−1723	40	−1830	4	−2.7	U				Oak		68Mo21	
^{135}Ba(n,γ)^{136}Ba		9106.4	0.8	9107.74	0.04	1.7	U						69Ge07	
		9107.74	0.04			0.0	–				MMn		90Is07	Z
		9107.73	0.19			0.1	–				Bdn		06Fi.A	
^{135}Ba(d,p)^{136}Ba		6886	15	6883.17	0.04	−0.2	U				ANL		70Vo04	
^{135}Ba(n,γ)^{136}Ba	ave.	9107.74	0.04	9107.74	0.04	0.0	1	100	55	^{136}Ba			average	
^{136}Te(β^-)^{136}I		5100	150	5120	14	0.1	U						77Sc21	
		5095	100			0.2	U				Bwg		87Gr.A	
		5086	20			1.7	1	50	50	^{136}I	Stu		07Fo02	
^{136}I(β^-)^{136}Xe		6960	100	6884	14	−0.8	U						59Jo37	*
		6690	150			1.3	U				Stu		76Lu04	*
		6925	70			−0.6	U				Bwg		87Gr.A	
		6850	20			1.7	1	50	50	^{136}I	Stu		07Fo02	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{136}I^m(β^-)^{136}Xe	7100	230	7090	5	0.0	o			Stu		76Lu04	*
	7705	120			−5.1	C			Bwg		87Gr.A	
	7051	12			3.2	B			Stu		07Fo02	
^{136}Cs(β^-)^{136}Ba	2548.1	2.0	2548.2	1.9	0.1	2					54Ol05	*
	2549	5			−0.2	2					65Re07	*
^{136}La(β^+)^{136}Ba	2870	70	2850	50	−0.3	R					59Gi50	
^{136}Pr(β^+)^{136}Ce	5084	50	5168	11	1.7	U					68Zh04	*
	5114	75			0.7	U					71Ke07	*
	5134	20			1.7	1	33	33 ^{136}Pr	IRS		83Al.B	*
^{136}Nd(β^+)^{136}Pr	2501	50	2141	16	−7.2	B					68Zh04	*
	2211	25			−2.8	B					75Br16	*
^{136}Pm(β^+)^{136}Nd	7850	200	8030	70	0.9	R			IRS		83Al06	*
*^{136}La−u	$M-A$=–85935(32) keV for mixture gs+m at 259.3 keV										Nub16b	**
*^{136}Pm−u	$M-A$=–71091(28) keV for mixture gs+m at 110(120) keV										Nub16b	**
*^{136}Pm^m−^{133}Cs$_{1.023}$	Slightly contaminated by ground state, original error (20) increased										00Be42	**
*^{136}I^m−^{136}Xe	High spin isomer is preferred (see also ^{134}Sb)										GAu	**
*^{136}I(β^-)^{136}Xe	E_{β^-}=7000(100), 5610(150), 4280(150) to ground state, 2$^+$ levels 1313.027, 2634.16 keV										Ens026	**
*^{136}I(β^-)^{136}Xe	E_{β^-}=5370(400), 4700(320), 3920(220) to 2$^+$ levels 1313.027, 2289.53, 2634.16										Ens026	**
*^{136}I^m(β^-)^{136}Xe	E_{β^-}=5170(400) 4670(270) to ^{136}Xe^m 6$^+$ at 1891.703 and 2444.39 level										Ens026	**
*^{136}Cs(β^-)^{136}Ba	E_{β^-}=341(2) 342(5) respectively, to 6$^+$ level at 2207.077 keV										Ens026	**
*^{136}Pr(β^+)^{136}Ce	E_{β^+}=2970(50) 3000(75) 3020(20) respectively, to 2$^+$ level at 1092.09 keV										Ens026	**
*^{136}Nd(β^+)^{136}Pr	E_{β^+}=1330(50) to 1$^+$ level at 149.11 keV										Ens026	**
*^{136}Nd(β^+)^{136}Pr	K/β^+=13.2(0.5) to 1$^+$ level at 149.11 keV										Ens026	**
*^{136}Pm(β^+)^{136}Nd	E_{β^-}=4732(70) probably from high spin isomer going to several										AHW	**
*	high spin levels around 2100 keV										AHW	**
^{137}Sb−u	−64445	215	−64480	60	−0.1	o			GT1	1.5	04Ma.A	
	−65068	186			1.3	U			GT3	2.5	16Kn03	
^{137}Te−u	−74528	101	−74400.6	2.3	0.5	o			GT2	2.5	08Kn.A	
	−74386	129			0.0	U			GT2	2.5	08Su19	
^{137}I−u	−82145	130	−81972	9	0.5	U			GT2	2.5	08Su19	
C$_{11}$ H$_5$−^{137}Ba	133366	24	133297.8	0.3	−1.9	U			R07	1.5	68De17	
C$_7$ ^{13}C N O H$_{10}$−^{137}Ba	173792	73	173766.4	0.3	−0.2	U			R07	1.5	68De17	
C$_{12}$ H$_9$−^{137}Ba O	169692	39	169683.3	0.3	−0.1	U			R07	1.5	68De17	
^{137}La−u	−93556	30	−93549.4	1.8	0.2	U			GS2	1.0	05Li24	
^{137}Ce−u	−92101	85	−92237.4	0.5	−1.6	U			GS2	1.0	05Li24	*
^{137}Nd−u	−85438	30	−85438	13	0.0	1	18	18 ^{137}Nd	GS2	1.0	05Li24	
^{137}Pm−u	−79608	62	−79520	14	1.4	U			GS2	1.0	05Li24	*
^{137}Sm−u	−73025	69	−73030	50	−0.1	1	44	44 ^{137}Sm	GS2	1.0	05Li24	*
^{137}Te−^{130}Xe$_{1.054}$	27300.0	2.7	27300.5	2.3	0.2	1	70	70 ^{137}Te	JY1	1.0	12Ha25	
^{137}Sb−^{133}Cs$_{1.030}$	32907	56				2			CP1	1.0	13Va12	
^{137}Te−^{133}Cs$_{1.030}$	22985.0	4.1	22983.8	2.3	−0.3	1	30	30 ^{137}Te	CP1	1.0	13Va12	
^{137}Xe−^{133}Cs$_{1.030}$	8943.6	2.0	8942.25	0.11	−0.7	U			MA8	1.0	09Ne11	
^{137}Cs−^{133}Cs$_{1.030}$	4452	19	4473.9	0.4	1.2	o			MA1	1.0	90St25	
	4470	14			0.3	U			MA1	1.0	99Am05	
^{137}Pr−^{133}Cs$_{1.030}$	8095	15	8064	9	−2.1	1	34	34 ^{137}Pr	MA5	1.0	00Be42	
^{137}Nd−^{133}Cs$_{1.030}$	11947	14	11947	13	0.0	1	81	81 ^{137}Nd	MA5	1.0	00Be42	
^{137}Pm−^{133}Cs$_{1.030}$	17864	14				2			MA5	1.0	00Be42	
^{137}Sm−^{133}Cs$_{1.030}$	24350	78	24350	50	0.1	1	34	34 ^{137}Sm	MA5	1.0	00Be42	*
^{137}Eu−^{133}Cs$_{1.030}$	32815.2	4.7				2			MA8	1.0	13Wo05	
^{137}Ba ^{35}Cl−^{135}Ba ^{37}Cl	3089.1	0.6	3088.88	0.11	−0.1	U			H49	2.5	10Mc04	
^{137}Te−^{136}Xe$_{1.007}$	19057	18	19034.4	2.3	−1.3	U			CP1	1.0	12Va02	
^{137}I−^{136}Xe$_{1.007}$	11463.2	9.0				2			CP1	1.0	12Va02	
^{137}Xe−^{136}Xe$_{1.007}$	5004	11	4992.79	0.11	−1.0	U			CP1	1.0	12Va02	
^{137}Ba−^{136}Ba	1249	3	1251.42	0.07	0.3	U			M17	2.5	66Be10	
	1222	50			0.4	U			R07	1.5	68De17	
	1227	44			0.4	U			R07	1.5	68De17	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.		Lab	F	Reference	
^{137}Ba−^{135}Ba		143	3	138.77	0.09	−0.6	U				M17	2.5	66Be10	
		69	63			0.7	U				R07	1.5	68De17	
		106	46			0.5	U				R07	1.5	68De17	
^{137}I(β^-n)^{136}Xe		1850	30	2002	8	5.1	C						84Kr.B	
^{136}Xe(n,γ)^{137}Xe		4025.5	0.5	4025.56	0.10	0.1	U						77Fo02	Z
		4025.8	0.3			−0.8	2						77Pr07	Z
		4025.53	0.11			0.3	2				Bdn		06Fi.A	
^{136}Xe(d,p)^{137}Xe		1637	20	1801.00	0.10	8.2	F				Oak		68Mo21	*
^{136}Xe(^{3}He,d)^{137}Cs		1918	12	1911.9	0.4	−0.5	U				ChR		81Ha08	
^{136}Ba(n,γ)^{137}Ba		6891	5	6905.63	0.07	2.9	U						69Gr31	
		6905.54	0.10			0.9	–				MMn		90Is07	Z
		6905.70	0.12			−0.6	–				Mtn		95Bo03	Z
		6905.74	0.16			−0.7	–				Bdn		06Fi.A	
^{137}Ba(γ,n)^{136}Ba		−6949	38	−6905.63	0.07	1.1	U				Phi		60Ge01	
^{136}Ba(d,p)^{137}Ba		4680	15	4681.06	0.07	0.1	U				ANL		70Vo04	
^{136}Ba(n,γ)^{137}Ba	ave.	6905.63	0.07	6905.63	0.07	0.0	1	100	99	^{137}Ba			average	
^{136}Ce(n,γ)^{137}Ce		7481.3	0.4	7481.53	0.16	0.6	–						81Ko.A	Z
		7481.58	0.17			−0.3	–				Bdn		06Fi.A	
	ave.	7481.54	0.16			0.0	1	100	100	^{137}Ce			average	
^{137}Te(β^-)^{137}I		7030	300	7053	9	0.1	U						85Sa15	
		6925	130			1.0	U				Bwg		87Gr.A	
^{137}I(β^-)^{137}Xe		5880	60	6027	8	2.5	U				Bwg		87Gr.A	
^{137}Xe(β^-)^{137}Cs		4140	70	4162.2	0.4	0.3	U						64On03	
		4150	100			0.1	U						68Ho22	
^{137}Cs(β^-)^{137}Ba		1173.29	0.84	1175.63	0.17	2.8	U						68Wo02	*
		1175.55	0.26			0.3	2						78Ch22	*
		1175.69	0.23			−0.3	2						83Be18	*
^{137}Ce(β^+)^{137}La		1222.1	1.6				2						81Ar.A	*
^{137}Pr(β^+)^{137}Ce		2702	10	2717	8	1.5	1	66	66	^{137}Pr			73Bu17	
^{137}Nd(β^+)^{137}Pr		3497	40	3617	14	3.0	B						73Bu18	*
		3690	54			−1.3	U						85Af.A	*
^{137}Pm^m(β^+)^{137}Nd		5690	130	5660	50	−0.3	–				IRS		83Al06	*
		5650	60			0.1	–				Dbn		95Ve08	*
	ave.	5660	50			0.0	1	71	70	^{137}Pm^m			average	
^{137}Sm(β^+)^{137}Pm^m		5900	70	5900	50	0.0	1	53	30	^{137}Pm^m	Dbn		95Ve08	
*^{137}Ce−u	$M-A$=–85665(29) keV for mixture gs+m at 254.29 keV												Nub16b	**
*^{137}Pm−u	$M-A$=–74079(28) keV for mixture gs+m at 150(50) keV												Nub16b	**
*^{137}Sm−u	$M-A$=–67932(28) keV for mixture gs+m at 180#50 keV												Nub16b	**
*^{137}Sm−^{133}Cs$_{1.030}$	Might be a mixture of ground state and isomer say authors												00Be42	**
*	D_M=24447(14) μu for mixture gs+m at 180#50 keV; $M-A$=–67941(13) keV												Nub16b	**
*^{136}Xe(d,p)^{137}Xe	F : error severely underestimated and value low, see excitation energies												AHW	**
*^{137}Cs(β^-)^{137}Ba	E_{β^-}=511.63(0.84) 513.89(0.26) 514.03(0.23) to ^{137}Ba^m at 661.659 keV												Nub16b	**
*^{137}Ce(β^+)^{137}La	E_{β^+}=189.5(1.6) to 5/2$^+$ level at 10.59 keV												Ens079	**
*^{137}Nd(β^+)^{137}Pr	E_{β^+}=2400(40) E_{β^+}=2592(54) respectively, to 3/2$^+$ level at 75.5 keV												Ens079	**
*^{137}Pm^m(β^+)^{137}Nd	E_{β^+}=4132(+150–115) 4110(60) respectively, to 11/2$^-$ ^{137}Nd^m at 519.43 keV												Nub16b	**
^{138}Sb−u		−58208	457				2				GT3	2.5	16Kn03	
^{138}Te−u		−70940	247	−70528	4	1.1	o				GT1	1.5	04Ma.A	
		−70583	106			0.2	o				GT2	2.5	08Kn.A	
		−70591	131			0.2	U				GT2	2.5	08Su19	
C_{10} H_{18}−^{138}Ba		235609	20	235603.4	0.3	−0.1	U				M17	2.5	66Be10	
C_{11} H_7−^{138}Ba H		141649	51	141703.0	0.3	0.7	U				R07	1.5	68De17	
C_{11} H_6−^{138}Ba		141701	30			0.0	U				R07	1.5	68De17	
C_{12} H_{10}−^{138}Ba O		178106	15	178088.5	0.3	−0.8	U				R07	1.5	68De17	
		178105	49			−0.2	U				R07	1.5	68De17	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
C_{11} ^{13}C $H_9-^{138}Ba$ O		173612	37	173618.3	0.3	0.1	U			R07	1.5	68De17	
C_{10} $H_{18}-^{138}Ce$		234799	60	234862	5	0.3	U			R05	4.0	65De13	
C_{12} $H_{10}-^{138}Ce$ O		177382	46	177347	5	−0.2	U			R05	4.0	65De13	
C_9 ^{13}C $H_{17}-^{138}Ce$		230358	60	230392	5	0.1	U			R05	4.0	65De13	
$^{138}Pr^m-u$		−88896	30	−88870	18	0.9	1	35	35 $^{138}Pr^m$	GS2	1.0	05Li24	
$^{138}Nd-u$		−88060	130	−88050	12	0.1	o			GS1	1.0	00Ra23	
		−88060	30			0.3	R			GS2	1.0	05Li24	
$^{138}Pm-u$		−80242	141	−80452	30	−1.5	o			GS1	1.0	00Ra23	*
		−80454	35			0.1	1	72	72 ^{138}Pm	GS2	1.0	05Li24	*
$^{138}Sm-u$		−76766	30	−76756	13	0.3	R			GS2	1.0	05Li24	
$^{138}Eu-u$		−66291	30				2			GS2	1.0	05Li24	
$^{138}Te-^{130}Xe_{1.062}$		31945.3	4.7	31946	4	0.0	1	75	75 ^{138}Te	JY1	1.0	12Ha25	
$^{138}Te-^{133}Cs_{1.038}$		27614.0	8.1	27613	4	−0.1	1	25	25 ^{138}Te	CP1	1.0	13Va12	
$^{138}Xe-^{133}Cs_{1.038}$		12284.1	3.5	12287	3	0.9	1	74	74 ^{138}Xe	MA8	1.0	09Ne11	
$^{138}Cs-^{133}Cs_{1.038}$		9158	14	9158	10	0.0	1	49	49 ^{138}Cs	MA1	1.0	99Am05	
$^{138}Ba-^{133}Cs_{1.038}$		3388	14	3388.1	0.3	0.0	U			MA1	1.0	99Am05	
$^{138}Nd-^{133}Cs_{1.038}$		10093	14	10091	12	−0.2	–			MA5	1.0	00Be42	
	ave.	10091	13			0.0	1	96	96 ^{138}Nd			average	
$^{138}Pm^m-^{133}Cs_{1.038}$		17721	14				2			MA5	1.0	00Be42	
$^{138}Sm-^{133}Cs_{1.038}$		21387	14	21385	13	−0.2	2			MA5	1.0	00Be42	
$^{138}I-^{136}Xe_{1.015}$		16903.7	6.4				2			CP1	1.0	12Va02	
$^{138}Xe-^{136}Xe_{1.015}$		8332.2	5.9	8324	3	−1.5	1	26	26 ^{138}Xe	CP1	1.0	12Va02	
^{138}Ba $^{35}Cl-^{136}Ba$ ^{37}Cl		3621.1	0.6	3621.38	0.11	0.2	U			H49	2.5	10Mc04	
$^{138}Ba-^{137}Ba$		−582	2	−580.15	0.04	0.4	U			M17	2.5	66Be10	
		−480	27			−2.5	U			R07	1.5	68De17	
		−553	40			−0.5	U			R07	1.5	68De17	
$^{138}Ba-^{136}Ba$		676	3	671.27	0.09	−0.6	U			M17	2.5	66Be10	
		658	98			0.1	U			R07	1.5	68De17	
		628	43			0.7	U			R07	1.5	68De17	
$^{138}Ce-^{136}Ce$		−1040	47	−1141	5	−0.5	U			R05	4.0	65De13	
		−1158	20			0.3	U			M17	2.5	66Be10	
^{138}Ba $H-^{137}Ba$		7399	88	7244.89	0.04	−1.2	U			R07	1.5	68De17	
		7280	43			−0.5	U			R07	1.5	68De17	
$^{137}Ba(n,\gamma)^{138}Ba$		8611.3	0.8	8611.72	0.04	0.5	U					68Ma35	
		8611.72	0.04			0.0	1	100	99 ^{138}Ba	MMn		90Is07	Z
		8611.5	0.15			1.5	U			Ltn		95Bo05	
		8611.63	0.18			0.5	U			Bdn		06Fi.A	
$^{137}Ba(d,p)^{138}Ba$		6398	15	6387.15	0.04	−0.7	U			ANL		70Vo04	
$^{138}I(\beta^-)^{138}Xe$		7820	70	7992	7	2.5	U			Bwg		87Gr.A	
$^{138}Xe(\beta^-)^{138}Cs$		2700	50	2915	10	4.3	B					72Mo33	*
		2830	80			1.1	U			Trs		78Wo15	
$^{138}Cs^x(IT)^{138}Cs$		40	23				2					82Au01	*
$^{138}Cs(\beta^-)^{138}Ba$		5350	80	5375	9	0.3	U			Trs		78Wo15	
		5388	25			−0.5	–			Gsn		81De25	
		5370	15			0.3	–			McG		84He.A	
	ave.	5375	13			0.0	1	51	51 ^{138}Cs			average	
$^{138}La(\varepsilon)^{138}Ba$		1620	15	1742	3	8.2	B					56Tu17	*
$^{138}La(\beta^-)^{138}Ce$		994	10	1052	4	5.8	B					57Gl20	*
		1159	40			−2.7	U					70El.A	*
		1052.7	4.3			−0.2	1	88	82 ^{138}Ce			16Qu01	*
$^{138}Pr(\beta^+)^{138}Ce$		4437	10				2					71Af05	
$^{138}Pr^m(\beta^+)^{138}Ce$		4801	20	4789	16	−0.6	1	67	65 $^{138}Pr^m$			64Fu08	*
$^{138}Nd(\beta^+)^{138}Pr$		2020	100	1116	16	−9.0	C					61Bo.B	
$^{138}Pm(\beta^+)^{138}Nd$		7090	100	7078	29	−0.1	–			IRS		83Al06	
		7080	60			0.0	–			Dbn		95Ve08	
	ave.	7080	50			−0.1	1	31	28 ^{138}Pm			average	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{138}Pm^m(β^+)^{138}Nd		7000	250	7108	17	0.4	U					81De38	*
*^{138}Pm−u	$M-A$=–74730(130) keV for mixture gs+m at 30(30) keV											Nub16b	**
*^{138}Pm−u	$M-A$=–74927(28) keV for mixture gs+m at 30(30) keV											Nub16b	**
*^{138}Xe(β^-)^{138}Cs	E_{β^-}=2460(50), 2270(50) to (1$^-$ 2$^-$) level at 258.400, 1$^-$ at 412.260 keV											Ens035	**
*^{138}Cs^x(IT)^{138}Cs	Based on ^{138}Cs^m(IT)=79.9 keV											Nub16b	**
*^{138}La(ε)^{138}Ba	L/K=1.40(0.25) to 2$^+$ level at 1435.816 keV											Ens035	**
*^{138}La(β^-)^{138}Ce	E_{β^-}=205(10) 370(40) 264.0(4.3) respectively, to 2$^+$ level at 788.744 keV											Ens035	**
*^{138}Pr^m(β^+)^{138}Ce	E_{β^+}=1650(20) to 7$^-$ level at 2129.17 keV											Ens035	**
*^{138}Pm^m(β^+)^{138}Nd	E_{β^+}=3900(200) to 5$^-$ level at 1990.4, 6$^+$ at 2134.3 and (5$^-$) at 2221.8keV											Ens035	**
^{139}Te−u		−64541	333	−64633	4	−0.2	U			GT1	1.5	04Ma.A	
^{139}Te−^{130}Xe$_{1.069}$		38515.7	3.8				2			JY1	1.0	12Ha25	
^{139}I−u		−73838	102	−73507	4	1.3	U			GT2	2.5	08Kn.A	
		−73567	130			0.2	U			GT2	2.5	08Su19	
C$_6$ ^{13}C O$_3$ H$_6$−^{139}La		128474	41	128690.1	2.2	1.3	U			R05	4.0	65De13	
C$_7$ O$_3$ H$_7$−^{139}La		133063	32	133160.3	2.2	0.8	U			R05	4.0	65De13	
C$_6$ N O$_3$ H$_5$−^{139}La		120496	21	120584.2	2.2	1.1	U			R05	4.0	65De13	
C$_{12}$ H$_{11}$−^{139}La O		184568	66	184801.9	2.2	0.9	U			R05	4.0	65De13	
C$_{11}$ ^{13}C H$_{10}$−^{139}La O		180100	58	180331.7	2.2	1.0	U			R05	4.0	65De13	
^{139}Nd−u		−87840	79	−88046	30	−2.6	U			GS2	1.0	05Li24	*
^{139}Sm−u		−77704	30	−77703	12	0.0	R			GS2	1.0	05Li24	
		−77711	30			0.3	R			GS2	1.0	05Li24	*
^{139}Eu−u		−70215	30	−70208	14	0.2	R			GS2	1.0	05Li24	
^{139}Te−^{133}Cs$_{1.045}$		34185	17	34170	4	−0.9	U			CP1	1.0	13Va12	
^{139}I−^{133}Cs$_{1.045}$		25296.1	4.3				2			CP1	1.0	13Va12	
^{139}Xe−^{133}Cs$_{1.045}$		17594.9	2.3				2			MA8	1.0	09Ne11	*
^{139}Cs−^{133}Cs$_{1.045}$		12163	14	12167	3	0.3	U			MA1	1.0	99Am05	
^{139}Ba−^{133}Cs$_{1.045}$		7649	14	7644.0	0.3	−0.4	U			MA1	1.0	99Am05	
^{139}Pm−^{133}Cs$_{1.045}$		15604	15	15603	15	−0.1	1	95	95 ^{139}Pm	MA5	1.0	00Be42	
^{139}Sm−^{133}Cs$_{1.045}$		21101	14	21099	12	−0.1	2			MA5	1.0	00Be42	
^{139}Eu−^{133}Cs$_{1.045}$		28597	16	28595	14	−0.1	2			MA5	1.0	00Be42	
^{139}I−^{136}Xe$_{1.022}$		21333	31	21320	4	−0.4	U			CP1	1.0	12Va02	
^{139}Xe−^{136}Xe$_{1.022}$		13618	12	13619.0	2.3	0.1	U			CP1	1.0	12Va02	
^{139}La−^{138}La		−622	132	−759.0	2.7	−0.3	U			R05	4.0	65De13	
^{139}La−^{138}Ce		485	74	370	5	−0.4	U			R05	4.0	65De13	
^{133}Cs−^{139}Cs$_{.239}$ ^{131}Cs$_{.761}$		−1774	24	−1771	4	0.1	F			P33	2.5	86Au02	*
^{138}Cs^x−^{139}Cs$_{.496}$ ^{137}Cs$_{.504}$		770	40	800	25	0.3	U			P23	2.5	82Au01	
^{138}Ba(n,γ)^{139}Ba		4723.4	0.7	4723.43	0.04	0.0	U					69Mo13	
		4723.4	0.3			0.1	U					80Ba.A	
		4723.43	0.04			0.0	1	100	99 ^{139}Ba	MMn		90Is07	Z
		4723.20	0.14			1.6	U			Bdn		06Fi.A	
^{138}Ba(d,p)^{139}Ba		2495	10	2498.86	0.04	0.4	U			MIT		64Sp12	
		2496	15			0.2	U			Hei		67Wi08	
		2493	10			0.6	U			ANL		70Vo04	
^{139}La(γ,n)^{138}La		−8775	25	−8778.3	2.5	−0.1	U			Phi		60Ge01	
^{138}La(d,p)^{139}La		6553	3	6553.8	2.5	0.3	–			Tal		71Du02	
^{139}La(d,t)^{138}La		−2522	5	−2521.1	2.5	0.2	–			Tal		72La20	
^{138}La(d,p)^{139}La	ave.	6553.4	2.6	6553.8	2.5	0.1	1	96	94 ^{138}La			average	
^{139}I(β^-)^{139}Xe		6815	100	7174	5	3.6	C			Bwg		87Gr.A	
		6806	23			16.0	B			Bwg		92Gr06	
^{139}Xe(β^-)^{139}Cs		5020	60	5056	4	0.6	U			Trs		78Wo15	
		5062	22			−0.3	U			Bwg		92Gr06	
^{139}Cs(β^-)^{139}Ba		4290	70	4213	3	−1.1	U			Trs		78Wo15	
		4190	25			0.9	o			Gsn		80Bl.A	
		4213	5			0.0	o			Gsn		81De25	
		4214	4			−0.3	2			McG		84He.A	
		4211	5			0.4	2			Gsn		92Pr04	
^{139}Ba(β^-)^{139}La		2307	5	2312.5	2.0	1.1	–					75Fl07	*
		2336	25			−0.9	U			Gsn		81De25	
		2316	4			−0.9	–			McG		84He.A	
	ave.	2312	3			0.0	1	42	41 ^{139}La			average	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{139}Ce(ε)^{139}La		278	7	278	7	0.0	1	99	99 ^{139}Ce			Averag	*
^{139}Pr(β^+)^{139}Ce		2129	3	2129.1	3.0	0.0	1	100	98 ^{139}Pr			81Ar.A	
^{139}Nd(β^+)^{139}Pr		2787	50	2805	28	0.4	1	31	30 ^{139}Nd			75Vy02	*
^{139}Pm(β^+)^{139}Nd		4450	100	4513	26	0.6	–					77De06	*
		4540	40			−0.7	–			IRS		83Al06	
		4470	50			0.9	–			Dbn		95Ve08	
	ave.	4507	30			0.2	1	76	70 ^{139}Nd			average	
^{139}Sm(β^+)^{139}Pm		5430	150	5120	17	−2.1	U					82De06	*
		5510	150			−2.6	U			IRS		83Al06	*
^{139}Eu(β^+)^{139}Sm		6080	50	6982	17	18.0	C			Dbn		95Ve08	*
*^{139}Nd−u	$M-A$=–81707(30) keV for mixture gs+m at 231.15 keV											Nub16b	**
*^{139}Sm−u	$M-A$=–71930(28) keV for ^{139}Sm^m at 457.40 keV											Nub16b	**
*^{139}Xe−^{133}Cs$_{1.045}$	Typo in original paper, ratio should read 1.045 245 4357(175)											GAu	**
*^{133}Cs−^{139}Cs$_{.239}$ ^{131}Cs.	F : rejection based on line-shape analysis											86Au02	**
*^{139}Ba(β^-)^{139}La	E_{β^-}=2141(5) to 5/2$^+$ level at 165.8576 keV											Ens014	**
*^{139}Ce(ε)^{139}La	Average pK=0.73(0.01) to 5/2$^+$ level at 165.8576 keV in 10 references:											Ens014	**
*	pK=0.76 (0.04)											54Pr31	**
*	pK=0.73 (0.01)											56Ke23	**
*	pK=0.68 (0.02)											67Ma07	**
*	pK=0.75 (0.01)											68Ad08	**
*	pK=0.69 (0.02)											68Va08	**
*	pK=0.716(0.02)											72Ca07	**
*	pK=0.78 (0.02)											72Sc08	**
*	pK=0.726(0.010)											75Ha43	**
*	pK=0.801(0.034)											75Pl06	**
*	pK=0.705(0.020)											76Ha36	**
*^{139}Nd(β^+)^{139}Pr	E_{β^+}=1770(50); and 1170(50) from ^{139}Nd^m at 231.15 to 1/2$^-$ level at 821.98											Ens014	**
*^{139}Pm(β^+)^{139}Nd	E_{β^+}=3020(120), 2990(100) to 3/2$^+$ levels at 463.10, 402.77 keV											Ens014	**
*^{139}Sm(β^+)^{139}Pm	E_{β^+}=4100(150) to (1/2,3/2)$^+$ level at 306.69 keV											Ens014	**
*^{139}Sm(β^+)^{139}Pm	E_{β^+}=4735(+180–130) from ^{139}Sm^m at 457.40 to ^{139}Pm^m at 188.7 keV											Nub16b	**
*^{139}Eu(β^+)^{139}Sm	E_{β^+}=4600(50) to ^{139}Sm^m at 457.40 keV											Nub16b	**
^{140}Te−u		−60827	225	−60740	70	0.3	U			GT1	1.5	04Ma.A	
^{140}Te−^{130}Xe$_{1.077}$		43419	30	43180	70	−7.9	B			JY1	1.0	12Ha25	
^{140}I−u		−68181	193	−68284	13	−0.4	o			GT1	1.5	04Ma.A	
		−68463	102			0.7	o			GT2	2.5	08Kn.A	
		−68273	130			0.0	o			GT2	2.5	08Su19	
		−68202	186			−0.2	U			GT2	2.5	16Kn03	
^{140}Xe−u		−78449	103	−78354.2	2.5	0.4	o			GT2	2.5	08Kn.A	
		−78229	130			−0.4	U			GT2	2.5	08Su19	
C_{11} H_8−^{140}Ce		157116	29	157153.8	1.7	0.3	U			R05	4.0	65De13	
C_{10} ^{13}C H_7−^{140}Ce		152553	17	152683.6	1.7	1.9	U			R05	4.0	65De13	
C_{10} N H_6−^{140}Ce		144599	35	144577.8	1.7	−0.2	U			R05	4.0	65De13	
C_{10} N_2 H_8−^{140}Ce O		168207	48	168387.2	1.7	0.9	U			R05	4.0	65De13	
^{140}Nd−u		−90448	30	−90456	4	−0.3	U			GS2	1.0	05Li24	
^{140}Pm^m−u		−83532	30	−83503	14	1.0	1	22	22 ^{140}Pm^m	GS2	1.0	05Li24	
^{140}Sm−u		−81018	30	−81005	13	0.4	R			GS2	1.0	05Li24	
^{140}Gd−u		−66326	30				2			GS2	1.0	05Li24	
^{140}Te−^{133}Cs$_{1.053}$		38822	67				2			CP1	1.0	13Va12	
^{140}I−^{133}Cs$_{1.053}$		31275	13				2			CP1	1.0	13Va12	
^{140}Xe−^{133}Cs$_{1.053}$		21204.9	2.5				2			MA8	1.0	09Ne11	
^{140}Cs−^{133}Cs$_{1.053}$		16837	14	16842	9	0.4	–			MA1	1.0	99Am05	
		16857	14			−1.0	–			MA4	1.0	99Am05	
	ave.	16847	10			−0.5	1	79	79 ^{140}Cs			average	
^{140}Ba−^{133}Cs$_{1.053}$		10150	14	10166	9	1.1	1	37	37 ^{140}Ba	MA1	1.0	99Am05	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{140}Ce O$-^{133}$Cs$_{1.173}$		11269.2	2.7	11265.9	1.7	−1.2	1	40	40 ^{140}Ce	MA8	1.0	17Ma.A	
^{140}Nd O$-^{133}$Cs$_{1.173}$		15363.8	3.7				2			MA8	1.0	17Ma.A	
^{140}Pm$^m-^{133}$Cs$_{1.053}$		16064	16	16056	14	−0.5	1	78	78 ^{140}Pm^m	MA5	1.0	00Be42	
^{140}Sm$-^{133}$Cs$_{1.053}$		18557	15	18554	13	−0.2	2			MA5	1.0	00Be42	
^{140}Xe$-^{136}$Xe$_{1.029}$		17134	11	17122.1	2.5	−1.1	U			CP1	1.0	12Va02	
C$_{11}$ H$_9-^{140}$Ce		164956	40	164978.9	1.7	0.2	U			M17	2.5	66Be10	
^{140}Ce$-^{139}$La		−1029	80	−912.4	1.9	0.4	U			R05	4.0	65De13	
C$_{11}$ H$_{10}-^{140}$Ce		172765	40	172803.9	1.7	0.4	U			M17	2.5	66Be10	
^{140}Ce$-^{138}$Ce		−497	83	−542	5	−0.1	U			R05	4.0	65De13	
		−543	8			0.0	U			M17	2.5	66Be10	
^{139}Cs$-^{140}$Cs$_{.883}$ ^{131}Cs$_{.118}$		−2280	40	−2275	8	0.1	U			P23	2.5	82Au01	
^{139}Cs$-^{140}$Cs$_{.869}$ ^{132}Cs$_{.132}$		−2210	40	−2240	8	−0.3	U			P23	2.5	82Au01	
^{138}Ce(t,p)^{140}Ce		8184	15	8166	5	−1.2	–			LAl		72Mu09	
^{140}Ce(p,t)^{138}Ce		−8167	20	−8166	5	0.0	–			Brk		77Sh06	
^{138}Ce(t,p)^{140}Ce	ave.	8178	12	8166	5	−1.0	1	16	16 ^{138}Ce			average	
^{139}La(n,γ)^{140}La		5161.1	1.0	5160.98	0.04	−0.1	U					70Ju04	
		5160	1			1.0	U					72Fu10	
		5160.97	0.05			0.1	–			MMn		90Is09	Z
		5161.00	0.10			−0.2	–			Bdn		06Fi.A	
^{139}La(d,p)^{140}La		2938	3	2936.41	0.04	−0.5	U			Tal		67Ke02	
^{139}La(n,γ)^{140}La	ave.	5160.98	0.04	5160.98	0.04	0.0	1	100	57 ^{139}La			average	
^{140}Ho(p)^{139}Dy		1093.9	10.				3					99Ry04	
^{140}Xe(β^-)^{140}Cs		4060	60	4064	9	0.1	U			Trs		78Wo15	
^{140}Cs(β^-)^{140}Ba		6100	100	6219	10	1.2	U			Trs		78Wo15	
		6235	25			−0.6	o			Gsn		80Bl.A	
		6220	15			−0.1	o			Gsn		81De25	
		6212	20			0.4	–			Gsn		92Pr04	
		6199	25			0.8	–			Ida		93Gr17	
	ave.	6207	16			0.8	1	40	21 ^{140}Cs			average	
^{140}Ba(β^-)^{140}La		1060	20	1047	8	−0.7	–					49Be36	*
		1050	20			−0.2	–					59Bo61	*
		1055	30			−0.3	–					65Bu07	*
	ave.	1055	13			−0.7	1	39	38 ^{140}Ba			average	
^{140}La(β^-)^{140}Ce		3760.2	2.0	3760.2	1.7	0.0	1	75	56 ^{140}La			72Na04	*
^{140}Pr(β^+)^{140}Ce		3388	6				2					68Ab17	
^{140}Nd(ε)^{140}Pr		160	60	429	7	4.5	B					72Ba91	
^{140}Pm(β^+)^{140}Nd		6080	100	6045	24	−0.3	U					75Ke09	
		6090	40			−1.1	3			IRS		83Al06	
		6020	30			0.8	3			Dbn		95Ve08	
^{140}Pm^m(β^+)^{140}Nd		6484	70	6476	14	−0.1	U					75Ke09	*
^{140}Sm(ε)^{140}Pm		3400	300	2758	27	−2.1	U					87De04	
^{140}Eu(β^+)^{140}Sm		8400	400	8470	50	0.2	U			LBL		91Fi03	*
		8470	50				3			Dbn		95Ve08	
^{140}Gd(β^+)^{140}Eu		4800	400	5200	60	1.0	U			LBL		91Fi03	
^{140}Tb(β^+)^{140}Gd		11300	800				3			LBL		91Fi03	*
*^{140}Ba(β^-)^{140}La	E_{β^-}=1022(20), 480(20) to 2$^-$ level at 29.9641, 0$^-$ at 581.07 keV											Ens077	**
*^{140}Ba(β^-)^{140}La	E_{β^-}=1020(20), 830(50), 590(50) to 2$^-$ level at 29.9641, 2$^-$ at 162.6591,											GAu	**
*	and 1$^-$ at 467.653 keV											Ens077	**
*^{140}Ba(β^-)^{140}La	E_{β^-}=1030(30), 1020(30) to 2$^-$ level at 29.9641, 1$^-$ at 43.844 keV											Ens077	**
*^{140}La(β^-)^{140}Ce	E_{β^-}=2164(2) to 2$^+$ level at 1596.237 keV											Ens077	**
*^{140}Pm^m(β^+)^{140}Nd	E_{β^+}=3240(70) to 7$^-$ level at 2221.4 keV											Ens077	**
*^{140}Eu(β^+)^{140}Sm	From p$^+$. May be lower limit											91Fi03	**
*^{140}Tb(β^+)^{140}Gd	Lower limit											91Fi03	**
^{141}I$-$u		−64316	419	−64334	17	0.0	o			GT1	1.5	04Ma.A	
		−64549	120			0.7	o			GT2	2.5	08Kn.A	
		−64736	137			1.2	o			GT2	2.5	08Su19	
		−64445	186			0.2	U			GT3	2.5	16Kn03	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{141}Xe−u		−73092	126	−73213	3	−0.4	o			GT2	2.5	08Kn.A	
		−73560	136			1.0	U			GT2	2.5	08Su19	
^{141}Ba−u		−85603.5	7.5	−85596	6	0.9	1	58	58 ^{141}Ba	CP1	1.0	06Sa56	
C_{11} H_9−^{141}Pr		162852	41	162766.9	1.8	−0.5	U			R05	4.0	65De13	
C_{10} N H_7−^{141}Pr		150229	37	150190.8	1.8	−0.3	U			R05	4.0	65De13	
C_9 ^{13}C N H_6−^{141}Pr		145722	65	145720.6	1.8	0.0	U			R05	4.0	65De13	
^{141}Pr−u		−92374	30	−92341.6	1.8	1.1	U			GS2	1.0	05Li24	
^{141}Nd−u		−90401	30	−90385	4	0.5	U			GS2	1.0	05Li24	
		−90365	30			−0.7	U			GS2	1.0	05Li24	*
^{141}Sm−u		−81496	62	−81518	9	−0.4	U			GS2	1.0	05Li24	*
^{141}Eu−u		−75048	42	−75068	14	−0.5	U			GS2	1.0	05Li24	*
^{141}Gd−u		−67881	30	−67874	21	0.2	2			GS2	1.0	05Li24	
		−67867	30			−0.2	2			GS2	1.0	05Li24	*
^{141}Tb−u		−58552	113				2			GS2	1.0	05Li24	*
^{141}I−^{133}Cs$_{1.060}$		35887	17				2			CP1	1.0	13Va12	
^{141}Xe−^{133}Cs$_{1.060}$		27008.1	3.1				2			MA8	1.0	09Ne11	
^{141}Cs−^{133}Cs$_{1.060}$		20269	16	20266	10	−0.2	1	38	38 ^{141}Cs	MA4	1.0	99Am05	
^{141}Ba−^{133}Cs$_{1.060}$		14625	15	14624	6	0.0	–			MA1	1.0	99Am05	
		14631	16			−0.4	–			MA4	1.0	99Am05	
	ave.	14628	11			−0.3	1	27	27 ^{141}Ba			average	
^{141}Pm−^{133}Cs$_{1.060}$		13776	15				2			MA5	1.0	00Be42	
^{141}Sm−^{133}Cs$_{1.060}$		18692	14	18703	9	0.8	1	43	43 ^{141}Sm	MA5	1.0	00Be42	*
^{141}Eu−^{133}Cs$_{1.060}$		25164	15	25153	14	−0.8	1	82	82 ^{141}Eu	MA5	1.0	00Be42	*
^{141}Xe−^{136}Xe$_{1.037}$		23003	10	23006	3	0.3	U			CP1	1.0	12Va02	
^{141}Cs−^{136}Xe$_{1.037}$		16277	22	16264	10	−0.6	1	20	20 ^{141}Cs	CP1	1.0	12Va02	
^{139}Cs−^{141}Cs$_{.789}$ ^{131}Cs$_{.212}$		−3190	40	−3270	8	−0.8	U			P23	2.5	82Au01	
^{140}Cs−^{141}Cs$_{.894}$ ^{131}Cs$_{.107}$		−970	40	−1045	12	−0.7	U			P23	2.5	82Au01	
^{139}Cs−^{141}Cs$_{.767}$ ^{132}Cs$_{.234}$		−3210	40	−3183	8	0.3	U			P23	2.5	82Au01	
^{141}Cs(β^-n)^{140}Ba		735	30	721	12	−0.5	1	15	9 ^{141}Cs			84Kr.B	
^{140}Ce(n,γ)^{141}Ce		5428.6	0.6	5428.14	0.10	−0.8	U			BNn		70Ge03	Z
		5428.01	0.20			0.7	–			Ptn		80Ba.A	Z
		5428.19	0.12			−0.4	–			Bdn		06Fi.A	
^{140}Ce(d,p)^{141}Ce		3210	10	3203.58	0.10	−0.6	U			MIT		64Sp12	
		3202	15			0.1	U			Hei		67Wi08	
^{140}Ce(n,γ)^{141}Ce	ave.	5428.14	0.10	5428.14	0.10	0.0	1	100	64 ^{141}Ce			average	
^{141}Pr(γ,n)^{140}Pr		−9361	23	−9399	6	−1.6	U			Phi		60Ge01	
^{141}Ho(p)^{140}Dy		1177.4	8.	1177	7	−0.1	3					98Da03	
		1172.9	20.			0.2	3					99Ry04	*
^{141}Xe(β^-)^{141}Cs		6150	90	6280	10	1.4	U			Trs		78Wo15	
^{141}Cs(β^-)^{141}Ba		5200	80	5255	10	0.7	U			Trs		78Wo15	
		5264	15			−0.6	o			Gsn		80Bl.A	*
		5252	15			0.2	o			Gsn		81De25	
		5242	15			0.9	1	41	33 ^{141}Cs	Gsn		92Pr04	
^{141}Ba(β^-)^{141}La		3010	60	3199	7	3.2	B			Trs		78Wo15	
		3208	35			−0.3	U			Gsn		81De25	
		3217	20			−0.9	1	11	7 ^{141}Ba	McG		84He.A	
^{141}La(β^-)^{141}Ce		2430	30	2501	4	2.4	U					51Du19	
		2502	4			−0.2	1	96	96 ^{141}La	McG		84He.A	
^{141}Ce(β^-)^{141}Pr		584	3	582.7	1.2	−0.4	–					50Fr58	*
		585	4			−0.6	–					52Ko27	*
		576.4	2.0			3.2	B					55Jo02	*
		581.4	2.0			0.7	–					68Be06	*
		582.2	2.6			0.2	–					79Ha09	*
	ave.	582.5	1.3			0.2	1	83	48 ^{141}Pr			average	
^{141}Nd(β^+)^{141}Pr		1816	8	1823.0	2.8	0.9	2					73Bu21	
		1824	3			−0.3	2					76Ga.A	*

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{141}Pm(β^+)^{141}Nd		3730	60	3670	14	−1.0	U					70Ch29	*
		3640	70			0.4	U					75Ke09	
^{141}Sm(β^+)^{141}Pm		4580	50	4589	16	0.2	U					77Ke03	*
		4463	60			2.1	U			IRS		83Al06	*
		4524	80			0.8	U			IRS		93Al03	*
^{141}Eu(β^+)^{141}Sm		6030	100	6008	14	−0.2	U					77De25	*
		5950	40			1.5	–			IRS		83Al06	*
		6035	60			−0.4	U					85Af.A	
		5550	100			4.6	B			IRS		93Al03	
		5980	40			0.7	–			Dbn		95Ve08	*
	ave.	5965	28			1.5	1	26	18 ^{141}Eu			average	
*^{141}Nd−u	$M-A$=–83418(28) keV for ^{141}Nd^m at 756.51 keV											Nub16b	**
*^{141}Sm−u	$M-A$=–75825(28) keV for mixture gs+m at 175.9 keV											Nub16b	**
*^{141}Eu−u	$M-A$=–69858(28) keV for mixture gs+m at 96.45 keV											Nub16b	**
*^{141}Gd−u	$M-A$=–62840(28) keV for ^{141}Gd^m at 377.76 keV											Nub16b	**
*^{141}Tb−u	$M-A$=–54541(34) keV for mixture gs+m at 0#200 keV											Nub16b	**
*^{141}Sm−^{133}Cs$_{1.060}$	D_M=18694(14) and D_M=18878(14) from ^{141}Sm^m at 175.9 keV											Nub16b	**
*^{141}Eu−^{133}Cs$_{1.060}$	Slight (< 10%) isomeric contamination cannot be excluded											00Be42	**
*^{141}Ho(p)^{140}Dy	E_p=1230(20) from ^{141}Ho^m at 66(2) keV											Nub16b	**
*^{141}Cs(β^-)^{141}Ba	E_{β^-}=5215(15) to (5/2)$^-$ level at 48.53 keV											Ens141	**
*^{141}Ce(β^-)^{141}Pr	E_{β^-}=442(3) 444(4) 432(2) 436(2) 436.7(2.6) respectively, to 7/2$^+$ level at 145.4434											Ens141	**
*^{141}Nd(β^+)^{141}Pr	Was erroneously quoted 77Ga.A in the 1993 tables											GAu	**
*^{141}Pm(β^+)^{141}Nd	Original error 40 increased due to lack of information on calibration											GAu	**
*^{141}Sm(β^+)^{141}Pm	E_{β^+}=3180(50), 3100(50) to 3/2$^+$ level at 403.82, (1/2)$^+$ at 438.69 keV											Ens141	**
*	and E_{β^+}=1670(70), 1600(70) from ^{141}Sm^m											77Ke03	**
*	at 175.9 to 11/2$^-$ at 2091.71, (9/2,11/2,13/2)$^-$ at 2119.05											Ens141	**
*^{141}Sm(β^+)^{141}Pm	E_{β^+}=3020(60) 32% to 3/2$^+$ level at 403.82, 31% to (1/2)$^+$ 438.29 keV											Ens141	**
*^{141}Sm(β^+)^{141}Pm	Q_{β^+}=4700(80) from ^{141}Sm^m at 175.9 keV											Nub16b	**
*^{141}Eu(β^+)^{141}Sm	E_{β^+}=4620(110) to (5/2)$^+$ level at 395.56 keV, and other E_{β^+} (not given)											Ens141	**
*^{141}Eu(β^+)^{141}Sm	E_{β^+}=4925(40) to 3/2$^+$ level at 1.58 keV											Ens141	**
*^{141}Eu(β^+)^{141}Sm	E_{β^+}=4960(40) to 3/2$^+$ level at 1.58 keV											Ens141	**
^{142}I−u		−58798	268				2			GT1	1.5	04Ma.A	
^{142}Xe−u		−70247	111	−70026.9	2.9	0.8	U			GT2	2.5	08Kn.A	
^{142}Xe−^{133}Cs$_{1.068}$		30950.4	2.9				2			MA8	1.0	09Ne11	
^{142}Cs−^{133}Cs$_{1.068}$		25270	16	25277	8	0.4	–			MA4	1.0	99Am05	
		25304	23			−1.2	–			CP1	1.0	13Va12	
	ave.	25281	13			−0.3	1	33	33 ^{142}Cs			average	
^{142}Ba−^{133}Cs$_{1.068}$		17410	15	17410	6	0.0	–			MA1	1.0	99Am05	
		17420	16			−0.6	–			MA4	1.0	99Am05	
	ave.	17415	11			−0.4	1	34	34 ^{142}Ba			average	
^{142}Ba−u		−83576.8	9.1	−83567	6	1.1	1	49	49 ^{142}Ba	CP1	1.0	06Sa56	
C_{11} H_{10}−^{142}Ce		169111	15	169000.4	2.7	−1.8	U			R05	4.0	65De13	
		168955	40			0.5	U			M17	2.5	66Be10	
		168955	40			0.5	U			M17	2.5	66Be10	
C_{10} ^{13}C H_9−^{142}Ce		164528	82	164530.2	2.7	0.0	U			R05	4.0	65De13	
C_{10} N H_8−^{142}Ce		156558	42	156424.4	2.7	−0.8	U			R05	4.0	65De13	
C_{11} H_{10}−^{142}Nd		170509	36	170521.4	1.5	0.1	U			R05	4.0	65De13	
C_{10} N H_8−^{142}Nd		157870	43	157945.4	1.5	0.4	U			R05	4.0	65De13	
C_{10} O H_6−^{142}Nd		134076	36	134135.9	1.5	0.4	U			R05	4.0	65De13	
C_{10} ^{13}C H_9−^{142}Nd		166021	32	166051.2	1.5	0.2	U			R05	4.0	65De13	*
^{142}Pm−u		−87136	30	−87110	25	0.9	–			GS2	1.0	05Li24	
	ave.	−87124	27			0.5	1	89	89 ^{142}Pm			average	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{142}Sm$-^{133}$Cs$_{1.068}$		16173	14	16182	3	0.6	U			MA5	1.0	00Be42	
^{142}Eu$^m-^{133}$Cs$_{1.068}$		24909	15	24910	13	0.1	2			MA5	1.0	00Be42	
^{142}Eu$^m-$u		−76063	30	−76067	13	−0.1	R			GS2	1.0	05Li24	
^{142}Gd$-$u		−71884	30				2			GS2	1.0	05Li24	
^{142}Cs$-^{136}$Xe$_{1.044}$		21171	11	21168	8	−0.3	1	48	48 ^{142}Cs	CP1	1.0	12Va02	
^{142}Ce$-$C$_{11}$ H$_9$		−161176	40	−161175.4	2.7	0.0	U			M17	2.5	66Be10	
^{142}Nd$-$C$_{11}$ H$_9$		−162665	30	−162696.4	1.5	−0.4	U			M17	2.5	66Be10	
^{142}Ce$-^{140}$Ce		3818	3	3803.5	2.7	−1.9	U			M17	2.5	66Be10	
^{142}Ce$-^{138}$Ce		3644	35	3261	6	−2.7	B			R05	4.0	65De13	
^{139}Cs$-^{142}$Cs$_{.685}$ ^{132}Cs$_{.316}$		−4840	40	−4858	6	−0.2	U			P23	2.5	82Au01	
^{140}Cs$-^{142}$Cs$_{.789}$ ^{132}Cs$_{.212}$		−2950	40	−2938	10	0.1	U			P23	2.5	82Au01	
^{141}Cs$-^{142}$Cs$_{.794}$ ^{137}Cs$_{.206}$		−580	40	−661	11	−0.8	U			P23	2.5	82Au01	
^{138}Cs$^x-^{142}$Cs$_{.194}$ ^{137}Cs$_{.806}$		550	40	589	25	0.4	U			P23	2.5	82Au01	
^{140}Cs$-^{142}$Cs$_{.329}$ ^{139}Cs$_{.671}$		260	40	300	9	0.4	U			P23	2.5	82Au01	
^{141}Cs$-^{142}$Cs$_{.662}$ ^{139}Cs$_{.338}$		−410	40	−520	10	−1.1	U			P23	2.5	82Au01	
^{141}Cs$-^{142}$Cs$_{.496}$ ^{140}Cs$_{.504}$		−640	40	−669	11	−0.3	U			P23	2.5	82Au01	
		−663	19			−0.1	U			P33	2.5	86Au02	
^{142}Ce(α)^{138}Ba		1545	200	1303.5	2.5	−1.2	U					57Ri43	
^{140}Ce(t,p)^{142}Ce		4112	5	4117.9	2.5	1.2	1	25	20 ^{142}Ce	LAl		72Mu09	
^{142}Ce(p,t)^{140}Ce		−4170	20	−4117.9	2.5	2.6	U			Osa		70Ya05	
^{142}Nd(p,t)^{140}Nd		−9150	20	−9352	4	−10.1	B			Osa		71Ya10	*
^{142}Ce(γ,n)^{141}Ce		−7240	70	−7171.6	2.5	1.0	U			Phi		60Ge01	
^{142}Ce(d,t)^{141}Ce		−909	15	−914.4	2.5	−0.4	U			Mtr		72Le17	
^{141}Pr(n,γ)^{142}Pr		5843.14	0.10	5843.15	0.08	0.1	–			MMn		81Ke11	Z
		5843.16	0.12			−0.1	–			Bdn		06Fi.A	
^{141}Pr(d,p)^{142}Pr		3626	10	3618.58	0.08	−0.7	U			MIT		64Sp12	
^{141}Pr(n,γ)^{142}Pr	ave.	5843.15	0.08	5843.15	0.08	0.0	1	100	52 ^{141}Pr			average	
^{142}Xe(β^-)^{142}Cs		5040	100	5285	8	2.4	U			Trs		78Wo15	
^{142}Cs(β^-)^{142}Ba		7230	70	7328	8	1.4	U			Trs		78Wo15	
		7329	20			−0.1	o			Gsn		81De25	
		7280	40			1.2	U			Bwg		87Gr.A	
		7315	15			0.8	1	31	19 ^{142}Cs	Gsn		92Pr04	
^{142}Ba(β^-)^{142}La		2200	25	2182	8	−0.7	1	11	6 ^{142}La			83Ch39	
		2216	5			−6.8	C			McG		84He.A	
^{142}La(β^-)^{142}Ce		4517	25	4509	6	−0.3	U					65Pr03	
		4510	6			−0.2	1	95	94 ^{142}La	McG		84He.A	
^{142}Pr(β^-)^{142}Nd		2164	2	2162.5	1.4	−0.7	–					66Be12	
		2158	3			1.5	–					75Ra09	
	ave.	2162.2	1.7			0.2	1	72	52 ^{142}Pr			average	
^{142}Pm(β^+)^{142}Nd		4800	80	4808	24	0.1	R					60Ma.A	
		4880	80			−0.9	R			IRS		83Al06	
		4880	160			−0.5	U			LBL		91Fi03	
^{142}Sm(β^+)^{142}Pm		2050	70	2156	24	1.5	1	12	11 ^{142}Pm			60Ma.A	
		2100	400			0.1	U			LBL		91Fi03	
^{142}Eu(β^+)^{142}Sm		8000	300	7670	30	−1.1	U					75Ke08	
		7400	100			2.7	U					82Gr.A	
		7000	300			2.2	U			LBL		91Fi03	
		7673	30				2			Dbn		94Po26	
^{142}Eu^m(β^+)^{142}Sm		8150	100	8130	13	−0.2	U					75Ke08	*
		8174	50			−0.9	U			IRS		83Al06	*
		7480	100			6.5	B			IRS		93Al03	*
		8150	60			−0.3	U			Dbn		94Po26	*
^{142}Gd(β^+)^{142}Eu		4200	300	4350	40	0.5	U			LBL		91Fi03	
^{142}Tb(β^+)^{142}Gd		10400	700				3			LBL		91Fi03	
^{142}Dy(β^+)^{142}Tb		7100	200	6440#	200#	−3.3	D			LBL		91Fi03	*

*C$_{10}$ ^{13}C H$_9-^{142}$Nd	Original 1002055(32) is certainly a typo; rebuilt from M=141.907760(36)u	WgM127	**
*^{142}Nd(p,t)^{140}Nd	Disagrees strongly with ^{140}Nd$-$u	AHW	**
*^{142}Eu^m(β^+)^{142}Sm	E_{β^+}=4760(100) 4782(50) respectively, to 7$^-$ level at 2372.1 keV	Ens118	**
*^{142}Eu^m(β^+)^{142}Sm	Measured half-life 73.4(0.5) s corresponds to ^{142}Eu^m	GAu	**
*^{142}Eu^m(β^+)^{142}Sm	E_{β^+}=4756(60) to 7$^-$ level at 2372.1 keV	Ens118	**
*^{142}Dy(β^+)^{142}Tb	Trends from Mass Surface TMS suggest ^{142}Dy 660 more bound	GAu	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{143}I$-$u		$-$53849	495	$-$54350#	220#	$-$0.4	D			GT3	2.5	16Kn03	*
^{143}Xe$-$u		$-$64649	290	$-$64630	5	0.0	o			GT1	1.5	04Ma.A	
		$-$64858	108			0.8	o			GT2	2.5	08Kn.A	
		$-$64684	133			0.2	U			GT2	2.5	08Su19	
^{143}Xe$-^{133}$Cs$_{1.075}$		37008.7	5.0				2			MA8	1.0	09Ne11	
^{143}Cs$-$u		$-$72771	117	$-$72653	8	0.4	U			GT2	2.5	08Kn.A	
^{143}Cs$-^{133}$Cs$_{1.075}$		28985.6	8.5	28986	8	0.1	1	91	91 ^{143}Cs	CP1	1.0	13Va12	
^{143}Ba$-^{133}$Cs$_{1.075}$		22268	16	22264	7	$-$0.2	1	21	21 ^{143}Ba	MA1	1.0	99Am05	
^{143}Ba$-$u		$-$79375.0	8.5	$-$79375	7	0.0	1	73	73 ^{143}Ba	CP1	1.0	06Sa56	
^{143}La$-$u		$-$83918.1	8.7	$-$83921	8	$-$0.3	1	82	82 ^{143}La	CP1	1.0	06Sa56	
C$_{10}$ N H$_9-^{143}$Nd		163719	31	163679.4	1.5	$-$0.3	U			R05	4.0	65De13	
C$_{10}$ O H$_7-^{143}$Nd		139814	42	139870.0	1.5	0.3	U			R05	4.0	65De13	
^{143}Pm$-^{133}$Cs$_{1.075}$		12567	15	12577	3	0.7	U			MA5	1.0	00Be42	
^{143}Sm$-^{133}$Cs$_{1.075}$		16268	15	16274	3	0.4	U			MA5	1.0	00Be42	
^{143}Sm$-$u		$-$85347	30	$-$85365	3	$-$0.6	U			GS2	1.0	05Li24	*
^{143}Eu$-^{133}$Cs$_{1.075}$		21947	14	21938	12	$-$0.7	2			MA5	1.0	00Be42	
^{143}Eu$-$u		$-$79706	30	$-$79701	12	0.2	R			GS2	1.0	05Li24	
^{143}Gd$-$u		$-$73012	56	$-$73250	220	$-$4.2	C			GS2	1.0	05Li24	*
^{143}Tb$-$u		$-$64879	64	$-$64860	60	0.3	U			GS2	1.0	05Li24	*
^{143}Tb$-^{85}$Rb$_{1.682}$		83507	55				2			SH1	1.0	07Ra37	*
^{143}Dy$-^{85}$Rb$_{1.682}$		92364	14				2			SH1	1.0	07Ra37	*
^{143}Nd ^{35}Cl$-^{141}$Pr ^{37}Cl		5116	4	5111.6	1.5	$-$0.4	U			H21	2.5	70Ma05	
^{143}Nd$-$C$_{11}$ H$_{10}$		$-$168422	30	$-$168430.4	1.5	$-$0.1	U			M17	2.5	66Be10	
^{143}Nd$-^{142}$Nd		2322	46	2090.99	0.07	$-$1.3	U			R05	4.0	65De13	
		2084	2			1.4	U			M17	2.5	66Be10	
^{143}Nd$-$C$_{11}$ H$_9$		$-$160594	30	$-$160605.4	1.5	$-$0.2	U			M17	2.5	66Be10	
^{141}Cs$-^{143}$Cs$_{.493}$ ^{139}Cs$_{.507}$		$-$230	40	$-$198	10	0.3	U			P23	2.5	82Au01	
		$-$115	22			$-$1.5	U			P33	2.5	86Au02	
^{142}Cs$-^{143}$Cs$_{.497}$ ^{141}Cs$_{.504}$		647	15	657	9	0.3	U			P33	2.5	86Au02	
^{143}Nd(n,α)^{140}Ce		9699	15	9720.3	1.6	1.4	U			ILL		75Em.A	
^{143}Nd(p,t)^{141}Nd		$-$7450	20	$-$7470	3	$-$1.0	U			Osa		71Ya10	
^{142}Ce(n,γ)^{143}Ce		5145.9	0.5	5144.80	0.09	$-$2.2	U					76Ge02	
		5144.78	0.15			0.1	–			Ptn		80Ba.A	Z
		5144.81	0.12			$-$0.1	–			Bdn		06Fi.A	
^{142}Ce(d,p)^{143}Ce		2945	15	2920.23	0.09	$-$1.7	U			Mtr		72Le17	
^{142}Ce(n,γ)^{143}Ce	ave.	5144.80	0.09	5144.80	0.09	0.0	1	100	79 ^{142}Ce			average	
^{142}Nd(n,γ)^{143}Nd		6123.62	0.08	6123.57	0.07	$-$0.6	–			MMn		82Is05	Z
		6123.41	0.14			1.1	–			Bdn		06Fi.A	
^{142}Nd(d,p)^{143}Nd		3916	15	3899.00	0.07	$-$1.1	U			Kop		67Ch16	
		3902	15			$-$0.2	U			Tal		67Ne04	
		3902	15			$-$0.2	U			Hei		67Wi08	
^{142}Nd(n,γ)^{143}Nd	ave.	6123.57	0.07	6123.57	0.07	0.0	1	100	79 ^{142}Nd			average	
^{142}Nd(^{3}He,d)^{143}Pm		$-$1099	25	$-$1193.8	2.7	$-$3.8	B			Oak		71Wi04	
		$-$1195	5			0.2	1	29	29 ^{143}Pm	McM		80St10	*
^{143}Cs(β^-)^{143}Ba		6250	90	6262	10	0.1	o			Gsn		81De25	*
		6240	70			0.3	U			Bwg		87Gr.A	
		6270	25			$-$0.3	1	15	9 ^{143}Cs	Gsn		92Pr04	
^{143}Ba(β^-)^{143}La		4240	50	4234	10	$-$0.1	U					79Sc11	
		4259	40			$-$0.6	U			Gsn		81De25	
		4210	70			0.3	U			Bwg		87Gr.A	
^{143}La(β^-)^{143}Ce		3425	17	3435	8	0.6	1	20	18 ^{143}La			84Is09	*
^{143}Ce(β^-)^{143}Pr		1460.6	2.	1461.6	1.9	0.5	1	87	77 ^{143}Ce			77Ra18	*
^{143}Pr(β^-)^{143}Nd		932	2	934.0	1.4	1.0	–					49Fe18	
		935	2			$-$0.5	–					76Ra33	
	ave.	933.5	1.4			0.3	1	94	90 ^{143}Pr			average	
^{143}Pm(β^+)^{143}Nd		1000	70	1041.6	2.7	0.6	U					67Va01	*

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{143}Sm(β^+)^{143}Pm	3492	30	3443	4	−1.6	U					66Be21	
	3437	30			0.2	U			IRS		83Al06	
	3500	60			−0.9	U			IRS		93Al03	
	3461	40			−0.4	U			Dbn		94Po26	
^{143}Eu(β^+)^{143}Sm	5100	50	5276	11	3.5	B					74Ch21	
	5160	60			1.9	o			IRS		83Ve.A	
	5240	70			0.5	o			IRS		83Al06	
	5250	80			0.3	U			IRS		93Al03	
	5236	30			1.3	R			Dbn		94Po26	
^{143}Gd(β^+)^{143}Eu	6010	200				3			IRS		93Al03	*
*^{143}I−u	Trends from Mass Surface TMS suggest ^{143}I 750 less bound										GAu	**
*^{143}Sm−u	$M-A$=–78746(28) keV for ^{143}Sm^m at 753.99 keV										Nub16b	**
*^{143}Gd−u	$M-A$=–67934(28) keV for mixture gs+m at 152.6 keV										Nub16b	**
*^{143}Tb−u	$M-A$=–60434(32) keV for mixture gs+m at 0#100 keV										Nub16b	**
*	outweighed by next item before correcting for isomeric mixture										GAu	**
*^{143}Tb−^{85}Rb$_{1.682}$	$M-A$=–60419.5(7.8) keV for mixture gs+m at 0#100 keV										Nub16b	**
*^{143}Dy−^{85}Rb$_{1.682}$	D_M=92354(17) and D_M=92705(14) for ^{143}Dy^m at 310.7 keV										Nub16b	**
*^{142}Nd(^{3}He,d)^{143}Pm	Based on ^{146}Nd(^{3}He,d)^{147}Pm Q =–87.6(0.9) keV										AHW	**
*^{143}Cs(β^-)^{143}Ba	E_{β^-}=6070(50) and 5847(100) to 3/2$^-$ level at 228.83 keV										Ens123	**
*^{143}La(β^-)^{143}Ce	E_{β^-}=3419(17) 64% to 3/2$^-$ ground state, 29% to 7/2$^-$ level at 18.9 keV										Ens123	**
*^{143}Ce(β^-)^{143}Pr	E_{β^-}=1110(2) to 3/2$^+$ level at 350.622 keV										Ens123	**
*^{143}Pm(β^+)^{143}Nd	pK=0.806(0.023) to 3/2$^-$ level at 742.05 keV, and p$^+$ $<1\times10^{-6}$										Ens123	**
*^{143}Gd(β^+)^{143}Eu	Q_{β^+}=6160(200) from ^{143}Gd^m at 152.6 keV										Nub16b	**
^{144}Xe−^{133}Cs$_{1.083}$	41340.6	5.7				2			MA8	1.0	09Ne11	
^{144}Cs−^{133}Cs$_{1.083}$	34488	33	34471	22	−0.5	1	43	43 ^{144}Cs	CP1	1.0	13Va12	
^{144}Ba−^{133}Cs$_{1.083}$	25347	15	25350	8	0.2	1	26	26 ^{144}Ba	MA1	1.0	99Am05	
^{144}Ba−u	−77045.3	9.1	−77045	8	0.0	1	71	71 ^{144}Ba	CP1	1.0	06Sa56	
^{144}La−u	−80337.1	19.3	−80354	14	−0.9	2			CP1	1.0	06Sa56	
	−80373	20			0.9	2			GS3	1.0	12Ch19	
C$_{10}$ O H$_8$−^{144}Nd	147408	28	147422.0	1.5	0.1	U			R05	4.0	65De13	
	147384	29			0.3	U			R05	4.0	65De13	
C$_9$ ^{13}C N H$_9$−^{144}Nd	166777	28	166761.3	1.5	−0.1	U			R05	4.0	65De13	
C$_{10}$ H$_8$ O−^{144}Sm	145450	50	145508.5	1.7	0.3	U			R04	4.0	64De15	
C$_9$ ^{13}C H$_9$ N−^{144}Sm	164955	46	164847.8	1.7	−0.6	U			R04	4.0	64De15	
^{144}Eu−^{133}Cs$_{1.083}$	21223	17	21215	12	−0.5	1	46	46 ^{144}Eu	MA5	1.0	00Be42	
^{144}Eu−u	−81117	30	−81180	12	−2.1	1	15	15 ^{144}Eu	GS2	1.0	05Li24	
^{144}Gd−u	−77037	30				2			GS2	1.0	05Li24	
^{144}Tb−u	−66955	30				2			GS2	1.0	05Li24	*
^{144}Dy−u	−60746	33	−60730	8	0.5	U			GS2	1.0	05Li24	
^{144}Dy−^{85}Rb$_{1.694}$	88697.7	7.7				2			SH1	1.0	07Ra37	
^{144}Ho−^{85}Rb$_{1.694}$	101537.9	9.1				2			SH1	1.0	07Ra37	
^{144}Nd ^{35}Cl−^{142}Nd ^{37}Cl	5329	3	5314.08	0.12	−1.2	U			H12	4.0	64Ba15	
	5308	3			0.8	U			H21	2.5	70Ma05	
^{144}Sm−^{144}Nd	1951	3	1913.5	0.9	−3.1	B			H19	4.0	64Mc11	
	1911.9	1.1			0.6	–			H25	2.5	72Ba08	
	1913.68	0.94			−0.2	–			SH1	1.0	11Go23	
ave.	1913.5	0.9			0.0	1	91	85 ^{144}Sm			average	
^{144}Nd−^{143}Nd	269	25	272.98	0.06	0.0	U			R05	4.0	65De13	
	273	3			0.0	U			M17	2.5	66Be10	
^{144}Nd−^{142}Nd	2366	3	2363.97	0.09	−0.3	U			M17	2.5	66Be10	
^{142}Cs−^{144}Cs$_{.592}$ ^{139}Cs$_{.409}$	−60	40	−51	14	0.1	U			P23	2.5	82Au01	
^{143}Cs−^{144}Cs$_{.745}$ ^{140}Cs$_{.255}$	−920	50	−891	17	0.2	U			P23	2.5	82Au01	
^{142}Cs−^{144}Cs$_{.329}$ ^{141}Cs$_{.671}$	290	40	276	11	−0.1	U			P23	2.5	82Au01	
^{143}Cs−^{144}Cs$_{.662}$ ^{141}Cs$_{.338}$	−651	21	−616	16	0.7	U			P33	2.5	86Au02	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.		Lab	F	Reference	
^{143}Cs$-^{144}$Cs$_{.497}$ ^{142}Cs$_{.504}$		−790	50	−690	13	0.8	U				P23	2.5	82Au01	
^{144}Nd(α)^{140}Ce		1882.4	30.	1903.2	1.6	0.7	U						61Ma05	
		1882.4	20.			1.0	U						65Is01	
^{144}Sm(^{3}He,^{6}He)^{141}Sm		−8693	12	−8693	9	0.0	1	51	50	^{141}Sm	MSU		78Pa11	
^{142}Ce(t,p)^{144}Ce		3582	15	3560	3	−1.5	U				LAl		72Mu09	
^{142}Nd(t,p)^{144}Nd		5450	30	5458.82	0.09	0.3	U				Ald		72Ch11	
^{144}Nd(p,t)^{142}Nd		−5470	20	−5458.82	0.09	0.6	U				Osa		71Ya10	
^{144}Sm(p,t)^{142}Sm		−10649	15	−10639.9	2.7	0.6	U				Ham		73Oe02	
^{143}Nd(n,γ)^{144}Nd		7817.11	0.07	7817.04	0.05	−1.0	–				MMn		82Is05	Z
		7816.93	0.08			1.4	–				ILn		91Ro.A	Z
		7816.94	0.23			0.4	U				Bdn		06Fi.A	
^{144}Nd(d,t)^{143}Nd		−1555	15	−1559.81	0.05	−0.3	U				Ors		73Ga01	
^{143}Nd(n,γ)^{144}Nd	ave.	7817.03	0.05	7817.04	0.05	0.1	1	99	61	^{144}Nd			average	
^{143}Nd(^{3}He,d)^{144}Pm		−804	5	−790.6	2.6	2.7	B				McM		80St10	*
^{143}Nd(^{3}He,d)^{144}Pm$-^{142}$Nd()^{143}Pm		402.7	1.6	403.2	1.5	0.3	1	91	49	^{143}Pm			75Ma04	
^{144}Sm(t,α)^{143}Pm		13542	25	13520.0	2.7	−0.9	U				Ald		68Ha13	
^{144}Sm(d,t)^{143}Sm		−4262	10	−4262.5	2.3	0.0	U						72Ja28	
^{144}Sm(p,d)^{143}Sm$-^{148}$Gd()^{147}Gd		−1536	2	−1536.0	2.0	0.0	1	100	100	^{143}Sm			86Ru04	
^{144}Tm(p)^{143}Er		1712.0	16.				3				ORp		05Gr32	
^{144}Cs(β^-)^{144}Ba		8451	30	8496	20	1.5	o				Gsn		81De25	
		8560	80			−0.8	–				Bwg		87Gr.A	
		8462	35			1.0	–				Gsn		92Pr04	
	ave.	8480	30			0.6	1	41	38	^{144}Cs			average	
^{144}Ba(β^-)^{144}La		3055	70	3083	15	0.4	U				Bwg		87Gr.A	
^{144}La(β^-)^{144}Ce		4300	100	5582	13	12.8	B						79Ik07	
		5435	90			1.6	U				Bwg		87Gr.A	
		5540	100			0.4	o				Kur		02Sh.B	
		5540	100			0.4	U				Kur		02Sh16	
^{144}Ce(β^-)^{144}Pr		315.6	1.5	318.6	0.8	2.0	3						66Da04	
		320	1			−1.4	3						76Ra33	
^{144}Pr(β^-)^{144}Nd		2996	3	2997.4	2.4	0.5	2						59Po77	
		3000	4			−0.6	2						66Da04	
^{144}Eu(β^+)^{144}Sm		6330	30	6346	11	0.5	–				IRS		83Al06	
		6400	80			−0.7	U				IRS		93Al03	
		6287	30			2.0	–				Dbn		94Po26	
^{144}Sm(p,n)^{144}Eu		−7110.0	30.	−7129	11	−0.6	–						65Me12	
^{144}Eu(β^+)^{144}Sm	ave.	6315	17	6346	11	1.8	1	39	39	^{144}Eu			average	
^{144}Gd(β^+)^{144}Eu		4300	400	3860	30	−1.1	U						70Ar04	
*^{144}Tb−u		$M-A$=–61971(28) keV for ^{144}Tb^m at 396.9 keV											Nub16b	**
*^{143}Nd(^{3}He,d)^{144}Pm		Based on ^{146}Nd(^{3}He,d)^{147}Pm Q =–87.6(0.9) keV											AHW	**
^{145}Xe$-^{133}$Cs$_{1.090}$		47777	12				2				MA8	1.0	09Ne11	
^{145}Cs$-^{133}$Cs$_{1.090}$		38588	12	38586	10	−0.1	–				MA8	1.0	08We02	
		38583	17			0.2	–				CP1	1.0	13Va12	
	ave.	38586	10			0.0	1	99	99	^{145}Cs			average	
^{145}Ba−u		−72481.6	9.1				2				CP1	1.0	06Sa56	
^{145}La−u		−78188.8	13.3	−78192	13	−0.2	1	98	98	^{145}La	CP1	1.0	06Sa56	
^{145}Ce−u		−82771.8	92.2	−82730	40	0.4	1	16	16	^{145}Ce	CP1	1.0	06Sa56	
C_{10} O $H_9$$-^{145}$Nd		152641	55	152760.7	1.5	0.5	U				R05	4.0	65De13	
		152653	30			0.9	U				R05	4.0	65De13	
C_9 ^{13}C O $H_8$$-^{145}$Nd		148231	31	148290.5	1.5	0.5	U				R05	4.0	65De13	
^{145}Pm−u		−87255	30	−87244	3	0.4	U				GS2	1.0	05Li24	
^{145}Sm−u		−86535	30	−86582.8	1.7	−1.6	U				GS2	1.0	05Li24	
^{145}Eu$-^{133}$Cs$_{1.090}$		19338	17	19330	3	−0.5	U				MA5	1.0	00Be42	
^{145}Gd−u		−78287	30	−78290	21	−0.1	–				GS2	1.0	05Li24	
		−78294	30			0.1	–				GS2	1.0	05Li24	*
	ave.	−78291	21			0.0	1	99	99	^{145}Gd			average	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{145}Tb−u		−71134	266	−71270	120	−0.5	1	19	19 ^{145}Tb	GS2	1.0	05Li24	*
^{145}Dy−u		−62575	49	−62526	7	1.0	U			GS2	1.0	05Li24	*
^{145}Dy−^{85}Rb$_{1.706}$		87960.7	7.0				2			SH1	1.0	07Ra37	*
^{145}Ho−^{85}Rb$_{1.706}$		97754.1	8.0				2			SH1	1.0	07Ra37	
^{145}Nd ^{35}Cl$_2$−^{141}Pr ^{37}Cl$_2$		10828	7	10821.0	1.5	−0.4	U			H21	2.5	70Ma05	
^{145}Nd ^{35}Cl−^{143}Nd ^{37}Cl		5744	5	5709.42	0.26	−1.7	U			H12	4.0	64Ba15	
		5703	4			0.6	U			H21	2.5	70Ma05	
^{145}Nd−^{144}Nd		2582	21	2486.33	0.25	−1.1	U			R05	4.0	65De13	
		2480	2			1.3	U			M17	2.5	66Be10	
^{145}Nd−^{143}Nd		2862	40	2759.31	0.25	−0.6	U			R05	4.0	65De13	
		2751	3			1.1	U			M17	2.5	66Be10	
^{142}Cs−^{145}Cs$_{.490}$ ^{139}Cs$_{.511}$		240	50	150	9	−0.7	U			P23	2.5	82Au01	
^{144}Cs−^{145}Cs$_{.828}$ ^{139}Cs$_{.173}$		450	50	415	21	−0.3	U			P23	2.5	82Au01	
^{143}Cs−^{145}Cs$_{.592}$ ^{140}Cs$_{.409}$		−700	80	−610	10	0.5	U			P23	2.5	82Au01	
^{143}Cs−^{145}Cs$_{.493}$ ^{141}Cs$_{.507}$		−310	40	−309	10	0.0	U			P23	2.5	82Au01	
^{144}Cs−^{145}Cs$_{.662}$ ^{142}Cs$_{.338}$		320	18	319	21	0.0	1	21	20 ^{144}Cs	P33	2.5	86Au02	
^{144}Cs−^{145}Cs$_{.497}$ ^{143}Cs$_{.503}$		600	40	616	21	0.2	U			P23	2.5	82Au01	
^{145}Pm(α)^{141}Pr		2303.6	40.	2323.3	2.9	0.5	U					62Nu01	
^{145}Nd(n,α)^{142}Ce		8706	30	8747.6	2.2	1.4	U			ILL		75Em04	
^{145}Nd(p,t)^{143}Nd		−5100	20	−5090.56	0.24	0.5	U			Osa		71Ya10	
^{144}Nd(n,γ)^{145}Nd		5755.3	0.7	5755.31	0.23	0.0	–					75Na.A	
		5756.9	2.0			−0.8	U					77Mc09	
		5755.26	0.25			0.2	–			Bdn		06Fi.A	
^{144}Nd(d,p)^{145}Nd		3521	15	3530.75	0.23	0.6	U			Hei		67Wi08	
		3538	15			−0.5	U			Ors		73Ga01	
^{144}Nd(n,γ)^{145}Nd	ave.	5755.26	0.24	5755.31	0.23	0.2	1	95	89 ^{145}Nd			average	
^{144}Nd(^{3}He,d)^{145}Pm		−680	5	−685.0	2.5	−1.0	1	26	25 ^{145}Pm	McM		80St10	*
^{144}Nd(^{3}He,d)^{145}Pm−^{143}Nd()^{144}Pm		105.2	1.6	105.7	1.5	0.3	1	91	57 ^{144}Pm			75Ma04	
^{144}Sm(n,γ)^{145}Sm		6757.1	0.3	6757.10	0.30	0.0	1	99	92 ^{145}Sm			79Wa22	
^{144}Sm(d,p)^{145}Sm		4533	12	4532.53	0.30	0.0	U			Tal		65Ke09	
		4547	15			−1.0	U			Kop		67Ch16	
^{144}Sm(^{3}He,d)^{145}Eu		−2184	4	−2178.5	2.7	1.4	–			Mun		82Sc25	
		−2174	4			−1.1	–					84Ru.A	
	ave.	−2179.0	2.8			0.2	1	92	91 ^{145}Eu			average	
^{145}Dy(εp)^{144}Gd		6000	500	6228	29	0.5	U					83La.A	*
^{145}Tm(p)^{144}Er		1740.1	10.	1736	7	−0.4	3			ORp		98Ba13	
		1732.1	10.			0.4	3			Arp		07Se06	
^{145}Cs(β^-)^{145}Ba		7358	70	7462	12	1.5	U			Gsn		81De25	
		7930	75			−6.2	C			Bwg		87Gr.A	
		7865	50			−8.1	B			Gsn		92Pr04	
^{145}Ba(β^-)^{145}La		4925	80	5319	15	4.9	C			Bwg		87Gr.A	
^{145}La(β^-)^{145}Ce		4110	80	4230	40	1.5	1	19	18 ^{145}Ce	Bwg		87Gr.A	
^{145}Ce(β^-)^{145}Pr		2490	100	2560	30	0.7	–					67Ho19	*
		2600	100			−0.4	–					80Ya07	*
		2530	50			0.6	–			Bwg		87Gr.A	
	ave.	2540	40			0.6	1	68	67 ^{145}Ce			average	
^{145}Pr(β^-)^{145}Nd		1805	10	1806	7	0.1	1	50	50 ^{145}Pr			59Dr.A	
^{145}Pm(ε)^{145}Nd		143	15	164.5	2.5	1.4	U					59Br65	*
		150	5			2.9	B					74To04	*
^{145}Sm(ε)^{145}Pm		607	6	616.2	2.5	1.5	–					71My01	*
		622	5			−1.2	–					83Vo10	*
	ave.	616	4			0.1	1	44	41 ^{145}Pm			average	
^{145}Eu(β^+)^{145}Sm		2710	15	2659.8	2.7	−3.3	B					68Ad04	*
		2647	12			1.1	U					83Sc28	*
^{145}Gd(β^+)^{145}Eu		5070	60	5065	20	−0.1	U					79Fi07	
		5090	90			−0.3	o			IRS		83Ve.A	*
		5070	80			−0.1	U			IRS		85Al13	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.		Lab	F	Reference	
^{145}Gd(ε)^{145}Eu		5000	70	5065	20	0.9	U						77Ho18	
^{145}Tb(β^+)^{145}Gd		6700	200	6540	110	−0.8	–						86Ve.A	*
		6400	150			0.9	–				IRS		93Al03	
	ave.	6510	120			0.2	1	81	81	^{145}Tb			average	
^{145}Dy(β^+)^{145}Tb^m		7300	200				3				IRS		93Al03	
*^{145}Gd−u		$M-A$=–72181(28) keV for ^{145}Gd^m at 749.1 keV											Nub16b	**
*^{145}Tb−u		$M-A$=–65881(28) keV for mixture gs+m at 760(220) keV											Nub16b	**
*^{145}Dy−u		$M-A$=–58230(30) keV for mixture gs+m at 118.2 keV											Nub16b	**
*^{145}Dy−^{85}Rb$_{1.706}$		D_M=88054.7(6.8) μu for mixture gs+m at 118.2 keV with ratio R=0.741(13)											Nub16b	**
*^{144}Nd(^{3}He,d)^{145}Pm		Based on ^{146}Nd(^{3}He,d)^{147}Pm Q =–87.6(0.9) keV											AHW	**
*^{145}Dy(εp)^{144}Gd		As read from graph											AHW	**
*^{145}Ce(β^-)^{145}Pr		E_{β^-}=1700(100) 1810(100) respectively, to (3/2)$^-$ level at 786.91; and other E_{β^-}											Ens092	**
*^{145}Pm(ε)^{145}Nd		LM/K=0.85(0.03) to 3/2$^-$ level at 67.167 keV											Ens092	**
*^{145}Pm(ε)^{145}Nd		pK=0.554(0.025) to 5/2$^-$ level at 72.486 keV, and other pK											Ens092	**
*^{145}Sm(ε)^{145}Pm		pK=0.27(0.03) 0.35(0.025) respectively, to 3/2$^+$ level at 492.31 keV											Ens092	**
*^{145}Eu(β^+)^{145}Sm		E_{β^+}=794(15) to 3/2$^+$ level at 893.788 keV											Ens092	**
*^{145}Eu(β^+)^{145}Sm		pK=0.72(0.02) to (5/2$^-$,7/2$^-$) level at 2508.31 and 9$^-$ at 2513.37 levels											Ens092	**
*^{145}Gd(β^+)^{145}Eu		E_{β^+}=2310(90) to 3/2$^+$ level at 1758.03 keV, and other E_{β^+}											Ens092	**
*^{145}Tb(β^+)^{145}Gd		E_{β^+}=3300(200) to (9/2$^-$) level at 2382.3(0.2) keV											Ens092	**
^{146}Xe−^{133}Cs$_{1.098}$		52332	26				2				MA8	1.0	09Ne11	
^{146}Cs−^{133}Cs$_{1.098}$		44437.4	3.3	44436	3	−0.5	2				MA8	1.0	15At.A	
		44421.8	9.2			1.5	2				CP1	1.0	13Va12	
^{146}Ba−u		−69618	112	−69724	22	−0.4	o				GT2	2.5	08Kn.A	
		−69963	141			0.7	U				GT2	2.5	08Su19	
		−69717.5	23.7			−0.3	1	89	89	^{146}Ba	CP1	1.0	06Sa56	
^{146}La−u		−74252	86	−74130	40	1.4	1	18	18	^{146}La	CP1	1.0	06Sa56	*
^{146}Ce−u		−81191.8	20.8	−81198	18	−0.3	–				CP1	1.0	06Sa56	
		−81171	40			−0.7	–				GS3	1.0	12Ch19	
	ave.	−81187	18			−0.6	1	90	90	^{146}Ce			average	
C_{12} H_2−^{146}Nd		102453	31	102527.6	1.5	0.6	U				R05	4.0	65De13	
C_{10} O H_{10}−^{146}Nd		160017	27	160042.4	1.5	0.2	U				R05	4.0	65De13	
		159971	50			0.4	U				R05	4.0	65De13	
C_9 ^{13}C O H_9−^{146}Nd		155525	35	155572.2	1.5	0.3	U				R05	4.0	65De13	
^{146}Pm−u		−85289	30	−85298	5	−0.3	U				GS2	1.0	05Li24	
^{146}Eu−^{133}Cs$_{1.098}$		21029	15	21025	6	−0.3	1	19	19	^{146}Eu	MA5	1.0	00Be42	
^{146}Tb−u		−72464	77	−72750	50	−3.7	C				GS2	1.0	05Li24	*
^{146}Dy−u		−67150	30	−67155	7	−0.2	U				GS2	1.0	05Li24	
^{146}Dy−^{85}Rb$_{1.718}$		84390.0	7.2	84390	7	0.0	1	100	100	^{146}Dy	SH1	1.0	07Ra37	
^{146}Ho−^{133}Cs$_{1.098}$		48797	10	48807	7	1.0	1	50	50	^{146}Ho	SH1	1.0	07Ra37	
^{146}Ho−^{85}Rb$_{1.718}$		96549	10	96539	7	−1.0	1	50	50	^{146}Ho	SH1	1.0	07Ra37	
^{146}Er−^{85}Rb$_{1.718}$		103960.4	9.2	103964	7	0.3	1	61	61	^{146}Er	SH1	1.0	07Ra37	
^{146}Nd ^{35}Cl−^{144}Nd ^{37}Cl		6003	3	5979.75	0.27	−1.9	U				H12	4.0	64Ba15	
		5966	4			1.4	U				H21	2.5	70Ma05	
		5982.8	1.1			−1.1	U				H25	2.5	72Ba08	
^{146}Nd−^{145}Nd		526	33	543.30	0.09	0.1	U				R05	4.0	65De13	
		536	2			1.5	U				M17	2.5	66Be10	
^{146}Nd−^{144}Nd		3147	36	3029.64	0.26	−0.8	U				R05	4.0	65De13	
		3026	3			0.5	U				M17	2.5	66Be10	
^{145}Cs−^{146}Cs$_{.828}$ ^{140}Cs$_{.173}$		−580	80	−928	9	−1.7	U				P23	2.5	82Au01	
^{144}Cs−^{146}Cs$_{.329}$ ^{143}Cs$_{.671}$		320	50	336	21	0.1	U				P23	2.5	82Au01	
^{145}Cs−^{146}Cs$_{.662}$ ^{143}Cs$_{.338}$		−440	30	−565	10	−1.7	U				P33	2.5	86Au02	
^{145}Cs−^{146}Cs$_{.497}$ ^{144}Cs$_{.503}$		−730	30	−740	13	−0.1	U				P33	2.5	86Au02	
^{146}Sm(α)^{142}Nd		2529.5	20.	2528.8	2.8	0.0	U						64Nu02	
		2622.0	30.			−3.1	B						66Fr11	
		2524.2	4.			1.1	1	47	46	^{146}Sm			87Me08	Z

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{144}Nd(t,p)^{146}Nd		4834	30	4838.75	0.24	0.2	U			Ald		72Ch11	
^{144}Sm(t,p)^{146}Sm		6681	25	6691.6	2.8	0.4	U			Ald		66Bj01	
^{144}Sm(^{3}He,p)^{146}Eu		2797	12	2794	6	−0.2	1	25	24 ^{146}Eu			84Ru.A	
^{144}Sm(^{3}He,n)^{146}Gd		977	30	980	4	0.1	U			Bld		79Al07	
^{144}Sm(^{12}C,^{10}Be)^{146}Gd		−18476	25	−18487	4	−0.4	U			MSU		80Pa07	
^{146}Nd(d,^{3}He)^{145}Pr		−3095	10	−3095	7	0.0	1	50	49 ^{145}Pr	KVI		79Sa.A	
^{145}Nd(n,γ)^{146}Nd		7565.28	0.10	7565.23	0.09	−0.5	–			MMn		82Is05	Z
		7565.05	0.18			1.0	–			Bdn		06Fi.A	
	ave.	7565.23	0.09			0.1	1	99	88 ^{146}Nd			average	
^{146}Sm(^{3}He,α)^{145}Sm		12161	5	12161.3	2.9	0.1	1	33	30 ^{146}Sm			86Ru04	*
^{146}Tm(p)^{145}Er		895.2	8.	896	6	0.1	o			ORp		03Gi10	
		896.2	8.			−0.1	3			Arp		05Ro40	
		895.2	8.			0.1	3			ORp		06Ta08	
^{146}Tm^m(p)^{145}Er		1197.3	5.	1199.3	1.0	0.4	U			Dap		93Li18	
		1198.3	10.			0.1	o			ORp		01Ry01	
		1200.3	8.			−0.1	U			Arp		05Ro40	
		1199.3	1.				3			ORp		06Ta08	
^{146}Tm^m(p)^{145}Er^m		994.5	4.				4			ORp		06Ta08	
^{146}Tm^n(p)^{145}Er^m		1126.8	5.	1127.8	1.0	0.2	U			Dap		93Li18	
		1127.8	10.			0.0	o			ORp		01Ry01	
		1129.8	8.			−0.3	U			Arp		05Ro40	
		1127.8	1.				5			ORp		06Ta08	
^{146}Cs(β^-)^{146}Ba		9300	900	9637	21	0.4	o			Gsn		81De25	
		9310	60			5.4	B			Bwg		87Gr.A	
		9375	50			5.2	B			Gsn		92Pr04	
^{146}Ba(β^-)^{146}La		4280	100	4100	30	−1.8	–			Gsn		81De25	*
		4030	50			1.5	–			Bwg		87Gr.A	
	ave.	4080	40			0.5	1	56	45 ^{146}La			average	
^{146}La(β^-)^{146}Ce		6175	100	6590	30	4.1	B			Gsn		81De25	*
		6380	30			6.8	B			Trs		82Br23	*
		6620	70			−0.5	–			Bwg		87Gr.A	
		6580	80			0.1	–					01Ko07	*
	ave.	6600	50			−0.3	1	43	37 ^{146}La			average	
^{146}Ce(β^-)^{146}Pr		1100	80	1050	30	−0.7	–					54Be10	*
		1050	100			0.0	–					67Ho19	*
		951	50			1.9	–					80Ya07	*
		1065	100			−0.2	–					81Eb01	*
	ave.	1010	40			1.0	1	80	76 ^{146}Pr			average	
^{146}Pr(β^-)^{146}Nd		4150	200	4240	30	0.5	U					54Be10	*
		4250	200			0.0	U					65Ra02	*
		4080	100			1.6	–					68Da13	*
		4140	100			1.0	–					78Ik03	*
	ave.	4110	70			1.9	1	24	24 ^{146}Pr			average	
^{146}Pm(β^-)^{146}Sm		1542	3				2					74Sc06	*
^{146}Eu(β^+)^{146}Sm		3871	10	3879	6	0.8	–					62Fu16	*
		3871	20			0.4	–					64Ta11	*
		3896	20			−0.9	–			Got		88Sa06	*
	ave.	3875	8			0.4	1	52	46 ^{146}Eu			average	
^{146}Gd(β^+)^{146}Eu		1757	30	1032	7	−24.2	B					70Ag01	*
		1300	200			−1.3	U					81Ka07	*
^{146}Tb(β^+)^{146}Gd		8240	150	8320	40	0.5	o			IRS		83Al06	
		7910	150			2.7	U			IRS		93Al03	*
		8310	50			0.2	1	80	80 ^{146}Tb	Dbn		94Po26	
^{146}Dy(β^+)^{146}Tb		5160	100	5210	50	0.5	1	20	20 ^{146}Tb	IRS		93Al03	

*^{146}La−u	D_M=–74182.5(30.6) μu for mixture gs+m at 130(130) keV; $M-A$=–69100.6(28.5) keV	Nub16b	**
*^{146}Tb−u	$M-A$=–67424(28) keV for mixture gs+m at 150#100 keV	Nub16b	**
*^{146}Sm(^{3}He,α)^{145}Sm	$Q-Q$(^{148}Gd(^{3}He,α))=–567(5) keV	AHW	**
*^{146}Ba(β^-)^{146}La	E_{β^-}=3910(100) to 1$^+$ level at 372.4 keV, and other E_{β^-}	Ens97c	**
*^{146}La(β^-)^{146}Ce	E_{β^-}=5919(100) 6120(30) respectively, to 2$^+$ level at 258.46 keV, and other E_{β^-}	Ens97c	**
*^{146}La(β^-)^{146}Ce	E_{β^-}=6580(100) and 6320(80) to ground state and 2$^+$ level at 258.46 keV	01Ko07	**
*^{146}Ce(β^-)^{146}Pr	E_{β^-}=750(80) 700(100) 600(50) 715(100) respectively, to 1$^+$ at 351.78 keV	Ens97c	**
*^{146}Pr(β^-)^{146}Nd	E_{β^-}=3700(200) 3800(200) respectively, to 2$^+$ level at 453.77 keV	Ens97c	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
$*^{146}$Pr(β^-)^{146}Nd	E_{β^-}=4100(200), 3600(100), 2100(100) to ground state, 2^+ 453.77, 2^+ 1978.45 levels											Ens97c	**
$*^{146}$Pr(β^-)^{146}Nd	E_{β^-}=4150(150), 3700(100), 2160(100) to ground state, 2^+ 453.77, 2^+ 1978.45 levels											Ens97c	**
$*^{146}$Pm(β^-)^{146}Sm	E_{β^-}=795(3) to 2^+ level at 747.2 keV											Ens97c	**
$*^{146}$Eu(β^+)^{146}Sm	E_{β^+}=2107(11) 2100(20) respectively, to 2^+ level at 747.2 keV, and other E_{β^+}											Ens97c	**
$*^{146}$Eu(β^+)^{146}Sm	e/β^+ to 2045.8 level											Ens97c	**
$*^{146}$Gd(β^+)^{146}Eu	E_{β^+}=350(30) to 1^- level at 384.79 keV											Ens97c	**
$*^{146}$Gd(β^+)^{146}Eu	pK to 690.7 level, p$^+$ $<1\times10^{-4}$ to 384.8 level, see ^{150}Dy(β^+)											Ens97c	**
$*^{146}$Tb(β^+)^{146}Gd	Reported half-life 24.1(0.5)s corresponds to ^{146}Tb^m											GAu	**
*	Q_{β^-}=8060(100) keV from ^{146}Tb^m at estimated 150#100 keV											Nub16b	**
^{147}Cs$-^{133}$Cs$_{1.105}$		48640	64	48737	9	1.5	U			MA8	1.0	08We02	
		48737.1	9.0				2			MA8	1.0	15At.A	
^{147}Ba$-$u		−64696.1	21.2				2			CP1	1.0	06Sa56	
^{147}La$-$u		−71582.2	11.5				2			CP1	1.0	06Sa56	
^{147}Ce$-$u		−77309.2	9.6	−77310	9	−0.1	1	92	92 ^{147}Ce	CP1	1.0	06Sa56	
C_8 H_5 N $O_2$$-^{147}$Sm		117197	40	117124.3	1.5	−0.5	U			R04	4.0	64De15	
C_9 H_7 $O_2$$-^{147}$Sm		129703	17	129700.4	1.5	0.0	U			R04	4.0	64De15	
^{147}Eu$-^{133}$Cs$_{1.105}$		21215	16	21227.9	2.8	0.8	U			MA5	1.0	00Be42	
^{147}Tb$-$u		−75934	34	−75945	9	−0.3	U			GS2	1.0	05Li24	*
^{147}Tb$-^{133}$Cs$_{1.105}$		28533	12	28530	9	−0.2	1	53	53 ^{147}Tb	SH1	1.0	07Ra37	*
^{147}Dy$-$u		−68909	30	−68917	10	−0.3	U			GS2	1.0	05Li24	
		−68908	30			−0.3	U			GS2	1.0	05Li24	*
^{147}Dy$-^{133}$Cs$_{1.105}$		35558.3	9.5				2			SH1	1.0	07Ra37	*
^{147}Ho$-$u		−59944	30	−59858	5	2.9	B			GS2	1.0	05Li24	
^{147}Ho$-^{133}$Cs$_{1.105}$		44613.7	7.8	44618	5	0.5	1	47	47 ^{147}Ho	SH1	1.0	07Ra37	
^{147}Ho$-^{85}$Rb$_{1.729}$		92661.6	7.4	92658	5	−0.5	1	53	53 ^{147}Ho	SH1	1.0	07Ra37	
^{147}Er$-^{133}$Cs$_{1.105}$		54452	42	54440	40	−0.3	o			SH1	1.0	07Ra37	*
^{147}Er$-^{85}$Rb$_{1.729}$		102480	41				2			SH1	1.0	07Ra37	*
^{147}Tm$-^{85}$Rb$_{1.729}$		113900	11	113895	7	−0.4	1	45	45 ^{147}Tm	SH1	1.0	07Ra37	
^{147}Eu$-^{142}$Sm$_{1.035}$		4516	17	4516	4	0.0	U			MA7	1.0	01Bo59	
^{147}Sm ^{35}Cl$-^{145}$Nd ^{37}Cl		5305	4	5275.0	0.4	−1.9	U			H12	4.0	64Ba15	
		5264	4			1.1	U			H21	2.5	70Ma05	
^{145}Cs$-^{147}$Cs$_{.705}$ ^{140}Cs$_{.296}$		−170	170	−644	11	−1.1	U			P23	2.5	82Au01	
^{144}Cs$-^{147}$Cs$_{.490}$ ^{141}Cs$_{.511}$		80	250	227	21	0.2	U			P23	2.5	82Au01	
^{145}Cs$-^{147}$Cs$_{.493}$ ^{143}Cs$_{.507}$		−87	22	−146	11	−1.1	U			P33	2.5	86Au02	
^{147}Sm(α)^{143}Nd		2292.5	10.	2311.0	0.4	1.8	U					62Si14	Z
		2296.7	5.			2.9	U					66Ma05	Z
		2300.8	5.			2.0	U					70Gu14	Z
		2310.5	0.5			0.9	1	50	28 ^{147}Sm			16Ca.1	
^{147}Eu(α)^{143}Pm		2990.6	10.	2991	3	0.0	U					62Si14	Z
		2981.5	20.			0.5	U					64To04	Z
		2987.2	5.			0.7	1	37	22 ^{143}Pm	Dba		67Go32	Z
^{147}Sm(n,α)^{144}Nd		10114	8	10128.0	0.4	1.8	U			ILL		74Em01	
^{144}Sm(^{12}C,^{9}Be)^{147}Gd		−17832	30	−17957.0	1.2	−4.2	B			MSU		80Pa07	
		−17921	25			−1.4	U			Ors		85Be24	
^{144}Sm(^{14}N,^{11}Be)^{147}Tb		−28280	50	−28537	8	−5.1	B			Hei		85Gy01	
^{147}Sm(p,t)^{145}Sm		−6287	8	−6275.9	0.9	1.4	U			Min		72De47	
^{146}Nd(n,γ)^{147}Nd		5292.19	0.15	5292.20	0.09	0.1	–			ILn		75Ro16	Z
		5292.19	0.11			0.1	–			Bdn		06Fi.A	
^{146}Nd(d,p)^{147}Nd		3070	15	3067.63	0.09	−0.2	U			Hei		67Wi08	
^{146}Nd(n,γ)^{147}Nd	ave.	5292.19	0.09	5292.20	0.09	0.1	1	99	89 ^{147}Nd			average	
^{147}Sm(d,t)^{146}Sm		−98	10	−84.1	2.8	1.4	U			McM		75Si03	
^{147}Tb(p)^{146}Gd		−1945	18	−1946	9	0.0	1	23	19 ^{147}Tb			87Sc.A	
^{147}Tm(p)^{146}Er		1062.2	6.	1059	3	−0.6	o					82Kl03	
		1058.2	3.3			0.1	1	94	55 ^{147}Tm	Dap		93Se04	*
		1067.3	15.			−0.6	U			ORp		03Gi10	
^{147}Tm^m(p)^{146}Er		1124.7	6.	1120	3	−0.7	2					84Ho.A	
		1118.5	3.9			0.5	2			Dap		93Se04	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{147}Ba(β^-)^{147}La		5750	50	6414	22	13.3	C			Bwg		87Gr.A	
^{147}La(β^-)^{147}Ce		4945	55	5336	14	7.1	C			Bwg		87Gr.A	
		5150	40			4.6	B			Kur		95Ik03	
		5370	100			−0.3	o			Kur		02Sh.B	
		5366	40			−0.8	U			Kur		09Ha.B	
^{147}Ce(β^-)^{147}Pr		3290	40	3430	16	3.5	C			Bwg		87Gr.A	
		3426	20			0.2	1	60	52 ^{147}Pr	Kur		95Ik03	
		3380	100			0.5	U			Kur		02Sh.B	
^{147}Pr(β^-)^{147}Nd		2700	200	2703	16	0.0	U					64Ho03	
		2790	100			−0.9	U					81Ya06	*
		2711	28			−0.3	–			Kur		95Ik03	
	ave.	2697	23			0.2	1	48	48 ^{147}Pr			average	
^{147}Nd(β^-)^{147}Pm		894.6	1.0	895.5	0.5	0.9	1	23	13 ^{147}Pm			67Ca18	*
^{147}Pm(β^-)^{147}Sm		223.2	0.5	224.09	0.29	1.8	–					50La04	
		224.3	1.3			−0.2	–					58Ha32	
		224.5	0.4			−1.0	–					66Hs01	
	ave.	224.0	0.3			0.3	1	93	87 ^{147}Pm			average	
^{147}Eu(β^+)^{147}Sm		1767	10	1721.6	2.3	−4.5	B					67Ad03	
		1723	3			−0.5	1	58	57 ^{147}Eu			80Bu04	
		1702	13			1.5	U					84Sc18	*
		1692	18			1.6	U					84Sc18	
^{147}Gd(β^+)^{147}Eu		2185	5	2187.8	2.5	0.6	1	25	19 ^{147}Eu			80Vy01	*
		2199	17			−0.7	U					84Sc18	*
^{147}Tb(β^+)^{147}Gd		4700	90	4614	8	−1.0	U					83Ve06	*
		4490	60			2.1	U			Got		85Ti01	
		4560	50			1.1	U					Averag	*
		4609	15			0.4	1	29	28 ^{147}Tb	GSI		91Ke11	*
		4509	60			1.8	U			IRS		93Al03	*
^{147}Dy(β^+)^{147}Tb		6334	60	6547	12	3.5	B			IRS		83Al06	*
		6480	100			0.7	U			IRS		83Al18	*
		6334	60			3.5	C					85Af.A	*
		6480	100			0.7	U			IRS		85Al08	*

*^{147}Tb−u	$M-A$=–70707(28) keV for mixture gs+m at 50.6 keV	Nub16b	**
*^{147}Tb−^{133}Cs$_{1.105}$	D_M=28574(12) μu for mixture gs+m at 50.6 keV with ratio R=0.741(13)	Nub16b	**
*^{147}Dy−u	$M-A$=–63437(28) keV for ^{147}Dy^m at 750.5 keV	Nub16c	**
*^{147}Dy−^{133}Cs$_{1.105}$	D_M=35567(14) and D_M=36358.4(9.5) for ^{147}Dy^m at 750.5 keV	Nub16b	**
*^{147}Er−^{133}Cs$_{1.105}$	D_M=54531(11) μu for mixture gs+m at 100#50 keV with ratio R=0.741(13)	Nub16b	**
*	error due to excitation energy, use only next item	GAu	**
*^{147}Er−^{85}Rb$_{1.729}$	D_M=102559.5(8.3) μu for mixture gs+m at 100#50 keV with R=0.741(13)	Nub16b	**
*^{147}Tm(p)^{146}Er	Q_p from E_p=1051.0(3.3), no screening correction should be applied	GAu	**
*^{147}Pr(β^-)^{147}Nd	E_{β^-}=2760(100) to 49.93, 1450(100) to 1310.7 and 1350.5 keV	Ens092	**
*^{147}Nd(β^-)^{147}Pm	E_{β^-}=803.5(1.0) to 5/2$^+$ level at 91.1047 keV	Ens092	**
*^{147}Eu(β^+)^{147}Sm	p$^+$ =2.9(0.3)×10^{-3} to 3/2$^-$ level at 197.284 keV	Ens092	**
*^{147}Eu(β^+)^{147}Sm	pK=0.724(0.026) to (3/2$^+$,5/2$^+$) level at 1548.634 keV	Ens092	**
*^{147}Gd(β^+)^{147}Eu	E_{β^+}=933(5) to 7/2$^+$ level at 229.323 keV	Ens092	**
*^{147}Gd(β^+)^{147}Eu	pK=0.694(0.016) to 2073 level, recalculated by AHW	84Sc18	**
*^{147}Tb(β^+)^{147}Gd	E_{β^+}=2460(80) to 3/2$^+$ level at 1152.56 and 1/2$^+$ at 1292.3 keV, reinterpretd	Ens092	**
*^{147}Tb(β^+)^{147}Gd	Average KLM/β^+=2.03(0.15) → E_{β^+}=2190(50) from ^{147}Tb^m at 50.6(0.9) to 9/2$^-$	Ens092	**
*	level at 1397.00 from 3 references (no side-feeding correction applied):	AHW	**
*	p$^+$ =0.32(0.07) gives KLM/β^+=2.2(0.8)	84Ha.B	**
*	KLM/β^+=2.17(0.30)	85Al08	**
*	β^+/K=0.59(0.05) gives KLM/β^+=1.99(0.17)	85Sc09	**
*^{147}Tb(β^+)^{147}Gd	Q_{β^+}=4660(15) 4560(60) respectively, from ^{147}Tb^m at 50.6(0.9) keV	Nub16b	**
*^{147}Dy(β^+)^{147}Tb	E_{β^+}=6012(60) from ^{147}Dy^m at 750.5 to ^{147}Tb^m at 50.6(0.9) keV	Nub16b	**
*^{147}Dy(β^+)^{147}Tb	Q_{β^+}=7180(100) from ^{147}Dy^m at 750.5 to ^{147}Tb^m at 50.6(0.9) keV	Nub16b	**
*^{147}Dy(β^+)^{147}Tb	E_{β^+}=6012(60) from ^{147}Dy^m at 750.5 to ^{147}Tb^m at 50.6(0.9) keV	Nub16b	**
*^{147}Dy(β^+)^{147}Tb	Q_{β^+}=7180(100) from ^{147}Dy^m at 750.5 to ^{147}Tb^m at 50.6(0.9) keV	Nub16b	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{148}Cs$-^{133}$Cs$_{1.113}$		54871	14				2			MA8	1.0	15At.A	
^{148}La$-$u		−67320.6	20.9				2			CP1	1.0	06Sa56	
^{148}Ce$-$u		−75578.2	13.0	−75576	12	0.2	1	85	85 ^{148}Ce	CP1	1.0	06Sa56	
^{148}Pr$-$u		−77781	41	−77870	16	−2.2	B			CP1	1.0	06Sa56	*
C$_{12}$ H$_4-^{148}$Nd		114261	34	114401.0	2.3	1.0	U			R05	4.0	65De13	
C$_9$ N O H$_{10}-^{148}$Nd		159186	59	159339.9	2.3	0.7	U			R05	4.0	65De13	
C$_9$ H$_8$ O$_2-^{148}$Sm		137540	26	137600.5	1.5	0.6	U			R04	4.0	64De15	
C$_9$ H$_{10}$ N O$-^{148}$Sm		161275	31	161409.9	1.5	1.1	U			R04	4.0	64De15	
C$_8$ ^{13}C H$_7$ O$_2-^{148}$Sm		133030	60	133130.3	1.5	0.4	U			R04	4.0	64De15	
^{148}Eu$-^{133}$Cs$_{1.113}$		23315	15	23321	11	0.4	1	51	51 ^{148}Eu	MA5	1.0	00Be42	
^{148}Tb$-$u		−75692	41	−75725	13	−0.8	U			GS2	1.0	05Li24	*
^{148}Dy$-^{133}$Cs$_{1.113}$		32394	16	32382	9	−0.8	–			MA5	1.0	00Be42	
		32380	14			0.1	–			SH1	1.0	07Ra37	
	ave.	32386	11			−0.4	1	79	79 ^{148}Dy			average	
^{148}Ho$-$u		−62201	100	−62260	90	−0.6	U			GS2	1.0	05Li24	*
^{148}Ho$-^{85}$Rb$_{1.741}$		91318	90				2			SH1	1.0	07Ra37	*
^{148}Er$-^{133}$Cs$_{1.113}$		49967	11				2			SH1	1.0	07Ra37	
^{148}Tm$-^{133}$Cs$_{1.113}$		63616	11				2			SH1	1.0	07Ra37	
^{148}Eu$-^{142}$Sm$_{1.042}$		6451	17	6446	11	−0.3	1	41	38 ^{148}Eu	MA7	1.0	01Bo59	
^{148}Nd ^{35}Cl$_2-^{144}$Nd ^{37}Cl$_2$		12690	9	12706.4	1.8	0.7	U			H21	2.5	70Ma05	
		12703.6	2.1			0.5	1	12	11 ^{148}Nd	H25	2.5	72Ba08	
^{148}Sm ^{35}Cl$_2-^{144}$Sm ^{37}Cl$_2$		8710	10	8722.9	0.9	0.3	U			H12	4.0	64Ba15	
		8721.4	2.6			0.2	U			H25	2.5	72Ba08	
^{148}Nd ^{35}Cl$-^{146}$Nd ^{37}Cl		6740	5	6726.7	1.8	−0.7	U			H12	4.0	64Ba15	
		6721	4			0.6	U			H21	2.5	70Ma05	
		6723.8	2.7			0.4	U			H25	2.5	72Ba08	
		6725.7	0.9			0.4	1	62	61 ^{148}Nd	H26	2.5	73Me28	
^{148}Sm ^{35}Cl$-^{146}$Nd ^{37}Cl		4656	3	4656.6	0.5	0.1	U			H12	4.0	64Ba15	
^{148}Sm$-^{147}$Sm		110	44	−75.05	0.28	−1.1	U			R04	4.0	64De15	
^{148}Nd$-^{146}$Nd		3866	50	3776.6	1.8	−0.4	U			R05	4.0	65De13	
		3773	3			0.5	U			M17	2.5	66Be10	
^{145}Cs$-^{148}$Cs$_{.392}$ ^{143}Cs$_{.608}$		−370	90	−519	11	−0.7	U			P33	2.5	86Au02	
^{148}Sm(α)^{144}Nd		2014.6	20.	1986.8	0.4	−1.4	U					70Gu14	
		1987.3	0.5			−1.0	1	52	26 ^{144}Nd			16Ca.1	
^{148}Eu(α)^{144}Pm		2703.2	30.	2692	10	−0.4	1	11	10 ^{148}Eu			64To04	
^{148}Gd(α)^{144}Sm		3271.29	0.03	3271.29	0.03	0.0	1	100	96 ^{148}Gd			73Go29	
^{146}Nd(t,p)^{148}Nd		4139	30	4143.0	1.7	0.1	U			Ald		72Ch11	
^{148}Sm(p,t)^{146}Sm		−6011	8	−6000.8	2.8	1.3	1	12	12 ^{146}Sm	Min		72De47	
		−6018	15			1.1	U			Ham		74Oe03	
^{148}Gd(p,t)^{146}Gd		−7844	14	−7844	4	0.0	U			LAl		83Fl05	
^{148}Gd(p,t)^{146}Gd$-^{65}$Cu()^{63}Cu		1500	4	1500	4	0.1	1	90	89 ^{146}Gd	Liv		86Ma40	
^{148}Nd(d,^{3}He)^{147}Pr		−3726	40	−3759	16	−0.8	R			KVI		79Sa.A	
^{148}Nd(d,t)^{147}Nd		−1072	4	−1075.3	1.7	−0.8	1	17	17 ^{148}Nd	McM		77St22	
^{147}Sm(n,γ)^{148}Sm		8139.8	1.2	8141.23	0.26	1.2	U					69Re04	Z
		8141.1	1.5			0.1	U					70Bu19	Z
		8141.8	0.8			−0.7	–					71Gr37	Z
		8141.3	0.3			−0.2	–			Bdn		06Fi.A	
^{147}Sm(d,p)^{148}Sm		5920	10	5916.66	0.26	−0.3	U			Tal		64Ke03	
^{148}Sm(d,t)^{147}Sm		−1890	15	−1884.00	0.26	0.4	U			Kop		67Ve04	
^{147}Sm(n,γ)^{148}Sm	ave.	8141.36	0.28	8141.23	0.26	−0.5	1	84	51 ^{147}Sm			average	
^{148}Gd(p,d)^{147}Gd		−6755	5	−6759.1	1.2	−0.8	U					86Ru04	
^{148}Gd(p,d)^{147}Gd$-^{148}$Sm()^{147}Sm		−842	2	−842.5	1.2	−0.2	–					86Ru04	
^{148}Gd(d,t)^{147}Gd$-^{148}$Sm()^{147}Sm		−843	2			0.3	–					86Ru04	
^{148}Gd(^{3}He,α)^{147}Gd$-^{148}$Sm()^{147}Sm		−842	3			−0.2	–					86Ru04	
^{148}Gd(p,d)^{147}Gd$-^{148}$Sm()^{147}S	ave.	−842.4	1.3			−0.1	1	89	86 ^{147}Gd			average	
^{148}Ba(β^-)^{148}La		5115	60				3			Bwg		90Gr10	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{148}La(β^-)^{148}Ce		7310	140	7690	22	2.7	U			Trs		82Br23	*
		7255	55			7.9	B			Bwg		90Gr10	
		7650	100			0.4	U			Kur		02Sh.B	
		7732	70			−0.6	U			Kur		09Ha.B	
^{148}Ce(β^-)^{148}Pr		2060	75	2137	13	1.0	U			Bwg		87Gr.A	
		2140	14			−0.2	1	81	66 ^{148}Pr	Kur		95Ik03	
^{148}Pr(β^-)^{148}Nd		4800	200	4873	15	0.4	U					79Ik06	
		4965	100			−0.9	U			Bwg		87Gr.A	
		4890	50			−0.3	–					88Ka14	
		4880	30			−0.2	–			Kur		95Ik03	
		4930	100			−0.6	U			Kur		02Sh.B	
	ave.	4883	26			−0.4	1	34	34 ^{148}Pr			average	
^{148}Pm(β^-)^{148}Sm		2480	15	2471	6	−0.6	R					62Sc04	*
		2475	30			−0.1	U					63Ba31	*
^{148}Eu(β^+)^{148}Sm		3122	30	3037	10	−2.8	U					63Ba32	*
		3150	30			−3.8	B					70Ag01	*
^{148}Tb(β^+)^{148}Gd		5630	80	5732	13	1.3	F					76Cr.B	*
		5835	70			−1.5	U					83Ve06	*
		5710	100			0.2	U			Got		85Sc09	*
		5390	100			3.4	B			Got		85Ti01	*
		5760	80			−0.3	U			IRS		93Al03	*
		5752	40			−0.5	1	10	10 ^{148}Tb	GSI		95Ke05	*
^{148}Dy(β^+)^{148}Tb		2660	60	2678	10	0.3	U					81Sc21	
		2805	60			−2.1	U					81Sp03	*
		2700	60			−0.4	U			IRS		82Al.A	
		2700	60			−0.4	U					82Ve.A	
		2722	60			−0.7	U					83Ve06	*
		2835	95			−1.7	U					84Ha.B	*
		2740	60			−1.0	U			Got		85Sc09	*
		2682	10			−0.4	1	92	86 ^{148}Tb	GSI		95Ke05	*
^{148}Ho^m(β^+)^{148}Dy		9400	250	10120#	130#	2.9	B			IRS		93Al03	

*^{148}Pr−u	D_M=–77739.3(30.6) μu for mixture gs+m at 76.80; $M-A$=–72413.7(28.5) keV	Nub16b	**
*^{148}Tb−u	$M-A$=–70462(28) keV for mixture gs+m at 90.1 keV	Nub16b	**
*^{148}Ho−u	$M-A$=–57815(30) keV for mixture gs+m at 250#100 keV	Nub16b	**
*	outweighed by next item before correcting for isomeric mixture	GAu	**
*^{148}Ho−^{85}Rb$_{1.741}$	D_M=91517.5(9.5) μu for mixture gs+m at 250#100 keV with R=0.74(15)	Nub16b	**
*^{148}La(β^-)^{148}Ce	E_{β^-}=5862(100) supposed to go to levels around E=1450(100) keV	90Gr10	**
*^{148}Pm(β^-)^{148}Sm	E_{β^-}=2460(20) 1020(15) to ground state, 1$^-$ level at 1465.137 keV	Ens144	**
*^{148}Pm(β^-)^{148}Sm	E_{β^-}=2480(30) 1930(30) 1020(30) to ground state, 2$^+$ at 550.255, 1$^-$ at 1465.137 keV	Ens144	**
*	and E_{β^-}=400(30) from ^{148}Pm^m at 137.9 to 6$^+$ level at 2194.061 keV	Nub16b	**
*^{148}Eu(β^+)^{148}Sm	E_{β^+}=920(30) to 1180.261 keV 4$^+$ level	Ens144	**
*^{148}Eu(β^+)^{148}Sm	E_{β^+}=540(30) to 1594.247 keV 5$^-$ level, and other E_{β^+}	Ens144	**
*^{148}Tb(β^+)^{148}Gd	E_{β^+}=4610(80) assumed to ground state	76Cr.B	**
*	F : since ^{148}Tb ground state 2$^-$, transition to ^{148}Gd ground state weak	AHW	**
*^{148}Tb(β^+)^{148}Gd	E_{β^+}=2210(70) from ^{148}Tb^m at 90.1 to 8$^+$ level at 2693.35 keV and	Nub16b	**
*	E_{β^+}=4560(80) mainly to 2$^+$ at 784.433 keV. Conflicting, not used	Ens144	**
*^{148}Tb(β^+)^{148}Gd	p$^+$ =0.271(0.10) $\rightarrow$ E_{β^+}=1920(30) from ^{148}Tb^m at 90.1 to 8$^+$ at 2693.35 keV	Ens144	**
*	but assuming 5(5)% side-feeding; see reference	90Sa32	**
*^{148}Tb(β^+)^{148}Gd	KL/β^+=1.54(0.09) to 1863.42 level; yields Q_{β^+}=5295(45) keV	85Ti01	**
*	but assuming 7(7)% side-feeding; see 1990Sa32	AHW	**
*^{148}Tb(β^+)^{148}Gd	Q_{β^+}=5700(80); and 5910(80) from ^{148}Tb^m at 90.1 keV	Nub16b	**
*^{148}Tb(β^+)^{148}Gd	Q_{β^+}=5750(40); and 5846(50) from ^{148}Tb^m at 90.1 keV	Nub16b	**
*^{148}Dy(β^+)^{148}Tb	p$^+$ =0.069(0.014) to 1$^+$ level at 620.24 keV, recalculated Q	Ens144	**
*^{148}Dy(β^+)^{148}Tb	E_{β^+}=1040(60), 1120(60) to 1$^+$ level at 620.24 keV	Ens144	**
*^{148}Dy(β^+)^{148}Tb	p$^+$ =0.055(0.015) to 1$^+$ level at 620.24 keV	Ens144	**
*^{148}Dy(β^+)^{148}Tb	β^+/K=0.045(0.005) to 1$^+$ level at 620.24 keV, gives Q_{β^+}=2680(30) keV	Ens144	**
*^{148}Dy(β^+)^{148}Tb	GSI average of E_{β^+}=1043(10) and 1036(10) of reference	91Ke11	**
*	to 1$^+$ level at 620.24 keV	Ens144	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{149}Ba−u		−57027	188				2			GT3	2.5	16Kn03	
^{149}Ce−u		−71573.1	11.0				2			CP1	1.0	06Sa56	
^{149}Pr−u		−76263.9	10.6				2			CP1	1.0	06Sa56	
C_8 ^{13}C H_8 O_2−^{149}Sm		138597	29	138593.0	1.4	0.0	U			R04	4.0	64De15	
C_9 H_{11} N O−^{149}Sm		166820	33	166872.6	1.4	0.4	U			R04	4.0	64De15	
C_8 ^{13}C H_{10} N O−^{149}Sm		162408	46	162402.4	1.4	0.0	U			R04	4.0	64De15	
^{149}Eu−^{133}Cs$_{1.120}$		23849	17	23831	4	−1.1	U			MA5	1.0	00Be42	
^{149}Tb−u		−76730	32	−76746	4	−0.5	U			GS2	1.0	05Li24	∗
^{149}Dy−^{133}Cs$_{1.120}$		33278	109	33219	10	−0.5	U			MA5	1.0	00Be42	
^{149}Dy−u		−72698	30	−72675	10	0.8	U			GS2	1.0	05Li24	∗
^{149}Ho−u		−66179	34	−66180	13	0.0	1	14	14 ^{149}Ho	GS2	1.0	05Li24	∗
^{149}Er−u		−57694	30				2			GS2	1.0	05Li24	∗
^{149}Eu−^{142}Sm$_{1.049}$		6909	18	6888	5	−1.2	U			MA7	1.0	01Bo59	
^{149}Dy−^{142}Sm$_{1.049}$		16249	16	16276	10	1.7	1	39	36 ^{149}Dy	MA7	1.0	01Bo59	
^{149}Sm ^{35}Cl−^{147}Sm ^{37}Cl		5257	4	5237.4	1.0	−1.2	U			H12	4.0	64Ba15	
		5231	3			0.9	U			H21	2.5	70Ma05	
		5239.8	0.8			−1.2	1	24	14 ^{147}Sm	M21	2.5	75Ka25	
^{149}Sm−^{148}Sm		2282	31	2362.4	1.0	0.6	U			R04	4.0	64De15	
^{149}Sm−^{147}Sm		2320	60	2287.3	1.0	−0.1	U			R04	4.0	64De15	
^{149}Gd(α)^{145}Sm		3102.3	10.	3099	3	−0.3	–					65Ma51	Z
		3096.1	10.3			0.3	–			ORa		66Wi12	Z
		3099.1	5.			0.1	–			Dba		67Go32	Z
	ave.	3099	4			0.1	1	56	53 ^{149}Gd			average	
^{149}Tb(α)^{145}Eu		4074.4	3.	4077.9	2.2	1.2	–			Dba		67Go32	Z
		4073.8	7.			0.6	U			ORa		74To07	∗
		4074.6	10.			0.3	U					81Ho.A	Z
		4081.8	5.			−0.8	–			Bka		82Bo04	Z
		4082.8	4.			−1.2	–			Daa		96Pa01	
	ave.	4078.2	2.2			−0.1	1	95	86 ^{149}Tb			average	
^{149}Sm(n,α)^{146}Nd		9429	4	9436.5	1.0	1.9	U			McM		67Oa01	
		9421	15			1.0	U			ILL		75Em.A	
^{149}Sm(p,t)^{147}Sm		−5532	8	−5530.2	0.9	0.2	U			Min		72De47	
		−5532	7			0.3	U			McM		73Ga04	
^{148}Nd(n,γ)^{149}Nd		5038.76	0.10	5038.79	0.07	0.3	2			ILn		76Pi04	Z
		5038.82	0.11			−0.3	2			Bdn		06Fi.A	
^{148}Nd(^{3}He,d)^{149}Pm		455	5	451.8	2.5	−0.6	1	24	13 ^{149}Pm	McM		80St10	∗
^{149}Sm(d,^{3}He)^{148}Pm		−2064	6	−2066	6	−0.3	2					88No02	
^{148}Sm(n,γ)^{149}Sm		5872.5	1.8	5870.8	0.9	−0.9	1	25	15 ^{148}Sm			70Sm.A	
		5850.8	0.6			33.3	C					82Ba15	
^{149}Sm(γ,n)^{148}Sm		−5890	160	−5870.8	0.9	0.1	U			Phi		60Ge01	
^{148}Sm(d,p)^{149}Sm		3656	15	3646.2	0.9	−0.7	U			Kop		67Ve04	
^{149}Er(εp)^{148}Dy		5758	900	6829	29	1.2	U					83La.A	∗
		7080	470			−0.5	U			LBL		89Fi01	
^{149}La(β^-)^{149}Ce		6450	200				3			Kur		02Sh.B	
^{149}Ce(β^-)^{149}Pr		4190	75	4369	14	2.4	U			Bwg		87Gr.A	
		4380	60			−0.2	U			Kur		95Ik03	
		4310	100			0.6	U			Kur		02Sh.B	
^{149}Pr(β^-)^{149}Nd		3000	200	3336	10	1.7	U					67Va14	
		3390	90			−0.6	U			Kur		95Ik03	
^{149}Nd(β^-)^{149}Pm		1669	10	1688.8	2.5	2.0	U					64Go08	∗
^{149}Pm(β^-)^{149}Sm		1072	2	1071.5	1.9	−0.3	1	88	87 ^{149}Pm			60Ar05	
		1062	2			4.7	B					78Re01	
^{149}Eu(ε)^{149}Sm		680	10	695	4	1.5	1	14	14 ^{149}Eu			85Ad.A	
^{149}Gd(ε)^{149}Eu		1308	6	1314	4	1.0	1	48	30 ^{149}Eu	Got		84Sc.B	
^{149}Tb(β^+)^{149}Gd		3575	50	3638	4	1.3	U			Got		85Sc09	∗
		3635	10			0.3	1	19	10 ^{149}Tb	GSI		91Ke06	∗

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.		Lab	F	Reference	
^{149}Dy(β^+)^{149}Tb		3930	150	3793	9	−0.9	U						84Al36	*
		3925	65			−2.0	U				Got		90Sa32	*
		3797	13			−0.3	1	50	46	^{149}Dy	GSI		91Ke11	*
		3950	100			−1.6	U				IRS		93Al03	
^{149}Ho(β^+)^{149}Dy		6043	50	6049	13	0.1	–				IRS		83Al06	*
		5330	100			7.2	C						84Ha.B	
		6000	90			0.5	U				IRS		93Al03	
		6009	20			2.0	–				GSI		91Ke11	*
	ave.	6014	19			1.9	1	48	32	^{149}Ho			average	
^{149}Er(ε)^{149}Ho		8610	650	7900	30	−1.1	U				LBL		89Fi01	*
*^{149}Tb−u		$M-A$=–71456(28) keV for mixture gs+m at 35.78 keV											Nub16c	**
*^{149}Dy−u		$M-A$=–65057(28) keV for ^{149}Dy^m at 2661.1 keV											Nub16b	**
*^{149}Ho−u		$M-A$=–61621(28) keV for mixture gs+m at 48.80 keV											Nub16b	**
*^{149}Er−u		$M-A$=–53000(28) keV for ^{149}Er^m at 741.8 keV											Nub16b	**
*^{149}Tb(α)^{145}Eu		E_α=3999(7) from ^{149}Tb^m at 35.78 keV											Nub16c	**
*^{148}Nd(^{3}He,d)^{149}Pm		Based on ^{146}Nd(^{3}He,d)^{147}Pm Q =–87.6(0.9) keV											AHW	**
*^{149}Er(εp)^{148}Dy		As read from graph; Q =6500 from ^{149}Er^m at 741.8 keV											Nub16b	**
*^{149}Nd(β^-)^{149}Pm		E_{β^-}=1555(10) to 5/2$^+$ level at 114.312 level											Ens046	**
*^{149}Tb(β^+)^{149}Gd		β^+/K=0.31(0.03) from ^{149}Tb^m at 35.78 to 9/2$^-$ level at 795.82 keV											Ens046	**
*^{149}Tb(β^+)^{149}Gd		E_{β^+}=1853(10) from ^{149}Tb^m at 35.78 to 9/2$^-$ level at 795.82 keV											Ens046	**
*^{149}Dy(β^+)^{149}Tb		E_{β^+}=1030(150) to 1728.31−1876.96 levels											Ens046	**
*^{149}Dy(β^+)^{149}Tb		KL/β^+=29.4(10.6), 14.5(3.7), 17.6(4.9) to 1883, 1735, 1728 levels											90Sa32	**
*^{149}Dy(β^+)^{149}Tb		Original Q =3812(10) from E_{β^+}=1965(10) to 825.16 level corrected											GAu	**
*		to E_{β^+}=1950(13) for background substraction											GAu	**
*^{149}Ho(β^+)^{149}Dy		E_{β^+}=3930(50) to 9/2$^-$ level at 1090.76 keV											Ens046	**
*^{149}Ho(β^+)^{149}Dy		E_{β^+}=3896(20) to 9/2$^-$ level at 1090.76 keV											Ens046	**
*^{149}Er(ε)^{149}Ho		KLM/β^+=0.68(0.34) from ^{149}Er^m at 741.8 to 4699.7 level											Ens046	**
^{150}Ba−u		−55309	371	−53570#	320#	1.9	D				GT3	2.5	16Kn03	*
^{150}La−u		−60258	187				2				GT3	2.5	16Kn03	
^{150}Ce−u		−69618.6	13.1	−69616	13	0.2	1	92	92	^{150}Ce	CP1	1.0	06Sa56	
^{150}Pr−u		−73322.9	10.6	−73324	10	−0.1	1	83	83	^{150}Pr	CP1	1.0	06Sa56	
C_{12} H_6−^{150}Nd		126194	43	126048.7	1.4	−0.8	U				R05	4.0	65De13	
C_8 ^{13}C N O H_{11}−^{150}Nd		166439	34	166517.3	1.4	0.6	U				R05	4.0	65De13	
C_9 N O H_{12}−^{150}Nd		170931	46	170987.5	1.4	0.3	U				R05	4.0	65De13	
C_{12} H_6−^{150}Sm		129810	140	129668.0	1.4	−0.3	U				R04	4.0	64De15	
C_8 ^{13}C H_{11} N O−^{150}Sm		170029	25	170136.6	1.4	1.1	U				R04	4.0	64De15	
C_9 H_{12} N O−^{150}Sm		174612	47	174606.8	1.4	0.0	U				R04	4.0	64De15	
^{150}Tb^m−u		−75850	30	−75840	28	0.3	1	89	89	^{150}Tb^m	GS2	1.0	05Li24	
^{150}Ho−^{133}Cs$_{1.128}$		40150	29	40149	15	−0.1	–				MA5	1.0	00Be42	
	ave.	40132	21			0.8	1	53	53	^{150}Ho			average	
^{150}Ho−u		−66504	40	−66502	15	0.1	U				GS2	1.0	05Li24	*
^{150}Er−u		−62060	30	−62084	18	−0.8	1	38	38	^{150}Er	GS2	1.0	05Li24	
^{150}Nd ^{35}Cl$_2$−^{146}Nd ^{37}Cl$_2$		13654	9	13679.2	1.1	1.1	U				H21	2.5	70Ma05	
		13672.5	1.8			1.5	U				H25	2.5	72Ba08	
^{150}Nd ^{35}Cl−^{148}Nd ^{37}Cl		7006	4	6952.5	2.0	−3.3	B				H12	4.0	64Ba15	
		6939	4			1.4	U				H21	2.5	70Ma05	
^{150}Sm ^{35}Cl−^{148}Sm ^{37}Cl		5452	8	5403.3	1.0	−1.5	U				H12	4.0	64Ba15	
		5400	4			0.3	U				H21	2.5	70Ma05	
		5404.8	0.6			−1.0	1	41	26	^{148}Sm	M21	2.5	75Ka25	
^{150}Nd−^{150}Sm		3633	4	3619.33	0.21	−0.9	U				H19	4.0	64Mc11	
		3617.0	1.2			0.8	U				H25	2.5	72Ba08	
		3619.33	0.21			0.0	1	100	100	^{150}Nd	JY1	1.0	10Ko28	
^{150}Sm−^{149}Sm		149	30	90.8	0.4	−0.5	U				R04	4.0	64De15	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{150}Nd$-^{148}$Nd		3860	46	4002.4	2.0	0.8	U			R05	4.0	65De13	
		3988	3			1.9	U			M17	2.5	66Be10	
^{150}Sm$-^{148}$Sm		2430	50	2453.2	1.0	0.1	U			R04	4.0	64De15	
^{150}Nd$-^{146}$Nd		7719	67	7779.0	1.0	0.2	U			R05	4.0	65De13	
^{150}Gd(α)^{146}Sm		2804.9	10.	2807	6	0.2	–					62Si14	
		2792.6	18.			0.8	–					65Og01	
	ave.	2802	9			0.6	1	45	39 ^{150}Gd			average	
^{150}Tb(α)^{146}Eu		3585.5	5.	3587	5	0.3	1	92	80 ^{150}Tb	Dba		67Go32	Z
^{150}Dy(α)^{146}Gd		4345.8	5.	4351.3	1.5	1.1	–			Dba		67Go32	Z
		4349.5	5.			0.3	–			GSa		79Ho10	Z
		4351.3	3.			0.0	–			Bka		82Bo04	*
		4352.5	2.1			−0.6	–			Ora		82De11	Z
	ave.	4351.3	1.5			0.0	1	99	92 ^{150}Dy			average	
^{148}Nd(t,p)^{150}Nd		3935	30	3932.6	1.9	−0.1	U			Ald		72Ch11	
^{148}Sm(t,p)^{150}Sm		5372	25	5375.7	0.9	0.1	U			Ald		66Bj01	
^{150}Sm(p,t)^{148}Sm		−5379	8	−5375.7	0.9	0.4	U			Min		72De47	
		−5378	15			0.2	U			Ham		74Oe03	
^{150}Nd(d,^{3}He)^{149}Pr		−4501	10	−4436	10	6.5	C			KVI		79Sa.A	
^{150}Nd(d,t)^{149}Nd		−1122	10	−1118.4	1.9	0.4	U			McM		73Bu02	
^{149}Sm(n,γ)^{150}Sm		7984.9	0.6	7986.7	0.4	3.0	B					69Re04	Z
		7986.7	1.5			0.0	–					70Bu19	Z
		7986.7	0.4			0.0	–			Bdn		06Fi.A	
^{149}Sm(d,p)^{150}Sm		5764	4	5762.2	0.4	−0.5	U			Tal		64Ke03	
^{150}Sm(d,t)^{149}Sm		−1738	15	−1729.5	0.4	0.6	U			Kop		67Ve04	
^{149}Sm(n,γ)^{150}Sm	ave.	7986.7	0.4	7986.7	0.4	0.0	1	95	79 ^{149}Sm			average	
^{150}Lu(p)^{149}Yb		1269.6	4.	1269.6	2.3	0.0	3					84Ho.A	
		1269.6	4.			0.0	3			Dap		93Se04	
		1269.6	4.			0.0	3			ORp		03Gi10	
^{150}Lu^{m}(p)^{149}Yb		1303.8	15.	1291	5	−0.8	o			ORp		00Gi01	
		1285.6	8.			0.7	3			ORp		03Gi10	
		1294.7	6.			−0.5	3			Arp		03Ro21	
^{150}Ce(β^-)^{150}Pr		3010	90	3454	14	4.9	C			Bwg		87Gr.A	
		3480	40			−0.7	1	13	8 ^{150}Ce	Kur		95Ik03	
^{150}Pr(β^-)^{150}Nd		5690	80	5379	9	−3.9	C			Bwg		87Gr.A	
		5386	26			−0.3	1	12	12 ^{150}Pr	Kur		95Ik03	
		5290	100			0.9	U			Kur		02Sh.B	
^{150}Pm(β^-)^{150}Sm		3454	20				2					77Ho09	
^{150}Eu(β^+)^{150}Sm		2222	25	2259	6	1.5	U					65Gu03	*
^{150}Eu(β^-)^{150}Gd		978	10	972	4	−0.6	–					63Yo07	*
		968	4			0.9	–					65Gu03	*
	ave.	969	4			0.6	1	91	53 ^{150}Eu			average	
^{150}Tb(β^+)^{150}Gd		4720	40	4658	8	−1.5	U					68Wi21	
		4670	15			−0.8	1	31	20 ^{150}Tb			76Cr.B	
		4760	50			−2.0	U					77Ha31	*
		4620	60			0.6	U					83Ve06	
^{150}Tb^{m}(β^+)^{150}Gd		5040	100	5119	27	0.8	U			IRS		93Al03	
^{150}Dy(β^+)^{150}Tb		1760	40	1796	8	0.9	U					81Ka07	*
^{150}Ho(β^+)^{150}Dy		6980	150	7364	14	2.6	U					84Al36	*
		6560	100			8.0	B			IRS		93Al03	
^{150}Ho(ε)^{150}Dy		7400	200			−0.2	U					98Ag.A	
		7372	27			−0.3	1	29	27 ^{150}Ho			00Ca.A	
		7444	126			−0.6	U					01Ro35	
^{150}Ho^{m}(β^+)^{150}Dy		7360	50				2			IRS		83Al06	*
		6575	75	7360	50	10.5	C					84Ha.B	*
		6625	120			6.1	B			Got		85Sc09	*
		6900	130			3.5	B			Got		90Sa32	*
		7060	80			3.7	C			IRS		93Al03	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.		Lab	F	Reference	
^{150}Er(β^+)^{150}Ho		4010	80	4115	14	1.3	o						82No08	*
		4105	75			0.1	U						84Ha.B	*
		4108	15			0.4	1	82	62	^{150}Er	GSI		91Ke11	*
*^{150}Ba−u	Trends from Mass Surface TMS suggest ^{150}Ba 1620 less bound												WgM168	**
*^{150}Ho−u	$M-A$=–61948(28) keV for mixture gs+m at –0(50) keV												Nub16b	**
*^{150}Dy(α)^{146}Gd	Recalibrated as in reference												91Ry01	**
*^{150}Eu(β^+)^{150}Sm	E_{β^+}=1242(25) from ^{150}Eu^m at 41.7 keV												Nub16b	**
*^{150}Eu(β^-)^{150}Gd	Q_{β^-}=1020(10) 1010(4) respectively, from ^{150}Eu^m at 41.7 keV												Nub16b	**
*^{150}Tb(β^+)^{150}Gd	E_{β^+}=1655(80) to 2$^+$ at 2091.623, and other E_{β^+}. Orig. error 35 increased												Ens136	**
*^{150}Dy(β^+)^{150}Tb	p$^+$ =2(10)×10^{-3} to 1$^+$ 397.2 level combined with lower limit through ^{146}Gd(ε)												Ens136	**
*^{150}Ho(β^+)^{150}Dy	E_{β^+}=4550(150) to 1395.0 and 1456.8 levels												82No08	**
*^{150}Ho^m(β^+)^{150}Dy	E_{β^+}=3940(50) to 8$^+$ level at 2401.6 keV												Ens136	**
*^{150}Ho^m(β^+)^{150}Dy	p$^+$ =0.56(0.02) 0.58(0.07) respectively to 8$^+$ level at 2401.6 keV												Ens136	**
*^{150}Ho^m(β^+)^{150}Dy	Q_{β^+}=6819(+117–100) from p$^+$ to 2401.6 level; could be raised 140												90Sa32	**
*	if 4% feeding of higher Dy levels												90Sa32	**
*^{150}Er(β^+)^{150}Ho	p$^+$ =0.36(0.04) 0.39(0.04) to 1$^+$ level at 476.16 keV												Ens136	**
*^{150}Er(β^+)^{150}Ho	E_{β^+}=2610(15) to 1$^+$ level at 476.16 keV												Ens136	**
^{151}La−u		−58734	397	−57230	470	2.5	C				GT1	1.5	04Ma.A	
		−57231	187				2				GT3	2.5	16Kn03	
^{151}Ce−u		−65727.8	19.0				2				CP1	1.0	06Sa56	
^{151}Pr−u		−71697.5	14.3	−71691	13	0.5	1	77	77	^{151}Pr	CP1	1.0	06Sa56	
C_{12} H_7−^{151}Eu		134920	37	134918.4	1.4	0.0	U				R04	4.0	64De15	
C_{10} H_{15} O−^{151}Eu		192490	70	192433.2	1.4	−0.2	U				R04	4.0	64De15	
^{151}Eu−^{85}Rb$_{1.776}$		76520	15	76518.3	1.4	−0.1	U				MA5	1.0	00Be42	
^{151}Tb−u		−76866	43	−76891	4	−0.6	U				GS2	1.0	05Li24	*
^{151}Dy−u		−73809	30	−73809	4	0.0	U				GS2	1.0	05Li24	
^{151}Ho−u		−68323	33	−68302	9	0.6	U				GS2	1.0	05Li24	*
^{151}Er−u		−62528	30	−62551	18	−0.8	2				GS2	1.0	05Li24	
		−62540	30			−0.4	2				GS2	1.0	05Li24	*
^{151}Eu ^{35}Cl−^{149}Sm ^{37}Cl		5620.3	2.6	5615.6	0.7	−0.7	U				H25	2.5	72Ba08	
^{151}Eu−^{150}Sm		2800	60	2574.7	0.6	−0.9	U				R04	4.0	64De15	
^{151}Eu(α)^{147}Pm		1960	30	1964.5	1.1	0.1	U						07Be48	
		1948.9	8.6			1.8	U						14Ca13	
^{151}Gd(α)^{147}Sm		2670.8	30.	2652.7	2.9	−0.6	U						65Si06	
^{151}Tb(α)^{147}Eu		3499.6	5.	3496	4	−0.6	1	58	49	^{151}Tb	Dba		67Go32	
^{151}Dy(α)^{147}Gd		4175.5	5.	4179.6	2.6	0.8	2				Dba		67Go32	Z
		4181.1	3.			−0.5	2				Bka		82Bo04	Z
^{151}Ho(α)^{147}Tb		4696.3	5.	4695.0	1.8	−0.3	2				GSa		79Ho10	*
		4695.8	3.			−0.3	2				Bka		82Bo04	*
		4693.8	3.			0.4	2				Ora		82De11	*
		4694.9	5.			0.0	2				Daa		96Pa01	*
^{151}Eu(n,α)^{148}Pm		7870	20	7859	6	−0.5	U				ILL		74Em01	
^{151}Sm(p,t)^{149}Sm		−5100	4	−5101.4	0.4	−0.3	U				McM		73Ga04	
^{151}Eu(p,t)^{149}Eu		−5872	5	−5873	4	−0.1	1	57	56	^{149}Eu	Min		75Ta12	
^{150}Nd(n,γ)^{151}Nd		5334.55	0.2	5334.55	0.10	0.0	–				ILn		76Pi13	Z
		5334.55	0.11			0.0	–				Bdn		06Fi.A	
^{150}Nd(d,p)^{151}Nd		3084	15	3109.98	0.10	1.7	U				Tal		67Ne08	
^{150}Nd(n,γ)^{151}Nd	ave.	5334.55	0.10	5334.55	0.10	0.0	1	100	100	^{151}Nd			average	
^{150}Nd(^{3}He,d)^{151}Pm		1503	5	1502	4	−0.2	1	80	80	^{151}Pm	McM		80St10	*
^{150}Sm(n,γ)^{151}Sm		5596.5	1.8	5596.46	0.11	0.0	U						70Sm.A	*
		5596.	1.5			0.3	U						71Gr22	
		5596.42	0.20			0.2	–				ILn		86Va08	Z
		5596.44	0.13			0.1	–				Bdn		06Fi.A	
^{150}Sm(d,p)^{151}Sm		3369	16	3371.89	0.11	0.2	U				Tal		65Ke09	
^{150}Sm(n,γ)^{151}Sm	ave.	5596.43	0.11	5596.46	0.11	0.2	1	100	62	^{150}Sm			average	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{151}Eu(γ,n)^{150}Eu		−8040	110	−7932	6	1.0	U			Phi		60Ge01	
^{151}Eu(p,d)^{150}Eu		−5721	9	−5707	6	1.5	1	47	47 ^{150}Eu			82So.B	
^{151}Yb(εp)^{150}Er		9000	300				2			ORa		86To12	*
^{151}Lu(p)^{150}Yb		1239.2	3.	1241.0	1.8	0.6	o			Dap		82Ho04	
		1241.0	2.8			0.0	3			Dap		93Se04	
		1241.3	3.0			−0.1	3			ORp		03Gi10	
		1240.3	4.0			0.2	3			Man		15Ta12	
^{151}Lu^m(p)^{150}Yb		1318.8	10.	1294	4	−2.5	B			Dap		98Ba.B	
		1293.6	4.				3			Man		15Ta12	
^{151}Ce(β$^-$)^{151}Pr		5270	100	5555	21	2.8	U			Kur		02Sh.B	
^{151}Pr(β$^-$)^{151}Nd		4170	75	4163	12	−0.1	U			Bwg		90Gr10	
		4136	40			0.7	–			Ida		93Gr17	*
		4210	30			−1.6	–			Kur		95Ik03	
	ave.	4183	24			−0.8	1	24	23 ^{151}Pr			average	
^{151}Nd(β$^-$)^{151}Pm		2510	50	2443	4	−1.3	U					73Se12	*
		2480	50			−0.7	U			Kur		95Ik03	
^{151}Pm(β$^-$)^{151}Sm		1195	10	1190	4	−0.5	1	20	20 ^{151}Pm			64Be10	*
^{151}Sm(β$^-$)^{151}Eu		75.9	0.6	76.6	0.5	1.1	1	80	59 ^{151}Eu			59Ac28	
^{151}Gd(ε)^{151}Eu		463	3	464.1	2.8	0.4	1	86	85 ^{151}Gd			83Vo10	*
^{151}Tb(β$^+$)^{151}Gd		2562	5	2565	4	0.6	–					77Cr05	*
		2566	12			−0.1	–					84Sc18	*
	ave.	2563	5			0.6	1	66	51 ^{151}Tb			average	
^{151}Ho(β$^+$)^{151}Dy		5080	50	5130	9	1.0	U			IRS		83Al06	*
		5100	80			0.4	U			IRS		93Al03	
^{151}Er(β$^+$)^{151}Ho		5130	110	5356	18	2.1	U					98Fo06	
^{151}Tm(β$^+$)^{151}Er		6025	145	7494	25	10.1	C					84Ha.B	*
		7074	50			8.4	F			GSI		91Ke11	*
^{151}Tm^m(IT)^{151}Tm		96.4	7.0	94	6	−0.4	o					97Da07	*
^{151}Lu^m(IT)^{151}Lu		77	5	53	4	−4.9	B			Dap		99Bi14	
*^{151}Tb−u	$M-A$=–71551(28) keV for mixture gs+m at 99.53 keV											Nub16b	**
*^{151}Ho−u	$M-A$=–63622(28) keV for mixture gs+m at 41.0 keV											Nub16b	**
*^{151}Er−u	$M-A$=–55670(28) keV for ^{151}Er^m at 2586.0 keV											Nub16b	**
*^{151}Ho(α)^{147}Tb	E=4523.8(5,Z) to ^{147}Tb^m at 50.6(0.9); 4610.8(5,Z) from ^{151}Ho^m 41.0(0.2)											Nub16b	**
*^{151}Ho(α)^{147}Tb	E=4521.5(3,Z) to ^{147}Tb^m at 50.6(0.9); 4611.5(3,Z) from ^{151}Ho^m 41.0(0.2)											Nub16b	**
*^{151}Ho(α)^{147}Tb	E=4521.2(3,Z) to ^{147}Tb^m at 50.6(0.9); 4607.2(4,Z) from ^{151}Ho^m 41.0(0.2)											Nub16b	**
*^{151}Ho(α)^{147}Tb	E_α=4521(5,Z) to ^{147}Tb^m at 50.6(0.9)											Nub16b	**
*^{150}Nd(^{3}He,d)^{151}Pm	Based on ^{146}Nd(^{3}He,d)^{147}Pm Q =–87.6(0.9) keV											AHW	**
*^{150}Sm(n,γ)^{151}Sm	E(γ)=5591.7(1.8) to 3/2$^-$ level at 4.821 keV											Ens091	**
*^{151}Yb(εp)^{150}Er	E_p estimated 7300(300) to levels around 1700 keV											GAu	**
*	"Statistical p's originate from 11/2$^-$ isomer."											86To12	**
*^{151}Pr(β$^-$)^{151}Nd	Two highest Q_{β^-}=4135(50),4137(40) keV											AHW	**
*^{151}Nd(β$^-$)^{151}Pm	E_{β^-}=2260(90) 2100(90) 1210(50) to 3/2$^+$ level at 255.692, 1/2$^+$ at 426.451,											Ens091	**
*	and 5/2$^+$ at 1297.682 keV											Ens091	**
*^{151}Pm(β$^-$)^{151}Sm	E_{β^-}=1190(10) to ground state and 3/2$^-$ level at 4.821 keV, and other E_{β^-}											Ens091	**
*^{151}Gd(ε)^{151}Eu	pK=0.652(0.007) to (5/2$^-$,7/2$^-$) level at 353.64 keV											Ens091	**
*^{151}Tb(β$^+$)^{151}Gd	E_{β^+}=700(5) p$^+$ =104(5)×10^{-4} respectively, to 1/2$^-$ level at 839.320 keV, and other E_{β^+}											Ens091	**
*^{151}Ho(β$^+$)^{151}Dy	E_{β^+}=3530(50) to 9/2$^-$ level at 527.40 keV											Ens091	**
*^{151}Tm(β$^+$)^{151}Er	p$^+$ =0.71(0.02) to 9/2$^-$ level at 801.52 keV											Ens091	**
*^{151}Tm(β$^+$)^{151}Er	F : lower limit: positrons escape from detector; E_{β^+}=5250(50) to 801.6 level											91Ke11	**
*^{151}Tm^m(IT)^{151}Tm	Only α-decay energies are used											GAu	**
^{152}Pr−u		−68447.1	19.9				2			CP1	1.0	06Sa56	
C_{12} H_8−^{152}Sm		142764	32	142861.2	1.3	0.8	U			R04	4.0	64De15	
		142867.0	5.0			−0.5	U			M22	2.5	75Ka25	
^{152}Eu−u		−78347	50	−78248.8	1.4	2.0	U			GS2	1.0	05Li24	*

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.		Lab	F	Reference	
C_{12} H_8−^{152}Gd		142870	50	142801.4	1.3	−0.3	U				R04	4.0	64De15	
^{152}Gd O−C_{14}		−85290.7	3.5	−85286.6	1.3	0.8	U				TG1	1.5	11Ke03	
^{152}Tb−u		−76212	159	−75920	40	1.9	U				GS2	1.0	05Li24	*
^{152}Dy−u		−75278	30	−75275	5	0.1	U				GS2	1.0	05Li24	
^{152}Ho−u		−68248	58	−68283	13	−0.6	U				GS2	1.0	05Li24	*
^{152}Er−u		−64962	30	−64950	9	0.4	U				GS2	1.0	05Li24	
^{152}Tm−u		−55524	58	−55520	60	0.0	1	100	100	^{152}Tm	GS2	1.0	05Li24	
^{152}Sm $^{35}Cl_2$−^{148}Sm $^{37}Cl_2$		10802	10	10810.2	1.1	0.3	U				H21	2.5	70Ma05	
		10810.8	2.0			−0.1	U				H25	2.5	72Ba08	
		10807.9	1.4			0.7	U				M21	2.5	75Ka25	
^{152}Sm ^{35}Cl−^{150}Sm ^{37}Cl		5429	4	5407.0	0.7	−1.4	U				H12	4.0	64Ba15	
		5396	4			1.1	o				H21	2.5	70Ma05	
		5402.7	0.8			2.1	1	11	8	^{150}Sm	M21	2.5	75Ka25	
^{152}Gd−^{152}Sm		59.80	0.19	59.78	0.19	−0.1	1	98	72	^{152}Sm	SH1	1.0	11El02	
^{152}Sm−^{151}Eu		95	42	−117.8	0.7	−1.3	U				R04	4.0	64De15	
^{152}Sm−^{150}Sm		2563	31	2456.8	0.7	−0.9	U				R04	4.0	64De15	
^{152}Gd(α)^{148}Sm		2197.9	30.	2204.4	1.0	0.2	U						61Ma05	
^{152}Dy(α)^{148}Gd		3728.0	8.	3727	4	−0.2	2						65Ma51	Z
		3726.0	5.			0.1	2				Dba		67Go32	Z
^{152}Ho(α)^{148}Tb		4506.9	3.	4507.4	1.3	0.2	–				Bka		82Bo04	*
		4508.0	2.			−0.3	–				Ora		82De11	Z
		4505.8	3.			0.5	–						82To14	
		4507.9	3.			−0.2	–						87St.A	Z
	ave.	4507.3	1.3			0.0	1	100	95	^{152}Ho			average	
^{152}Er(α)^{148}Dy		4935.2	5.	4934.3	1.6	−0.2	–				GSa		79Ho10	
		4934.6	3.			−0.1	–				Bka		82Bo04	Z
		4934.3	2.			0.0	–				Ora		82De11	Z
	ave.	4934.5	1.6			−0.1	1	100	85	^{152}Er			average	
^{150}Nd(t,p)^{152}Nd		4125	30	4130	24	0.2	1	66	66	^{152}Nd	Ald		72Ch11	
^{150}Sm(t,p)^{152}Sm		5376	25	5372.3	0.6	−0.1	U				Ald		66Bj01	
^{152}Sm(p,t)^{150}Sm		−5378	8	−5372.3	0.6	0.7	U				Min		72De47	
		−5376	4			0.9	U				McM		73Ga04	
		−5379	15			0.4	U				Ham		74Oe03	
^{151}Sm(n,γ)^{152}Sm		8257.6	0.8	8257.6	0.6	0.1	1	58	41	^{151}Sm			71Gr22	Z
^{151}Sm(p,γ)^{152}Eu		5604	4	5600.9	0.5	−0.8	U						75Jo.A	
^{151}Eu(n,γ)^{152}Eu		6306.70	0.10	6306.72	0.10	0.2	1	99	60	^{152}Eu	ILn		85Vo15	Z
		6307.11	0.14			−2.8	C				Bdn		06Fi.A	
^{152}Gd(d,t)^{151}Gd		−2338	10	−2332.3	2.9	0.6	U				Kop		67Tj01	
^{152}Pr(β^-)^{152}Nd		6350	120	6390	30	0.3	U				Kur		95Ik03	
^{152}Nd(β^-)^{152}Pm		1088	27	1105	19	0.6	–						93Sh23	
		1120	30			−0.5	–				Kur		95Ik03	
	ave.	1102	20			0.1	1	85	51	^{152}Pm			average	
^{152}Pm(β^-)^{152}Sm		3600	200	3508	26	−0.5	U						71Da19	
		3520	150			−0.1	U						72Wa04	
		3400	200			0.5	U						75Wi08	
		3500	100			0.1	–						77Ya07	
		3500	40			0.2	–				Kur		95Ik03	
	ave.	3500	40			0.2	1	49	49	^{152}Pm			average	
^{152}Pm^m(β^-)^{152}Sm		3603	100	3650	80	0.5	2						71Da19	*
		3753	150			−0.7	2						72Wa04	*
^{152}Eu(β^+)^{152}Sm		1871	5	1874.3	0.7	0.7	U						58Al99	*
		1866	5			1.7	U						62Lo10	*
		1870.8	2.			1.8	–						72Sv02	*
		1872.8	1.5			1.0	–						77Mi.A	*
	ave.	1872.1	1.2			1.9	1	33	26	^{152}Eu			average	
^{152}Eu(β^-)^{152}Gd		1809	10	1818.7	0.7	1.0	U						58Al99	*
		1827	7			−1.2	U						60La04	*
		1836	20			−0.9	U						60Sc14	*
		1806	4			3.2	B						69An18	*

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{152}Tb(β^+)^{152}Gd	3990	40				2					76Cr.B	*
^{152}Ho(β^+)^{152}Dy	6690	100	6513	13	−1.8	U			IRS		83Al06	*
	6270	140			1.7	U					Averag	*
	6225	90			3.2	B			IRS		93Al03	*
^{152}Tm(β^+)^{152}Er	8820	240	8780	50	−0.2	U					16Na02	
^{152}Tm^m(β^+)^{152}Er	6850	110	8680	240	16.6	C					84Ha.B	*
	8680	240				2					16Na02	
^{152}Yb(β^+)^{152}Tm	5465	195	5450	140	−0.1	–			Got		90Sa.A	
	5434	200			0.1	–			GSI		04Na.A	*
ave.	5450	140			0.0	1	100	100 ^{152}Yb			average	
*^{152}Eu−u	$M-A$=–72915(35) keV for mixture gs+m+r at 45.5998 and 147.86 keV										Nub16b	**
*^{152}Tb−u	$M-A$=–70740(29) keV for mixture gs+n at 501.74 keV										Nub16b	**
*^{152}Ho−u	$M-A$=–63492(28) keV for mixture gs+m at 160(1) keV										Nub16b	**
*^{152}Ho(α)^{148}Tb	E_α=4389.1(3,Z); and 4455.1(3,Z) from ^{152}Ho^m to ^{148}Tb^m										82Bo04	**
*	combined with ^{152}Ho^m(IT)-^{148}Tb^m(IT)=160(1)-90.1(0.3) keV										87St.A	**
*^{152}Pm^m(β^-)^{152}Sm	E_{β^-}=1800(100) 1950(150) respectively, to 5$^-$ level at 1803.94 keV										Ens13b	**
*^{152}Eu(β^+)^{152}Sm	E_{β^+}=895(5) 890(5) respectively, from ^{152}Eu^m at 45.5998 keV										Nub16b	**
*^{152}Eu(β^+)^{152}Sm	E_{β^+}=727(2) 729(1.5) respectively, to 2$^+$ level at 121.7818 keV										Ens13b	**
*^{152}Eu(β^-)^{152}Gd	Q_{β^-}=1855(10) from ^{152}Eu^m at 45.5998 keV										Nub16b	**
*^{152}Eu(β^-)^{152}Gd	E_{β^-}=1483(7) to 2$^+$ level at 344.2790 keV										Ens13b	**
*^{152}Eu(β^-)^{152}Gd	E_{β^-}=1840(30) 1490(20) 1072(20) to ground state, 2$^+$ at 344.2790, 4$^+$ at 755.3961 keV										Ens13b	**
*^{152}Eu(β^-)^{152}Gd	Q_{β^-}=1852(4) from ^{152}Eu^m at 45.5998 keV										Nub16b	**
*^{152}Tb(β^+)^{152}Gd	E_{β^+}=2830(15) 8(4)% to ground state, 5.2(1)% to 2$^+$ level at 344.2790 keV										Ens13b	**
*^{152}Ho(β^+)^{152}Dy	E_{β^+}=3390(100) from ^{152}Ho^m at 160(1) to 8$^+$ level at 2437.42 keV										Ens13b	**
*^{152}Ho(β^+)^{152}Dy	From adopted KLM/β^+=0.97(0.13)										AHW	**
*	from ^{152}Ho^m at 160(1) to 8$^+$ level at 2437.42 keV										Ens13b	**
*	after extra 3(2)% side-feeding correction; see reference										90Sa32	**
*	p$^+$ =0.52(0.04)/.967 gives KLM/β^+=0.86(0.14)										85Sc09	**
*	KLM/β^+=1.12(0.10) after 0.967(0.008) side-feeding correction										90Sa32	**
*^{152}Ho(β^+)^{152}Dy	Q_{β^+}=6270(90); and 6330(100) from ^{152}Ho^m at 160(1) keV										Nub16b	**
*^{152}Tm^m(β^+)^{152}Er	p$^+$ =0.64(0.02) to 8$^+$ level at 2183.3 keV										Ens13b	**
*^{152}Yb(β^+)^{152}Tm	As reported in reference										11Es03	**
^{153}Pr−u	−66110.5	15.3	−66096	13	0.9	–			CP1	1.0	06Sa56	
	−66065	40			−0.8	–			CP1	1.0	12Va02	*
ave.	−66105	14			0.6	1	80	80 ^{153}Pr			average	
^{153}Pr−^{80}Kr$_{1.913}$	93906	40	93872	13	−0.8	1	10	10 ^{153}Pr	CP1	1.0	12Va02	
^{153}Pr−^{86}Kr$_{1.779}$	92958	40	92927	13	−0.8	1	10	10 ^{153}Pr	CP1	1.0	12Va02	
^{153}Nd−u	−72283.3	5.2	−72282.1	2.9	0.2	1	32	32 ^{153}Nd	CP1	1.0	12Va02	*
^{153}Nd−^{80}Kr$_{1.913}$	87687.9	4.7	87687	3	−0.2	1	42	36 ^{153}Nd	CP1	1.0	12Va02	
^{153}Nd−^{86}Kr$_{1.779}$	86740.7	5.3	86741.6	2.9	0.2	1	31	31 ^{153}Nd	CP1	1.0	12Va02	
^{153}Pm−u	−75833	23	−75844	10	−0.5	1	18	18 ^{153}Pm	CP1	1.0	12Va02	*
^{153}Pm−^{80}Kr$_{1.913}$	84139	23	84125	10	−0.6	1	18	18 ^{153}Pm	CP1	1.0	12Va02	
^{153}Pm−^{86}Kr$_{1.779}$	83192	23	83180	10	−0.5	1	18	18 ^{153}Pm	CP1	1.0	12Va02	
C$_{12}$ H$_9$−^{153}Eu	149103	18	149188.2	1.4	1.2	U			R04	4.0	64De15	
C$_{11}$ ^{13}C H$_8$−^{153}Eu	144606	30	144718.0	1.4	0.9	U			R04	4.0	64De15	
C$_9$ ^{13}C H$_{16}$ O−^{153}Eu	201934	38	202232.9	1.4	2.0	U			R04	4.0	64De15	
^{153}Eu−^{85}Rb$_{1.800}$	80021	16	80015.5	1.4	−0.3	U			MA5	1.0	00Be42	
^{153}Ho−u	−69814	37	−69793	5	0.6	U			GS2	1.0	05Li24	*
^{153}Er−u	−64942	30	−64916	10	0.9	U			GS2	1.0	05Li24	
^{153}Eu ^{35}Cl−^{151}Eu ^{37}Cl	4334	4	4330.29	0.18	−0.4	U			H21	2.5	70Ma05	*
^{138}La O−^{153}Eu	−19266	123	−19205	4	0.1	U			R05	4.0	65De13	
^{153}Eu O−C$_{14}$	−83849.6	5.8	−83848.3	1.4	0.1	U			TG1	1.5	11Ke03	
^{153}Eu−^{152}Sm	1544	42	1498.0	0.7	−0.3	U			R04	4.0	64De15	
^{153}Eu−^{151}Eu	1567	33	1380.18	0.17	−1.4	U			R04	4.0	64De15	
^{153}Dy(α)^{149}Gd	3560.0	8.	3559	4	−0.1	–					65Ma51	Z
	3554.9	5.			0.8	–			Dba		67Go32	Z
ave.	3556	4			0.7	1	69	48 ^{153}Dy			average	
^{153}Ho(α)^{149}Tb	4052.3	5.	4052	4	−0.1	2					68Go.C	*
	4051.0	5.			0.1	2			ORa		71To01	*

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{153}Er(α)^{149}Dy		4799.8	10.	4802.4	1.4	0.3	U					81Ho.A	
		4804.5	3.			−0.7	–			Bka		82Bo04	Z
		4802.0	2.			0.2	–			Ora		82De11	Z
		4802.8	3.			−0.1	–					87Sc.A	Z
		4799.7	4.			0.6	–			Daa		96Pa01	
	ave.	4802.4	1.4			0.0	1	100	97 ^{153}Er			average	
^{153}Tm(α)^{149}Ho		5252.3	5.	5248.3	1.5	−0.8	U			GSa		79Ho10	*
		5246.1	3.			0.7	–			Bka		82Bo04	*
		5249.2	2.			−0.4	–			Ora		82De11	*
		5247.7	3.			0.2	o					87Sc.A	*
		5247.7	3.			0.2	–					88Sc.A	
		5249.5	5.			−0.2	U			Daa		96Pa01	
	ave.	5248.1	1.5			0.1	1	100	53 ^{149}Ho			average	
^{153}Gd(n,α)^{150}Sm		9790	30	9815.0	0.6	0.8	U			ILL		81Wa31	
^{153}Eu(p,t)^{151}Eu		−6374	5	−6375.21	0.16	−0.2	U			Min		75Ta12	
^{152}Sm(n,γ)^{153}Sm		5867.1	0.4	5868.40	0.13	3.3	B					69Re04	Z
		5868.4	0.3			0.0	2					71Be41	Z
		5868.4	0.7			0.0	U					82Ba15	Z
		5868.40	0.15			0.0	2			Bdn		06Fi.A	
^{152}Sm(d,p)^{153}Sm		3645	12	3643.83	0.13	−0.1	U			Tal		65Ke09	
^{152}Eu(n,γ)^{153}Eu		8550.28	0.12	8550.28	0.12	0.0	1	100	87 ^{153}Eu	ILn		85Vo15	Z
^{153}Eu(γ,n)^{152}Eu		−8650	130	−8550.28	0.12	0.8	U			Phi		60Ge01	
^{152}Gd(n,γ)^{153}Gd		6247.27	0.35	6246.95	0.13	−0.9	–			ILn		85Vo15	Z
		6246.89	0.14			0.4	–			ILn		93Sp.A	
		6247.48	0.21			−2.5	B			Bdn		06Fi.A	
^{152}Gd(d,p)^{153}Gd		4015	10	4022.39	0.13	0.7	U			Kop		67Tj01	
^{152}Gd(n,γ)^{153}Gd	ave.	6246.94	0.13	6246.95	0.13	0.1	1	99	74 ^{152}Gd			average	
^{152}Gd(^{3}He,d)^{153}Tb		−1634	30	−1598	4	1.2	U			McM		76St10	
^{153}Pr(β^-)^{153}Nd		5720	100	5762	12	0.4	U			Kur		02Sh.B	
^{153}Nd(β^-)^{153}Pm		3336	25	3318	9	−0.7	1	14	13 ^{153}Pm	Ida		93Gr17	
		3260	100			0.6	U			Kur		02Sh.B	
^{153}Pm(β^-)^{153}Sm		1777	50	1912	9	2.7	U					62Ko10	*
		1863	15			3.3	B			Ida		93Gr17	
^{153}Sm(β^-)^{153}Eu		810	10	807.5	0.7	−0.2	U					54Gr19	
		795	10			1.3	U					54Le08	
		820	10			−1.2	U					55Ma62	
		825	10			−1.7	U					56Du31	
		792	10			1.6	U					57Jo24	
^{153}Tb(β^+)^{153}Gd		1573	5	1569	4	−0.8	1	59	59 ^{153}Tb			78Cr02	*
^{153}Dy(β^+)^{153}Tb		2171	2	2170.4	1.9	−0.3	1	93	52 ^{153}Dy			78Gr13	*
^{153}Ho(β^+)^{153}Dy		4153	50	4131	6	−0.4	o			IRS		83Al06	*
		4160	60			−0.5	U			IRS		93Al03	
^{153}Lu^{m}(IT)^{153}Lu		80	5				4					97Ir01	

*^{153}Pr−u	Represents frequency ratio ^{153}Pr^{++}/(C$_{12}$H$_4$)$^+$ =0.99430250(26)	WgM124	**
*^{153}Nd−u	Represents frequency ratio ^{153}Pr^{++}/(C$_{12}$H$_4$)$^+$ =0.994342.931(34)	WgM124	**
*^{153}Pm−u	Represents frequency ratio ^{153}Pm^{++}/(C$_{12}$H$_4$)$^+$ =0.99436601(15)	WgM124	**
*^{153}Ho−u	$M-A$=–64997(28) keV for mixture gs+m at 68.7 keV	Nub16b	**
*^{153}Eu ^{35}Cl−^{151}Eu ^{37}Cl	Increased by 5 for systematic difference of H21 with later data	AHW	**
*^{153}Ho(α)^{149}Tb	E_α=4013.1(5,Z) from ^{153}Ho^m at 68.7 keV	Nub16b	**
*^{153}Ho(α)^{149}Tb	E_α=3910(5) to ^{149}Tb^m at 35.78 keV	Nub16b	**
*^{153}Tm(α)^{149}Ho	E_α=5114.2(5,Z) 5108.2(3,Z) 5111.2(2,Z) respectively, contain a 8%	AHW	**
*	^{153}Tm(α)^{149}Ho−^{153}Tm^m(α)^{149}Ho^m=48.80(0.20)-43.2(0.2)=	Nub16b	**
*	=5.6(0.3) keV lower ^{153}Tm^m(α)^{149}Ho^m branch, corrected thus +0.5keV	GAu	**
*^{153}Tm(α)^{149}Ho	E_α=5110.6(3,Z); and 5103.6(4,Z) for lower ^{153}Tm^m(α) branch	87Sc.A	**
*^{153}Pm(β^-)^{153}Sm	E_{β^-}=1650(50) to 3/2$^-$ level at 127.298 keV, and other E_{β^-}	Ens062	**
*^{153}Tb(β^+)^{153}Gd	E_{β^+}=339(5) to 3/2$^+$ level at 212.0078 keV	Ens062	**
*^{153}Dy(β^+)^{153}Tb	E_{β^+}=886(2) to 9/2$^-$ level at 262.831 keV	Ens062	**
*^{153}Ho(β^+)^{153}Dy	E_{β^+}=2835(50) to 9/2$^-$ level at 295.84 keV	Ens062	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.		Lab	F	Reference	
^{154}Ce−u		−56404	619	−56060#	220#	0.2	D				GT3	2.5	16Kn03	*
C_{12} H_{10}−^{154}Sm		155830	29	156034.2	1.6	1.8	U				R04	4.0	64De15	
		156035.7	4.0			−0.2	U				M22	2.5	75Ka25	
C_{12} H_{10}−^{154}Gd		157149	40	157376.9	1.3	1.4	U				R04	4.0	64De15	
C_{11} ^{13}C H_9−^{154}Gd		152550	110	152906.7	1.3	0.8	U				R04	4.0	64De15	
C_{10} $^{13}C_2$ H_8−^{154}Gd		148030	90	148436.5	1.3	1.1	U				R04	4.0	64De15	
C_{10} H_6 N_2−^{154}Gd		131980	240	132224.8	1.3	0.3	U				R04	4.0	64De15	
^{154}Gd−^{138}La O		19005	80	18841	4	−0.5	U				R05	4.0	65De13	
^{154}Tb−u		−75376	115	−75320	50	0.5	R				GS2	1.0	05Li24	*
^{154}Dy−$^{133}Cs_{1.158}$		33903	19	33916	8	0.7	1	18	18	^{154}Dy	MA5	1.0	00Be42	*
^{154}Ho−u		−69350	83	−69393	9	−0.5	U				GS2	1.0	05Li24	*
^{154}Tm−u		−58479	49	−58430	15	1.0	U				GS2	1.0	05Li24	*
^{154}Sm $^{35}Cl_2$−^{150}Sm $^{37}Cl_2$		10832.9	5.2	10834.2	1.1	0.1	U				M21	2.5	75Ka25	
^{154}Sm ^{35}Cl−^{152}Sm ^{37}Cl		5480	4	5427.2	0.9	−3.3	B				H12	4.0	64Ba15	
		5417	4			1.0	U				H21	2.5	70Ma05	
		5427.2	0.4			0.0	1	80	78	^{154}Sm	M21	2.5	75Ka25	
^{154}Gd ^{35}Cl−^{152}Gd ^{37}Cl		4019.5	2.	4024.69	0.23	1.0	U				H25	2.5	72Ba08	
		4016	30			0.1	U				H12	4.0	64Ba15	
^{154}Sm−^{154}Gd		1338.2	3.8	1342.8	0.9	0.5	U				H25	2.5	72Ba08	
		1342.8	0.8			0.0	1	21	21	^{154}Sm	M21	2.5	75Ka25	
^{154}Sm−C_{12} H_9		−148211.0	8.0	−148209.1	1.6	0.1	U				M21	2.5	75Ka25	
^{139}La O−^{154}Gd		−19616	55	−19600.0	2.3	0.1	U				R05	4.0	65De13	
^{154}Sm−^{153}Eu		1082	42	979.1	1.2	−0.6	U				R04	4.0	64De15	
^{154}Sm−^{152}Sm		2664	43	2477.1	0.9	−1.1	U				R04	4.0	64De15	
^{154}Gd−^{152}Gd		1400	50	1074.58	0.22	−1.6	U				R04	4.0	64De15	
^{154}Gd O−C_{15}		−84207.4	5.9	−84212.0	1.3	−0.5	U				TG1	1.5	09Ke.A	
		−84206.6	4.3			−0.8	U				TG1	1.5	11Ke03	
^{154}Dy(α)^{150}Gd		2946.4	5.	2945	5	−0.3	1	93	82	^{154}Dy	Dba		67Go32	Z
^{154}Ho(α)^{150}Tb		4041.3	5.	4041	4	0.0	2						68Go.C	Z
		4041.7	5.			0.0	2				ORa		74Sc19	Z
^{154}Ho^m(α)^{150}Tb^m		3819.2	10.	3823	5	0.4	–				ORa		71To01	Z
		3824.0	5.			−0.1	–				ORa		74Sc19	Z
	ave.	3823	5			0.1	1	100	89	^{154}Ho^m			average	
^{154}Er(α)^{150}Dy		4280.5	5.	4279.7	2.6	−0.2	–						68Go.C	Z
		4279.5	3.			0.1	–				Bka		82Bo04	Z
	ave.	4279.8	2.6			0.0	1	98	92	^{154}Er			average	
^{154}Tm(α)^{150}Ho		5096.9	5.1	5093.8	2.6	−0.6	2				GSa		79Ho10	Z
		5092.7	3.			0.4	2				Bka		82Bo04	
^{154}Tm^m(α)^{150}Ho^m		5174.8	5.	5171.8	1.6	−0.6	3				GSa		79Ho10	Z
		5170.8	3.			0.3	3				Bka		82Bo04	Z
		5171.8	2.1			0.0	3				Ora		82De11	Z
^{154}Yb(α)^{150}Er		5473.4	5.	5474.3	1.7	0.2	–				GSa		79Ho10	Z
		5474.7	2.			−0.2	–				Ora		82De11	Z
		5473.4	4.			0.2	–				Daa		96Pa01	
	ave.	5474.3	1.7			0.0	1	100	100	^{154}Yb			average	
^{152}Sm(t,p)^{154}Sm		5361	25	5353.4	0.8	−0.3	U				Ald		66Bj01	
^{154}Sm(p,t)^{152}Sm		−5357	8	−5353.4	0.8	0.4	U				Min		72De47	
		−5353	15			0.0	U				Ham		74Oe03	
^{154}Gd(p,t)^{152}Gd		−6660	5	−6659.88	0.21	0.0	U				Min		73Oo01	
^{154}Sm(d,^{3}He)^{153}Pm		−3623	25	−3603	9	0.8	–						76Su.B	
^{154}Sm(t,α)^{153}Pm		10748	20	10718	9	−1.5	–				LAl		78Bu18	
^{154}Sm(d,^{3}He)^{153}Pm	ave.	−3592	16	−3603	9	−0.7	1	34	33	^{153}Pm			average	
^{153}Eu(n,γ)^{154}Eu		6442.2	0.3	6442.22	0.24	0.1	–				ILn		87Ba52	Z
		6442.2	0.4			0.0	–				Bdn		06Fi.A	
	ave.	6442.20	0.24			0.1	1	99	85	^{154}Eu			average	
^{153}Gd(n,γ)^{154}Gd		8895.25	0.30	8894.72	0.17	−1.8	–				ILn		85Vo15	Z
		8894.47	0.20			1.3	–				ILn		93Sp.A	Z

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{154}Gd(d,t)^{153}Gd		−2642	10	−2637.49	0.17	0.5	U			Kop		67Tj01	
^{153}Gd(n,γ)^{154}Gd	ave.	8894.71	0.17	8894.72	0.17	0.1	1	98	74 ^{153}Gd			average	
^{154}Pr(β^-)^{154}Nd		7720	100				5			Kur		02Sh.B	∗
^{154}Nd(β^-)^{154}Pm		2687	25				4			Ida		93Gr17	
^{154}Pm^m(IT)^{154}Pm		−210	70	20	12	3.3	B					72Ta13	∗
		20	12				3					90So08	∗
^{154}Pm(β^-)^{154}Sm		3900	200	3940	50	0.2	U					71Da28	
		4396	180			−2.5	U					72Ta13	
		3880	200			0.3	U					74Ya07	∗
^{154}Pm^m(β^-)^{154}Sm		3900	200	3960	40	0.3	U					71Da28	∗
		4190	170			−1.3	U					72Ta13	∗
		3940	50			0.5	2					73Pr05	∗
		3940	200			0.1	U					74Ya07	∗
		4056	100			−0.9	2			Ida		93Gr17	
^{154}Eu(β^-)^{154}Gd		1978	5	1967.8	0.8	−2.0	U					60La04	∗
		1967	2			0.4	1	14	12 ^{154}Eu			77Ra08	∗
		1975	3			−2.4	U					81Bu.A	∗
^{154}Tb(β^+)^{154}Gd		3562	50	3550	50	−0.2	2					70Ag03	∗
^{154}Ho(β^+)^{154}Dy		5700	80	5755	10	0.7	U			IRS		83Al06	∗
		5750	80			0.1	U			IRS		93Al03	
^{154}Ho^m(β^+)^{154}Dy		5994	100	5997	28	0.0	o			IRS		83Al.A	∗
		6070	80			−0.9	1	12	11 ^{154}Ho^m	IRS		93Al03	
^{154}Tm^m(β^+)^{154}Er		8234	150	8250	50	0.1	U			Dbn		94Po26	∗
^{154}Lu(β^+)^{154}Yb		7556	450	10220#	200#	5.9	C					84Ha.B	∗
^{154}Lu^m(IT)^{154}Lu		58.7	9.3	60	12	0.1	o			Ara		97Da07	∗
∗^{154}Ce−u	Trends from Mass Surface TMS suggest ^{154}Ce 320 less bound											GAu	∗∗
∗^{154}Tb−u	$M-A$=–70142(43) keV for mixture gs+m+n at 12(7) and 200#150 keV											Nub16b	∗∗
∗^{154}Dy−^{133}Cs$_{1.158}$	No contamination observed, but contamination by ^{154}Tb											00Be42	∗∗
∗	cannot be excluded											00Be42	∗∗
∗^{154}Ho−u	$M-A$=–64478(28) keV for mixture gs+m at 243(28) keV											Nub16b	∗∗
∗^{154}Tm−u	$M-A$=–54438(32) keV for mixture gs+m at 70(50) keV											Nub16b	∗∗
∗^{154}Pr(β^-)^{154}Nd	E_{β^-}=7490(100) to 4$^+$ level at 233.2 keV											96To05	∗∗
∗^{154}Pm^m(IT)^{154}Pm	Only use the two $Q-$'s to ^{154}Sm, see below											GAu	∗∗
∗^{154}Pm^m(IT)^{154}Pm	Supported by reference 30(10) keV											12So10	∗∗
∗^{154}Pm(β^-)^{154}Sm	E_{β^-}=2410(180) to 3$^-$ level at 1986.59 keV											Ens09a	∗W
∗^{154}Pm(β^-)^{154}Sm	E_{β^-}=2400(200), 1850(200) to 2$^+$ levels at 1440.04, 2069.07 keV											Ens09a	∗∗
∗^{154}Pm^m(β^-)^{154}Sm	E_{β^-}=3270, 3090, 2810 (all 170) to 921.345 1$^-$, 1099.26 0$^+$, 1475.81 1$^-$											Ens09a	∗∗
∗^{154}Pm^m(β^-)^{154}Sm	E_{β^-}=2810(170) to 1$^-$ level at 1475.81 keV, and other E_{β^-}											Ens09a	∗∗
∗^{154}Pm^m(β^-)^{154}Sm	E_{β^-}=3950(50) 3010(80) to ground state, 1$^-$ level at 921.345 keV											Ens09a	∗∗
∗^{154}Pm^m(β^-)^{154}Sm	E_{β^-}=3000(200), 1900(200), 1800(200) to 1$^-$ level at 921.345, 2$^+$ at 2069.07,											Ens09a	∗∗
∗	and (1,2$^+$) at 2139.82 keV											Ens09a	∗∗
∗^{154}Eu(β^-)^{154}Gd	E_{β^-}=1855(5) 1844(2) respectively, to 2$^+$ level at 123.0709 keV											Ens09a	∗∗
∗^{154}Eu(β^-)^{154}Gd	E_{β^-}=257(3) to 2$^-$ level at 1719.5593 keV, and other E_{β^-}											Ens09a	∗∗
∗^{154}Tb(β^+)^{154}Gd	E_{β^+}=2540(50) 1860(50) to ground state and 0$^+$ level at 680.6673 keV											Ens09a	∗∗
∗^{154}Ho(β^+)^{154}Dy	E_{β^+}=4340(80) to 2$^+$ level at 334.34 keV											Ens09a	∗∗
∗^{154}Ho^m(β^+)^{154}Dy	E_{β^+}=2500(100) to 7$^+$ level at 2472.40 keV											Ens09a	∗∗
∗^{154}Tm^m(β^+)^{154}Er	E_{β^+}=4882(150) to 8$^+$ level 2329.5 keV											Ens09a	∗∗
∗^{154}Lu(β^+)^{154}Yb	p$^+$ =0.75(0.05) Q =5710(450) from ^{154}Lu^m at 200#150 to 8$^+$ level at 2046.2 keV											Ens09a	∗∗
∗^{154}Lu^m(IT)^{154}Lu	Use only their Q_α's											GAu	∗∗
^{155}Pr−u		−59492	31	−59491	18	0.0	1	35	35 ^{155}Pr	CP1	1.0	12Va02	∗
^{155}Pr−^{80}Kr$_{1.938}$		102571	33	102569	18	−0.1	1	31	31 ^{155}Pr	CP1	1.0	12Va02	
^{155}Pr−^{86}Kr$_{1.802}$		101588	32	101589	18	0.0	1	33	33 ^{155}Pr	CP1	1.0	12Va02	
^{155}Nd−u		−66866	17	−66864	10	0.1	1	33	33 ^{155}Nd	CP1	1.0	12Va02	∗
^{155}Nd−^{80}Kr$_{1.938}$		95197	17	95195	10	−0.1	1	34	33 ^{155}Nd	CP1	1.0	12Va02	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{155}Nd$-^{86}$Kr$_{1.802}$		94215	17	94215	10	0.0	1	33	33 ^{155}Nd	CP1	1.0	12Va02	
^{155}Pm$-$u		$-$71863.8	8.8	$-$71863	5	0.1	1	33	33 ^{155}Pm	CP1	1.0	12Va02	*
^{155}Pm$-^{80}$Kr$_{1.938}$		90197.8	8.6	90196	5	$-$0.2	1	36	34 ^{155}Pm	CP1	1.0	12Va02	
^{155}Pm$-^{86}$Kr$_{1.802}$		89216.0	8.8	89217	5	0.1	1	33	33 ^{155}Pm	CP1	1.0	12Va02	
^{155}Sm$-$u		$-$75357	24	$-$75352.9	1.6	0.2	U			CP1	1.0	12Va02	*
^{155}Sm$-^{80}$Kr$_{1.938}$		86704	24	86706.4	2.1	0.1	U			CP1	1.0	12Va02	
^{155}Sm$-^{86}$Kr$_{1.802}$		85722	24	85726.7	1.6	0.2	U			CP1	1.0	12Va02	
C$_{12}$ H$_{11}-^{155}$Gd		163530	70	163445.6	1.3	$-$0.3	U			R04	4.0	64De15	
C$_{11}$ ^{13}C H$_{10}-^{155}$Gd		158921	42	158975.4	1.3	0.3	U			R04	4.0	64De15	
C$_{10}$ ^{13}C$_2$ H$_9-^{155}$Gd		154450	140	154505.2	1.3	0.1	U			R04	4.0	64De15	
C$_{10}$ H$_7$ N$_2-^{155}$Gd		138213	38	138293.4	1.3	0.5	U			R04	4.0	64De15	
^{155}Gd$-^{139}$La O		21252	32	21356.4	2.3	0.8	U			R05	4.0	65De13	
^{155}Tb$-$u		$-$76431	30	$-$76490	11	$-$2.0	U			GS2	1.0	05Li24	
^{155}Dy$-$u		$-$74227	30	$-$74242	10	$-$0.5	U			GS2	1.0	05Li24	
^{155}Ho$-$u		$-$70867	30	$-$70896	19	$-$1.0	1	39	39 ^{155}Ho	GS2	1.0	05Li24	
^{155}Er$-$u		$-$66785	30	$-$66784	7	0.0	U			GS2	1.0	05Li24	
^{155}Tm$-$u		$-$60814	33	$-$60790	11	0.7	U			GS2	1.0	05Li24	*
^{155}Gd ^{35}Cl$_3-^{149}$Sm ^{37}Cl$_3$		14282.4	6.3	14288.8	0.9	0.4	U			M21	2.5	75Ka25	
^{155}Gd ^{35}Cl$-^{153}$Eu ^{37}Cl		4345.4	2.4	4342.9	0.8	$-$0.4	U			H25	2.5	72Ba08	
^{155}Gd$-^{138}$La O		20558	49	20597	4	0.2	U			R05	4.0	65De13	
^{155}Gd$-^{154}$Gd		1480	60	1756.40	0.20	1.2	U			R04	4.0	64De15	
^{155}Gd O$-$C$_{15}$		$-$82452.8	5.0	$-$82455.6	1.3	$-$0.4	o			TG1	1.5	09Ke.A	
		$-$82452.2	2.6			$-$0.9	1	11	11 ^{155}Gd	TG1	1.5	11Ke03	
^{155}Er(α)^{151}Dy		4118.3	5.				3			ORa		74To07	Z
^{155}Tm(α)^{151}Ho		4578.3	10.3	4572	5	$-$0.6	3			ORa		71To01	*
		4568.1	10.			0.4	3			ORa		71To01	*
		4570.1	8.			0.2	3					92Ha10	*
^{155}Yb(α)^{151}Er		5344.1	5.	5338.8	2.1	$-$1.1	3			GSa		79Ho10	
		5336.6	5.			0.4	3			Bka		82Bo04	Z
		5344.2	5.			$-$1.1	3					87Ka.A	
		5331.8	4.			1.7	3			ORa		91To08	
		5340.1	4.			$-$0.3	3			Daa		96Pa01	
^{155}Lu(α)^{151}Tm		5796.9	5.	5802.8	2.6	1.2	5					89Ho12	*
		5797.9	5.			1.0	5			ORa		91To08	
		5805.1	5.			$-$0.5	5			Daa		96Pa01	
		5811.2	5.			$-$1.7	5			Ara		97Da07	
^{155}Lu^m(α)^{151}Tm^m		5723.0	10.	5730.6	2.8	0.7	6					89Ho12	
		5727.1	5.			0.7	6			ORa		91To08	
		5732.2	5.			$-$0.3	6			Daa		96Pa01	
		5734.2	5.			$-$0.7	6			Ara		97Da07	
^{155}Lu^n(α)^{151}Tm		7574.9	15.	7584	3	0.2	U					89Ho12	*
		7586.2	5.			$-$0.5	o			Daa		96Pa01	*
^{155}Gd(n,α)^{152}Sm		8331	6	8339.1	0.3	1.4	U			McM		69Be17	
^{155}Gd(p,t)^{153}Gd		$-$6850	7	$-$6848.17	0.25	0.3	U			McM		73Lo08	
		$-$6853	5			1.0	U			Min		73Oo01	
^{154}Sm(n,γ)^{155}Sm		5806.8	0.6	5806.96	0.27	0.3	2					82Ba15	Z
		5807.0	0.3			$-$0.1	2			ILn		82Sc03	Z
^{154}Sm(d,p)^{155}Sm		3584	12	3582.39	0.27	$-$0.1	U			Tal		65Ke09	
^{154}Eu(n,γ)^{155}Eu		8151.3	0.4	8151.3	0.4	0.0	1	100	98 ^{155}Eu	ILn		86Pr03	
^{154}Gd(n,γ)^{155}Gd		6435.11	0.30	6435.24	0.18	0.4	–			ILn		86Sc25	Z
		6435.29	0.23			$-$0.2	–			Bdn		06Fi.A	
^{154}Gd(d,p)^{155}Gd		4217	10	4210.68	0.18	$-$0.6	U			Kop		67Tj01	
^{155}Gd(d,t)^{154}Gd		$-$190	10	$-$178.01	0.18	1.2	U			Kop		67Tj01	
^{154}Gd(n,γ)^{155}Gd	ave.	6435.22	0.18	6435.24	0.18	0.1	1	99	73 ^{154}Gd			average	
^{155}Ta(p)^{154}Hf		1776	10	1453	15	$-$32.3	B			Arp		99Uu01	*
		1453	15				3			Jya		07Pa27	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{155}Nd(β^-)^{155}Pm	4222	150	4656	10	2.9	U			Ida		93Gr17	
^{155}Pm(β^-)^{155}Sm	3224	30	3251	5	0.9	U			Ida		93Gr17	
^{155}Sm(β^-)^{155}Eu	1634	15	1627.3	1.2	−0.4	U					63Kr04	*
	1624	15			0.2	U					65Fu13	*
	1607	25			0.8	U			Ida		93Gr17	
^{155}Eu(β^-)^{155}Gd	252	5	251.8	0.9	0.0	U					54Le08	
	245	5			1.4	U					58Gl56	
	245	5			1.4	U					59Am16	
^{155}Dy(β^+)^{155}Tb	2099	6	2094.5	1.9	−0.8	2					63Pe13	*
	2094	2			0.2	2					80Bu04	*
^{155}Ho(β^+)^{155}Dy	3102	20	3116	17	0.7	1	69	61 ^{155}Ho			72To07	*
^{155}Lu^m(IT)^{155}Lu	23.0	6.2	21	4	−0.3	5					96Pa01	
	19.9	6.2			0.2	5					97Da07	
^{155}Lu^n(IT)^{155}Lu	1781	2				5					96Pa01	
*^{155}Pr−u	Represents frequency ratio ^{155}Pr^{++}/(C$_{12}$H$_4$)$^+$ =0.98142559(20)										WgM124	**
*^{155}Nd−u	Represents frequency ratio ^{155}Nd^{++}/(C$_{12}$H$_4$)$^+$ =0.98147230(11)										WgM124	**
*^{155}Pm−u	Represents frequency ratio ^{155}Pm^{++}/(C$_{12}$H$_4$)$^+$ =0.981503965(56)										WgM124	**
*^{155}Sm−u	Represents frequency ratio ^{155}Sm^{++}/(C$_{12}$H$_4$)$^+$ =0.98152610(15)										WgM124	**
*^{155}Tm−u	$M-A$=–56627(28) keV for mixture gs+m at 41(6) keV										Nub16b	**
*^{155}Tm(α)^{151}Ho	First assigned to ^{156}Tm^m but belonging to ^{155}Tm ground state										94To10	**
*^{155}Tm(α)^{151}Ho	Doublet from ground state and isomer, less than 5 keV apart										90Po13	**
*^{155}Lu(α)^{151}Tm	Original value E=5656(6) (Q =5806.1) recalibrated										79Ho10	**
*^{155}Lu^n(α)^{151}Tm	Original value E=7408(10) recalibrated										81Ho.A	**
*^{155}Lu^n(α)^{151}Tm	Replaced by authors' value for ^{155}Lu^n(IT)										AHW	**
*^{155}Ta(p)^{154}Hf	E_p=1765(10) for (11/2$^-$) state; ground state may be 1/2$^+$, slightly lower										99Uu01	**
*	1776 keV proton not observed in coincidence with feeding α										07Pa27	**
*^{155}Sm(β^-)^{155}Eu	E_{β^-}=1530(15) E_{β^-}=1520(15) respectively, to 5/2$^-$ level at 104.334 keV										Ens051	**
*^{155}Dy(β^+)^{155}Tb	E_{β^+}=850(6) 845(2) respectively, to 5/2$^-$ level at 226.918 keV, and other E_{β^+}										Ens051	**
*^{155}Ho(β^+)^{155}Dy	E_{β^+}=1840(20) to 3/2$^+$ level at 240.196 keV										Ens051	**
^{156}Pm−u	−68883.4	6.9	−68883	4	0.1	1	32	32 ^{156}Pm	CP1	1.0	12Va02	*
^{156}Pm−^{80}Kr$_{1.950}$	94181.7	6.4	94180	4	−0.2	1	38	35 ^{156}Pm	CP1	1.0	12Va02	
^{156}Pm−^{86}Kr$_{1.814}$	93269.1	6.8	93270	4	0.1	1	33	33 ^{156}Pm	CP1	1.0	12Va02	
C$_{12}$ H$_{12}$−^{156}Gd	171923	44	171769.8	1.3	−0.9	U			R04	4.0	64De15	
C$_{11}$ ^{13}C H$_{11}$−^{156}Gd	167384	43	167299.6	1.3	−0.5	U			R04	4.0	64De15	
C$_{10}$ ^{13}C$_2$ H$_{10}$−^{156}Gd	162810	60	162829.4	1.3	0.1	U			R04	4.0	64De15	
C$_{10}$ H$_8$ N$_2$−^{156}Gd	146661	38	146617.7	1.3	−0.3	U			R04	4.0	64De15	
^{156}Tb−u	−75165	40	−75246	4	−2.0	U			GS2	1.0	05Li24	*
C$_{10}$ H$_8$ N$_2$−^{156}Dy	145130	100	144464.2	1.3	−1.7	U			R04	4.0	64De15	
^{156}Dy−^{133}Cs$_{1.173}$	35195.1	4.8	35188.9	1.3	−1.3	1	7	7 ^{156}Dy	MA8	1.0	17Ma.A	
^{156}Ho−u	−70107	122	−70290	60	−1.5	o			GS1	1.0	00Ra23	*
^{156}Ho^n−u	−70107	30				2			GS2	1.0	05Li24	*
^{156}Er−u	−68907	30	−68934	26	−0.9	1	78	78 ^{156}Er	GS2	1.0	05Li24	
^{156}Tm−u	−61044	30	−61014	15	1.0	U			GS2	1.0	05Li24	
^{156}Yb−u	−57202	30	−57183	10	0.6	U			GS2	1.0	05Li24	
^{156}Gd ^{35}Cl−^{154}Gd ^{37}Cl	4199	5	4207.27	0.22	0.4	U			H12	4.0	64Ba15	
	4206	10			0.1	U			H21	2.5	70Ma05	
	4204.8	1.4			0.7	U			H25	2.5	72Ba08	
	4203.0	1.0			1.7	U			M21	2.5	75Ka25	
^{156}Dy−^{156}Gd	2153.47	0.11	2153.48	0.11	0.0	1	100	92 ^{156}Dy	SH1	1.0	11El05	
^{156}Gd−^{139}La O	20618	71	20857.1	2.3	0.8	U			R05	4.0	65De13	
^{156}Gd−^{155}Gd	−584	33	−499.23	0.07	0.6	U			R04	4.0	64De15	
^{156}Gd O−C$_{15}$	−82946.5	5.8	−82954.8	1.3	−1.0	o			TG1	1.5	09Ke.A	
	−82945.6	3.6			−1.7	U			TG1	1.5	11Ke03	
^{156}Er(α)^{152}Dy	3109.9	70.	3481	25	5.3	C					95Ka.A	
^{156}Tm(α)^{152}Ho	4341.6	10.	4345	7	0.4	–			ORa		71To10	
	4345.6	10.			0.0	–					81Ga36	
ave.	4344	7			0.2	1	98	94 ^{156}Tm			average	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.		Lab	F	Reference	
^{156}Tm^m(α)^{152}Ho		4737.5	10.	*			F				ORa		71To01	*
^{156}Yb(α)^{152}Er		4813.6	10.	4810	4	−0.4	–						77Ha48	
		4809.6	10.			0.0	–				GSa		79Ho10	
		4810.6	4.			−0.2	–				Daa		96Pa01	
	ave.	4811	4			−0.3	1	98	83	^{156}Yb			average	
^{156}Lu(α)^{152}Tm		5593.7	10.	5596	3	0.2	U				GSa		79Ho10	
		5592.7	5.			0.6	2				Dba		92Po14	
		5597.9	4.			−0.5	2				Daa		96Pa01	
^{156}Lu^m(α)^{152}Tm^m		5713.7	5.	5711.5	2.6	−0.4	3				GSa		79Ho10	Z
		5709.7	5.			0.4	3				Dba		92Po14	
		5709.7	8.			0.2	3						92Ha10	
		5711.7	4.			−0.1	3				Daa		96Pa01	
^{156}Hf(α)^{152}Yb		6033.0	10.	6029	4	−0.4	–				GSa		79Ho10	
		6027.9	4.			0.2	–				Daa		96Pa01	
	ave.	6029	4			0.0	1	100	100	^{156}Hf			average	
^{156}Hf^m(α)^{152}Yb		8009.8	15.	7988	4	−1.5	U				GSa		81Ho.A	
		7987.2	4.			0.1	o				Daa		96Pa01	*
^{154}Sm(t,p)^{156}Sm		4556	25	4566	9	0.4	1	12	11	^{156}Sm	Ald		66Bj01	
^{154}Eu(t,p)^{156}Eu		6003	4	6005	3	0.6	1	71	70	^{156}Eu	LAl		84La06	*
^{154}Gd(t,p)^{156}Gd		6495.1	3.6	6489.80	0.19	−1.5	U				McM		89Lo07	
^{156}Gd(p,t)^{154}Gd		−6490	7	−6489.80	0.19	0.0	U				McM		73Lo08	
		−6490	5			0.0	U				Min		73Oo01	
^{155}Gd(n,γ)^{156}Gd		8536.8	0.5	8536.35	0.07	−0.9	U				ILn		82Ba28	
		8536.39	0.07			−0.6	–				MMn		82Is05	Z
		8536.04	0.19			1.6	–				Bdn		06Fi.A	
^{155}Gd(d,p)^{156}Gd		6319	10	6311.78	0.07	−0.7	U				Kop		67Tj01	
^{156}Gd(d,t)^{155}Gd		−2287	10	−2279.12	0.07	0.8	U				Kop		67Tj01	
^{155}Gd(n,γ)^{156}Gd	ave.	8536.35	0.07	8536.35	0.07	0.0	1	100	59	^{155}Gd			average	
^{155}Gd(α,t)^{156}Tb−^{158}Gd()^{159}Tb		−821.9	3.6	−822	4	0.0	1	100	100	^{156}Tb	McM		75Bu02	
^{156}Dy(d,t)^{155}Dy		−3184	10	−3188	10	−0.4	1	92	92	^{155}Dy	Kop		70Gr46	
^{156}Ta(p)^{155}Hf		1028.6	13.	1020	4	−0.7	o				Dap		92Pa05	
		1013.6	5.			1.2	o				Dap		96Pa01	
		1017.9	5.			0.4	3				Dap		11Da12	
^{156}Ta^m(p)^{155}Hf		1110.2	12.	1114	7	0.3	3				Dap		93Li34	
		1115.2	8.			−0.2	3				Dap		96Pa01	
^{156}Nd(β^-)^{156}Pm		3690	200				2				Kur		02Sh.B	*
^{156}Pm(β^-)^{156}Sm		5155	35	5197	9	1.2	U				Stu		90He11	
		5110	100			0.9	U				Kur		02Sh.B	
^{156}Sm(β^-)^{156}Eu		721	10	722	8	0.1	–						63Gu04	*
		721	15			0.1	–						65Wi08	*
	ave.	721	8			0.1	1	90	89	^{156}Sm			average	
^{156}Eu(β^-)^{156}Gd		2430	10	2452	3	2.2	–						62Ew01	
		2460	10			−0.8	–						63Th02	
		2450	15			0.2	–						64Pe17	
		2478	20			−1.3	U						67Va23	
	ave.	2446	6			1.0	1	28	28	^{156}Eu			average	
^{156}Tb(β^+)^{156}Gd		3570	50	2444	4	−22.5	B						70Ag02	*
^{156}Ho(β^+)^{156}Dy		4400	400	5050	60	1.6	U						76Gr20	*
		5050	90			0.0	o						02Iz01	
		5050	60				2						04Iz02	*
^{156}Er(β^+)^{156}Ho		1670	70	1270	60	−5.8	B						82Vy06	*
^{156}Tm(β^+)^{156}Er		7458	50	7377	27	−1.6	1	29	22	^{156}Er	Dbn		94Po26	*
		7390	100			−0.1	U						95Ga.A	
^{156}Hf^m(IT)^{156}Hf		1959	1				2						96Pa01	

*^{156}Pm−u	Represents frequency ratio ^{156}Pm^{++}/(C$_{12}$H$_4$)$^+$ =0.975190689(43)	WgM124	**
*^{156}Tb−u	$M-A$=–69968(32) keV for mixture gs+m+n at 54(3) and 88.4 keV	Nub16b	**
*^{156}Ho−u	$M-A$=–65230(100) keV for mixture gs+m+n at 52.37 and 170(70) keV	Nub16b	**
*^{156}Ho^n−u	Assuming high spin isomer is favored	GAu	**
*^{156}Tm^m(α)^{152}Ho	F : originally E_α=4460(10) to ^{152}Ho^m at 160(1), reassigned to ^{155}Tm	94To10	**
*^{156}Hf^m(α)^{152}Yb	Replaced by authors' value for ^{156}Hf^m(IT)	AHW	**
*^{154}Eu(t,p)^{156}Eu	Q =5569(4) to 3$^-$ level at 434.23 keV	91Ba06	**
*^{156}Nd(β^-)^{156}Pm	Trends from Mass Surface TMS suggest ^{156}Nd 70 less bound	GAu	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
$*^{156}$Sm(β^-)^{156}Eu	E_{β^-}=430(10) 430(15) respectively, to 1^+ level at 291.3037 keV											Ens12a	**
$*^{156}$Tb(β^+)^{156}Gd	E_{β^+}=2640(50) from ^{156}Tb^n at 88.4 to ground state											Nub16b	**
$*^{156}$Ho(β^+)^{156}Dy	E_{β^+}=1800(50) to levels around 1600											Ens12a	**
$*^{156}$Ho(β^+)^{156}Dy	Original error 20 is for statistics only, increased by evaluator											GAu	**
$*^{156}$Er(β^+)^{156}Ho	p$^+$ =0.0036(0.0017) to 2^- level at 82.23 keV, reanalyzed											Ens12a	**
$*^{156}$Tm(β^+)^{156}Er	E_{β^+}=6091(50) to 2^+ level at 344.53 keV											Ens12a	**
^{157}Nd−u		−60614	47	−60614	27	0.0	1	32	32 ^{157}Nd	CP1	1.0	12Va02	*
^{157}Nd−^{80}Kr$_{1.963}$		103537	46	103536	27	0.0	1	34	34 ^{157}Nd	CP1	1.0	12Va02	
^{157}Nd−^{86}Kr$_{1.826}$		102610	46	102611	27	0.0	1	34	34 ^{157}Nd	CP1	1.0	12Va02	
^{157}Pm−u		−66880	13	−66879	8	0.1	1	33	33 ^{157}Pm	CP1	1.0	12Va02	*
^{157}Pm−^{80}Kr$_{1.963}$		97273	13	97271	8	−0.1	1	34	33 ^{157}Pm	CP1	1.0	12Va02	
^{157}Pm−^{86}Kr$_{1.826}$		96346	13	96346	8	0.0	1	33	33 ^{157}Pm	CP1	1.0	12Va02	
^{157}Sm−u		−71582.2	8.3	−71581	5	0.1	1	33	33 ^{157}Sm	CP1	1.0	12Va02	*
^{157}Sm−^{80}Kr$_{1.963}$		92570.0	8.0	92569	5	−0.2	1	36	34 ^{157}Sm	CP1	1.0	12Va02	
^{157}Sm−^{86}Kr$_{1.826}$		91643.0	8.3	91644	5	0.1	1	33	33 ^{157}Sm	CP1	1.0	12Va02	
C$_{10}$ H$_9$ N$_2$−^{157}Gd		152720	60	152605.4	1.3	−0.5	U			R04	4.0	64De15	
C$_9$ ^{13}C H$_8$ N$_2$−^{157}Gd		148170	70	148135.2	1.3	−0.1	U			R04	4.0	64De15	
C$_{10}$ H$_5$ O$_2$−^{157}Gd		105080	60	104986.5	1.3	−0.4	U			R04	4.0	64De15	
^{157}Ho−u		−71724	30	−71748	25	−0.8	1	71	71 ^{157}Ho	GS2	1.0	05Li24	
^{157}Er−u		−68084	30	−68077	28	0.2	1	90	90 ^{157}Er	GS2	1.0	05Li24	
^{157}Tm−u		−63027	30				2			GS2	1.0	05Li24	
^{157}Yb−u		−57389	30	−57351	12	1.3	U			GS2	1.0	05Li24	
^{157}Lu−u		−49842	31	−49856	13	−0.5	1	17	17 ^{157}Lu	GS2	1.0	05Li24	*
^{157}Gd ^{35}Cl−^{155}Gd ^{37}Cl		4318	4	4288.18	0.19	−1.9	U			H12	4.0	64Ba15	
		4287	3			0.2	U			H21	2.5	70Ma05	
		4289.0	0.7			−0.5	U			M21	2.5	75Ka25	
		4288.83	0.66			−0.4	U			H41	2.5	85Dy04	
^{157}Gd−^{156}Gd		1860	60	1837.31	0.16	−0.1	U			R04	4.0	64De15	
^{157}Gd O−C$_{15}$		−81114.2	5.4	−81117.5	1.3	−0.4	o			TG1	1.5	09Ke.A	
		−81113.6	3.3			−0.8	U			TG1	1.5	11Ke03	
^{157}Yb(α)^{153}Er		4622.0	7.	4622	6	0.0	–					77Ha48	
		4623.0	10.			−0.1	–			GSa		79Ho10	
	ave.	4622	6			−0.1	1	99	96 ^{157}Yb			average	
^{157}Lu(α)^{153}Tm		5097.2	5.	5107.9	2.9	2.1	o			Dba		91Le15	*
		5096.2	20.			0.6	U			Bka		91To09	*
		5111.5	5.			−0.7	o			Dba		92Po14	*
^{157}Lu^m(α)^{153}Tm		5128.9	10.	5128.8	2.0	0.0	U			IRa		79Al16	Z
		5131.8	5.			−0.6	–			GSa		79Ho10	Z
		5133.7	5.			−0.9	–			ORa		83To01	Z
		5128.9	5.			0.0	o			Dba		91Le15	
		5118.7	5.			2.0	–			Bka		91To09	
		5125.8	6.			0.5	–					92Ha10	
		5132.0	5.			−0.6	–			Dba		92Po14	
		5127.9	4.			0.2	–			Daa		96Pa01	
	ave.	5128.4	2.1			0.2	1	99	54 ^{153}Tm			average	
^{157}Hf(α)^{153}Yb		5869.4	10.	5880	3	1.0	3					73Ea01	Z
		5884.1	5.			−0.8	3			GSa		79Ho10	Z
		5879.1	4.			0.2	3			Daa		96Pa01	
^{157}Ta(α)^{153}Lu^m		6277.2	4.	6275	8	−0.6	o			Ara		97Ir01	*
^{157}Ta^m(α)^{153}Lu		6381.9	10.	6377	4	−0.5	3			GSa		79Ho10	
		6375.8	4.			0.2	3			Daa		96Pa01	*
^{157}Ta^n(α)^{153}Lu		7946.9	8.	7948	8	0.0	o			Daa		96Pa01	*
^{155}Gd(t,p)^{157}Gd		6417.8	2.9	6414.43	0.16	−1.2	U			McM		89Lo07	
^{157}Gd(p,t)^{155}Gd		−6414	7	−6414.43	0.16	−0.1	U			McM		73Lo08	
		−6417	5			0.5	U			Min		73Oo01	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{156}Gd(n,γ)^{157}Gd	6359.6	0.8	6359.88	0.15	0.3	U					70Bo29	
	6360	1			−0.1	U					71Gr42	
	6359.80	0.15			0.5	o			ILn		87Sp.A	Z
	6359.86	0.15			0.1	1	99	57 ^{156}Gd	ILn		03Bo25	
^{157}Gd(γ,n)^{156}Gd	−6350	80	−6359.88	0.15	−0.1	U			Phi		60Ge01	
^{156}Gd(d,p)^{157}Gd	4136	10	4135.31	0.15	−0.1	U			Kop		67Tj01	
^{157}Gd(d,t)^{156}Gd	−112	10	−102.65	0.15	0.9	U			Kop		67Tj01	
^{156}Gd(α,t)^{157}Tb−^{158}Gd()^{159}Tb	−616.2	2.0	−614.3	0.8	0.9	1	16	9 ^{159}Tb	McM		75Bu02	
^{156}Dy(d,p)^{157}Dy	4748	10	4742	5	−0.6	–			Tal		68Be.A	
	4753	10			−1.1	–			Kop		70Gr46	
ave.	4750	7			−1.2	1	53	52 ^{157}Dy			average	
^{157}Ta(p)^{156}Hf	925.0	17.	935	10	0.6	o			Dap		96Pa01	
	933.0	7.			0.2	o			Ara		97Ir01	*
^{157}Pm(β^-)^{157}Sm	4360	100	4381	8	0.2	U			Kur		02Sh.B	
^{157}Sm(β^-)^{157}Eu	2700	200	2781	6	0.4	U					73Ka23	*
	2734	50			0.9	U			Ida		93Gr17	
^{157}Eu(β^-)^{157}Gd	1350	20	1365	4	0.7	U					64Sh21	*
	1370	20			−0.3	U					66Fu05	*
^{157}Tb(ε)^{157}Gd	62.4	0.6	60.04	0.30	−3.9	B					67Na08	*
	62.2	0.6			−3.6	B					83Be42	*
	60.0	0.3			0.1	1	98	93 ^{157}Tb			92Ra18	
^{157}Ho(β^+)^{157}Dy	2540	50	2592	24	1.0	1	23	22 ^{157}Ho			72To05	*
^{157}Er(β^+)^{157}Ho	3470	80	3420	30	−0.6	1	18	10 ^{157}Er			75Al.A	
	3805	100			−3.9	B			Dbn		94Po26	*
^{157}Tm(β^+)^{157}Er	4480	100	4700	40	2.2	B			IRS		93Al03	
	4482	100			2.2	B			Dbn		94Po26	
^{157}Yb(β^+)^{157}Tm	5074	100	5290	30	2.1	U			Dbn		94Po26	
^{157}Lu^m(IT)^{157}Lu	32	2	20.9	2.0	−5.5	B			Dba		91Le15	
	21	2			0.0	1	100	83 ^{157}Lu	Dba		92Po14	*
^{157}Ta^m(IT)^{157}Ta	22	5				3					97Ir01	
^{157}Ta^n(IT)^{157}Ta^m	1571	7				3			Daa		96Pa01	
*^{157}Nd−u	Represents frequency ratio ^{157}Nd^{++}/(C$_{12}$H$_4$)$^+$ =0.96892546(29)										WgM124	**
*^{157}Pm−u	Represents frequency ratio ^{157}Pm^{++}/(C$_{12}$H$_4$)$^+$ =0.968964141(81)										WgM124	**
*^{157}Sm−u	Represents frequency ratio ^{157}Sm^{++}/(C$_{12}$H$_4$)$^+$ =0.968993178(51)										WgM124	**
*^{157}Lu−u	$M-A$=–46417(28) keV for mixture gs+m at 20.9(2.0) keV										Nub16b	**
*^{157}Lu(α)^{153}Tm	E_α=4925(5) to ^{153}Tm^m at 43.2(0.2) keV										Nub16b	**
*^{157}Lu(α)^{153}Tm	E_α=4924(20) to ^{153}Tm^m at 43.2(0.2) keV										Nub16b	**
*^{157}Lu(α)^{153}Tm	E_α=4939(5) to ^{153}Tm^m at 43.2(0.2) keV; replaced by ^{157}Lu^m(IT)										Nub16b	**
*^{157}Ta(α)^{153}Lu^m	Replaced by ^{153}Lu^m(IT)										AHW	**
*^{157}Ta^m(α)^{153}Lu	Reassigned										97Ir01	**
*^{157}Ta^n(α)^{153}Lu	Replaced by authors' value for ^{157}Ta^n(IT)										AHW	**
*^{157}Ta(p)^{156}Hf	Use instead ^{157}Ta^m(IT)										AHW	**
*^{157}Sm(β^-)^{157}Eu	E_{β^-}=2400(200) to 5/2$^-$ level at 197.863 and 3/2$^+$ at 394.334 keV										Ens162	**
*^{157}Eu(β^-)^{157}Gd	E_{β^-}=870(30) 910(20) respectively, to 3/2$^+$ level at 474.630 keV, and other E_{β^-}										Ens162	**
*^{157}Tb(ε)^{157}Gd	LK=2.65(0.20); original value 66(6) recalculated										92Ha03	**
*^{157}Tb(ε)^{157}Gd	LK=2.69(0.20); original value 62.9(0.7) recalculated										85Vo09	**
*^{157}Ho(β^+)^{157}Dy	E_{β^+}=1180(50) to 5/2$^-$ level at 341.118 keV										Ens162	**
*^{157}Er(β^+)^{157}Ho	E_{β^+}=2525(100) to ground state yielding 3547(100), rather 24% to (3/2$^+$)										94Po26	**
*	level at 174.55 keV, 15% to 5/2$^-$ at 391.32 keV $\rightarrow$ +258 keV										Ens162	**
*^{157}Lu^m(IT)^{157}Lu	Derived from ^{157}Lu^m(α)-^{157}Lu(α) difference										92Po14	**
^{158}Pm−u	−63436	25	−63435	14	0.0	1	33	33 ^{158}Pm	CP1	1.0	12Va02	*
^{158}Pm−^{80}Kr$_{1.975}$	101720	25	101718	14	−0.1	1	33	33 ^{158}Pm	CP1	1.0	12Va02	
^{158}Pm−^{86}Kr$_{1.837}$	100773	25	100773	14	0.0	1	33	33 ^{158}Pm	CP1	1.0	12Va02	
^{158}Sm−u	−70049.2	9.5	−70049	5	0.0	1	31	31 ^{158}Sm	CP1	1.0	12Va02	*

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.		Lab	F	Reference	
^{158}Sm$-^{80}$Kr$_{1.975}$		95106.5	9.1	95104	5	−0.2	1	34	32	^{158}Sm	CP1	1.0	12Va02	
^{158}Sm$-^{86}$Kr$_{1.837}$		94159.3	9.4	94159	5	0.0	1	31	31	^{158}Sm	CP1	1.0	12Va02	
^{158}Eu$-$u		−72208	25	−72201	11	0.3	1	19	19	^{158}Eu	CP1	1.0	12Va02	*
^{158}Eu$-^{80}$Kr$_{1.975}$		92949	25	92952	11	0.1	1	20	19	^{158}Eu	CP1	1.0	12Va02	
^{158}Eu$-^{86}$Kr$_{1.837}$		92001	25	92007	11	0.2	1	19	19	^{158}Eu	CP1	1.0	12Va02	
C_{10} H_6 O_2-^{158}Gd		112444	33	112667.8	1.3	1.7	U				R04	4.0	64De15	
C_{10} H_6 O_2-^{158}Dy		112870	100	112364.8	2.5	−1.3	U				R04	4.0	64De15	
^{158}Ho$-$u		−71101	67	−71055	29	0.7	R				GS2	1.0	05Li24	*
^{158}Er$-$u		−70220	110	−70107	27	1.0	U				GS1	1.0	00Ra23	
		−70107	30			0.0	1	81	81	^{158}Er	GS2	1.0	05Li24	
^{158}Tm$-$u		−63080	110	−63020	27	0.5	U				GS1	1.0	00Ra23	
		−63020	30			0.0	1	81	81	^{158}Tm	GS2	1.0	05Li24	
^{158}Yb$-^{142}$Sm$_{1.113}$		34252	22	34248	9	−0.2	1	16	14	^{158}Yb	MA7	1.0	01Bo59	
^{158}Lu$-$u		−50720	30	−50684	16	1.2	R				GS2	1.0	05Li24	
^{158}Gd ^{35}Cl$-^{156}$Gd ^{37}Cl		4956	4	4931.19	0.19	−1.6	U				H12	4.0	64Ba15	
		4929	3			0.3	U				H21	2.5	70Ma05	
		4926.2	1.4			1.4	U				H25	2.5	72Ba08	
		4930.8	0.7			0.2	U				M21	2.5	75Ka25	
		4930.13	1.36			0.3	U				H41	2.5	85Dy04	
^{158}Dy ^{35}Cl$-^{156}$Dy ^{37}Cl		3081.4	3.3	3080.7	2.6	−0.1	U				H25	2.5	72Ba08	
^{158}Gd$-^{157}$Gd		392	48	143.78	0.07	−1.3	U				R04	4.0	64De15	
^{158}Gd O$-C_{15}$		−80968.3	5.4	−80973.7	1.3	−0.7	o				TG1	1.5	09Ke.A	
		−80967.8	3.2			−1.2	U				TG1	1.5	11Ke03	
^{158}Gd O$-C_{14}$		−80964.7	8.2			−0.7	U				TG1	1.5	11Ke03	
^{158}Yb(α)^{154}Er		4174.9	10.	4170	7	−0.5	–						77Ha48	
		4164.6	12.			0.4	–						92Ha10	
	ave.	4171	8			−0.1	1	80	71	^{158}Yb			average	
^{158}Lu(α)^{154}Tm		4792.2	10.	4790	5	−0.2	3				IRa		79Al16	Z
		4789.5	5.			0.1	3				ORa		83To01	Z
^{158}Hf(α)^{154}Yb		5406.0	5.	5404.8	2.7	−0.2	–				GSa		79Ho10	Z
		5401.4	5.			0.7	–				ORa		83To01	Z
		5406.1	4.			−0.3	–				Daa		96Pa01	
	ave.	5404.8	2.7			0.0	1	100	100	^{158}Hf			average	
^{158}Ta(α)^{154}Lu		6124.4	8.	6124	4	−0.1	9				Daa		96Pa01	
		6123.3	5.			0.1	9				Ara		97Da07	
^{158}Ta^m(α)^{154}Lu^m		6208.5	6.	6205.1	2.8	−0.6	10				GSa		79Ho10	
		6203.4	4.			0.4	10				Daa		96Pa01	
		6205.4	5.			−0.1	10				Ara		97Da07	
^{158}Ta^n(α)^{154}Lu^m		8869.0	11.3				11				Jya		14Ca03	
^{158}W(α)^{154}Hf		6600.4	30.	6613	3	0.4	U				GSa		81Ho10	*
		6609.7	30.			0.1	U				Daa		96Pa01	
		6612.7	3.				3				Ara		00Ma95	
^{158}W^m(α)^{154}Hf		8495.5	30.	8502	7	0.2	U				GSa		89Ho12	
		8506.8	24.			−0.2	U				Daa		96Pa01	
		8501.6	7.				3				Ara		00Ma95	
^{158}Gd(p,t)^{156}Gd		−5818	5	−5815.47	0.16	0.5	U				Min		73Oo01	
^{158}Dy(p,t)^{156}Dy		−7535	15	−7539.2	2.4	−0.3	U				Pri		77Ko04	
^{158}Gd(t,α)^{157}Eu$-^{156}$Gd()^{155}Eu		−512	5	−514	4	−0.4	1	69	67	^{157}Eu	LAl		79Bu05	
^{157}Gd(n,γ)^{158}Gd		7937.39	0.07	7937.39	0.06	0.0	–				MMn		82Is05	Z
		7937.39	0.17			0.0	–				Bdn		06Fi.A	
^{157}Gd(d,p)^{158}Gd		5724	10	5712.82	0.06	−1.1	U				Kop		67Tj01	
		5706	5			1.4	U				Tal		71Sh04	
^{158}Gd(d,t)^{157}Gd		−1688	10	−1680.16	0.06	0.8	U				Kop		67Tj01	
^{157}Gd(n,γ)^{158}Gd	ave.	7937.39	0.06	7937.39	0.06	0.0	1	100	58	^{158}Gd			average	
^{158}Gd(d,t)^{157}Gd$-^{159}$Tb()^{158}Tb		195.0	1.5	195.6	0.6	0.4	1	18	18	^{158}Tb	McM		84Bu14	
^{157}Gd(α,t)^{158}Tb$-^{158}$Gd()^{159}Tb		−198.3	1.0	−195.6	0.6	2.7	o				McM		75Bu02	
		−196.6	1.0			1.0	1	41	39	^{158}Tb	McM		84Bu14	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{158}Tb(p,d)^{157}Tb		−4560.3	4.2	−4554.0	1.0	1.5	U			Pri		85Al02	∗
^{158}Dy(d,t)^{157}Dy		−2804	10	−2797	5	0.7	–			Tal		68Be.A	
		−2804	10			0.7	–			Kop		70Gr46	
	ave.	−2804	7			1.0	1	53	48 ^{157}Dy			average	
^{158}Pm(β^-)^{158}Sm		6120	100	6161	14	0.4	o			Kur		02Sh.A	
		6085	80			1.0	o			Kur		07Ha57	
		6080	80			1.0	U			Kur		10Ha.A	
^{158}Sm(β^-)^{158}Eu		1999	15	2005	10	0.4	1	48	42 ^{158}Eu	Ida		93Gr17	
^{158}Eu(β^-)^{158}Gd		3550	120	3434	10	−1.0	U					65Sc19	∗
		3440	100			−0.1	U					66Da06	∗
^{158}Tb(ε)^{158}Gd		1237.542	0.018	1218.9	1.0	∗∗∗∗∗∗	F					83Ra25	∗
		1220	13			−0.1	U					87Br33	
		1222.1	3.			−1.1	U					85Vo13	∗
^{158}Tb(β^-)^{158}Dy		952	10	936.7	2.5	−1.5	U					68Sc04	∗
		933	6			0.6	1	17	14 ^{158}Dy			85Vo03	∗
^{158}Ho(β^+)^{158}Dy		4350	100	4220	27	−1.3	U					61Bo24	∗
		4230	30			−0.3	2					68Ab14	∗
^{158}Er(β^+)^{158}Ho		1710	40	880	40	−20.7	F					82Vy06	∗
^{158}Tm(β^+)^{158}Er		6530	100	6600	30	0.7	–			IRS		93Al03	
		6624	60			−0.4	–			Dbn		94Po26	∗
	ave.	6600	50			0.0	1	37	19 ^{158}Er			average	
^{158}Lu(ε)^{158}Yb		8960	200	8798	17	−0.8	U					95Ga.A	
∗^{158}Pm−u	Represents frequency ratio ^{158}Pm^{++}/(C$_{12}$H$_4$)$^+$ =0.96280782(15)											WgM124	∗∗
∗^{158}Sm−u	Represents frequency ratio ^{158}Sm^{++}/(C$_{12}$H$_4$)$^+$ =0.962848141(58)											WgM124	∗∗
∗^{158}Eu−u	Represents frequency ratio ^{158}Eu^{++}/(C$_{12}$H$_4$)$^+$ =0.96286130(15)											WgM124	∗∗
∗^{158}Ho−u	$M-A$=–66148(29) keV for mixture gs+m+n at 67.199 and 180#70 keV											Nub16b	∗∗
∗^{158}W(α)^{154}Hf	Original value E=6450(30) (Q =6617.8) recalibrated to E=6433(30) keV											89Ho12	∗∗
∗^{158}Tb(p,d)^{157}Tb	$Q-Q$(^{158}Gd(p,d))=1152.5(4.2) keV											AHW	∗∗
∗^{158}Eu(β^-)^{158}Gd	E_{β^-}=2520(120) 2430(100) respectively, to 2$^-$ level at 1023.6974 keV											Ens043	∗∗
∗	and 3$^-$ level at 1041.6376 keV, and other E_{β^-}											Ens043	∗∗
∗^{158}Tb(ε)^{158}Gd	pK=0.00009(2) to 2$^+$ level at 1187.143, recalculated Q											Ens043	∗∗
∗	F : pK<0.00002											87Br33	∗∗
∗^{158}Tb(ε)^{158}Gd	pL=0.689(0.01) to 2$^+$ level at 1187.143 keV, recalculated Q											Ens043	∗∗
∗^{158}Tb(β^-)^{158}Dy	E_{β^-}=853(10) 834(6) respectively, to 2$^+$ level at 98.9180 keV											Ens043	∗∗
∗^{158}Ho(β^+)^{158}Dy	E_{β^+}=780(80) to 2436−2605 levels; originally assigned to ^{158}Er(β^+);											Ens043	∗∗
∗	reinterpreted by evaluator											AHW	∗∗
∗^{158}Ho(β^+)^{158}Dy	E_{β^+}=2890(20), 700(60) to 317.139−637.712 and 2436.52−2605.96 levels, and											Ens043	∗∗
∗	E_{β^+}=1300(30), 1850(25) keV from ^{158}Ho^m at 67.199 to 1920.43−1940.75											Nub16b	∗∗
∗	and 1441.75 levels; E_{β^+}=700(60) was originally assigned to ^{158}Er(β^+);											68Ab14	∗∗
∗	reinterpreted by evaluator											AHW	∗∗
∗^{158}Er(β^+)^{158}Ho	p$^+$ =0.3(0.1) from annih. γ coinc. to 146.90 level											96Go06	∗∗
∗	F : Q¡(1550 from upper limit on p$^+$											75Bu.A	∗∗
∗^{158}Tm(β^+)^{158}Er	E_{β^+}=5410(60) to 2$^+$ level at 192.15 keV											Ens07a	∗∗
^{159}Pm−u		−60715	18	−60714	11	0.1	1	36	36 ^{159}Pm	CP1	1.0	12Va02	∗
^{159}Pm−^{80}Kr$_{1.988}$		105529	19	105527	11	−0.1	1	32	32 ^{159}Pm	CP1	1.0	12Va02	
^{159}Pm−^{86}Kr$_{1.849}$		104567	19	104567	11	0.0	1	32	32 ^{159}Pm	CP1	1.0	12Va02	
^{159}Sm−u		−66784	11	−66783	6	0.1	1	34	34 ^{159}Sm	CP1	1.0	12Va02	∗
^{159}Sm−^{80}Kr$_{1.988}$		99459	11	99458	6	−0.1	1	34	33 ^{159}Sm	CP1	1.0	12Va02	
^{159}Sm−^{86}Kr$_{1.849}$		98498	11	98498	6	0.0	1	34	34 ^{159}Sm	CP1	1.0	12Va02	
^{159}Eu−u		−70899	10	−70900	5	−0.1	1	22	22 ^{159}Eu	CP1	1.0	12Va02	∗
^{159}Eu−^{80}Kr$_{1.988}$		95344	10	95340	5	−0.4	1	23	21 ^{159}Eu	CP1	1.0	12Va02	
^{159}Eu−^{86}Kr$_{1.849}$		94382	10	94381	5	−0.1	1	22	22 ^{159}Eu	CP1	1.0	12Va02	
C$_9$ ^{13}C H$_6$ O$_2$−^{159}Tb		114840	50	114780.3	1.3	−0.3	U			R04	4.0	64De15	
C$_{10}$ H$_7$ O$_2$−^{159}Tb		119238	25	119250.5	1.3	0.1	U			R04	4.0	64De15	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{159}Dy−u		−74285	30	−74254.0	1.6	1.0	U			GS2	1.0	05Li24	
^{159}Ho−u		−72365	71	−72281	3	1.2	U			GS2	1.0	05Li24	*
^{159}Er−u		−69290	30	−69309	4	−0.6	U			GS2	1.0	05Li24	
^{159}Tm−u		−65025	30				2			GS2	1.0	05Li24	
^{159}Yb−^{142}Sm$_{1.120}$		35035	24	35026	19	−0.4	2			MA7	1.0	01Bo59	
^{159}Yb−u		−59960	30	−59945	19	0.5	R			GS2	1.0	05Li24	
^{159}Lu−u		−53420	61	−53360	40	0.9	2			GS2	1.0	05Li24	*
^{159}Hf−u		−46044	32	−46004	18	1.2	R			GS2	1.0	05Li24	
^{159}Tb ^{35}Cl$_2$−^{155}Gd ^{37}Cl$_2$		8625.64	1.03	8624.4	0.8	−0.5	1	11	7 ^{159}Tb	H41	2.5	85Dy04	
^{159}Tb ^{35}Cl−^{157}Gd ^{37}Cl		4333.3	1.2	4336.2	0.8	1.0	U			H25	2.5	72Ba08	
		4337.01	0.61			−0.5	1	28	18 ^{159}Tb	H41	2.5	85Dy04	
^{159}Lu(α)^{155}Tm		4534.3	10.	4490	40	−0.8	R			IRa		80Al14	
		4531.3	10.			−0.8	R					92Ha10	
^{159}Hf(α)^{155}Yb		5221.2	10.	5225.1	2.7	0.4	U					73Ea01	Z
		5226.2	5.			−0.2	4			GSa		79Ho10	Z
		5223.0	5.			0.4	4			ORa		83To01	Z
		5219.6	6.			0.9	4					92Ha10	
		5229.8	5.			−0.9	4			Daa		96Pa01	
^{159}Ta(α)^{155}Lu^m		5658.6	5.	5660	7	0.2	o			Daa		96Pa01	*
		5661.7	5.			−0.4	o			Ara		97Da07	*
^{159}Ta^m(α)^{155}Lu		5745.8	6.	5745	3	−0.2	4			GSa		79Ho10	
		5743.8	5.			0.2	4			Daa		96Pa01	
		5744.8	5.			0.0	4			Ara		97Da07	
^{159}W(α)^{155}Hf		6444.5	6.	6450	4	1.0	3			GSa		81Ho10	*
		6440.3	5.1			2.0	o			Daa		92Pa05	
		6454.7	5.			−0.8	3			Daa		96Pa01	
^{159}Re^m(α)^{155}Ta		6951.2	26.7	6969	23	0.7	R			Daa		07Pa27	
^{157}Gd(t,p)^{159}Gd		5398.9	2.3	5398.80	0.11	0.0	U			McM		89Lo07	
^{158}Gd(n,γ)^{159}Gd		5942	1	5943.21	0.08	1.2	U					71Gr42	
		5943.07	0.15			0.9	–			ILn		87Sp.A	Z
		5943.1	0.2			0.5	–			Dbn		03Gr13	
		5943.32	0.12			−0.9	–			BNn		03Gr27	
^{158}Gd(d,p)^{159}Gd		3717	10	3718.64	0.08	0.2	U			Kop		67Tj01	
^{158}Gd(n,γ)^{159}Gd	ave.	5943.20	0.08	5943.21	0.08	0.1	1	100	91 ^{159}Gd			average	
^{158}Gd(α,t)^{159}Tb		−13686.6	10.	−13682.1	0.8	0.5	U			McM		75Bu02	
^{158}Gd(α,t)^{159}Tb−^{164}Dy()^{165}Ho		−85.7	2.2	−88.2	1.1	−1.1	1	23	10 ^{165}Ho	McM		84Bu14	
^{159}Tb(γ,n)^{158}Tb		−8141	39	−8133.0	0.6	0.2	U			Phi		60Ge01	
^{159}Tb(d,t)^{158}Tb		−1870	15	−1875.8	0.6	−0.4	U			Tal		70Jo22	
^{159}Tb(d,t)^{158}Tb−^{164}Dy()^{163}Dy		−474.3	1.0	−474.9	0.6	−0.6	1	41	39 ^{158}Tb	McM		84Bu14	
^{158}Dy(d,p)^{159}Dy		4608	10	4606.5	2.6	−0.1	U			Tal		68Be.A	
		4600	10			0.7	U			Kop		70Gr46	
^{159}Re^m(p)^{158}W		1816.4	20.	1809	17	−0.4	4			Dap		06Jo10	
^{159}Pm(β^-)^{159}Sm		5460	140	5653	12	1.4	o			Kur		07Ha57	
		5430	140			1.6	U			Kur		10Ha.A	
^{159}Sm(β^-)^{159}Eu		3840	100	3836	7	0.0	o			Kur		02Sh.A	
		3805	65			0.5	o			Kur		07Ha57	
		3800	65			0.5	U			Kur		10Ha.A	
^{159}Eu(β^-)^{159}Gd		2600	50	2518	4	−1.6	U					65Iw01	*
^{159}Gd(β^-)^{159}Tb		969.0	1.5	970.9	0.8	1.3	1	26	16 ^{159}Tb			77Bo.A	
^{159}Dy(ε)^{159}Tb		365.9	1.3	365.2	1.2	−0.5	1	80	62 ^{159}Dy			68My.A	*
^{159}Ho(β^+)^{159}Dy		1837.6	6.	1837.6	2.7	0.0	2					79Ad08	*
		1837.6	3.			0.0	2					82Vy02	*
^{159}Er(β^+)^{159}Ho		2768.5	2.0				3					84Ka.A	*
		2810	100	2768.5	2.0	−0.4	U			IRS		93Al03	
^{159}Tm(β^+)^{159}Er		3400	300	3991	28	2.0	U					75St07	
		3850	100			1.4	U			IRS		93Al03	
		3670	100			3.2	B			Dbn		94Po26	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{159}Yb(β^+)^{159}Tm		5050	200	4730	30	−1.6	U			IRS		93Al03	
		4554	150			1.2	U			Dbn		94Po26	*
^{159}Lu(β^+)^{159}Yb		5850	150	6130	40	1.9	U			IRS		93Al03	
		5803	150			2.2	U			Dbn		94Po26	
^{159}Ta^m(IT)^{159}Ta		63.7	5.2				4			Ara		97Da07	
*^{159}Pm−u		Represents frequency ratio ^{159}Pm^{++}/(C$_{12}$H$_4$)$^+$ =0.95673359(11)										WgM124	**
*^{159}Sm−u		Represents frequency ratio ^{159}Sm^{++}/(C$_{12}$H$_4$)$^+$ =0.956770122(65)										WgM124	**
*^{159}Eu−u		Represents frequency ratio ^{159}Eu^{++}/(C$_{12}$H$_4$)$^+$ =0.956794898(63)										WgM124	**
*^{159}Ho−u		$M-A$=–67304(28) keV for mixture gs+m at 205.91 keV										Nub16b	**
*^{159}Lu−u		$M-A$=–49710(28) keV for mixture gs+m at 100#80 keV										Nub16b	**
*^{159}Ta(α)^{155}Lu^m		Replaced by ^{155}Lu^m(IT)										AHW	**
*^{159}W(α)^{155}Hf		Original value E_α=6299(6) recalibrated to E_α=6282(6) keV										89Ho12	**
*^{159}Eu(β^-)^{159}Gd		E_{β^-}=2350(50) to 7/2$^-$ level at 227.412 level, and other E_{β^-}										Ens121	**
*^{159}Dy(ε)^{159}Tb		From intensity of feeding 5/2$^-$ level at 363.5449 keV										Ens121	**
*^{159}Ho(β^+)^{159}Dy		E_{β^+}=506(6) 506(3) respectively, to 5/2$^-$ level at 309.593 keV										Ens121	**
*^{159}Er(β^+)^{159}Ho		E_{β^+}=1122(3) to 13/2$^+$ level at 624.5 keV, and other E_{β^+}										Ens121	**
*^{159}Yb(β^+)^{159}Tm		E_{β^+}=3366(150) to 7/2$^-$ level at 166.17 keV										Ens121	**
^{160}Sm−u		−64666	11	−64665	6	0.1	1	34	34 ^{160}Sm	CP1	1.0	12Va02	*
^{160}Sm−^{80}Kr$_{2.000}$		102581	11	102579	6	−0.2	1	34	33 ^{160}Sm	CP1	1.0	12Va02	
^{160}Sm−^{86}Kr$_{1.860}$		101599	11	101600	6	0.0	1	34	34 ^{160}Sm	CP1	1.0	12Va02	
^{160}Eu−u		−68150	17	−68149	10	0.1	1	36	36 ^{160}Eu	CP1	1.0	12Va02	*
^{160}Eu−^{80}Kr$_{2.000}$		99096	18	99095	10	−0.1	1	32	32 ^{160}Eu	CP1	1.0	12Va02	
^{160}Eu−^{86}Kr$_{1.860}$		98115	18	98115	10	0.0	1	32	32 ^{160}Eu	CP1	1.0	12Va02	
C$_{12}$ H$_{16}$−^{160}Gd		198150	50	198139.0	1.4	−0.1	U			R04	4.0	64De15	
C$_{12}$ H$_{16}$−^{160}Dy		200050	70	199997.3	0.8	−0.2	U			R04	4.0	64De15	
^{160}Er−u		−70916	30	−70923	26	−0.2	–			GS2	1.0	05Li24	
	ave.	−70914	27			−0.3	1	95	95 ^{160}Er			average	
^{160}Tm−u		−64773	127	−64740	40	0.3	U			GS1	1.0	00Ra23	*
		−64755	39			0.5	1	89	89 ^{160}Tm	GS2	1.0	05Li24	*
^{160}Yb−^{142}Sm$_{1.127}$		33120	20	33124	8	0.2	1	18	15 ^{160}Yb	MA7	1.0	01Bo59	
^{160}Yb−u		−62440	120	−62440	8	0.0	U			GS1	1.0	00Ra23	
		−62438	30			−0.1	U			GS2	1.0	05Li24	
^{160}Yb−^{133}Cs$_{1.203}$		51301.8	8.4	51301	8	−0.1	1	85	85 ^{160}Yb	MA8	1.0	17Ma.A	
^{160}Lu−u		−53967	61				2			GS2	1.0	05Li24	*
^{160}Hf−u		−49334	30	−49317	10	0.6	U			GS2	1.0	05Li24	
^{160}Gd ^{35}Cl$_2$−^{156}Gd ^{37}Cl$_2$		10831.70	1.27	10831.2	0.8	−0.2	U			H41	2.5	85Dy04	
^{160}Gd ^{35}Cl−^{158}Gd ^{37}Cl		5890	5	5900.0	0.8	0.5	U			H12	4.0	64Ba15	
		5899	3			0.1	U			H21	2.5	70Ma05	
		5900.0	0.5			0.0	–			M21	2.5	75Ka25	
		5899.88	0.96			0.1	–			H41	2.5	85Dy04	
	ave.	5900.0	1.1			0.0	1	51	35 ^{160}Gd			average	
^{160}Dy ^{35}Cl−^{158}Dy ^{37}Cl		3731.8	2.3	3738.8	2.4	1.2	1	18	18 ^{158}Dy	H25	2.5	72Ba08	
^{160}Gd−^{160}Dy		1854.5	0.8	1858.3	1.3	1.9	1	41	35 ^{160}Gd	H25	2.5	72Ba08	
^{160}Gd O−C$_{15}$		−78020.1	5.8	−78023.8	1.4	−0.4	o			TG1	1.5	09Ke.A	
		−78019.9	3.6			−0.7	U			TG1	1.5	11Ke03	
^{160}Hf(α)^{156}Yb		4892.2	10.	4901.9	2.6	0.9	–					73Ea01	Z
		4905.0	5.			−0.6	–			GSa		79Ho10	Z
		4904.0	5.			−0.4	–			ORa		83To01	Z
		4901.8	6.			0.0	–					92Ha10	
		4902.8	10.			−0.1	–					95Hi12	
		4900.8	6.			0.2	–			Daa		96Pa01	
	ave.	4902.4	2.6			−0.2	1	99	82 ^{160}Hf			average	
^{160}Ta(α)^{156}Lu		5449.5	5.	5451	5	0.3	3			Daa		96Pa01	
		5456.6	10.			−0.6	3			Jya		09Ha42	
^{160}Ta^m(α)^{156}Lu^m		5550.9	5.	5548.5	3.0	−0.5	4			GSa		79Ho10	Z
		5538.7	6.			1.6	4					92Ha10	
		5552.1	5.			−0.7	4			Daa		96Pa01	
		5551.0	10.			−0.3	4			Jya		09Ha42	
^{160}W(α)^{156}Hf		6072.1	10.	6066	5	−0.6	–			GSa		79Ho10	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.		Lab	F	Reference	
^{160}W(α)^{156}Hf		6063.9	5.	6066	5	0.3	–				Daa		96Pa01	
	ave.	6066	5			0.0	1	100	100	^{160}W			average	
^{160}Re(α)^{156}Ta		6704.9	16.	6698	4	−0.4	o				Daa		92Pa05	
		6711.1	16.			−0.8	o				Daa		96Pa01	
		6697.7	4.				4				Daa		11Da12	
^{158}Gd(t,p)^{160}Gd		4912.0	2.2	4913.0	0.7	0.5	U				McM		89Lo07	
^{160}Gd(p,t)^{158}Gd		−4919	5	−4913.0	0.7	1.2	U				Min		73Oo01	
^{160}Dy(p,t)^{158}Dy		−6924	5	−6926.2	2.3	−0.4	–				Min		73Oo01	
		−6925.1	3.4			−0.3	–				McM		88Bu08	*
	ave.	−6924.8	2.8			−0.5	1	64	64	^{158}Dy			average	
^{160}Gd(t,α)^{159}Eu−^{158}Gd()^{157}Eu		−666	5	−668	4	−0.4	1	69	36	^{159}Eu	LAl		79Bu05	
^{160}Gd(d,t)^{159}Gd		−1200	10	−1194.4	0.7	0.6	U				Kop		67Tj01	
^{159}Tb(n,γ)^{160}Tb		6375.45	0.3	6375.21	0.13	−0.8	–						74Ke01	Z
		6375.13	0.15			0.5	–				Bdn		06Fi.A	
^{159}Tb(d,p)^{160}Tb		4165	20	4150.65	0.13	−0.7	U				MIT		64Sp12	
		4153	5			−0.5	U				Tal		67St14	
^{159}Tb(n,γ)^{160}Tb	ave.	6375.19	0.13	6375.21	0.13	0.1	1	99	90	^{160}Tb			average	
^{160}Dy(d,t)^{159}Dy		−2339	10	−2319.7	1.4	1.9	U				Tal		68Be.A	
		−2323	10			0.3	U				Kop		70Gr46	
^{160}Re(p)^{159}W		1269.1	6.	1267	7	−0.3	o				Dap		92Pa05	
		1271	9			−0.4	o				Dap		96Pa01	*
		1272.2	6.			−0.9	R				Dap		11Da12	
^{160}Eu(β^-)^{160}Gd		3900	300	4461	10	1.9	U						73Da05	
		4200	200			1.3	U						73Mo18	
		4705	60			−4.1	B				Kur		07Ha57	
		4695	60			−3.9	C				Kur		10Ha.A	
		4480	35			−0.5	U				Kur		14Ha38	
^{160}Tb(β^-)^{160}Dy		1838	10	1836.5	1.2	−0.2	U						57Na03	*
		1827	10			0.9	U						59Gr93	*
		1825	10			1.1	U						63Wu01	*
^{160}Ho(β^+)^{160}Dy		3290	15				2						66Av03	*
^{160}Er(ε)^{160}Ho		420	150	319	29	−0.7	U						82Vy06	*
^{160}Tm(β^+)^{160}Er		5600	300	5760	40	0.5	U						75St12	*
		5890	100			−1.3	1	16	11	^{160}Tm	IRS		93Al03	
^{160}Lu(β^+)^{160}Yb		7210	240	7890	60	2.8	U						83Ge08	
		7340	100			5.5	C				IRS		83Vi.A	
		7300	100			5.9	B				IRS		93Al03	
*^{160}Sm−u		Represents frequency ratio ^{160}Sm^{++}/(C$_{12}$H$_4$)$^+$ =0.950775181(67)											WgM124	**
*^{160}Eu−u		Represents frequency ratio ^{160}Eu^{++}/(C$_{12}$H$_4$)$^+$ =0.95079589(10)											WgM124	**
*^{160}Tm−u		$M-A$=–60300(110) keV for mixture gs+m at 70(20) keV											Nub16b	**
*^{160}Tm−u		$M-A$=–60283(28) keV for mixture gs+m at 70(20) keV											Nub16b	**
*^{160}Lu−u		$M-A$=–50270(28) keV for mixture gs+m at 0#100 keV											Nub16b	**
*^{160}Dy(p,t)^{158}Dy		$Q-Q$(^{164}Dy(p,t))=–1477.9(3.4), see ^{164}Dy(p,t)											AHW	**
*^{160}Re(p)^{159}W		Corrected : Ame2003 assumed E_p=1271(9) thus Q_p=1279.1(9.) keV											WgM105	**
*^{160}Tb(β^-)^{160}Dy		E_{β^-}=870(10) 858(10) 868(10) respectively, to 8$^+$ level at 966.85 keV, and other E_{β^-}											Ens059	**
*^{160}Ho(β^+)^{160}Dy		E_{β^+}=570(15) to 4$^+$ level at 1694.37 keV; and 1045(15) from											Ens059	**
*		^{160}Ho^m at 59.98 to 1$^-$ level at 1285.602 and 3$^-$ at 1286.711 keV											Nub16b	**
*^{160}Er(ε)^{160}Ho		pK=0.795(0.2) to 1$^+$ level at 67.11 keV											Ens059	**
*^{160}Tm(β^+)^{160}Er		E_{β^+}=3700(300) to 854.4−1007.95 levels, reassigned by evaluator											Ens059	**
^{161}Sm−u		−60841	13	−60840	7	0.1	1	32	32	^{161}Sm	CP1	1.0	12Va02	*
^{161}Sm−^{80}Kr$_{2.013}$		107493	12	107491	7	−0.2	1	38	37	^{161}Sm	CP1	1.0	12Va02	
^{161}Sm−^{86}Kr$_{1.872}$		106496	13	106497	7	0.1	1	32	32	^{161}Sm	CP1	1.0	12Va02	
^{161}Eu−u		−66336	19	−66336	11	0.0	1	35	35	^{161}Eu	CP1	1.0	12Va02	*
^{161}Eu−^{80}Kr$_{2.013}$		101996	19	101995	11	0.0	1	35	34	^{161}Eu	CP1	1.0	12Va02	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.		Lab	F	Reference	
^{161}Eu$-^{86}$Kr$_{1.872}$	101000	20	101001	11	0.0	1	31	31	^{161}Eu	CP1	1.0	12Va02	
C$_{13}$ H$_5-^{161}$Dy	112246	25	112186.1	0.8	−0.6	U				R04	4.0	64De15	
^{161}Tm−u	−66451	30				2				GS2	1.0	05Li24	*
^{161}Yb$-^{142}$Sm$_{1.134}$	34071	19	34065	16	−0.3	2				MA7	1.0	01Bo59	
^{161}Yb−u	−62120	110	−62093	16	0.2	U				GS1	1.0	00Ra23	
	−62107	30			0.5	R				GS2	1.0	05Li24	
^{161}Lu−u	−56428	30				2				GS2	1.0	05Li24	
^{161}Hf−u	−49733	30	−49721	24	0.4	1	65	65	^{161}Hf	GS2	1.0	05Li24	
^{161}Dy ^{35}Cl$-^{159}$Tb ^{37}Cl	4535.0	1.0	4535.3	1.3	0.1	1	25	22	^{159}Tb	H25	2.5	72Ba08	
^{161}Hf(α)^{157}Yb	4717.0	10.	4682	24	−0.7	–						73Ea01	Z
	4725.2	10.			−0.9	–						82Sc15	Z
	4724.2	5.			−0.8	–				ORa		83To01	Z
	4716.4	7.			−0.7	–						92Ha10	
	4721.5	10.			−0.8	–						95Hi12	
ave.	4721	3			−0.8	1	23	19	^{161}Hf			average	
^{161}Ta^m(α)^{157}Lu^m	5278.9	5.	5277	6	−0.5	F				GSa		79Ho10	*
	5280.4	5.			−0.8	F						92Ha10	
	5271.2	7.			0.8	F				Daa		96Pa01	*
	5282.5	7.			−0.9	F				Jya		05Sc22	*
	5273.2	6.			0.5	1	94	56	^{161}Ta^m	Jya		12Th13	
^{161}W(α)^{157}Hf	5923.4	5.	5923	4	−0.1	4				GSa		79Ho10	Z
	5922.4	5.			0.1	4				Daa		96Pa01	
^{161}Re^m(α)^{157}Ta^m	6439.3	10.	6430	4	−0.9	2				GSa		79Ho10	
	6425.0	6.			0.8	2				Daa		96Pa01	
	6432.1	7.			−0.3	2				Ara		97Ir01	
^{161}Os(α)^{157}W	7065.9	12.				3						10Bi03	
^{161}Os(α)^{157}W^p	6748.0	30.				4						10Bi03	
^{161}Dy(p,t)^{159}Dy	−6546	5	−6549.5	1.4	−0.7	–				Min		73Oo01	
	−6547.9	2.5			−0.6	–				McM		88Bu08	*
ave.	−6547.5	2.2			−0.9	1	40	38	^{159}Dy			average	
^{160}Gd(n,γ)^{161}Gd	5635.4	1.0				2						71Gr42	
^{160}Gd(d,p)^{161}Gd	3411	10	3410.8	1.0	0.0	U				Kop		67Tj01	
^{160}Gd(α,t)^{161}Tb$-^{158}$Gd()^{159}Tb	678.0	1.0	677.0	0.7	−1.0	1	56	27	^{160}Gd	McM		75Bu02	
^{160}Tb(n,γ)^{161}Tb	7696.3	0.6	7696.6	0.6	0.6	1	84	74	^{161}Tb			75He.C	
^{160}Dy(n,γ)^{161}Dy	6451.5	2.	6454.39	0.08	1.4	U						77Be03	
	6454.40	0.09			−0.1	–				ILn		86Sc16	Z
	6454.34	0.14			0.3	–				Bdn		06Fi.A	
^{160}Dy(d,p)^{161}Dy	4231	10	4229.82	0.08	−0.1	U				Tal		68Be.A	
	4237	10			−0.7	U				Kop		70Gr46	
^{161}Dy(d,t)^{160}Dy	−205	10	−197.16	0.08	0.8	U				Kop		70Gr46	
^{160}Dy(n,γ)^{161}Dy ave.	6454.38	0.08	6454.39	0.08	0.1	1	100	94	^{160}Dy			average	
^{160}Dy(^{3}He,d)^{161}Ho$-^{164}$Dy()^{165}Ho	−1406.5	2.0	−1406.5	2.0	0.0	1	100	100	^{161}Ho	McM		75Bu02	
^{161}Re(p)^{160}W	1199.5	6.	1197	5	−0.4	1	79	79	^{161}Re	Ara		97Ir01	
^{161}Re^m(p)^{160}W	1323.3	7.	1321	5	−0.3	o				Ara		97Ir01	*
^{161}Sm(β^-)^{161}Eu	5065	130	5120	12	0.4	o				Kur		07Ha57	
	5050	130			0.5	U				Kur		10Ha.A	
^{161}Eu(β^-)^{161}Gd	3705	60	3714	11	0.2	o				Kur		07Ha57	
	3705	60			0.2	U				Kur		10Ha.A	
	3722	35			−0.2	U				Kur		14Ha38	
^{161}Gd(β^-)^{161}Tb	1977	30	1955.8	1.4	−0.7	U						66Zy02	*
^{161}Tb(β^-)^{161}Dy	584	6	594.2	1.3	1.7	U						63Ko08	
	590	10			0.4	U						64Fu11	
^{161}Er(β^+)^{161}Ho	2050	40	1996	9	−1.4	U						65Gr35	*
	1980	18			0.9	R						84Ka.A	*
^{161}Tm(β^+)^{161}Er	3100	200	3303	29	1.0	U						75Ad08	*
	3180	100			1.2	U				IRS		93Al03	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{161}Yb(β^+)^{161}Tm	3850	250	4060	30	0.8	U					81Ad02	
	3585	200			2.4	U			Dbn		94Po26	
^{161}Lu(β^+)^{161}Yb	5300	100	5280	30	−0.2	o			IRS		83Vi.A	
	5300	100			−0.2	U			IRS		93Al03	
	5255	150			0.1	U			Dbn		94Po26	*
^{161}Re^m(IT)^{161}Re	123.8	1.3	123.7	1.3	−0.1	1	99	78 ^{161}Re^m			97Ir01	
*^{161}Sm−u	Represents frequency ratio ^{161}Sm^{++}/(C$_{12}$H$_4$)$^+$ =0.944844874(74)										WgM124	**
*^{161}Eu−u	Represents frequency ratio ^{161}Eu^{++}/(C$_{12}$H$_4$)$^+$ =0.94487714(11)										WgM124	**
*^{161}Tm−u	$M-A$=–61895(28) keV for mixture gs+m at 7.51 keV										Nub16b	**
*^{161}Ta^m(α)^{157}Lu^m	F : above 4 items are not unambiguously assigned										WgM151	**
*^{161}Dy(p,t)^{159}Dy	$Q-Q$(^{164}Dy(p,t))=–1100.7(2.5) keV										AHW	**
*^{161}Re^m(p)^{160}W	Replaced by author's result for ^{161}Re^m(IT)^{161}Re										AHW	**
*^{161}Gd(β^-)^{161}Tb	E_{β^-}=1560(30) mainly to 7/2$^-$ level at 417.228 keV										Ens11b	**
*^{161}Er(β^+)^{161}Ho	E_{β^+}=820(40) 748(18) respectively, to 1/2$^+$ level at 211.15 keV										Ens11b	**
*^{161}Tm(β^+)^{161}Er	E_{β^+}=1800(100) to several levels around 7/2$^-$ one at 266.44 keV										Ens11b	**
*^{161}Lu(β^+)^{161}Yb	E_{β^+}=3866(150) to 367.28 level										Ens11b	**
C$_{13}$ H$_6$−^{162}Dy	120115	19	120146.0	0.8	0.4	U			R04	4.0	64De15	
C$_{12}$ H$_4$ N−^{162}Er	105590	70	105587.2	0.9	0.0	U			R04	4.0	64De15	
C$_{13}$ H$_6$−^{162}Er	118430	170	118163.2	0.9	−0.4	U			R04	4.0	64De15	
^{162}Tm−u	−65942	55	−65999	28	−1.0	R			GS2	1.0	05Li24	*
^{162}Yb−^{142}Sm$_{1.141}$	32524	19	32525	16	0.1	2			MA7	1.0	01Bo59	
^{162}Yb−u	−64210	110	−64226	16	−0.1	U			GS1	1.0	00Ra23	
	−64223	30			−0.1	R			GS2	1.0	05Li24	
^{162}Lu−u	−56758	234	−56720	80	0.2	o			GS1	1.0	00Ra23	*
	−56781	190			0.3	2			GS2	1.0	05Li24	*
^{162}Hf−u	−52756	30	−52785	10	−1.0	U			GS2	1.0	05Li24	
^{162}Er ^{35}Cl$_2$−^{158}Gd ^{37}Cl$_2$	10577.5	2.7	10575.5	1.2	−0.3	U			H25	2.5	72Ba08	
^{162}Dy ^{35}Cl−^{160}Dy ^{37}Cl	4555	6	4551.03	0.12	−0.2	U			H12	4.0	64Ba15	
	4552.1	1.1			−0.4	U			H25	2.5	72Ba08	
^{162}Er ^{35}Cl−^{160}Gd ^{37}Cl	4674.6	1.9	4675.5	1.3	0.2	U			H25	2.5	72Ba08	
^{162}Er−^{162}Dy	1982.79	0.32	1982.8	0.3	0.0	1	100	100 ^{162}Er	SH1	1.0	11El04	
^{161}Dy ^{37}Cl−^{162}Dy ^{35}Cl	−3080	70	−2815.19	0.09	0.9	U			R04	4.0	64De15	
^{162}Dy−^{161}Dy	150	70	−134.92	0.06	−1.0	U			R04	4.0	64De15	
	78	23			−2.3	U			R04	4.0	64De15	
	22	40			−1.0	U			R04	4.0	64De15	
^{162}Hf(α)^{158}Yb	4417.2	10.	4416	5	−0.1	–					82Sc15	
	4420.4	10.3			−0.4	–			ORa		83To01	
	4414.2	9.			0.2	–					92Ha10	
	4416.3	10.3			0.0	–					95Hi12	
ave.	4417	5			−0.1	1	95	81 ^{162}Hf			average	
^{162}Ta(α)^{158}Lu	5003.8	10.	5010	50	0.1	4					86Ru05	
	5007.9	5.			0.0	4					92Ha10	
^{162}W(α)^{158}Hf	5669.9	10.	5678.3	2.4	0.8	U					73Ea01	Z
	5668.0	10.			1.0	U			ORa		75To05	Z
	5677.5	5.			0.2	–			GSa		81Ho10	Z
	5674.5	4.			0.9	–			Ora		82De11	Z
	5681.6	5.			−0.6	–			Daa		96Pa01	
	5681.5	5.1			−0.6	–			Jya		15Li24	
ave.	5678.3	2.4			0.0	1	100	100 ^{162}W			average	
^{162}Re(α)^{158}Ta	6240.3	5.				8			Ara		97Da07	
^{162}Re^m(α)^{158}Ta^m	6274.2	6.	6274	3	0.0	9			GSa		79Ho10	
	6278.3	6.			−0.7	9			Daa		96Pa01	
	6271.1	5.			0.6	9			Ara		97Da07	
	6256	16			1.1	U			Jya		16Ca15	*

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.		Lab	F	Reference	
^{162}Os(α)^{158}W	6778.8	30.	6767	3	−0.4	U				GSa		89Ho12	*
	6785.8	10.			−1.8	U				ORa		96Bi07	
	6767.4	3.				4				Ara		00Ma95	
	6781.7	13.			−1.1	U				Jya		04Jo12	
^{160}Gd(t,p)^{162}Gd	3999.5	3.8				2				McM		89Lo07	
^{160}Dy(t,p)^{162}Dy	6169.5	1.9	6169.59	0.10	0.0	U				McM		88Bu08	*
^{162}Dy(p,t)^{160}Dy	−6168	5	−6169.59	0.10	−0.3	U				Min		73Oo01	
	−6169.7	2.1			0.1	U				McM		88Bu08	*
^{162}Er(p,t)^{160}Er	−7944	55	−7931	24	0.2	R				Win		74De31	*
^{161}Dy(n,γ)^{162}Dy	8196.99	0.06	8196.99	0.06	0.1	1	100	88	^{161}Dy	MMn		82Is05	Z
	8193	3			1.3	U				Bdn		06Fi.A	
^{161}Dy(d,p)^{162}Dy	5969	10	5972.43	0.06	0.3	U				Tal		67Ba34	
	5981	10			−0.9	U				Kop		70Gr46	
^{162}Dy(d,t)^{161}Dy	−1944	10	−1939.77	0.06	0.4	U				Kop		70Gr46	
	−1943	10			0.3	U				Tal		77Be03	
^{161}Dy(^{3}He,d)^{162}Ho−^{164}Dy()^{165}Ho	−945.3	3.0	−945.3	3.0	0.0	1	100	100	^{162}Ho	McM		75Bu02	
^{162}Er(d,t)^{161}Er	−2952	10	−2947	9	0.5	2				Kop		69Tj01	
^{162}Eu(β^-)^{162}Gd	5575	60	5580	40	0.0	o				Kur		07Ha57	
	5585	60			−0.1	o				Kur		10Ha.A	
	5577	35				3				Kur		14Ha38	
^{162}Gd(β^-)^{162}Tb	1442	100	1400	40	−0.5	R						70Ch02	*
^{162}Tb(β^-)^{162}Dy	2448	100	2510	40	0.6	2						66Fu08	*
	2523	50			−0.3	2						66Sc24	*
	2528	80			−0.3	2						77Ka08	*
^{162}Ho(β^+)^{162}Dy	2220	50	2140	3	−1.6	U						69Ak01	
^{162}Tm(β^+)^{162}Er	4840	50	4857	26	0.3	2						63Ab02	
	4705	70			2.2	2						74De47	*
	4900	100			−0.4	2				IRS		93Al03	
	4892	50			−0.7	2				Dbn		94Po26	*
^{162}Lu(β^+)^{162}Yb	6740	270	6990	80	0.9	U						83Ge08	
	6990	120			0.0	o				IRS		83Vi.A	
	6960	100			0.3	R				IRS		93Al03	
	7111	150			−0.8	R				Dbn		94Po26	*
*^{162}Tm−u	$M-A$=–61359(28) keV for mixture gs+m at 130(40) keV											Nub16b	**
*^{162}Lu−u	$M-A$=–52730(130) keV for mixture gs+m+n at 120#200 and 300#200 keV											Nub16b	**
*^{162}Lu−u	$M-A$=–52751(28) keV for mixture gs+m+n at 120#200 and 300#200 keV											Nub16b	**
*^{162}Re^m(α)^{158}Ta^m	E_α=6037(16) keV to 10$^+$ level 66 keV above the 9$^+$ ^{158}Ta^m											16Ca15	**
*^{162}Os(α)^{158}W	Original value E=6640(20) (Q =6808.4) recalibrated											88Ho.B	**
*^{160}Dy(t,p)^{162}Dy	$Q-Q$(^{162}Dy(t,p))=722.3(1.9) keV											AHW	**
*^{162}Dy(p,t)^{160}Dy	$Q-Q$(^{164}Dy(p,t))=–722.5(2.1) keV											AHW	**
*^{162}Er(p,t)^{160}Er	Not resolved peak. Original uncertainty 28 increased to 51 keV and											GAu	**
*	added systematic error 21 keV											GAu	**
*^{162}Gd(β^-)^{162}Tb	E_{β^-}=1000(100) to 1$^+$ level at 442.11 keV											Ens162	**
*^{162}Tb(β^-)^{162}Dy	E_{β^-}=1300(100) 1375(50) 1380(80) respectively, to 2$^-$ level at 1148.232 keV											Ens078	**
*^{162}Tm(β^+)^{162}Er	E_{β^+}=2110(70) to 2$^-$ level at 1572.84 keV											Ens078	**
*^{162}Tm(β^+)^{162}Er	E_{β^+}=3768(50) to 2$^+$ level at 102.04 keV											Ens078	**
*^{162}Lu(β^+)^{162}Yb	E_{β^+}=6006(150) to ground state and 2$^+$ level at 166.8, unknown intensity ratio											Ens078	**
^{163}Gd−u	−65824	16	−65823	9	0.1	1	32	32	^{163}Gd	CP1	1.0	12Va02	*
^{163}Gd−^{80}Kr$_{2.038}$	104600	16	104598	9	−0.1	1	32	32	^{163}Gd	CP1	1.0	12Va02	
^{163}Gd−^{86}Kr$_{1.895}$	103569	15	103570	9	0.0	1	36	36	^{163}Gd	CP1	1.0	12Va02	
C$_{13}$ H$_7$−^{163}Dy	125906	36	126038.3	0.8	0.9	U				R04	4.0	64De15	
^{163}Tm−u	−67327	30	−67342	6	−0.5	U				GS2	1.0	05Li24	
^{163}Yb−^{142}Sm$_{1.148}$	33686	19	33685	16	−0.1	2				MA7	1.0	01Bo59	
^{163}Yb−u	−63663	30	−63660	16	0.1	R				GS2	1.0	05Li24	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.		Lab	F	Reference	
^{163}Lu−u		−58730	110	−58820	30	−0.8	U				GS1	1.0	00Ra23	
		−58821	30				2				GS2	1.0	05Li24	
^{163}Hf−u		−52911	30	−52887	27	0.8	1	79	79	^{163}Hf	GS2	1.0	05Li24	
^{163}Ta−u		−45855	54	−45660	40	3.6	C				GS2	1.0	05Li24	∗
^{163}Dy ^{35}Cl−^{161}Dy ^{37}Cl		5200	60	4747.90	0.11	−1.9	U				R04	4.0	64De15	
		4746	3			0.3	U				H23	2.5	70Wh01	
		4744.7	1.2			1.1	U				H25	2.5	72Ba08	
^{163}Ho O−^{163}Dy O		2.72	0.77	3.043	0.020	0.3	U				TG1	1.5	15Sc13	
^{163}Ho−^{163}Dy		3.042	0.037	3.043	0.020	0.0	1	31	17	^{163}Ho	SH2	1.0	15El03	
^{162}Dy ^{37}Cl−^{163}Dy ^{35}Cl		−5069	42	−4882.82	0.08	1.1	U				R04	4.0	64De15	
^{163}Dy−^{162}Dy		2164	35	1932.71	0.05	−1.7	U				R04	4.0	64De15	
		1985	38			−0.3	U				R04	4.0	64De15	
		2174	40			−1.5	U				R04	4.0	64De15	
^{163}Dy O−C$_{15}$		−76349.06	0.86	−76348.5	0.8	0.4	1	41	41	^{163}Dy	TG1	1.5	15Sc13	
^{163}Ho O−C$_{15}$		−76346.61	0.97	−76345.5	0.8	0.8	1	32	32	^{163}Ho	TG1	1.5	15Sc13	
^{163}Ta(α)^{159}Lu		4741.5	15.	4749	5	0.5	3						83Sc18	∗
		4746.7	10.			0.2	3						86Ru05	
		4751.8	7.			−0.4	3						92Ha10	
^{163}W(α)^{159}Hf		5520.3	5.	5520	50	0.0	5						73Ea01	Z
		5518.1	5.			0.0	5				GSa		79Ho10	Z
		5519.9	3.			0.0	5				Ora		82De11	Z
		5525.9	10.3			−0.1	U						84Sc06	∗
		5518.7	6.			0.0	5				Daa		96Pa01	
^{163}Re(α)^{159}Ta		6017.9	5.	6012	8	−1.2	o				Ara		97Da07	∗
^{163}Re^{m}(α)^{159}Ta^{m}		6067.2	6.	6068	3	0.2	3				GSa		79Ho10	
		6067.2	7.			0.1	3				Daa		96Pa01	
		6069.2	5.			−0.2	3				Ara		97Da07	
^{163}Os(α)^{159}W		6674.1	30.	6677	8	0.1	4				GSa		81Ho10	
		6678.2	10.			−0.1	4				ORa		96Bi07	
		6676.2	19.			0.1	4				Daa		96Pa01	
		6674.1	30.			0.1	4				Jya		13Dr06	∗
^{161}Dy(t,p)^{163}Dy		5986.3	1.5	5986.21	0.08	−0.1	U				McM		88Bu08	∗
^{163}Dy(p,t)^{161}Dy		−5985	5	−5986.21	0.08	−0.2	U				Min		73Oo01	
		−5987.1	2.2			0.4	U				McM		88Bu08	∗
^{162}Dy(n,γ)^{163}Dy		6270.98	0.06	6271.01	0.05	0.5	–				MMn		82Is05	Z
		6271.00	0.09			0.1	–				ILn		89Sc31	Z
		6271.14	0.13			−1.0	–				Bdn		06Fi.A	
^{163}Dy(γ,n)^{162}Dy		−6320	110	−6271.01	0.05	0.4	U				Phi		60Ge01	
^{162}Dy(d,p)^{163}Dy		4049	5	4046.44	0.05	−0.5	U				Tal		67Sc05	
		4045	10			0.1	U				Kop		70Gr46	
^{163}Dy(d,t)^{162}Dy		−14	5	−13.78	0.05	0.0	U						67Ba34	
		−27	10			1.3	U				Kop		70Gr46	
^{162}Dy(n,γ)^{163}Dy	ave.	6271.01	0.05	6271.01	0.05	0.1	1	100	100	^{162}Dy			average	
^{162}Dy(^{3}He,d)^{163}Ho−^{164}Dy()^{165}Ho		−734.3	1.0	−734.2	0.8	0.1	1	68	56	^{165}Ho	McM		75Bu02	
^{162}Er(d,p)^{163}Er		4682	10	4680	5	−0.2	1	21	21	^{163}Er	Kop		69Tj01	
^{163}Eu(β^-)^{163}Gd		4828	70	4830	70	0.0	o				Kur		07Ha57	∗
		4813	70			0.2	o				Kur		10Ha.A	∗
		4829	65				2				Kur		14Ha38	
^{163}Gd(β^-)^{163}Tb		3170	70	3282	9	1.6	o				Kur		07Ha57	
		3120	70			2.3	o				Kur		10Ha.A	
		3187	40			2.4	U				Kur		14Ha38	
^{163}Tb(β^-)^{163}Dy		1684	50	1785	4	2.0	U						66Fu08	∗
		1721	100			0.6	U						71Ka22	∗
^{163}Ho(ε)^{163}Dy		2.83	0.05	2.834	0.019	0.1	–						82An19	∗
		2.65	0.20			0.9	U						83Ba32	
		2.84	0.10			−0.1	U						84La.A	∗
		2.56	0.05			5.5	B						85Ha12	∗
		2.60	0.03			7.8	B						86Ya17	
		2.561	0.020			13.7	B						92Ha15	
		2.54	0.03			9.8	C						93Bo.A	∗
		2.71	0.10			1.2	U						94Ya07	
		2.800	0.050			0.7	–						97Ga12	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.		Lab	F	Reference	
^{163}Ho(ε)^{163}Dy	2.849	0.030	2.834	0.019	−0.5	–						14Ra.1	*
ave.	2.835	0.023			0.0	1	69	39	^{163}Ho			average	
^{163}Er(β^+)^{163}Ho	1210	6	1211	5	0.1	1	58	58	^{163}Er			63Pe16	
^{163}Tm(β^+)^{163}Er	2439	3				2						82Vy07	*
	2360	100	2439	3	0.8	U				IRS		93Al03	
^{163}Yb(β^+)^{163}Tm	3370	100	3430	16	0.6	U						75Ad09	*
^{163}Lu(β^+)^{163}Yb	4860	170	4510	30	−2.1	U						83Ge08	
	4600	200			−0.5	o				IRS		83Vi.A	
	4600	200			−0.5	U				IRS		93Al03	
^{163}Re^m(IT)^{163}Re	115.1	4.0	120	5	1.2	o				Ara		97Da07	*
*^{163}Gd−u	Represents frequency ratio ^{163}Gd^{++}/(C$_{12}$H$_4$)$^+$ =0.933275822(91)											WgM124	**
*^{163}Ta−u	$M-A$=–42644(28) keV for mixture gs+m at 140#(18#) keV											Nub16b	**
*^{163}Ta(α)^{159}Lu	Original assignment to 13 s ^{164}Ta changed to ^{163}Ta											86Ru05	**
*^{163}W(α)^{159}Hf	Originally assigned to ^{166}Re, re-assigned in reference											92Me10	**
*	original E_α=5372 recalibrated using their ^{168}Os−^{170}Os results											GAu	**
*^{163}Re(α)^{159}Ta	Replaced by author's value for ^{159}Ta^m(IT)											AHW	**
*^{163}Os(α)^{159}W	Error not given, estimated by evaluator											GAu	**
*^{161}Dy(t,p)^{163}Dy	$Q-Q$(^{162}Dy(t,p))=539.1(1.5) keV											AHW	**
*^{163}Dy(p,t)^{161}Dy	$Q-Q$(^{164}Dy(p,t))=–539.9(2.2) keV											AHW	**
*^{163}Eu(β^-)^{163}Gd	E_{β^-}=4690(70) to ^{163}Gd^m at 137.8 keV											14Ha38	**
*^{163}Eu(β^-)^{163}Gd	E_{β^-}=4675(70) to ^{163}Gd^m at 137.8 keV											14Ha38	**
*^{163}Tb(β^-)^{163}Dy	E_{β^-}=800(50) to 1/2$^+$ level at 884.2943 keV											Ens105	**
*^{163}Tb(β^-)^{163}Dy	E_{β^-}=1300(100) to 3/2$^-$ level at 421.8439 keV											Ens105	**
*^{163}Ho(ε)^{163}Dy	Original 2.58(0.10) from partial T=40(12)×10^{+3} y, re-evaluated by authors											84La.A	**
*^{163}Ho(ε)^{163}Dy	Original value 2.82(+0.11–0.08)											84La.A	**
*^{163}Ho(ε)^{163}Dy	Original value 2.60(0.03) corrected to 2.561(0.020) for dynamic effects											87Sp02	**
*	error 0.020 is statistical only											87Sp02	**
*^{163}Ho(ε)^{163}Dy	Original 2616< $Q_{\rm i}$(2694 eV 68% CL for charge 66$^+$ Q_{β^+},											92Ju01	**
*	corrected to 2511< Q_{β^+} <2572 eV 68% CL											93Bo.A	**
*^{163}Ho(ε)^{163}Dy	"Preliminary Q_ε=2.849(0.005)"; syst error estimated 0.030 by evaluator											GAu	**
*^{163}Tm(β^+)^{163}Er	E_{β^+}=884(3) to 1/2$^+$ level at 540.56 keV, and other E_{β^+}											Ens105	**
*^{163}Yb(β^+)^{163}Tm	E_{β^+}=1400(100) to 5/2$^-$ level at 947.29 keV											Ens105	**
*^{163}Re^m(IT)^{163}Re	Redundant with ^{167}Ir(α)^{163}Re in same paper											GAu	**
C$_{13}$ H$_8$−^{164}Dy	133320	38	133419.8	0.8	0.7	U				R04	4.0	64De15	
C$_{12}$ ^{13}C H$_7$−^{164}Dy	128920	34	128949.6	0.8	0.2	U				R04	4.0	64De15	
C$_{12}$ H$_6$ N−^{164}Er	120876	39	120816.8	0.8	−0.4	U				R04	4.0	64De15	
^{164}Tm−u	−66440	30	−66457	26	−0.6	1	76	76	^{164}Tm	GS2	1.0	05Li24	*
^{164}Yb−^{142}Sm$_{1.155}$	32429	19	32434	16	0.3	2				MA7	1.0	01Bo59	
^{164}Yb−u	−65690	104	−65505	16	1.8	U				GS1	1.0	00Ra23	
	−65493	30			−0.4	R				GS2	1.0	05Li24	
^{164}Lu−u	−58750	110	−58660	30	0.8	U				GS1	1.0	00Ra23	
	−58661	30				2				GS2	1.0	05Li24	
^{164}Hf−u	−55620	110	−55629	17	−0.1	U				GS1	1.0	00Ra23	
	−55596	30			−1.1	1	32	32	^{164}Hf	GS2	1.0	05Li24	
^{164}Ta−u	−46466	30				2				GS2	1.0	05Li24	
^{164}Dy ^{35}Cl−^{162}Dy ^{37}Cl	5347	5	5326.41	0.11	−1.0	U				H12	4.0	64Ba15	
	5589	19			−3.5	B				R04	4.0	64De15	
	5321	3			0.7	U				H23	2.5	70Wh01	
	5326.5	0.9			0.0	U				H25	2.5	72Ba08	
^{164}Er ^{35}Cl−^{162}Er ^{37}Cl	3373.3	1.3	3370.5	0.4	−0.8	U				H25	2.5	72Ba08	
^{164}Er−^{164}Dy	26.92	0.12	26.92	0.12	0.0	1	100	100	^{164}Er	SH1	1.0	11El08	
^{164}Dy ^{35}Cl−^{161}Dy ^{37}Cl	5610	48	5191.49	0.13	−2.2	U				R04	4.0	64De15	
^{163}Dy ^{37}Cl−^{164}Dy ^{35}Cl	−3360	50	−3393.70	0.10	−0.2	U				R04	4.0	64De15	
^{164}Dy−^{163}Dy	392	48	443.59	0.07	0.3	U				R04	4.0	64De15	
	540	25			−1.0	U				R04	4.0	64De15	
	446	28			0.0	U				R04	4.0	64De15	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{164}Er$-^{162}$Er		556	48	420.4	0.4	−0.7	U			R04	4.0	64De15	
^{164}W(α)^{160}Hf		5281.7	5.	5278.3	2.0	−0.7	–					73Ea01	Z
		5274.7	5.			0.7	–			ORa		75To05	Z
		5268.7	10.			1.0	U					78Sc26	*
		5279.0	5.			−0.1	–			GSa		79Ho10	
		5279.2	3.			−0.3	–			Ora		82De11	Z
		5283.0	8.			−0.6	U					84Sc06	*
		5277.0	6.			0.2	–			Daa		96Pa01	
	ave.	5278.6	2.0			−0.2	1	99	81 ^{164}W			average	
^{164}Re(α)^{160}Ta		5922.7	10.	5926	5	0.4	4			GSa		79Ho10	
		5928.9	7.			−0.4	4			Daa		96Pa01	
		5924.7	10.			0.2	4			Jya		09Ha42	
^{164}Re^m(α)^{160}Ta^m		5763.8	10.				5			Jya		09Ha42	
^{164}Os(α)^{160}W		6478.3	20.	6479	5	0.1	U			GSa		81Ho10	
		6473.2	10.			0.6	–			ORa		96Bi07	
		6479.4	7.			0.0	–			Daa		96Pa01	
	ave.	6477	6			0.4	1	80	80 ^{164}Os			average	
^{164}Ir^m(α)^{160}Re^m		7052.3	10.2				6			Jya		14Dr02	
^{162}Dy(t,p)^{164}Dy		5447.3	1.9	5447.33	0.08	0.0	U			McM		88Bu08	*
^{164}Dy(p,t)^{162}Dy		−5450	5	−5447.33	0.08	0.5	U			Min		73Oo01	
^{164}Er(p,t)^{162}Er		−7262	10	−7269.2	0.3	−0.7	U			Min		73Oo01	
^{164}Dy(t,α)^{163}Tb		11153	4				2			McM		92Ga15	*
^{163}Dy(n,γ)^{164}Dy		7658.11	0.07	7658.11	0.07	0.0	1	100	84 ^{164}Dy	MMn		82Is05	Z
		7658.90	0.06			−13.1	C					99Fo.A	
		7655.0	0.9			3.5	C			Bdn		06Fi.A	
^{163}Dy(d,p)^{164}Dy		5434	5	5433.55	0.07	−0.1	U			Tal		64Sh06	
		5441	10			−0.7	U			Kop		70Gr46	
^{164}Dy(d,t)^{163}Dy		−1407	10	−1400.88	0.07	0.6	U			Kop		70Gr46	
		−1407	10			0.6	U			Kop		70Gr46	
^{163}Dy(^{3}He,d)^{164}Ho$-^{164}$Dy()^{165}Ho		−331.6	1.4	−330.7	1.1	0.6	1	67	67 ^{164}Ho	McM		75Bu02	*
^{164}Er(d,t)^{163}Er		−2593	10	−2589	5	0.4	1	21	21 ^{163}Er	Kop		69Tj01	
^{164}Ir^m(p)^{163}Os		1828	8	1824	6	−0.5	o			Jyp		01Ke05	
		1818	14			0.4	5			Arp		02Ma61	
		1825	6			−0.2	5			Jyp		14Dr02	
^{164}Eu(β^-)^{164}Gd		6430	70	6390	50	−0.5	o			Kur		07Ha57	
		6440	70			−0.7	o			Kur		10Ha.A	
		6393	50				3			Kur		14Ha38	
^{164}Tb(β^-)^{164}Dy		3890	100				2					71Gu18	*
^{164}Ho(β^-)^{164}Er		990	30	961.4	1.4	−1.0	U					54Br96	
		965	20			−0.2	U					66Se07	
^{164}Tm(β^+)^{164}Er		3985	20	4039	24	2.7	B					67Vr04	*
		3989	50			1.0	1	24	24 ^{164}Tm	IRS		94Po26	*
^{164}Lu(β^+)^{164}Yb		6390	140	6380	30	−0.1	U					83Ge08	
		6250	90			1.4	o			IRS		83Vi.A	
		6290	90			0.9	U			IRS		93Al03	*
		6255	120			1.0	U			Dbn		94Po26	*
*^{164}Tm−u		$M-A$=–61884(28) keV for mixture gs+m at 10(6) keV										Nub16b	**
*^{164}W(α)^{160}Hf		Originally assigned to ^{168}Re										AHW	**
*^{164}W(α)^{160}Hf		Originally assigned to ^{167}Re, re-assigned in reference										92Me10	**
*		original E_α=5136 recalibrated using their ^{168}Os$-^{170}$Os results										GAu	**
*^{162}Dy(t,p)^{164}Dy		$Q-Q$(^{160}Dy(t,p))=–722.3(1.9) keV, see ^{162}Dy(p,t)										88Bu08	**
*^{164}Dy(t,α)^{163}Tb		$Q-Q$(^{162}Dy(t,α)=–123(4)+54−584=–653(4) keV										AHW	**
*^{163}Dy(^{3}He,d)^{164}Ho$-^{164}$Dy()^{165}H		See erratum										75Bu02	**
*^{164}Tb(β^-)^{164}Dy		E_{β^-}=1700(100) to 4$^+$ level at 2194.44 and 4$^+$ at 2205.63 keV, and other E_{β^-}										Ens017	**
*^{164}Tm(β^+)^{164}Er		E_{β^+}=2940(20) 29 to ground state 10 to 2$^+$ level at 91.38 keV										Ens017	**
*^{164}Tm(β^+)^{164}Er		E_{β^+}=2944(50) 29 to ground state 10 to 2$^+$ level at 91.38 keV										Ens017	**
*^{164}Lu(β^+)^{164}Yb		Q_{β^+}=6250(90) partly to 2$^+$ level at 123.31 keV										Ens017	**
*^{164}Lu(β^+)^{164}Yb		E_{β^+}=5191(120) partly to 2$^+$ level at 123.31 keV										Ens017	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
C_{13} $H_9-{}^{165}$Ho		140043	29	140097.2	1.1	0.5	U			R04	4.0	64De15	
C_{12} H_7 N$-{}^{165}$Ho		127537	28	127521.2	1.1	−0.1	U			R04	4.0	64De15	
C_{11} ^{13}C H_6 N$-{}^{165}$Ho		122970	50	123051.0	1.1	0.4	U			R04	4.0	64De15	
^{165}Tm$-{}^{142}$Sm$_{1.162}$		30970	20	30975	4	0.2	U			MA7	1.0	01Bo59	
^{165}Yb−u		−64721	30	−64730	28	−0.3	1	90	90 ^{165}Yb	GS2	1.0	05Li24	
^{165}Lu−u		−60602	30	−60593	28	0.3	1	90	90 ^{165}Lu	GS2	1.0	05Li24	
^{165}Hf−u		−55360	140	−55430	30	−0.5	U			GS1	1.0	00Ra23	
		−55433	30				2			GS2	1.0	05Li24	
^{165}Ta−u		−49191	30	−49220	15	−1.0	1	25	25 ^{165}Ta	GS2	1.0	05Li24	
^{165}W−u		−41720	30	−41719	27	0.0	1	80	80 ^{165}W	GS2	1.0	05Li24	
^{165}Ho ^{35}Cl$-{}^{163}$Dy ^{37}Cl		4539	4	4541.3	0.9	0.2	U			H23	2.5	70Wh01	
^{165}W(α)^{161}Hf		5031.0	5.	5029	30	0.0	–			ORa		75To05	Z
		5034.2	10.			−0.1	–					84Sc06	∗
	ave.	5032	4			−0.1	1	36	20 ^{165}W			average	
^{165}Re(α)^{161}Ta		5629.6	6.	5694	6	10.8	B			Jya		05Sc22	
		5694.3	6.1				6			Jya		12Th13	
^{165}Re^m(α)^{161}Ta^m		5631.7	10.	5660.9	2.8	2.9	U					78Sc26	∗
		5643.0	10.			1.8	U			GSa		81Ho10	
		5664.5	4.			−0.9	–			Ora		82De11	∗
		5655.4	5.			1.1	–			Daa		96Pa01	∗
		5657.4	5.			0.7	o			Jya		05Sc22	
		5657.4	6.			0.6	–			Jya		12Th13	
	ave.	5660.2	2.8			0.2	1	99	55 ^{165}Re^m			average	
^{165}Os(α)^{161}W		6354.3	20.	6335	6	−0.9	5			Ora		78Ca11	
		6317.4	10.			1.8	5			GSa		81Ho10	
		6342.1	7.			−0.9	5			Daa		96Pa01	
		6342.1	30.			−0.2	U			Jya		13Dr06	∗
^{165}Ir^m(α)^{161}Re^m		6882.1	7.	6879	6	−0.4	1	70	48 ^{165}Ir^m	Ara		97Da07	
^{163}Dy(t,p)^{165}Dy		4890.6	2.9	4892.28	0.09	0.6	U			McM		88Bu08	∗
^{164}Dy(n,γ)^{165}Dy		5716.36	0.20	5715.96	0.05	−2.0	U			ILn		79Br25	Z
		5715.96	0.06			0.0	2			MMn		82Is05	Z
		5715.70	0.30			0.9	U			ILn		90Ka21	Z
		5715.95	0.12			0.1	2			Bdn		06Fi.A	
^{164}Dy(d,p)^{165}Dy		3488	5	3491.39	0.05	0.7	U			Tal		64Sh13	
		3496	10			−0.5	U			Kop		70Gr46	
^{164}Dy(^{3}He,d)^{165}Ho		717.3	10.	726.5	0.8	0.9	U			McM		75Bu02	
^{165}Ho(γ,n)^{164}Ho		−8160	80	−7988.8	1.1	2.1	U			Phi		60Ge01	
		−7987	2			−0.9	1	33	33 ^{164}Ho	MMn		85Ts01	
^{165}Ho(d,t)^{164}Ho		−1730	15	−1731.6	1.1	−0.1	U			Tal		70Jo11	
^{164}Er(n,γ)^{165}Er		6650.1	0.6	6650.0	0.6	−0.1	1	96	94 ^{165}Er			70Bo29	Z
^{164}Er(d,p)^{165}Er		4431	10	4425.5	0.6	−0.6	U			Kop		69Tj01	
^{164}Er(α,t)^{165}Tm$-{}^{168}$Er()^{169}Tm		−1298.0	2.0	−1297.3	1.5	0.3	1	59	47 ^{165}Tm	McM		75Bu02	
^{165}Ir^m(p)^{164}Os		1717.5	7.	1721	6	0.4	1	72	52 ^{165}Ir^m	Ara		97Da07	
^{165}Eu(β^-)^{165}Gd		5800	120	5730	70	−0.6	o			Kur		07Ha57	
		5800	120			−0.6	o			Kur		10Ha.A	
		5729	65				4			Kur		14Ha38	
^{165}Gd(β^-)^{165}Tb		4113	65				3			Kur		14Ha38	
^{165}Dy(β^-)^{165}Ho		1305	20	1286.4	0.8	−0.9	U					59Bo52	
		1285	10			0.1	U					63Pe11	
^{165}Er(ε)^{165}Ho		370	10	377.4	1.0	0.7	U					63Ry01	
		371	6			1.1	U					63Zy01	
^{165}Tm(β^+)^{165}Er		1591.3	2.0	1592.0	1.5	0.3	1	59	53 ^{165}Tm			82Vy03	∗
^{165}Yb(β^+)^{165}Tm		2762	20	2634	27	−6.4	B					67Pa04	∗
^{165}Lu(β^+)^{165}Yb		4250	140	3850	40	−2.8	B					83Ge08	
		3920	80			−0.8	o			IRS		83Vi.A	
		3920	80			−0.8	1	20	10 ^{165}Yb	IRS		93Al03	
∗^{165}W(α)^{161}Hf	Originally assigned to ^{168}Re, re-assigned in reference											92Me10	∗∗
∗	original E_α=4894 recalibrated using their ^{168}Os$-{}^{170}$Os results											GAu	∗∗
∗^{165}Re^m(α)^{161}Ta^m	Originally assigned to ^{166}Re											AHW	∗∗
∗^{165}Re^m(α)^{161}Ta^m	Originally assigned to ^{166}Re											AHW	∗∗
∗^{165}Re^m(α)^{161}Ta^m	Due to a high spin isomer											99Po09	∗∗
∗^{165}Os(α)^{161}W	Error not given, estimated by evaluator											GAu	∗∗

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.		Lab	F	Reference	
$*^{163}$Dy(t,p)^{165}Dy	$Q-Q(^{162}$Dy(t,p))=–556.6(2.9) keV												AHW	**
$*^{165}$Tm(β^+)^{165}Er	E_{β^+}=272(2) to 1/2$^-$ level at 297.371 keV												Ens066	**
$*^{165}$Yb(β^+)^{165}Tm	E_{β^+}=1580(20) to 7/2$^-$ level at 160.47 keV												Ens066	**
C_{12} H_8 N$-^{166}$Er		135376	29	135375.2	1.3	0.0	U				R04	4.0	64De15	
		135420	60			−0.2	U				R04	4.0	64De15	
C_{13} $H_{10}-^{166}$Er		147740	60	147951.3	1.3	0.9	U				R04	4.0	64De15	
^{166}Lu−u		−60157	108	−60140	30	0.1	U				GS1	1.0	00Ra23	*
		−60141	32				2				GS2	1.0	05Li24	*
^{166}Hf−u		−57860	110	−57820	30	0.4	U				GS1	1.0	00Ra23	
		−57820	30				2				GS2	1.0	05Li24	
^{166}Ta−u		−49488	30				2				GS2	1.0	05Li24	
^{166}W−u		−44957	30	−44969	10	−0.4	1	12	12	^{166}W	GS2	1.0	05Li24	
^{166}Er ^{35}Cl$-^{164}$Er ^{37}Cl		4040.9	1.4	4041.7	1.2	0.2	U				H25	2.5	72Ba08	
^{166}Er$-^{164}$Er		1214	46	1091.6	1.2	−0.7	U				R04	4.0	64De15	
		1110	80			−0.1	U				R04	4.0	64De15	
^{166}W(α)^{162}Hf		4856.0	5.	4856	4	0.0	–				ORa		75To05	Z
		4855.0	10.			0.1	–				GSa		79Ho10	Z
		4858.3	8.2			−0.3	–						89Hi04	
	ave.	4856	4			−0.1	1	97	78	^{166}W			average	
^{166}Re(α)^{162}Ta		5461.8	10.				5						78Sc26	*
		5574.5	3.	5460	50	−2.3	U				Ora		82De11	*
		5637.0	13.			−3.5	B				Bea		92Me10	*
		5669.9	10.			−4.2	B				Daa		96Pa01	*
^{166}Os(α)^{162}W		6148.5	20.	6143	3	−0.3	U						77Ca23	
		6129.0	6.			2.2	–				GSa		81Ho10	
		6148.5	6.			−0.9	–				Daa		96Pa01	
		6148.4	5.1			−1.1	–				Jya		15Li24	
	ave.	6143	3			0.0	1	100	100	^{166}Os			average	
^{166}Ir(α)^{162}Re		6702.8	20.	6722	6	1.0	U				GSa		81Ho10	
		6724.3	6.			−0.3	7				Ara		97Da07	
		6713.1	13.			0.7	7				Jya		04Ke06	*
^{166}Ir^m(α)^{162}Re^m		6718.2	11.	6719	4	0.0	8				Daa		96Pa01	*
		6723.3	5.			−0.9	8				Ara		97Da07	
		6706.9	8.2			1.4	8				Jya		04Ke06	
^{166}Pt(α)^{162}Os		7285.9	15.				5				ORa		96Bi07	
^{164}Dy(t,p)^{166}Dy		4276.4	4.4	4277.7	0.4	0.3	U				McM		88Bu08	*
^{166}Er(p,t)^{164}Er		−6641	5	−6644.0	1.1	−0.6	U				Min		73Oo01	
^{165}Dy(n,γ)^{166}Dy		7043.5	0.4				3						83Ke.A	
^{165}Ho(n,γ)^{166}Ho		6243.69	0.06	6243.640	0.020	−0.8	U				MMn		82Is05	Z
		6243.64	0.02			0.0	1	100	77	^{166}Ho	MMn		84Ke15	Z
		6243.68	0.13			−0.3	U				Bdn		06Fi.A	
^{165}Ho(d,p)^{166}Ho		4025	7	4019.074	0.020	−0.8	U				Tal		65St06	
^{166}Er(d,t)^{165}Er		−2218	10	−2218.5	1.3	−0.1	U				Kop		69Tj01	
^{166}Ir(p)^{165}Os		1152.0	8.0				6				Ara		97Da07	
^{166}Ir^m(p)^{165}Os		1324.1	8.	1323	10	−0.1	o				Ara		97Da07	*
^{166}Eu(β^-)^{166}Gd		7322	300				3				Kur		14Ha38	
^{166}Tb(β^-)^{166}Dy		4830	100	4700	70	−1.3	o				Kur		02Sh.A	
		4695	70			0.1	o				Kur		07Ha57	
		4700	70				4				Kur		10Ha.A	
^{166}Dy(β^-)^{166}Ho		483	5	486.5	0.9	0.7	U						60He09	*
^{166}Ho(β^-)^{166}Er		1859	3	1854.7	0.9	−1.4	–						63Fu17	
		1857	3			−0.8	–						66Da04	
		1854.7	1.5			0.0	–						74Gr41	
		1851.6	2.0			1.6	–						83Ra.A	
	ave.	1854.7	1.0			0.1	1	78	54	^{166}Er			average	
^{166}Tm(β^+)^{166}Er		3043	20	3038	12	−0.3	2						61Gr33	*
		3031	20			0.3	2						61Zy02	*
		3039	20			−0.1	2						63Pr13	*

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{166}Yb(ε)^{166}Tm	280	40	293	14	0.3	U					Averag	*
^{166}Lu(β^+)^{166}Yb	5480	160	5570	30	0.6	U					74De09	*
^{166}Ir^m(IT)^{166}Ir	171.5	6.1				7			Ara		97Da07	
*^{166}Lu−u	$M-A$=–56010(100) keV for mixture gs+m+n at 34.37 and 43.0 keV										Nub16b	**
*^{166}Lu−u	$M-A$=–55995(28) keV for mixture gs+m+n at 34.37 and 43.0 keV										Nub16b	**
*^{166}Re(α)^{162}Ta	Originally assigned to ^{167}Re										AHW	**
*^{166}Re(α)^{162}Ta	Assignment uncertain, no other obvious attribution										AHW	**
*^{166}Re(α)^{162}Ta	Originally assigned to ^{167}Re										AHW	**
*^{166}Re(α)^{162}Ta	Assignment tentative, may be ^{165}Re										92Me10	**
*^{166}Re(α)^{162}Ta	Correlated to a ^{170}Ir 6003 line; assignment uncertain										GAu	**
*^{166}Ir(α)^{162}Re	All Q_α of reference increased by 7 keV for calibration error										04Ke06	**
*^{166}Ir^m(α)^{162}Re^m	Correlated with E_α=6123 of ^{162}Re^m										96Pa01	**
*^{164}Dy(t,p)^{166}Dy	$Q-Q$(^{162}Dy(t,p))=–1170.8(4.4) keV										AHW	**
*^{166}Ir^m(p)^{165}Os	Replaced by author's value for ^{166}Ir^m(IT)^{166}Ir										97Da07	**
*^{166}Dy(β^-)^{166}Ho	E_{β^-}=402(5) to 1$^-$ level at 82.47 keV, and other E_{β^-}										Ens084	**
*^{166}Tm(β^+)^{166}Er	E_{β^+}=1940(20) 1928(20) 1936(20) respectively, to 2$^+$ level at 80.5776 keV										Ens084	**
*^{166}Yb(ε)^{166}Tm	Average pK=0.712(0.038) to 1$^+$ level at 82.298 keV from 2 references:										Ens084	**
*	pK=0.74(0.05) to 82.298 level										63Ja06	**
*	pK=0.675(0.059) to 82.298 level										73De22	**
*^{166}Lu(β^+)^{166}Yb	E_{β^+}=2225(160) to (6$^-$,7$^-$) level at 2233.36 keV										Ens084	**
C_{13} H_{11}−^{167}Er	153840	130	154021.2	1.3	0.3	U			R04	4.0	64De15	
	154040.4	6.2			−0.8	U			M23	4.0	79Ha32	
C_{12} H_9 N−^{167}Er	141480	27	141445.2	1.3	−0.3	U			R04	4.0	64De15	
	141520	50			−0.4	U			R04	4.0	64De15	
^{167}Lu−u	−61730	34				2			GS2	1.0	05Li24	*
^{167}Hf−u	−57490	110	−57400	30	0.8	U			GS1	1.0	00Ra23	
	−57400	30				2			GS2	1.0	05Li24	
^{167}Ta−u	−51870	120	−51910	30	−0.3	U			GS1	1.0	00Ra23	
	−51907	30				2			GS2	1.0	05Li24	
^{167}W−u	−45175	30	−45194	20	−0.6	R			GS2	1.0	05Li24	
^{167}Er ^{35}Cl−^{165}Ho ^{37}Cl	4666	3	4676.2	1.0	1.4	U			H23	2.5	70Wh01	
	4679.5	1.2			−1.1	U			H25	2.5	72Ba08	
^{167}Er−^{166}Er	1722	31	1755.10	0.19	0.3	U			R04	4.0	64De15	
^{167}W(α)^{163}Hf	4661.9	20.	4741	28	1.6	–					89Me02	
	4671.1	13.			1.4	–					91Me05	
ave.	4668	11			1.4	1	32	21 ^{163}Hf			average	
^{167}Re(α)^{163}Ta^m	5138.3	12.				12			Bea		92Me10	
^{167}Re^m(α)^{163}Ta	5408.8	3.	5407.0	2.9	−0.6	4			Ora		82De11	*
	5397.5	10.			0.9	4			ChR		84Sc06	*
	5392.4	12.			1.2	4			Bea		92Me10	
^{167}Os(α)^{163}W	5983.6	5.	5980	50	0.0	6			GSa		81Ho10	Z
	5978.7	2.			0.1	6			Ora		82De11	Z
	5996.9	5.			−0.3	6			Daa		96Pa01	
	5979.5	5.			0.0	6			Bka		02Ro17	
^{167}Ir(α)^{163}Re	6507.1	5.	6504.9	2.6	−0.4	2			Ara		97Da07	
	6504.0	3.			0.3	2			Jya		05Sc22	
^{167}Ir^m(α)^{163}Re^m	6543.0	10.	6561	3	1.7	2			GSa		81Ho10	
	6567.6	11.			−0.6	2			Daa		96Pa01	
	6567.6	5.			−1.4	2			Ara		97Da07	
	6551.2	7.2			1.3	2			Jya		04Ke06	
	6561.5	6.			−0.1	2			Jya		05Sc22	
^{167}Pt(α)^{163}Os	7159.8	10.	7160	50	−0.1	5			ORa		96Bi07	
	7150.6	10.			0.1	5			Jya		04Ke06	
^{167}Er(p,t)^{165}Er	−6427	6	−6430.4	1.3	−0.6	U			Min		73Oo01	
	−6430	5			−0.1	U					75St08	
^{166}Er(n,γ)^{167}Er	6436.35	0.50	6436.46	0.18	0.2	–					70Bo29	Z
	6436.51	0.40			−0.1	–					70Mi01	Z
	6436.46	0.22			0.0	–			Bdn		06Fi.A	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{167}Er(γ,n)^{166}Er		−6560	80	−6436.46	0.18	1.5	U			Phi		60Ge01	
^{166}Er(d,p)^{167}Er		4209	10	4211.89	0.18	0.3	U			Tal		68Ha10	
		4214	10			−0.2	U			Kop		69Tj01	
^{167}Er(d,t)^{166}Er		−189	12	−179.23	0.18	0.8	U			Kop		69Bu01	
^{166}Er(n,γ)^{167}Er	ave.	6436.46	0.18	6436.46	0.18	0.0	1	99	53 ^{167}Er			average	
^{166}Er(α,t)^{167}Tm−^{168}Er()^{169}Tm		−666.5	1.0	−666.4	1.0	0.1	1	99	99 ^{167}Tm	McM		75Bu02	
^{167}Ir(p)^{166}Os		1070.5	6.	1070	4	−0.1	–					97Da07	
		1068.5	6.			0.3	–			Jyp		05Sc22	*
	ave.	1069	4			0.1	1	77	77 ^{167}Ir			average	
^{167}Ir^m(p)^{166}Os		1245.5	7.	1246	4	0.0	o					97Da07	*
^{167}Dy(β^-)^{167}Ho		2350	60				3					77Tu01	*
^{167}Ho(β^-)^{167}Er		970	20	1011	5	2.0	U					68Fu07	
^{167}Yb(β^+)^{167}Tm		1954	4	1953	4	−0.2	1	90	89 ^{167}Yb			77Kr.A	*
^{167}Lu(β^+)^{167}Yb		3130	100	3090	30	−0.4	U					64Ag.A	*
^{167}W(β^+)^{167}Ta		5620	270	6250	30	2.3	U			Got		89Me02	
^{167}Ir^m(IT)^{167}Ir		175.3	2.2	175.5	2.1	0.1	1	94	70 ^{167}Ir^m	Ara		97Da07	
*^{167}Lu−u	$M-A$=–57501(28) keV for mixture gs+m at 0#30 keV											Nub16b	**
*^{167}Re^m(α)^{163}Ta	Original assignment to ^{168}Re changed in reference											92Me10	**
*^{167}Re^m(α)^{163}Ta	Original assignment to ^{168}Re^m changed in reference											92Me10	**
*	original E_α=5250 recalibrated using their ^{168}Os−^{170}Os results											GAu	**
*^{167}Ir(p)^{166}Os	E_p=1062(6); also E_p=1248(7) from ^{167}Ir^m											05Sc22	**
*^{167}Ir^m(p)^{166}Os	Replaced by author's value for ^{167}Ir^m(IT)^{167}Ir											97Da07	**
*^{167}Dy(β^-)^{167}Ho	E_{β^-}=1780(60) to 3/2$^-$ level at 569.69 keV											Ens008	**
*^{167}Yb(β^+)^{167}Tm	E_{β^+}=639(4) to 7/2$^-$ level at 292.820 keV											Ens008	**
*^{167}Lu(β^+)^{167}Yb	E_{β^+}=2060(100) to 5/2$^+$ level at 29.658, 7/2$^-$ at 78.671 keV											Ens008	**
C_{13} H_{12}−^{168}Er		161543.3	5.1	161524.2	1.3	−0.9	U			M23	4.0	79Ha32	
C_{12} H_{10} N−^{168}Er		148884	44	148948.1	1.3	0.4	U			R04	4.0	64De15	
C_{11} ^{13}C H_9 N−^{168}Er		144524	29	144477.9	1.3	−0.4	U			R04	4.0	64De15	
C_{12} H_{10} N−^{168}Yb		147010	100	147435.2	1.3	1.1	U			R04	4.0	64De15	
^{168}Lu−u		−61217	70	−61260	40	−0.7	R			GS2	1.0	05Li24	*
^{168}Hf−u		−59560	104	−59430	30	1.2	U			GS1	1.0	00Ra23	
		−59432	30				2			GS2	1.0	05Li24	
^{168}Ta−u		−52020	110	−51950	30	0.6	U			GS1	1.0	00Ra23	
		−51953	30				2			GS2	1.0	05Li24	
^{168}W−u		−48181	30	−48195	14	−0.5	1	23	23 ^{168}W	GS2	1.0	05Li24	
^{168}Yb ^{35}Cl$_2$−^{164}Dy ^{37}Cl$_2$		10612.8	8.7	10608.9	1.2	−0.2	U			H27	2.5	74Ba90	
^{168}Er ^{35}Cl−^{166}Er ^{37}Cl		5037	50	5027.28	0.24	−0.1	U			R08	1.5	69De19	
		5026	3			0.2	U			H23	2.5	70Wh01	
		5028.9	1.5			−0.4	U			H25	2.5	72Ba08	
^{168}Yb−^{168}Er		1512.91	0.27	1512.91	0.27	0.0	1	100	99 ^{168}Yb	SH1	1.0	11El04	
^{168}Er−^{167}Er		284	31	322.07	0.13	0.3	U			R04	4.0	64De15	
		320.9	4.3			0.1	U			M24	2.5	79Ha32	
^{168}W(α)^{164}Hf		4506.5	12.	4500	11	−0.5	1	87	68 ^{164}Hf			91Me05	
^{168}Re(α)^{164}Ta		5063	13				3			Bea		92Me10	*
^{168}Os(α)^{164}W		5819.0	3.	5815.6	2.7	−1.1	–			Ora		82De11	Z
		5800.4	8.			1.9	–					84Sc06	
		5812.7	8.			0.4	–					95Hi02	
	ave.	5816.3	2.7			−0.2	1	99	80 ^{168}Os			average	
^{168}Ir(α)^{164}Re		6410.9	5.	6381	9	−5.9	B			Ora		82De11	
		6379.2	15.			0.1	5			Daa		96Pa01	
		6382.2	10.			−0.1	5			Jya		09Ha42	
^{168}Ir^m(α)^{164}Re^m		6477.5	8.	6476	6	−0.1	6			Daa		96Pa01	
		6474.4	10.			0.2	6			Jya		09Ha42	*
^{168}Pt(α)^{164}Os		6990.8	20.	6990	3	−0.1	U			GSa		81Ho10	
		6998.9	10.			−0.9	U			ORa		96Bi07	
		6986.7	8.			0.4	o			Jya		04Ke06	
		6989.7	3.1				2			Jya		09Go16	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.		Lab	F	Reference	
^{168}Er(p,t)^{166}Er		−5723	6	−5725.97	0.21	−0.5	U				Min		73Oo01	
^{168}Yb(p,t)^{166}Yb		−7647	7				2				Min		73Oo01	
^{167}Er(n,γ)^{168}Er		7771.43	0.40	7771.31	0.12	−0.3	–						70Mi01	Z
		7771.05	0.20			1.3	–				ILn		79Br25	Z
		7771.6	1.0			−0.3	U				ORn		84Ka22	
		7771.0	0.5			0.6	U						85Va.A	
		7771.45	0.16			−0.9	–				Bdn		06Fi.A	
^{167}Er(d,p)^{168}Er		5541	6	5546.74	0.12	1.0	U				Tal		67Ha25	
^{168}Er(d,t)^{167}Er		−1523	10	−1514.08	0.12	0.9	U				Kop		69Tj01	
^{167}Er(n,γ)^{168}Er	ave.	7771.31	0.12	7771.31	0.12	0.0	1	100	67	^{168}Er			average	
^{167}Er(α,t)^{168}Tm−^{168}Er()^{169}Tm		−262.3	1.5	−262.3	1.5	0.0	1	100	100	^{168}Tm	McM		75Bu02	
^{168}Yb(d,t)^{167}Yb		−2797	12	−2805	4	−0.7	1	11	11	^{167}Yb	Kop		66Bu16	
^{168}Ho(β^-)^{168}Er		2740	100	2930	30	1.9	U						73Ka07	∗
		2930	30				2						90Ch37	
^{168}Lu(β^+)^{168}Yb		4475	80	4510	40	0.5	2						70Ch28	∗
		4493	100			0.2	2						72Ch44	∗
		4500	80			0.2	2				IRS		83Vi.A	
∗^{168}Lu−u	$M-A$=–56922(28) keV for mixture gs+m at 202.81 keV												Nub16b	∗∗
∗^{168}Re(α)^{164}Ta	E_α=4833(13) to level at 111.5 keV												Ens089	∗∗
∗^{168}Ir^m(α)^{164}Re^m	E_α=6320(10), 6260(10) to ground state and level at 69 keV												09Ha42	∗∗
∗^{168}Ho(β^-)^{168}Er	E_{β^-}=1900(100) to 2$^+$ level at 821.17 and 3$^+$ at 895.79 keV												Ens108	∗∗
∗^{168}Lu(β^+)^{168}Yb	E_{β^+}=1230(80) to 2222.37 level												Ens108	∗∗
∗^{168}Lu(β^+)^{168}Yb	E_{β^+}=1470(100) from ^{168}Lu^m at 202.81 to 4$^+$ level at 2203.84 keV												Ens108	∗∗
C_{12} H_{11} N−^{169}Tm		154920	60	154931.0	0.9	0.0	U				R04	4.0	64De15	
^{169}Lu−u		−62362	31	−62356	3	0.2	U				GS2	1.0	05Li24	∗
^{169}Hf−u		−58741	30				2				GS2	1.0	05Li24	
^{169}Ta−u		−53960	110	−53990	30	−0.3	U				GS1	1.0	00Ra23	
		−53989	30				2				GS2	1.0	05Li24	
^{169}W−u		−48195	30	−48221	17	−0.9	1	31	31	^{169}W	GS2	1.0	05Li24	
^{169}Re−u		−41203	63	−41234	12	−0.5	U				GS2	1.0	05Li24	∗
^{169}Tm ^{35}Cl$_2$−^{165}Ho ^{37}Cl$_2$		9793.0	1.1	9790.5	1.1	−0.9	1	17	11	^{165}Ho	H25	2.5	72Ba08	
^{169}Tm ^{35}Cl−^{167}Er ^{37}Cl		5107	3	5114.3	1.2	1.0	U				H23	2.5	70Wh01	
		5113.2	1.1			0.4	1	19	15	^{167}Er	H25	2.5	72Ba08	
^{169}Re(α)^{165}Ta^m		4989.3	12.				5				Bea		92Me10	∗
^{169}Re^m(α)^{165}Ta		5189.1	3.	5189	3	−0.1	1	99	75	^{165}Ta	Ora		82De11	
		5191.1	10.			−0.2	U				ChR		84Sc06	∗
		5184.0	10.			0.5	U				Bea		92Me10	
^{169}Os(α)^{165}W		5717.6	4.	5713	3	−1.0	2				Ora		82De11	
		5699.2	8.			1.7	2						84Sc06	∗
		5713	8			0.1	2						95Hi02	∗
		5711.5	8.			0.2	2				Daa		96Pa01	
^{169}Ir(α)^{165}Re		6150.8	8.	6141	4	−1.2	5				Ara		99Po09	
		6138.5	4.			0.6	5				Jya		05Sc22	
		6165	14			−1.7	U				Jya		12Th13	
^{169}Ir^m(α)^{165}Re^m		6276.0	3.	6266.5	2.9	−3.2	B				Ora		82De11	Z
		6258.4	10.			0.8	U				GSa		84Sc.A	
		6267.6	9.			−0.1	–				Daa		96Pa01	
		6254.3	5.			2.4	B				Ara		99Po09	
		6265.6	3.			0.3	–				Jya		05Sc22	
		6268	14			−0.1	U				Jya		12Th13	
	ave.	6265.8	2.9			0.3	1	99	54	^{169}Ir^m			average	
^{169}Pt(α)^{165}Os		6840.2	15.	6858	5	1.2	U				GSa		81Ho10	
		6860.7	23.			−0.1	U				Daa		96Pa01	
		6853.5	8.2			0.5	o				Jya		04Ke06	
		6857.6	5.1				6				Jya		09Go16	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{168}Er(n,γ)^{169}Er	6002.5	0.7	6003.25	0.15	1.1	U					70Bo29	Z
	6003.5	0.3			−0.8	2					70Mu15	Z
	6003.16	0.18			0.5	2			Bdn		06Fi.A	
^{168}Er(d,p)^{169}Er	3773	12	3778.68	0.15	0.5	U			Tal		68Ha10	
	3781	10			−0.2	U			Kop		69Tj01	
^{168}Er(α,t)^{169}Tm	−14244.8	10.	−14240.9	1.1	0.4	U			McM		75Bu02	
^{169}Tm(γ,n)^{168}Tm	−8110	50	−8033.6	1.5	1.5	U			Phi		60Ge01	
^{169}Tm(d,t)^{168}Tm	−1775	6	−1776.4	1.5	−0.2	U			Pit		73Ko06	
^{168}Yb(n,γ)^{169}Yb	6866.8	0.4	6866.98	0.15	0.4	2					68Mi08	Z
	6867.2	0.4			−0.6	2					68Sh12	Z
	6866.97	0.18			0.0	2			Bdn		06Fi.A	
^{168}Yb(d,p)^{169}Yb	4636	12	4642.41	0.15	0.5	U			Kop		66Bu16	
^{169}Dy(β^-)^{169}Ho	3200	300				3			LBL		90Ch34	
^{169}Ho(β^-)^{169}Er	2070	100	2126	20	0.6	U					63Mi17	*
^{169}Er(β^-)^{169}Tm	343.8	3.	352.1	1.1	2.8	B					56Bi30	*
	347.8	5.			0.9	U					65Du02	*
^{169}Yb(ε)^{169}Tm	913	12	897.6	1.1	−1.3	U					86Ad07	*
	900	100			0.0	U					87Sa53	*
^{169}Lu(β^+)^{169}Yb	2293	3				3					77Bo31	
^{169}Hf(β^+)^{169}Lu	3365	200	3368	28	0.0	U					69Ar23	*
	3250	90			1.3	U					73Me09	*
*^{169}Lu−u	$M-A$=–58075(28) keV for mixture gs+m at 29.0 keV										Nub16b	**
*^{169}Re−u	$M-A$=–38293(29) keV for mixture gs+m at 175(13) keV										Nub16b	**
*^{169}Re(α)^{165}Ta^m	E_α=4871(12), and a stronger E_α=4700(12)										92Me10	**
*^{169}Re^m(α)^{165}Ta	Original E_α=5050 recalibrated using their ^{168}Os−^{170}Os results										GAu	**
*^{169}Os(α)^{165}W	Used to recalibrate other results in same reference										GAu	**
*^{169}Os(α)^{165}W	E_α=5578(8), 5536(10) to ground state, (3/2$^-$) level at 43 keV										Ens066	**
*^{169}Ho(β^-)^{169}Er	E_{β^-}=1200(100) to 5/2$^-$ level at 853.0 and 7/2$^-$ at 941.04 keV										Ens089	**
*^{169}Er(β^-)^{169}Tm	E_{β^-}=340(2) 344(4) respectively, 55% to ground state, 45% to 3/2$^+$ level at 8.41 keV										Ens089	**
*^{169}Yb(ε)^{169}Tm	From decay rates to (5/2)$^+$ level at 781.796, (7/2$^+$) 878.35 of same band										Ens089	**
*^{169}Yb(ε)^{169}Tm	pK=0.812(0.029) to 9/2$^-$ level at 472.88 keV										Ens089	**
*^{169}Hf(β^+)^{169}Lu	E_{β^+}=1850(200) to 7/2$^-$ level at 492.88 keV										Ens089	**
*^{169}Hf(β^+)^{169}Lu	K/β^+=5.2(1.0) to 7/2$^-$ level at 492.88 keV										Ens089	**
C_{12} H_{12} N−^{170}Er	161210	70	161503.7	1.7	1.0	U			R04	4.0	64De15	
C_{12} H_{12} N−^{170}Yb	161831	43	162207.146	0.011	2.2	U			R04	4.0	64De15	
C_{11} H_8 O N−^{170}Yb	125370	150	125821.636	0.011	0.8	U			R04	4.0	64De15	
C_{11} ^{13}C H_{11} N−^{170}Yb	157320	210	157736.949	0.011	0.5	U			R04	4.0	64De15	
^{170}Yb−^{129}Xe$_{1.318}$	60266.078	0.012	60266.070	0.009	−0.7	1	58	53 ^{170}Yb	FS1	1.0	12Ra34	
^{170}Yb−^{132}Xe$_{1.288}$	58215.483	0.013	58215.493	0.009	0.7	1	50	47 ^{170}Yb	FS1	1.0	12Ra34	
^{170}Lu−u	−61529	42	−61521	18	0.2	R			GS2	1.0	05Li24	*
^{170}Hf−u	−60400	104	−60390	30	0.1	U			GS1	1.0	00Ra23	
	−60391	30				2			GS2	1.0	05Li24	
^{170}Ta−u	−53810	104	−53830	30	−0.1	U			GS1	1.0	00Ra23	
	−53825	30				2			GS2	1.0	05Li24	
^{170}W−u	−50710	110	−50769	14	−0.5	U			GS1	1.0	00Ra23	
	−50755	30			−0.5	1	22	22 ^{170}W	GS2	1.0	05Li24	
^{170}Re−u	−41782	30	−41775	25	0.2	–			GS2	1.0	05Li24	
ave.	−41780	28			0.2	1	80	80 ^{170}Re			average	
^{170}Os−u	−36454	31	−36421	10	1.1	1	11	11 ^{170}Os	GS2	1.0	05Li24	
^{170}Er ^{35}Cl−^{168}Er ^{37}Cl	6073	31	6044.6	1.6	−0.6	U			R08	1.5	69De19	
	6040	3			0.6	U			H23	2.5	70Wh01	
	6046.9	1.8			−0.5	1	12	9 ^{170}Er	H25	2.5	72Ba08	
^{170}Yb ^{35}Cl−^{168}Yb ^{37}Cl	3806.0	7.6	3828.2	1.3	1.2	U			H27	2.5	74Ba90	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{170}Er$-^{168}$Er		3450	70	3094.5	1.6	−1.3	U			R04	4.0	64De15	
^{170}Yb$-^{168}$Yb		910	200	878.1	1.3	0.0	U			R04	4.0	64De15	
^{170}Os(α)^{166}W		5533.5	10.	5536.9	2.7	0.3	–			ORa		72To06	Z
		5541.8	4.1			−1.2	–			Ora		82De11	Z
		5523.2	8.			1.7	–					84Sc06	*
		5533.4	8.			0.4	–					95Hi02	
		5537.5	5.			−0.1	–			Bka		02Ro17	
	ave.	5537.1	2.7			−0.1	1	99	89 ^{170}Os			average	
^{170}Ir(α)^{166}Re^p		5955.4	10.				7			Bka		02Ro17	
^{170}Ir^m(α)^{166}Re		6175.4	10.	6272	10	9.7	B					78Sc26	*
		6172.7	5.			19.9	B			Ora		82De11	*
		6147.9	10.			12.4	B			Daa		96Pa01	*
		6229.9	11.			3.9	B			Daa		96Pa01	*
		6272.4	10.				6			Jya		07Ha45	*
^{170}Pt(α)^{166}Os		6703.0	8.	6707	3	0.5	–			GSa		81Ho10	
		6705.0	10.			0.2	–					82En03	
		6708.1	6.			−0.1	–			ORa		96Bi07	
		6711.2	11.			−0.3	–			Jya		97Uu01	
		6723.5	14.			−1.1	–			Bka		01Ro.B	
		6707.1	7.			0.0	–			Jya		04Ke06	
	ave.	6708	3			−0.1	1	84	84 ^{170}Pt			average	
^{170}Au(α)^{166}Ir		7174.1	11.	7177	15	0.3	o			Jya		02Ke.C	
		7170.0	12.			0.6	U			Jya		04Ke06	
^{170}Au^m(α)^{166}Ir^m		7277.5	6.	7285	12	0.2	o			Jya		02Ke.C	
		7226.3	15.			1.2	U			Ara		02Ma61	
		7278.5	9.			0.1	U			Jya		04Ke06	
^{170}Er(p,α)^{167}Ho		7036	5				2			NDm		83Ta.A	
^{170}Er(^{18}O,^{20}Ne)^{168}Dy		4710	140				2					98Lu08	
^{170}Er(p,t)^{168}Er		−4785	5	−4778.3	1.5	1.3	U			Min		73Oo01	
^{170}Yb(p,t)^{168}Yb		−6861	6	−6842.9	1.2	3.0	B			Min		73Oo01	
^{170}Er(d,^{3}He)^{169}Ho		−3107	20				2					76Su.A	
^{170}Er(d,t)^{169}Er		−1010	10	−999.7	1.5	1.0	U			Kop		69Tj01	
^{169}Tm(n,γ)^{170}Tm		6595.	2.5	6591.96	0.17	−1.2	U					66Sh03	
		6592.1	1.5			−0.1	U					70Or.A	
		6591.7	0.9			0.3	U			BNn		96Ho12	Z
		6591.95	0.17			0.0	1	99	79 ^{169}Tm	Bdn		06Fi.A	
^{169}Tm(d,p)^{170}Tm		4420	20	4367.39	0.17	−2.6	U			CIT		66Ry01	
		4369	15			−0.1	U			Tal		66Sh03	
^{170}Yb(d,t)^{169}Yb		−2211	12	−2200.4	1.2	0.9	U			Kop		66Bu16	
^{170}Au(p)^{169}Pt		1473.8	15.	1472	12	−0.1	o			Jyp		02Ke.C	
		1471.7	12.				7			Jyp		04Ke06	
^{170}Au^m(p)^{169}Pt		1749.5	8.	1751	5	0.2	o			Jyp		02Ke.C	
		1745.4	10.			0.6	7			Arp		02Ma61	
		1753.5	6.			−0.4	7			Jyp		04Ke06	
^{170}Ho(β^-)^{170}Er		3870	50				2					78Tu04	
^{170}Ho^m(β^-)^{170}Er		3970	60				2					78Tu04	
^{170}Tm(β^-)^{170}Yb		970	2	968.1	0.8	−1.0	–					54Po26	
		967.3	1.			0.8	–					69Va17	*
	ave.	967.8	0.9			0.3	1	80	80 ^{170}Tm			average	
^{170}Lu(β^+)^{170}Yb		3467	20	3458	17	−0.5	2					60Dz02	
		3410	50			1.0	2					65Ha30	

*^{170}Lu−u	$M-A$=–57267(29) keV for mixture gs+m at 92.91 keV	Nub16b	**
*^{170}Os(α)^{166}W	Used to recalibrate other results in same reference	GAu	**
*^{170}Ir^m(α)^{166}Re	E_α=6029.8(10,Z) 6027.2(5,Z) 6003(10) most probably to low levels in ^{166}Re	GAu	**
*^{170}Ir^m(α)^{166}Re	Correlated with ^{166}Re E_α=5533 keV	96Pa01	**
*^{170}Ir^m(α)^{166}Re	E_α=5951(10) to level at 175, 6007(10) to 122, 6053(10) to 75 keV	07Ha45	**
*^{170}Tm(β^-)^{170}Yb	E_{β^-}=883(1) to 2$^+$ level at 84.25468 keV	Ens02b	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.		Lab	F	Reference	
C_{11} ^{13}C H_{12} $N-^{171}Yb$		164140	80	163997.709	0.014	−0.4	U				R04	4.0	64De15	
C_{10} H_7 O $N_2-^{171}Yb$		119640	270	119506.337	0.014	−0.1	U				R04	4.0	64De15	
$^{171}Yb-^{129}Xe_{1.326}$		62592.096	0.012	62592.096	0.012	0.0	1	100	100	^{171}Yb	FS1	1.0	12Ra34	
^{171}Lu−u		−62132	41	−62081.3	2.0	1.2	U				GS2	1.0	05Li24	∗
^{171}Hf−u		−59570	104	−59510	30	0.6	U				GS1	1.0	00Ra23	∗
		−59508	31				2				GS2	1.0	05Li24	∗
^{171}Ta−u		−55550	104	−55520	30	0.3	U				GS1	1.0	00Ra23	
		−55524	30				2				GS2	1.0	05Li24	
^{171}W−u		−50650	110	−50550	30	0.9	U				GS1	1.0	00Ra23	
		−50549	30				2				GS2	1.0	05Li24	
^{171}Re−u		−44284	30				2				GS2	1.0	05Li24	
^{171}Os−u		−36796	30	−36825	19	−1.0	–				GS2	1.0	05Li24	
	ave.	−36801	21			−1.1	1	81	81	^{171}Os			average	
^{171}Yb $^{35}Cl_2-^{167}$Er $^{37}Cl_2$		10178.0	1.7	10177.6	1.3	−0.1	U				H27	2.5	74Ba90	
^{171}Yb ^{35}Cl$-^{169}$Tm ^{37}Cl		5055	3	5063.3	0.9	1.1	U				H23	2.5	70Wh01	
		5061.9	1.7			0.3	U				H27	2.5	74Ba90	
$^{171}Yb-^{170}Yb$		1220	60	1564.271	0.015	1.4	U				R04	4.0	64De15	
$^{171}Os(\alpha)^{167}W$		5365.8	10.	5371	4	0.5	–				ORa		72To06	
		5365.8	10.			0.5	–						78Sc26	
		5393.4	15.			−1.4	–						79Ha10	
		5367.9	8.			0.4	–						95Hi02	∗
		5374.0	9.			−0.3	–				Daa		96Pa01	
	ave.	5371	4			0.1	1	99	90	^{167}W			average	
$^{171}Ir(\alpha)^{167}Re^m$		5854.2	10.	5866	5	1.1	5				Bka		02Ro17	∗
		5865.4	8.			0.0	5				Ara		11Ko.B	∗
		5871.6	7.2			−0.8	5				Anv		13An10	
$^{171}Ir^m(\alpha)^{167}Re$		6159.2	3.	6161.1	2.3	0.6	11				Ora		82De11	∗
		6159	5			0.4	11						92Sc16	∗
		6180	11			−1.7	11				Daa		96Pa01	∗
		6159.2	8.			0.2	11				Anv		10An01	∗
		6172.4	8.			−1.4	11				Ara		11Ko.B	∗
$^{171}Pt(\alpha)^{167}Os$		6608.1	4.	6607	3	−0.2	7				Ora		81De22	Z
		6606.8	5.			0.1	7				GSa		81Ho10	Z
		6604.8	11.			0.2	7				Jya		97Uu01	
		6600.6	15.			0.5	U				Anv		10An01	
$^{171}Au^m(\alpha)^{167}Ir^m$		7163.9	6.	7164	4	0.1	–				Ara		97Da07	
		7162.9	8.			0.2	–				Jya		04Ke06	
	ave.	7164	5			0.2	1	69	39	$^{171}Au^m$			average	
$^{171}Hg(\alpha)^{167}Pt$		7667.7	15.				6				Jya		04Ke06	
$^{171}Yb(p,t)^{169}Yb$		−6599	5	−6590.1	1.2	1.8	U				Min		73Oo01	
$^{170}Er(n,\gamma)^{171}Er$		5681.5	0.5	5681.6	0.4	0.2	–						71Al01	
		5681.6	0.5			0.0	–				Bdn		06Fi.A	
$^{170}Er(d,p)^{171}Er$		3450	10	3457.0	0.4	0.7	U				Tal		68Ha10	
		3458	10			−0.1	U				Kop		69Tj01	
$^{170}Er(n,\gamma)^{171}Er$	ave.	5681.6	0.4	5681.6	0.4	0.1	1	98	62	^{171}Er			average	
$^{170}Er(\alpha,t)^{171}Tm-^{168}Er()^{169}Tm$		817.9	1.0	817.6	0.9	−0.3	1	82	53	^{170}Er	McM		75Bu02	
$^{170}Yb(n,\gamma)^{171}Yb$		6614.3	0.6	6614.208	0.014	−0.2	U						72Wa10	Z
		6616.6	0.4			−6.0	C				Bdn		06Fi.A	
$^{170}Yb(d,p)^{171}Yb$		4390	12	4389.642	0.014	0.0	U				Kop		66Bu16	
$^{171}Yb(d,t)^{170}Yb$		−359	12	−356.979	0.014	0.2	U				Kop		66Bu16	
$^{170}Yb(\alpha,t)^{171}Lu-^{174}Yb()^{175}Lu$		−1156.2	2.0	−1156.6	1.7	−0.2	1	73	61	^{171}Lu	McM		75Bu02	
$^{171}Au(p)^{170}Pt$		1452.6	17.	1448	10	−0.3	2				Arp		99Po09	
		1445.6	12.			0.2	2				Jyp		04Ke06	
$^{171}Au^m(p)^{170}Pt$		1702.1	6.	1702	4	0.1	–						97Da07	
		1704.1	6.			−0.3	–				Jyp		04Ke06	
	ave.	1703	4			−0.1	1	77	61	$^{171}Au^m$			average	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.		Lab	F	Reference	
^{171}Ho(β^-)^{171}Er		3200	600				2				LBL		90Ch34	
^{171}Er(β^-)^{171}Tm		1490	2	1491.3	1.3	0.7	1	39	38	^{171}Er			61Ar15	*
^{171}Tm(β^-)^{171}Yb		96.5	1.0	96.5	1.0	0.0	1	94	94	^{171}Tm			57Sm73	
^{171}Lu(β^+)^{171}Yb		1479.3	3.	1478.4	1.9	−0.3	1	39	39	^{171}Lu			77Bo32	*
^{171}Re(β^+)^{171}W		5670	200	5840	40	0.8	U				Got		87Ru05	
^{171}Au^m(IT)^{171}Au		250	16	255	10	0.3	o						99Po09	*
*^{171}Lu−u	$M-A$=–57840(33) keV for mixture gs+m at 71.13 keV												Nub16b	**
*^{171}Hf−u	$M-A$=–55480(100) keV for mixture gs+m at 21.93 keV												Nub16b	**
*^{171}Hf−u	$M-A$=–55420(28) keV for mixture gs+m at 21.93 keV												Nub16b	**
*^{171}Os(α)^{167}W	E_α=5241(8), 5166(8) to ground state and level at 79 keV												95Hi02	**
*^{171}Ir(α)^{167}Re^m	Correlated with E_α=6412 of ^{175}Au												02Ro17	**
*^{171}Ir(α)^{167}Re^m	Correlated with E_α=6430(8) of ^{175}Au and 6556(8) of ^{179}Tl												11Ko.B	**
*^{171}Ir^m(α)^{167}Re	E_α=5925.2(3,Z) 5925(5) 5945(11) 5925(8) respectively, to (11/2$^-$) level at 92 keV												92Sc16	**
*	E_α=5920 correlated with ^{175}Au E_α=6438 keV												02Ro17	**
*^{171}Ir^m(α)^{167}Re	E_α=5938(8) to 92 level; correlated with E_α=6431(8) of ^{175}Au^m												11Ko.B	**
*	and 7194(8) of ^{179}Tl^m												11Ko.B	**
*^{171}Er(β^-)^{171}Tm	E_{β^-}=1065(2) to 7/2$^-$ level at 424.95 keV												Ens029	**
*^{171}Lu(β^+)^{171}Yb	E_{β^+}=362(3) to 7/2$^+$ level at 95.28 keV												Ens029	**
*^{171}Au^m(IT)^{171}Au	Redundant; use only their Q_p												GAu	**
C_{10} H_6 O_2 N−^{172}Yb		103560	60	103466.778	0.015	−0.4	U				R04	4.0	64De15	
^{172}Yb−^{132}Xe$_{1.303}$		61272.578	0.013	61272.578	0.013	0.0	1	100	100	^{172}Yb	FS1	1.0	12Ra34	
^{172}Hf−u		−60555	30	−60550	26	0.2	2				GS2	1.0	05Li24	
^{172}Ta−u		−55105	30				2				GS2	1.0	05Li24	
^{172}W−u		−52770	110	−52710	30	0.6	U				GS1	1.0	00Ra23	
		−52708	30				2				GS2	1.0	05Li24	
^{172}Re−u		−44702	221	−44590	40	0.5	U				GS1	1.0	00Ra23	*
		−44587	62			−0.1	1	46	46	^{172}Re	GS2	1.0	05Li24	*
^{172}Yb ^{35}Cl$_2$−^{168}Er ^{37}Cl$_2$		9906.7	1.7	9910.7	1.3	0.9	U				H27	2.5	74Ba90	
^{172}Yb ^{35}Cl−^{170}Yb ^{37}Cl		4568.5	2.0	4569.52	0.07	0.2	U				H27	2.5	74Ba90	
^{172}Yb−^{171}Yb		−50	230	55.142	0.018	0.1	U				R04	4.0	64De15	
^{172}Os(α)^{168}W		5226.8	10.	5224	7	−0.2	–						71Bo06	
		5227.8	10.			−0.3	–				Daa		96Pa01	
	ave.	5227	7			−0.4	1	93	59	^{168}W			average	
^{172}Ir(α)^{168}Re		5990.6	10.				4						92Sc16	*
^{172}Ir^m(α)^{168}Re		6129.3	3.	6129.2	2.6	0.0	4				Ora		82De11	*
		6161	20			−1.6	F				GSa		84Sc.A	*
		6129.1	5.			0.0	4						92Sc16	*
		6123.0	12.			0.5	U				Daa		96Pa01	*
^{172}Pt(α)^{168}Os		6464.8	4.	6463	4	−0.4	1	97	77	^{172}Pt	Ora		81De22	Z
		6474.8	15.			−0.8	U				Anv		09An20	
^{172}Au(α)^{168}Ir		6923.3	10.2				6				Jya		09Ha42	
^{172}Au^m(α)^{168}Ir^m		7023.6	10.	7034	6	1.0	7						93Se09	
		7042.1	9.			−0.9	7				Daa		96Pa01	
		7033.8	10.			0.0	7				Jya		09Ha42	*
^{172}Hg(α)^{168}Pt		7525.3	12.	7524	6	−0.1	3						99Se14	
		7536.5	16.			−0.8	o				Jya		04Ke06	
		7523.3	7.2			0.1	3				Jya		09Sa27	
^{170}Er(t,p)^{172}Er		4034	4	4036	4	0.4	1	89	87	^{172}Er			80Sh14	
^{172}Yb(p,t)^{170}Yb		−6161	5	−6152.366	0.015	1.7	U				Min		73Oo01	
^{171}Yb(n,γ)^{172}Yb		8020.3	0.7	8019.953	0.017	−0.5	U						71Al14	Z
		8020.1	0.5			−0.3	U						75Gr32	
		8019.67	0.35			0.8	U				ILn		85Ge02	Z
		8019.27	0.17			4.0	C				Bdn		06Fi.A	
^{171}Yb(d,p)^{172}Yb		5797	12	5795.387	0.017	−0.1	U				Kop		66Bu16	
		5789	5			1.3	U				Tal		66Sh14	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.		Lab	F	Reference	
^{172}Yb(d,t)^{171}Yb		−1772	12	−1762.724	0.017	0.8	U				Kop		66Bu16	
^{171}Yb(^{3}He,d)^{172}Lu		−792	34	−775.3	2.3	0.5	U				Roc		76El11	
^{171}Yb(α,t)^{172}Lu−^{174}Yb()^{175}Lu		−791.9	2.0	−791.9	2.0	0.0	1	100	100	^{172}Lu	McM		75Bu02	
^{172}Er(β^-)^{172}Tm		888	5	891	5	0.6	1	83	70	^{172}Tm			62Gu03	∗
^{172}Tm(β^-)^{172}Yb		1870	10	1881	6	1.1	1	30	30	^{172}Tm			66Ha15	
^{172}Hf(ε)^{172}Lu		350	50	334	25	−0.3	R						79To18	
^{172}Ta(β^+)^{172}Hf		4920	180	5070	40	0.8	U						73Ca10	∗
^{172}W(β^+)^{172}Ta		3210	100	2230	40	−9.8	C						74Ca.A	∗
∗^{172}Re−u		$M-A$=–41640(200) keV for mixture gs+m at 0#100 keV											Nub16b	∗∗
∗^{172}Re−u		$M-A$=–41533(28) keV for mixture gs+m at 0#100 keV											Nub16b	∗∗
∗^{172}Ir(α)^{168}Re		E_α=5510(10) to 89.7+123.2+136.3 level											92Sc16	∗∗
∗^{172}Ir^m(α)^{168}Re		E_α=5736 followed by XK(Re), 128 M2 and 161 M3 γ's											84Sc.A	∗∗
∗^{172}Ir^m(α)^{168}Re		F : first assigned to ^{173}Ir(α); seen in neither nuclide in reference											92Sc16	∗∗
∗^{172}Ir^m(α)^{168}Re		E_α=5828.2(3,Z) 5828(5) 5822(12) respectively, to (8$^+$) level at 162.1 keV											Ens108	∗∗
∗^{172}Au^m(α)^{168}Ir^m		E_α=6870(10) 6800(10) to ground state and 70 keV level											09Ha42	∗∗
∗^{172}Er(β^-)^{172}Tm		E_{β^-}=278(5) to 1$^+$ level at 610.062 keV											Ens15c	∗∗
∗^{172}Ta(β^+)^{172}Hf		E_{β^+}=2480(180) to 4$^-$ level at 1418.55 keV											Ens959	∗∗
∗^{172}W(β^+)^{172}Ta		E_{β^+}=1600(100) in coinc. with 459.2 keV γ from 586.3 level											Ens15c	∗∗
C_{14} H_5−^{173}Yb		101030	70	100908.946	0.012	−0.4	U				R04	4.0	64De15	
C_{10} H_7 O_2 N−^{173}Yb		109810	60	109462.254	0.012	−1.4	U				R04	4.0	64De15	
^{173}Yb−^{129}Xe$_{1.341}$		65905.075	0.013	65905.080	0.010	0.3	1	60	56	^{173}Yb	FS1	1.0	12Ra34	
^{173}Yb−^{132}Xe$_{1.311}$		63868.901	0.015	63868.895	0.010	−0.4	1	47	44	^{173}Yb	FS1	1.0	12Ra34	
^{173}Hf−u		−59487	30				2				GS2	1.0	05Li24	
^{173}Ta−u		−56270	104	−56250	30	0.2	U				GS1	1.0	00Ra23	
		−56250	30				2				GS2	1.0	05Li24	
^{173}W−u		−52340	104	−52310	30	0.3	U				GS1	1.0	00Ra23	
		−52311	30				2				GS2	1.0	05Li24	
^{173}Re−u		−46910	110	−46760	30	1.4	U				GS1	1.0	00Ra23	
		−46757	30				2				GS2	1.0	05Li24	
^{173}Os−u		−40169	30	−40192	16	−0.8	1	29	29	^{173}Os	GS2	1.0	05Li24	
^{173}Ir−u		−32449	100	−32495	12	−0.5	U				GS2	1.0	05Li24	∗
^{173}Yb ^{35}Cl$_2$−^{169}Tm ^{37}Cl$_2$		9898.3	1.2	9898.1	0.9	−0.1	U				H27	2.5	74Ba90	
^{173}Yb ^{35}Cl−^{171}Yb ^{37}Cl		4827	4	4834.81	0.07	0.8	U				H23	2.5	70Wh01	
		4835.3	1.6			−0.1	U				H27	2.5	74Ba90	
^{173}Yb−^{172}Yb		1970	120	1829.556	0.017	−0.3	U				R04	4.0	64De15	
^{173}Os(α)^{169}W		5057.2	10.	5055	6	−0.2	–						71Bo06	
		5055.2	7.			−0.1	–				GSa		84Sc.A	
	ave.	5056	6			−0.2	1	97	69	^{169}W			average	
^{173}Ir(α)^{169}Re^m		5544.4	10.	5541	10	−0.4	1	90	76	^{169}Re^m			92Sc16	
^{173}Ir^m(α)^{169}Re		5930.4	5.	5941.8	2.5	2.3	4						67Si02	∗
		5947.1	4.			−1.3	4				Ora		82De11	∗
		5937	10			0.5	4				GSa		84Sc.A	∗
		5944.8	5.			−0.6	4						92Sc16	∗
		5951.9	13.			−0.8	4				Daa		96Pa01	∗
		5927.3	20.			0.7	U				Ara		01Ko.B	
^{173}Pt(α)^{169}Os		6359.3	8.2	6350	50	−0.1	3						79Ha10	Z
		6352.3	3.			0.1	3				Ora		81De22	Z
		6382.9	10.			−0.6	o				GSa		84Sc.A	
		6372.6	9.			−0.4	3				Daa		96Pa01	
		6387.9	15.			−0.7	U				Anv		09An20	
^{173}Au(α)^{169}Ir		6830.2	6.	6836	5	1.0	4				Ara		99Po09	
		6847.6	8.			−1.4	4				Ara		01Ko44	
		6846.6	14.			−0.7	U				Ara		12Th13	
^{173}Au^m(α)^{169}Ir^m		6896.8	10.	6897	3	0.0	–				GSa		84Sc.A	
		6909.1	9.			−1.3	–				Daa		96Pa01	
		6891.6	4.			1.3	–				Ara		99Po09	
		6900.8	6.			−0.6	–				Ara		01Ko44	
		6899	15			−0.1	U				Jya		12Th13	
	ave.	6896	3			0.3	1	98	52	^{173}Au^m			average	
^{173}Hg(α)^{169}Pt		7382.0	11.3	7378	4	−0.4	7						99Se14	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.		Lab	F	Reference	
^{173}Hg(α)^{169}Pt	7362.5	15.4	7378	4	1.0	7				Jya		04Ke06	
	7378.9	5.			−0.2	7						12Od01	
^{173}Yb(p,t)^{171}Yb	−5913	5	−5905.255	0.015	1.5	U				Min		73Oo01	
^{172}Yb(n,γ)^{173}Yb	6367.3	0.4	6367.097	0.015	−0.5	U						71Al01	Z
	6367.2	0.6			−0.2	U				Bdn		06Fi.A	
^{173}Yb(γ,n)^{172}Yb	−6500	80	−6367.097	0.015	1.7	U				Phi		60Ge01	
^{172}Yb(d,p)^{173}Yb	4145	12	4142.531	0.015	−0.2	U				Kop		66Bu16	
^{173}Yb(d,t)^{172}Yb	−114	12	−109.868	0.015	0.3	U				Kop		66Bu16	
^{172}Yb(α,t)^{173}Lu−^{174}Yb()^{175}Lu	−595.6	1.0	−595.6	1.0	0.0	1	100	100	^{173}Lu	McM		75Bu02	
^{173}Tm(β^-)^{173}Yb	1260	50	1295	4	0.7	U						63Ku22	
	1320	40			−0.6	U						63Or01	
^{173}Lu(ε)^{173}Yb	675	20	670.3	1.6	−0.2	U						73Ko13	
^{173}Ta(β^+)^{173}Hf	3670	200	3020	40	−3.3	B						73Re03	
^{173}W(β^+)^{173}Ta	4000	300	3670	40	−1.1	U						80Vi.A	
∗^{173}Ir−u	$M-A$=–30113(70) keV for mixture gs+m at 226(9) keV											Nub16b	∗∗
∗^{173}Ir^m(α)^{169}Re	E_α=5660.0(5,Z) 5676.2(4,Z) 5666(10) 5674(5) 5681(13) respectively,											AHW	∗∗
∗	to (11/2$^-$) level at 136.40 keV											Ens155	∗∗
C$_{14}$ H$_6$−^{174}Yb	108308	38	108082.645	0.012	−1.5	U				R04	4.0	64De15	
^{174}Yb−^{129}Xe$_{1.349}$	67318.179	0.011	67318.168	0.009	−1.0	1	72	68	^{174}Yb	FS1	1.0	12Ra34	
^{174}Yb−^{132}Xe$_{1.318}$	65191.113	0.017	65191.140	0.010	1.6	1	34	32	^{174}Yb	FS1	1.0	12Ra34	
^{174}Ta−u	−55546	30				2				GS2	1.0	05Li24	
^{174}W−u	−53940	104	−53920	30	0.2	U				GS1	1.0	00Ra23	
	−53921	30				2				GS2	1.0	05Li24	
^{174}Re−u	−46930	104	−46890	30	0.4	U				GS1	1.0	00Ra23	
	−46885	30				2				GS2	1.0	05Li24	
^{174}Os−u	−42880	110	−42937	11	−0.5	U				GS1	1.0	00Ra23	
	−42919	30			−0.6	1	13	13	^{174}Os	GS2	1.0	05Li24	
^{174}Ir−u	−33127	72	−33133	26	−0.1	R				GS2	1.0	05Li24	∗
^{174}Yb ^{35}Cl−^{172}Yb ^{37}Cl	5420	4	5431.00	0.07	1.1	U				H23	2.5	70Wh01	
	5430.3	1.1			0.3	U				H27	2.5	74Ba90	
^{174}Yb−^{173}Yb	700	50	651.333	0.014	−0.2	U				R04	4.0	64De15	
^{174}Hf(α)^{170}Yb	2558.9	30.	2494.5	2.3	−2.1	U						61Ma05	
^{174}Os(α)^{170}W	4872.2	10.	4871	10	−0.2	1	90	78	^{170}W			71Bo06	
^{174}Ir(α)^{170}Re	5624.1	10.	5625	10	0.1	1	97	77	^{174}Ir			92Sc16	∗
^{174}Ir^m(α)^{170}Re	5817.6	6.	5817	4	−0.1	2						67Si02	∗
	5816.4	5.			0.1	2						92Sc16	∗
^{174}Pt(α)^{170}Os	6176.3	10.	6183	3	0.7	2						79Ha10	Z
	6185.7	5.			−0.5	2				Ora		81De22	Z
	6182.4	5.1			0.2	2				Ara		04Go38	
^{174}Au(α)^{170}Ir	6700.3	10.	6699	7	−0.1	7				GSa		84Sc.A	
	6698.3	10.			0.1	7				Daa		96Pa01	∗
^{174}Au^m(α)^{170}Ir^m	6683.9	20.	6784	8	5.0	B				GSa		83Sc24	∗
	6778	10			0.6	7				GSa		84Sc.A	∗
	6793.5	13.			−0.7	7				Daa		96Pa01	
^{174}Hg(α)^{170}Pt	7235.6	11.	7233	6	−0.2	2				Jya		97Uu01	
	7232.5	8.2			0.1	2						99Se14	
	7231.5	14.3			0.1	2				Bka		01Ro.B	
^{174}Yb(p,t)^{172}Yb	−5359	5	−5349.906	0.015	1.8	U				Min		73Oo01	
^{173}Yb(n,γ)^{174}Yb	7464.63	0.06	7464.604	0.013	−0.4	U				MMn		82Is05	Z
	7464.58	0.35			0.1	U				ILn		87Ge01	Z
	7465.5	0.4			−2.2	U				Bdn		06Fi.A	
^{173}Yb(d,p)^{174}Yb	5239	12	5240.038	0.013	0.1	U				Kop		66Bu16	
	5229	5			2.2	U				Tal		66Sh14	
^{174}Yb(d,t)^{173}Yb	−1218	12	−1207.375	0.013	0.9	U				Kop		66Bu16	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.		Lab	F	Reference	
^{173}Yb(α,t)^{174}Lu$-^{174}$Yb()^{175}Lu	-202.1	1.0	-202.1	1.0	0.0	1	100	100	^{174}Lu	McM		75Bu02	
^{174}Tm(β^-)^{174}Yb	3080	100	3080	40	0.0	2						64Ka16	$*$
	3080	50			0.0	2						67Gu12	$*$
^{174}Lu(β^+)^{174}Yb	1402	5	1374.3	1.6	-5.5	B						68Kl08	
^{174}Lu(ε)^{174}Yb	1370	7			0.6	U						68Li01	$*$
^{174}Ta(β^+)^{174}Hf	3845	80	4104	28	3.2	B						71Ch26	$*$
$*^{174}$Ir$-$u	$M-A$=–30761(36) keV for mixture gs+m at 192(11) keV											Nub16b	$**$
$*^{174}$Ir(α)^{170}Re	E_α=5275(10) to (3$^+$) level at 224.7 keV											Ens02b	$**$
$*^{174}$Ir^m(α)^{170}Re	E_α=5478(6) to (7$^+$) level at 210.32 keV											Ens02b	$**$
$*^{174}$Ir^m(α)^{170}Re	E_α=5478(5) 5316(10) to (7$^+$) at 210.32 and 370.1 level											Ens02b	$**$
$*^{174}$Au(α)^{170}Ir	E_α=6538 correlated with ^{170}Ir E_α=5817 keV											02Ro17	$**$
$*$	and only this with ^{178}Tl α's											02Ro17	$**$
$*^{174}$Au^m(α)^{170}Ir^m	E_α=6530(20) to level above 76 keV											84Sc.A	$**$
$*^{174}$Au^m(α)^{170}Ir^m	E_α=6626, 6470, 6435 to ^{170}Ir^m and levels above ^{170}Ir^m (9$^+$) at 152.5,											Ens082	$**$
$*$	(7$^-$,8$^-$,9$^-$) at 190.56; last two E_α originally assigned to ^{175}Au											01Ko.B	$**$
$*^{174}$Tm(β^-)^{174}Yb	E_{β^-}=1200(100) 1200(50) respectively, to 5$^-$ level at 1884.674 keV, and other E_{β^-}											Ens998	$**$
$*^{174}$Lu(ε)^{174}Yb	No K capture to 2$^-$ level at 1318.361 keV $\rightarrow Q$¡(1380; and L capture											Ens998	$**$
$*$	of ^{174}Lu^m at 170.83 to ^{174}Yb^m at 1518.148 keV $\rightarrow Q_{gs}$>1357 keV											Nub16b	$**$
$*^{174}$Ta(β^+)^{174}Hf	E_{β^+}=2525(80) to 4$^+$ level at 297.38 keV											Ens04a	$**$
^{175}Lu ^{37}Cl$-^{142}$Nd ^{35}Cl$_2$	61249.5	2.5	61245.6	1.8	-0.6	U				H31	2.5	77So02	
C$_{14}$ H$_7-^{175}$Lu	114121	37	113997.9	1.3	-0.8	U				R04	4.0	64De15	
C$_{13}$ ^{13}C H$_6-^{175}$Lu	109763	36	109527.7	1.3	-1.6	U				R04	4.0	64De15	
^{175}Ta$-$u	-56350	120	-56260	30	0.7	U				GS1	1.0	00Ra23	
	-56263	30				2				GS2	1.0	05Li24	
^{175}W$-$u	-53290	104	-53280	30	0.1	U				GS1	1.0	00Ra23	
	-53283	30				2				GS2	1.0	05Li24	
^{175}Re$-$u	-48630	104	-48620	30	0.1	U				GS1	1.0	00Ra23	
	-48619	30				2				GS2	1.0	05Li24	
^{175}Os$-$u	-43120	110	-43055	13	0.6	U				GS1	1.0	00Ra23	
	-43024	30			-1.0	1	18	18	^{175}Os	GS2	1.0	05Li24	
^{175}Ir$-$u	-34353	1288	-35850	13	-0.5	U					2.5	91Br17	
	-35828	30			-0.7	1	20	20	^{175}Ir	GS2	1.0	05Li24	
^{175}Lu ^{35}Cl$-^{173}$Yb ^{37}Cl	5503	4	5511.2	1.3	0.8	U				H23	2.5	70Wh01	
	5507.3	1.4			1.1	1	14	14	^{175}Lu	H27	2.5	74Ba90	
^{175}Lu O$-$C$_{16}$	-64316.3	4.5	-64308.1	1.3	1.2	U				TG1	1.5	11Ke03	
^{175}Ir(α)^{171}Re	5709.0	5.	5430	30	-55.6	B						67Si02	$*$
	5709.2	5.			-55.7	B						92Sc16	$*$
^{175}Pt(α)^{171}Os	6179	5	6164	4	-3.1	C						79Ha10	$*$
	6178.1	3.			-4.8	B				Ora		82De11	$*$
	6164	4			-0.1	1	100	91	^{175}Pt	Jya		14Pe02	$*$
^{175}Au(α)^{171}Ir	6562.3	15.	6583	4	1.4	U				Bka		02Ro17	$*$
	6580.7	8.2			0.3	6				Ara		11Ko.B	$*$
	6583.7	4.			-0.2	6				Anv		13An10	
^{175}Au^m(α)^{171}Ir^m	6590.9	10.	6583	3	-0.7	10				Ora		75Ca06	
	6775.8	10.			-19.3	F				GSa		84Sc.A	$*$
	6588.8	9.			-0.6	10				Daa		96Pa01	
	6579.6	6.			0.6	10				Ara		01Ko44	
	6582.7	5.			0.1	10				Anv		10An01	
	6581.7	8.2			0.2	10				Ara		11Ko.B	$*$
^{175}Hg(α)^{171}Pt	7020.7	20.	7072	5	2.5	o				GSa		83Sc24	
	7039.2	20.			1.7	U				GSa		84Sc.A	
	7071.0	24.			0.1	o				Daa		96Pa01	
	7058.7	11.			1.2	8				Jya		97Uu01	
	7075	5			-0.5	8				Daa		09Od01	
	7082.1	20.			-0.5	U				Anv		10An01	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.		Lab	F	Reference	
^{174}Yb(n,γ)^{175}Yb		5822.35	0.07	5822.35	0.07	0.1	1	100	100	^{175}Yb	MMn		82Is05	Z
		5822.5	0.4			−0.4	U				Bdn		06Fi.A	
^{174}Yb(d,p)^{175}Yb		3595	12	3597.79	0.07	0.2	U				Kop		66Bu16	
^{174}Yb(α,t)^{175}Lu		−14303	10	−14303.8	1.2	−0.1	U				McM		75Bu02	
^{175}Lu(γ,n)^{174}Lu		−7880	80	−7666.7	1.0	2.7	U				Phi		60Ge01	
^{175}Lu(d,t)^{174}Lu		−1400	10	−1409.5	1.0	−0.9	U				Tal		70Jo08	
^{174}Hf(n,γ)^{175}Hf		6708.4	0.5	6708.5	0.4	0.2	–						71Al01	Z
		6708.8	0.6			−0.5	–				Bdn		06Fi.A	
	ave.	6708.6	0.4			−0.2	1	100	86	^{175}Hf			average	
^{175}Tm(β^-)^{175}Yb		2385	50				2						66Wi04	*
^{175}Yb(β^-)^{175}Lu		466	3	470.0	1.2	1.3	–						55De18	
		468	5			0.4	–						55Mi90	
		471	3			−0.3	–						56Co13	
		467	3			1.0	–						62Ba32	
	ave.	468.0	1.6			1.2	1	54	54	^{175}Lu			average	
^{175}Hf(ε)^{175}Lu		628	9	683.9	2.0	6.2	B						68Ja11	*
		650	20			1.7	U						69Jo16	*
		630	3			18.0	B						88Si22	*
*^{175}Ir(α)^{171}Re	E_α=5392.8(5,Z) to 189.8 level												95Hi02	**
*^{175}Ir(α)^{171}Re	E_α=5393(5) to 189.8 level												95Hi02	**
*^{175}Pt(α)^{171}Os	E_α=6037(10), 5963.0(5,Z) to ground state, 76.4(0.5) level												84Sc.A	**
*^{175}Pt(α)^{171}Os	E_α=5959.2(3,Z) to 76.4(0.5) level												84Sc.A	**
*^{175}Pt(α)^{171}Os	E_α=6021(4), 5948(4) to ground state, 76.7(0.3) level												14Pe02	**
*^{175}Au(α)^{171}Ir	Analysis by AHW of data in Fig. 3 of reference												02Ro17	**
*^{175}Au(α)^{171}Ir	Correlated with E_α=6556(8) of ^{179}Tl and 5728(8) of ^{171}Ir												11Ko.B	**
*^{175}Au^m(α)^{171}Ir^m	E_α=6435(10) and 6470(20) to 190.0 and 152.7 levels												84Sc.A	**
*^{175}Au^m(α)^{171}Ir^m	F : reassigned to ^{174}Au !												01Ko.B	**
*^{175}Au^m(α)^{171}Ir^m	Correlated with E_α=7194(8) of ^{179}Tl^m and 5958(8) of ^{171}Ir^m												11Ko.B	**
*	different method and different detectors as compared to 01Ko44												11Ko.B	**
*^{175}Tm(β^-)^{175}Yb	E_{β^-}=1870(50) to 1/2$^-$ level at 514.866 keV												Ens04a	**
*^{175}Hf(ε)^{175}Lu	pK=0.712(0.008) 0.740(0.015) 0.714(0.002) respectively,												AHW	**
*	to 7/2$^+$ level at 432.74 keV, and other capture ratios, recalculated												Ens04a	**
C_{14} H_8−^{176}Yb		119980	46	120025.549	0.016	0.2	U				R04	4.0	64De15	
C_{13} H_6 N−^{176}Yb		107190	110	107449.489	0.016	0.6	U				R04	4.0	64De15	
^{176}Yb−^{129}Xe$_{1.364}$		72453.619	0.016	72453.614	0.014	−0.3	1	75	73	^{176}Yb	FS1	1.0	12Ra34	
^{176}Yb−^{132}Xe$_{1.333}$		70335.958	0.027	70335.973	0.014	0.5	1	28	27	^{176}Yb	FS1	1.0	12Ra34	
^{176}Lu ^{37}Cl−^{143}Nd ^{35}Cl$_2$		61067.2	1.4	61069.1	1.8	0.5	1	27	15	^{143}Nd	H31	2.5	77So02	
C_{14} H_8−^{176}Lu		119962	49	119908.4	1.3	−0.3	U				R04	4.0	64De15	
^{176}Lu O−C$_{16}$		−62394.1	7.6	−62393.6	1.3	0.0	U				TG1	1.5	11Ke03	
^{176}Hf O−C$_{16}$		−63668.5	9.8	−63675.5	1.6	−0.5	U				TG1	1.5	11Ke03	
^{176}Ta−u		−55143	33				2				GS2	1.0	05Li24	
^{176}W−u		−54420	104	−54370	30	0.5	U				GS1	1.0	00Ra23	
		−54366	30				2				GS2	1.0	05Li24	
^{176}Re−u		−48380	110	−48380	30	0.0	U				GS1	1.0	00Ra23	
		−48377	30				2				GS2	1.0	05Li24	
^{176}Os−u		−45150	110	−45190	30	−0.4	U				GS1	1.0	00Ra23	
		−45194	30				2				GS2	1.0	05Li24	
^{176}Ir−u		−36328	30	−36370	18	−1.4	1	36	36	^{176}Ir	GS2	1.0	05Li24	
^{176}Yb ^{35}Cl$_2$−^{172}Yb ^{37}Cl$_2$		12088.9	2.4	12088.27	0.14	−0.1	U				H27	2.5	74Ba90	
^{176}Yb ^{35}Cl−^{174}Yb ^{37}Cl		6652	3	6657.27	0.07	0.7	U				H23	2.5	70Wh01	
		6656.3	1.4			0.3	U				H27	2.5	74Ba90	
^{176}Hf ^{35}Cl−^{174}Hf ^{37}Cl		4106	16	4311.5	1.9	5.1	B				H24	2.5	73Ba40	
		4314.21	0.86			−1.2	1	76	74	^{174}Hf	H37	2.5	77Sh12	
^{176}Lu−^{175}Lu		1980	60	1914.50	0.16	−0.3	U				R04	4.0	64De15	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{176}Yb$-^{174}$Yb		4000	50	3707.160	0.017	−1.5	U			R04	4.0	64De15	
^{176}Ir(α)^{172}Re		5237.3	8.	5230	40	−0.1	1	59	54 ^{172}Re			67Si02	
^{176}Pt(α)^{172}Os		5890.1	5.	5885.1	2.1	−1.0	–					79Ha10	Z
		5881.4	4.			0.9	–			Bka		82Bo04	Z
		5887.3	3.			−0.7	–			Ora		82De11	Z
		5874.8	8.			1.3	–			Daa		96Pa01	
	ave.	5885.3	2.1			−0.1	1	99	66 ^{172}Os			average	
^{176}Au(α)^{172}Ir		6574.2	10.	6433	7	−14.1	B			Ora		75Ca06	∗
		6541.5	10.			−10.8	C			GSa		84Sc.A	∗
		6433.4	7.				5			Anv		14An10	∗
^{176}Au^m(α)^{172}Ir^m		6436.6	10.	6433	4	−0.3	5			Ora		75Ca06	∗
		6428.4	10.			0.5	5			GSa		84Sc.A	∗
		6433.4	6.			0.0	5			Ara		01Ko44	∗
		6434.4	7.			−0.1	5			Anv		14An10	∗
^{176}Hg(α)^{172}Pt		6907.2	20.	6897	6	−0.5	o			GSa		83Sc24	
		6924.7	10.			−2.8	C			GSa		84Sc.A	
		6907.3	20.			−0.5	U			Daa		96Pa01	
		6897.0	6.			0.0	–			Ara		99Po09	
		6917.5	15.			−1.3	–			Anv		09An20	
	ave.	6900	6			−0.5	1	95	72 ^{176}Hg			average	
^{176}Yb(p,α)^{173}Tm		7628.8	4.4				2			NDm		78Ta10	
^{176}Yb(p,t)^{174}Yb		−4216	5	−4207.642	0.015	1.7	U			Min		73Oo01	
^{176}Hf(p,t)^{174}Hf		−6397	5	−6392.7	1.7	0.9	1	12	12 ^{174}Hf	Min		73Oo01	
^{176}Yb(d,t)^{175}Yb		−621	12	−609.85	0.07	0.9	U			Kop		66Bu16	
^{175}Lu(n,γ)^{176}Lu		6293.2	1.2	6287.97	0.15	−4.4	B					70Wa20	
		6287.96	0.15			0.1	1	100	79 ^{176}Lu	ILn		91Kl02	Z
		6289.78	0.24			−7.5	C			Bdn		06Fi.A	
^{175}Lu(d,p)^{176}Lu		4070	8	4063.41	0.15	−0.8	U			Tal		67St14	
^{176}Lu(d,t)^{175}Lu		−25	15	−30.74	0.15	−0.4	U			Tal		71Mi01	
^{176}Hf(d,t)^{175}Hf		−1925	8	−1908.7	1.8	2.0	U			Tal		73Za08	
^{176}Tl(p)^{175}Hg		1265.2	18.				9			Jyp		04Ke06	
^{176}Tm(β^-)^{176}Yb		4120	100				2					67Gu11	∗
^{176}Lu(β^-)^{176}Hf		1162	25	1194.1	0.9	1.3	U					69Pr11	∗
		1194.1	1.0			0.0	1	76	75 ^{176}Hf			73Va11	∗
^{176}Ta(β^+)^{176}Hf		3100	90	3210	30	1.2	U					71Be10	∗

∗^{176}Au(α)^{172}Ir	E_α=6260(10) coinc. with E(γ)=168.4(0.5) keV	75Ca06	∗∗
∗^{176}Au(α)^{172}Ir	E_α=6228(10) to 168.4(0.5) γ	84Sc.A	∗∗
∗^{176}Au(α)^{172}Ir	E_α=6260 correlated with ^{172}Ir E_α=5510 keV	02Ro17	∗∗
∗^{176}Au(α)^{172}Ir	and E_α=6157(20),6138(15),6054(20),5798(20) to 126.3, 151.5, 236.6,500.0	14An10	∗∗
∗^{176}Au^m(α)^{172}Ir^m	E_α=6286 correlated with ^{172}Ir^m E_α=5828 keV	02Ro17	∗∗
∗^{176}Au^m(α)^{172}Ir^m	E_α=6119+E(γ)=175.1 was misassigned to ^{177}Au	01Ko44	∗∗
∗^{176}Au^m(α)^{172}Ir^m	E_α=6115(6) coinc. with 175.1 γ of reference	84Sc.A	∗∗
∗^{176}Au^m(α)^{172}Ir^m	E_α=6287(7), 6117(7), 6082(7) to 0, 175.2, 211.6 above ^{172}Ir^m	14An10	∗∗
∗^{176}Tm(β^-)^{176}Yb	E_{β^-}=2000(100), 1150(100) to (3$^+$,4$^+$) level at 2053.34, (3$^+$,4$^+$,5$^+$) 3052.2	Ens062	∗∗
∗^{176}Lu(β^-)^{176}Hf	E_{β^-}=565(25) to 6$^+$ level at 596.82 keV	Ens062	∗∗
∗^{176}Lu(β^-)^{176}Hf	Q_{β^-}=1317(1) from ^{176}Lu^m at 122.845 keV	Nub16b	∗∗
∗^{176}Ta(β^+)^{176}Hf	KLM/β^+=119(50) to 2$^-$ level at 1247.70 keV, 1$^+$ level at 2994 keV	Ens062	∗∗

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference
^{177}Ta$-$u	−55559	30	−55518	4	1.4	U			GS2	1.0	05Li24
^{177}W$-$u	−53420	110	−53360	30	0.6	U			GS1	1.0	00Ra23
	−53357	30				2			GS2	1.0	05Li24
^{177}Re$-$u	−49620	104	−49670	30	−0.5	U			GS1	1.0	00Ra23
	−49672	30				2			GS2	1.0	05Li24
^{177}Os$-$u	−45020	104	−45042	16	−0.2	U			GS1	1.0	00Ra23
	−45012	30			−1.0	R			GS2	1.0	05Li24

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{177}Ir−u		−38810	110	−38699	21	1.0	U			GS1	1.0	00Ra23	
		−38699	30			0.0	2			GS2	1.0	05Li24	
^{177}Pt−u		−31545	30	−31530	16	0.5	1	29	29 ^{177}Pt	GS2	1.0	05Li24	
^{177}Hf O−C$_{16}$		−61845.2	7.2	−61855.1	1.5	−0.9	U			TG1	1.5	11Ke03	
^{177}Ir(α)^{173}Re		5127.1	10.	5080	30	−0.9	F					67Si02	*
^{177}Pt(α)^{173}Os		5654.6	6.	5642.9	2.7	−1.9	–					79Ha10	Z
		5640.5	3.1			0.8	–			Bka		82Bo04	Z
	ave.	5643.3	2.7			−0.2	1	99	55 ^{177}Pt			average	
^{177}Au(α)^{173}Ir		6292.5	10.	6298	4	0.6	–			Daa		75Ca06	
		6292.5	20.			0.3	U			GSa		84Sc.A	
		6296.5	10.			0.2	–			Daa		96Pa01	
		6298.6	6.			0.0	–			Ara		01Ko44	
		6303.7	7.			−0.7	–			Anv		09An14	
	ave.	6299	4			−0.1	1	99	86 ^{173}Ir			average	
^{177}Au^m(α)^{173}Ir^m		6251.5	10.	6262	4	1.0	3			Ora		75Ca06	
		6260.8	10.			0.1	3			GSa		84Sc.A	*
		6259.7	9.			0.2	3			Daa		96Pa01	*
		6263.8	6.			−0.3	3			Ara		01Ko44	
		6265.8	7.			−0.6	3			Anv		09An14	
^{177}Hg(α)^{173}Pt		6732.4	8.	6740	50	0.1	4					79Ha10	
		6747.8	10.			−0.2	4					91Ko.A	
		6729.4	9.2			0.1	4			Daa		96Pa01	
		6734.5	15.			0.0	4			Anv		09An20	
^{177}Tl(α)^{173}Au		7067.0	7.				3			Ara		99Po09	
^{177}Tl^m(α)^{173}Au^m		7660.4	13.	7660	9	0.0	–			Ara		99Po09	
		7645.1	13.			1.2	–			Jya		04Ke06	
	ave.	7653	9			0.8	1	86	48 ^{173}Au^m			average	
^{177}Hf(p,t)^{175}Hf		−6071	5	−6059.8	2.0	2.2	1	16	14 ^{175}Hf	Min		73Oo01	
^{176}Yb(n,γ)^{177}Yb		5565.1	1.0	5566.40	0.22	1.3	U					72Al19	Z
		5566.40	0.22				2			Bdn		06Fi.A	
^{176}Yb(d,p)^{177}Yb		3340	16	3341.83	0.22	0.1	U			Tal		63Ve09	
		3337	12			0.4	U			Kop		66Bu16	
^{176}Yb(α,t)^{177}Lu−^{174}Yb()^{175}Lu		674.1	1.0	671.42	0.22	−2.7	U			McM		75Bu02	
^{176}Lu(n,γ)^{177}Lu		7071.2	0.4	7072.89	0.16	4.2	B					71Ma45	Z
		7073.1	0.4			−0.5	–					72Mi16	Z
		7072.85	0.17			0.2	–			Bdn		06Fi.A	
^{176}Lu(d,p)^{177}Lu		4843	10	4848.32	0.16	0.5	U			Tal		71Mi01	
^{176}Lu(n,γ)^{177}Lu	ave.	7072.89	0.16	7072.89	0.16	0.0	1	99	92 ^{177}Lu			average	
^{176}Hf(n,γ)^{177}Hf		6385.8	0.8	6375.6	1.0	−12.7	C			Bdn		06Fi.A	
^{177}Hf(γ,n)^{176}Hf		−6400	30	−6375.6	1.0	0.8	U			Phi		60Ge01	
^{176}Hf(d,p)^{177}Hf		4150	7	4151.0	1.0	0.1	U			Tal		68Ri07	
^{177}Hf(d,t)^{176}Hf		−127	11	−118.4	1.0	0.8	U			Tal		72Za04	
^{177}Tl(p)^{176}Hg		1162.6	20.	1155	19	−0.4	o			Arp		99Po09	*
^{177}Tl^m(p)^{176}Hg		1969.2	10.	1962	7	−0.7	–			Arp		99Po09	
		1965.2	12.			−0.2	–			Jyp		04Ke06	
	ave.	1968	8			−0.7	1	90	62 ^{177}Tl^m			average	
^{177}Yb(β^-)^{177}Lu		1400	20	1397.4	1.2	−0.1	U					64Jo03	
^{177}Lu(β^-)^{177}Hf		497	2	496.8	0.8	−0.1	–					55Ma12	
		496.4	1.0			0.4	–					62El02	*
	ave.	496.5	0.9			0.3	1	78	70 ^{177}Hf			average	
^{177}Ta(β^+)^{177}Hf		1166	3				2					61We11	
^{177}Au^m(IT)^{177}Au		210	30	189	8	−0.7	o					01Ko44	*
^{177}Tl^m(IT)^{177}Tl		807	18				2					99Po09	

*^{177}Ir(α)^{173}Re	F : final state uncertain: possibly to 5/2$^-$ level at 214.7 keV	95Hi02	**
*^{177}Au^m(α)^{173}Ir^m	Followed by a 175.1(0.5) γ	84Sc.A	**
*	γ associated with E_α=6116 keV from ^{176}Au	01Ko44	**
*	yet E_α=6118 correlated with E_α=5672 of ^{173}Ir^m	02Ro17	**
*^{177}Au^m(α)^{173}Ir^m	E_α correlated with ^{173}Ir E_α=5681(13); also with ^{181}Tl E_α=6180 keV	96Pa01	**
*	evaluator doubts about correctness of latter remark	AHW	**
*^{177}Tl(p)^{176}Hg	Replaced by ^{177}Tl^m(IT)	AHW	**
*^{177}Lu(β^-)^{177}Hf	E_{β^-}=384(2), 175(1) to 112.95, 321.32 levels	Ens035	**
*^{177}Au^m(IT)^{177}Au	Authors say 157.9+x, x estimated by evaluator	AHW	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
*	x is better known from ^{181}Tl^m(IT)^{181}Tl combined with Q_α											09An14	**
^{178}W−u		−54152	30	−54114	16	1.3	U			GS2	1.0	05Li24	
^{178}Re−u		−48800	110	−49010	30	−1.9	U			GS1	1.0	00Ra23	
		−49011	30				2			GS2	1.0	05Li24	
^{178}Os−u		−46790	104	−46747	15	0.4	U			GS1	1.0	00Ra23	
		−46710	30			−1.2	1	24	24 ^{178}Os	GS2	1.0	05Li24	
^{178}Ir−u		−38950	110	−38918	21	0.3	U			GS1	1.0	00Ra23	
		−38888	30			−1.0	2			GS2	1.0	05Li24	
^{178}Pt−u		−34783	1181	−34351	11	0.1	U				2.5	91Br17	
		−34300	110			−0.5	U			GS1	1.0	00Ra23	
		−34333	30			−0.6	1	13	13 ^{178}Pt	GS2	1.0	05Li24	
^{178}Au−^{133}Cs$_{1.338}$		102562	11	102561	11	−0.1	1	97	97 ^{178}Au	MA8	1.0	17Ma.A	
^{178}Au^m−^{133}Cs$_{1.338}$		102764	11				2			MA8	1.0	17Ma.A	
^{178}Hf ^{35}Cl−^{176}Hf ^{37}Cl		5236	5	5248.7	1.1	1.0	U			H23	2.5	70Wh01	
		5239.5	1.3			2.8	U			H27	2.5	74Ba90	
^{178}Hf O−C$_{16}$		−61364.8	7.9	−61376.9	1.5	−1.0	U			TG1	1.5	11Ke03	
^{178}Pt−^{175}Ir		−472	1052	1500	17	0.7	U				2.5	91Br17	
^{178}Pt(α)^{174}Os		5583.3	5.	5573.0	2.2	−2.0	–					79Ha10	Z
		5569.9	3.			1.0	–			Bka		82Bo04	Z
		5568.4	13.			0.4	U			Lvn		94Wa23	
		5572.4	4.			0.1	–			Ara		00Ko16	*
	ave.	5573.2	2.2			−0.1	1	99	75 ^{174}Os			average	
^{178}Au(α)^{174}Ir		6056.4	10.	6135	25	1.6	F					68Si01	*
		6117.7	20.			0.3	1	26	23 ^{174}Ir	GSa		86Ke03	
^{178}Hg(α)^{174}Pt		6578.1	6.	6577.3	3.0	−0.1	3					79Ha10	
		6576.1	9.			0.1	3			Daa		96Pa01	
		6577.1	4.			0.1	3			Ara		00Ko48	
		6578.1	8.			−0.1	3			Anv		09An14	
^{178}Tl(α)^{174}Au		7017.0	5.	7020	10	0.6	o			Bka		02Ro17	*
		7020.0	10.				8			Bka		13Li49	*
^{178}Pb(α)^{174}Hg		7790.4	14.				3			Bka		01Ro.B	
^{178}Pt(p,α)^{175}Ir		4420	980	6261	16	1.9	U					91Br17	
^{176}Yb(t,p)^{178}Yb		3865	10				2			Phi		82Zu02	
^{176}Lu(t,p)^{178}Lu^m		4482	5	4492.6	2.9	2.1	1	34	34 ^{178}Lu^m	LAl		81Gi01	
^{178}Hf(p,t)^{176}Hf		−5531	5	−5519.8	1.0	2.2	U			Min		73Oo01	
^{177}Hf(n,γ)^{178}Hf		7625	1	7625.94	0.18	0.9	U					69Fa01	
		7624.4	1.5			1.0	U					77St10	
		7626.2	0.3			−0.9	–			ILn		86Ha22	Z
		7625.80	0.22			0.6	–			Bdn		06Fi.A	
^{178}Hf(d,t)^{177}Hf		−1364	9	−1368.71	0.18	−0.5	U			Tal		68Ri07	
^{177}Hf(n,γ)^{178}Hf	ave.	7625.94	0.18	7625.94	0.18	0.0	1	99	71 ^{178}Hf			average	
^{178}Yb(β^-)^{178}Lu		641	30	642	10	0.0	U					73Or03	*
^{178}Lu^m(IT)^{178}Lu		120	3	123.8	2.6	1.3	1	76	66 ^{178}Lu^m	McM		93Bu02	
^{178}Lu(β^-)^{178}Hf		2046	50	2097.5	2.1	1.0	U					73Or03	*
		2117	30			−0.7	U					75Ka15	*
^{178}Ta^m(β^+)^{178}Hf		1937	15				2					61Ga05	*
^{178}W(ε)^{178}Ta^m		91.3	2.				3					67Ni02	
^{178}Re(β^+)^{178}W		4660	180	4750	30	0.5	U					70Go20	*
*^{178}Pt(α)^{174}Os	Also E_α=5289(8) keV to 2$^+$ 158.601 level (not used)											GAu	**
*^{178}Au(α)^{174}Ir	F : higher E_α branch seen in reference											86Ke03	**
*^{178}Tl(α)^{174}Au	And a stronger E_α=6704; both correlated with ^{174}Au E_α=6538 keV											02Ro17	**
*^{178}Tl(α)^{174}Au	Also 6693(10) and 6595(10) to 173.0, 273.0 levels											13Li49	**
*^{178}Yb(β^-)^{178}Lu	E_{β^-}=250(30) to 1$^+$ level at 390.8 keV											Ens097	**
*^{178}Lu(β^-)^{178}Hf	E_{β^-}=2000(50) to ground state and 50% to 2$^+$ level at 93.18 keV											Ens097	**
*^{178}Lu(β^-)^{178}Hf	E_{β^-}=2050(50) to ground state and 50% to 2$^+$ level at 93.18 keV and											Ens097	**
*	E_{β^-}=770(30) from ^{178}Lu^m at 123.8(2.6) to 8$^-$ level 1479.025 keV											Nub16b	**
*^{178}Ta^m(β^+)^{178}Hf	E_{β^+}=890(10) to ground state and 2$^+$ level at 93.18 keV, ratio 2.7 to 1											Ens097	**
*^{178}Re(β^+)^{178}W	E_{β^+}=3300(180) to 4$^+$ level at 342.74 keV											Ens097	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{179}Lu$-^{85}$Rb$_{2.106}$		132997	21	133104	6	5.1	C			MA8	1.0	13Ro.A	
C$_{14}$ H$_{11}-^{179}$Hf		140260.3	1.8	140249.5	1.5	−1.5	U			M23	4.0	79Ha32	
^{179}W−u		−52964	76	−52920	16	0.6	U			GS2	1.0	05Li24	*
^{179}Re−u		−50010	30	−50010	26	0.0	1	78	78 ^{179}Re	GS2	1.0	05Li24	
^{179}Os−u		−46220	104	−46183	18	0.4	U			GS1	1.0	00Ra23	
		−46176	30			−0.2	1	35	35 ^{179}Os	GS2	1.0	05Li24	
^{179}Ir−u		−40910	104	−40882	10	0.3	U			GS1	1.0	00Ra23	
		−40852	30			−1.0	1	12	12 ^{179}Ir	GS2	1.0	05Li24	
^{179}Pt−u		−34710	110	−34641	9	0.6	U			GS1	1.0	00Ra23	
		−34625	30			−0.5	U			GS2	1.0	05Li24	
^{179}Au−u		−26811	31	−26826	13	−0.5	1	16	16 ^{179}Au	GS2	1.0	05Li24	
^{179}Hg$-^{208}$Pb$_{.861}$		1900	34	1930	29	0.9	1	74	74 ^{179}Hg	MA6	1.0	01Sc41	
^{179}Hf ^{35}Cl$-^{177}$Hf ^{37}Cl		5539	3	5545.63	0.22	0.9	U			H23	2.5	70Wh01	
		5544.4	0.7			0.7	U			H27	2.5	74Ba90	
^{179}Hf O−C$_{16}$		−59261.8	6.5	−59259.5	1.5	0.2	U			TG1	1.5	11Ke03	
^{179}Pt(α)^{175}Os		5370	10	5412	9	4.2	F					66Si08	*
		5416	10			−0.4	1	89	82 ^{175}Os			79Ha10	*
		5382	3			10.1	F			Bka		82Bo04	*
^{179}Au(α)^{175}Ir		5981.8	5.	5981	5	−0.1	1	97	80 ^{175}Ir			68Si01	
		5986.9	15.			−0.4	U			Jya		04Ra28	*
^{179}Hg(α)^{175}Pt		6431.0	5.	6360	30	−1.4	–			ISa		79Ha10	Z
		6418.7	9.			−1.2	–			Daa		96Pa01	
		6430.0	4.			−1.4	–			Ara		02Ko09	
	ave.	6429.1	3.0			−1.4	1	35	26 ^{179}Hg			average	
^{179}Tl(α)^{175}Au		6710.2	20.	6711	3	0.0	U			GSa		83Sc24	
		6718.4	18.			−0.4	U			Daa		96Pa01	
		6719.4	10.			−0.9	7			Ara		98To14	
		6706.1	8.			0.5	7			Ara		11Ko.B	
		6710.2	4.			0.1	7			Anv		13An10	
^{179}Tl^m(α)^{175}Au^m		7364.5	20.	7368	4	0.2	U			GSa		83Sc24	
		7366.0	20.			0.1	U			Daa		96Pa01	
		7378.1	10.			−1.0	o			Ara		98To14	
		7372.0	5.1			−0.7	9			Anv		10An01	
		7358.7	8.2			1.2	9			Ara		11Ko.B	
^{179}Pb(α)^{175}Hg		7598.3	20.				9			Anv		10An01	*
^{179}Hf(p,t)^{177}Hf		−5249	5	−5243.13	0.19	1.2	U			Min		73Oo01	
^{179}Hf(t,α)^{178}Lu$-^{178}$Hf()^{177}Lu		−72	2	−73.7	1.9	−0.8	1	89	89 ^{178}Lu	McM		93Bu02	
^{178}Hf(n,γ)^{179}Hf		6099.02	0.10	6098.99	0.08	−0.3	–			ILn		89Ri03	Z
		6098.95	0.12			0.3	–			Bdn		06Fi.A	
^{179}Hf(γ,n)^{178}Hf		−6000	70	−6098.99	0.08	−1.4	U			Phi		60Ge01	
^{178}Hf(d,p)^{179}Hf		3877	14	3874.42	0.08	−0.2	U			Tal		63Ve09	
^{178}Hf(n,γ)^{179}Hf	ave.	6098.99	0.08	6098.99	0.08	0.0	1	100	70 ^{179}Hf			average	
^{179}Lu(β^-)^{179}Hf		1350	50	1404	5	1.1	U					61Ku10	
		1380	70			0.3	U					63St06	
^{179}Ta(ε)^{179}Hf		129	16	105.6	0.4	−1.5	U					61Jo15	*
		105.61	0.41			−0.1	1	99	93 ^{179}Ta			01Hi06	
^{179}Re(β^+)^{179}W		2710	50	2711	27	0.0	1	29	22 ^{179}Re			75Me20	*
*^{179}W−u	$M-A$=–49225(29) keV for mixture gs+m at 221.91 keV											Nub16b	**
*^{179}Pt(α)^{175}Os	F : part of double line (with ^{180}Pt)											AHW	**
*^{179}Pt(α)^{175}Os	E_α=5150(10) 5195(10) 5161(3) respectively, to 1/2$^-$ level at 102.3 keV, recalibrated											Ens092	**
*^{179}Au(α)^{175}Ir	E_α=5853(15), 5810(15) to ground state, 49 keV level											04Ra28	**
*^{179}Pb(α)^{175}Hg	E_α=7350(20) to 80 keV level											10An01	**
*^{179}Ta(ε)^{179}Hf	As corrected in reference											76He.B	**
*^{179}Re(β^+)^{179}W	E_{β^+}=950(50) to 3/2$^+$ level at 720.18 and 5/2$^+$ at 773.65 keV											Ens092	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.		Lab	F	Reference	
$C_{14}H_{12}-{}^{180}Hf$		147356.6	4.8	147340.7	1.5	−0.8	U				M23	4.0	79Ha32	
$^{180}W-u$		−53299	30	−53286.6	1.5	0.4	U				GS2	1.0	05Li24	
$^{180}Re-u$		−49209	30	−49208	23	0.0	2				GS2	1.0	05Li24	
$^{180}Os-u$		−47650	104	−47620	18	0.3	U				GS1	1.0	00Ra23	
		−47626	30			0.2	1	34	34	^{180}Os	GS2	1.0	05Li24	
$^{180}Ir-u$		−40800	104	−40771	23	0.3	U				GS1	1.0	00Ra23	
		−40765	30			−0.2	2				GS2	1.0	05Li24	
$^{180}Pt-u$		−36900	104	−36968	12	−0.7	U				GS1	1.0	00Ra23	
		−36918	30			−1.7	R				GS2	1.0	05Li24	
$^{180}Au-u$		−27496	30	−27510	5	−0.5	U				GS2	1.0	05Li24	
$^{180}Au-{}^{133}Cs_{1.353}$		100411.5	5.3	100413	5	0.4	1	94	94	^{180}Au	MA8	1.0	16Ma.1	
$^{180}Hg-{}^{208}Pb_{.865}$		−1569	22	−1544	14	1.2	1	38	38	^{180}Hg	MA6	1.0	01Sc41	
$^{180}Hf\,{}^{35}Cl_2-{}^{176}Hf\,{}^{37}Cl_2$		11036.1	3.0	11050.0	1.1	1.9	U				H27	2.5	74Ba90	
$^{180}Hf\,{}^{35}Cl-{}^{178}Hf\,{}^{37}Cl$		5797	3	5801.32	0.19	0.6	U				H23	2.5	70Wh01	
		5798.4	0.7			1.7	U				H27	2.5	74Ba90	
$^{180}W-{}^{180}Hf$		153.73	0.30	153.77	0.30	0.1	1	98	82	^{180}W	SH1	1.0	12Dr01	
$^{180}Hf-{}^{179}Hf$		730.8	4.7	733.83	0.16	0.3	U				M24	2.5	79Ha32	
$^{180}Hf\,O-C_{16}$		−58524.5	6.5	−58525.7	1.5	−0.1	U				TG1	1.5	11Ke03	
$^{180}W(\alpha)^{176}Hf$		2516.4	1.6	2515.3	1.0	−0.7	1	41	23	^{176}Hf			04Co26	
$^{180}Pt(\alpha)^{176}Os$		5257.1	10.	5240	30	−2.0	F						66Si08	*
		5279	3			−14.0	F				Bka		82Bo04	*
$^{180}Au(\alpha)^{176}Ir$		5845	30	5828	17	−0.6	–				GSa		86Ke03	*
		5857	30			−1.0	–				Lvn		93Wa03	*
	ave.	5851	21			−1.1	1	61	59	^{176}Ir			average	
$^{180}Hg(\alpha)^{176}Pt$		6258.3	5.	6258.5	2.4	0.0	–				ISa		79Ha10	Z
		6259.5	5.			−0.2	–				Lvn		93Wa03	*
		6258.3	4.			0.0	–				Ara		00Ko48	
		6259.3	5.			−0.2	–				Anv		03An27	
	ave.	6258.8	2.4			−0.1	1	99	66	^{176}Pt			average	
$^{180}Tl(\alpha)^{176}Au$		6709.4	10.				6				Ara		98To14	*
$^{180}Pb(\alpha)^{176}Hg$		7394.6	40.	7419	5	0.6	U				ORa		96To08	
		7415.1	15.			0.2	2				Ara		99To11	
		7419.2	10.			−0.1	2				Anv		09An20	
		7419.2	7.			−0.1	2				Jya		10Ra12	
$^{180}Hf(p,t)^{178}Hf$		−5011	5	−5004.95	0.17	1.2	U				Min		73Oo01	
$^{180}Hf(t,\alpha)^{179}Lu-{}^{178}Hf()^{177}Lu$		−669	5	−669	5	0.0	1	100	100	^{179}Lu	McM		92Bu12	
$^{179}Hf(n,\gamma)^{180}Hf$		7387.3	0.4	7387.76	0.15	1.1	–						74Bu22	Z
		7387.8	0.6			−0.1	–						90Bo52	Z
		7387.85	0.17			−0.5	–				Bdn		06Fi.A	
$^{180}Hf(\gamma,n)^{179}Hf$		−7470	110	−7387.76	0.15	0.7	U				Phi		60Ge01	
$^{179}Hf(d,p)^{180}Hf$		5167	7	5163.19	0.15	−0.5	U				Tal		72Za04	
$^{180}Hf(d,t)^{179}Hf$		−1112	4	−1130.53	0.15	−4.6	B				Tal		68Ri07	
$^{179}Hf(n,\gamma)^{180}Hf$	ave.	7387.77	0.15	7387.76	0.15	−0.1	1	99	84	^{180}Hf			average	
$^{180}W(d,t)^{179}W$		−2155	15	−2155	15	0.0	1	94	94	^{179}W	Kop		72Ca01	
$^{180}Lu(\beta^-)^{180}Hf$		3148	100	3100	70	−0.4	2						71Gu02	*
		3058	100			0.5	2						71Sw01	*
$^{180}Ta(\beta^-)^{180}W$		705	15	703.2	2.3	−0.1	U						51Br87	
		712	15			−0.6	U						62Ga07	
$^{180}Re(\beta^+)^{180}W$		3830	60	3799	21	−0.5	R						67Go22	*
		3790	40			0.2	R						67Ho12	*

$*^{180}Pt(\alpha)^{176}Os$	F : part of double line (with ^{179}Pt); E_α=5140(10) keV	AHW	**
$*^{180}Pt(\alpha)^{176}Os$	F : part of double line (with ^{179}Pt)	AHW	**
$*^{180}Au(\alpha)^{176}Ir$	E_α=5685(10) to 40(30) level	93Wa03	**
$*^{180}Au(\alpha)^{176}Ir$	E_α=5647(10,Z) to 80(30) level	93Wa03	**
$*^{180}Hg(\alpha)^{176}Pt$	E_α=6120 5862 5689(5) to ground state, 2^+ level at 264.0, 0^+ at 443 keV	Ens062	**
$*^{180}Tl(\alpha)^{176}Au$	Highest E_α; not necessarily ground state to ground state	98To14	**
$*^{180}Lu(\beta^-)^{180}Hf$	E_{β^-}=1540(100) 1450(100) respectively, to 4^+ level at 1607.67 keV	Ens156	**
$*^{180}Re(\beta^+)^{180}W$	E_{β^+}=1800(60) 1760(40) respectively, to 2^- level 1006.381 keV	Ens156	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{181}Lu−u		−48092	135				2			GS3	1.0	13Sh30	
^{181}Ta O−^{133}Cs$_{1.481}$		82943.7	3.6	82939.6	1.5	−1.1	1	18	18 ^{181}Ta	MA8	1.0	16We.A	
^{181}Ta O−^{202}Tl$_{.975}$		−29891.4	2.5	−29892.4	1.8	−0.4	1	53	31 ^{202}Tl	MA8	1.0	16We.A	
^{181}Re−u		−49915	30	−49938	13	−0.8	R			GS2	1.0	05Li24	
^{181}Os−u		−46670	110	−46753	27	−0.8	U			GS1	1.0	00Ra23	∗
		−46756	34			0.1	1	64	64 ^{181}Os	GS2	1.0	05Li24	∗
^{181}Ir−u		−42330	104	−42365	6	−0.3	U			GS1	1.0	00Ra23	
		−42372	30			0.2	U			GS2	1.0	05Li24	
^{181}Pt−u		−36880	104	−36910	15	−0.3	U			GS1	1.0	00Ra23	
		−36900	30			−0.3	–			GS2	1.0	05Li24	
	ave.	−36890	21			−0.9	1	48	48 ^{181}Pt			average	
^{181}Au−u		−30030	110	−29921	21	1.0	U			GS1	1.0	00Ra23	
		−29920	30			0.0	R			GS2	1.0	05Li24	
^{181}Hg−^{208}Pb$_{.870}$		−1929	40	−1868	17	1.5	1	17	17 ^{181}Hg	MA6	1.0	01Sc41	
^{181}Tl−^{133}Cs$_{1.361}$		114936	11	114940	10	0.4	1	79	79 ^{181}Tl	MA8	1.0	08We02	
^{181}Ta ^{35}Cl−^{179}Hf ^{37}Cl		5128.6	2.1	5123.6	2.0	−1.0	1	14	7 ^{179}Hf	H35	2.5	80Sh06	
^{181}Ta ^{17}O ^{35}Cl−^{180}Ta^m O ^{37}Cl		7572	21	7617.31	0.21	0.9	U			H35	2.5	80Sh06	
^{181}Pt(α)^{177}Os		5133.7	20.	5150	5	0.8	U					66Si08	
		5150.1	5.				2			ORa		95Bi01	
^{181}Au(α)^{177}Ir		5750.1	5.	5751.4	2.9	0.2	3					68Si01	Z
		5751.9	5.			−0.1	3					79Ha10	Z
		5735	4			4.1	F			IRa		92Sa03	∗
		5752	5			−0.1	3			ORa		95Bi01	∗
^{181}Hg(α)^{177}Pt		6288	5	6284	4	−0.7	–					79Ha10	∗
		6283	10			0.1	–			GSa		86Ke03	∗
		6269.3	13.			1.2	–			Daa		96Pa01	∗
	ave.	6285	4			−0.2	1	99	83 ^{181}Hg			average	
^{181}Tl(α)^{177}Au		6319.9	20.	6321	6	0.1	U					92Bo.D	
		6326.1	10.			−0.5	–			Ara		98To14	
		6320.9	7.			0.1	–			Anv		09An14	
	ave.	6323	6			−0.2	1	97	88 ^{177}Au			average	
^{181}Tl(α)^{177}Au^m		6120.3	20.	6132	5	0.6	2			GSa		84Sc.A	∗
		6132.6	10.			−0.1	2			Ara		98To14	∗
		6133.1	6.4			−0.2	2			Anv		09An14	∗
^{181}Pb(α)^{177}Hg		7374.3	10.	7240	7	−13.4	F			GSa		86Ke03	∗
		7203.5	15.			2.4	5			ORa		89To01	
		7224.9	20.			0.7	o			Ara		96To01	∗
		7250.7	10.			−1.0	5			Ara		05Ca.A	∗
		7252.0	15.			−0.8	5			Anv		09An20	∗
^{181}Ta(p,t)^{179}Ta		−5738	5	−5741.8	1.9	−0.8	1	14	7 ^{179}Ta	Min		73Oo01	
^{180}Hf(n,γ)^{181}Hf		5695.2	0.6	5694.80	0.07	−0.7	U					71Al22	
		5694.80	0.07				2			Prn		02Bo41	
		5695.58	0.20			−3.9	C			Bdn		06Fi.A	
^{180}Hf(d,p)^{181}Hf		3440	25	3470.23	0.07	1.2	U			Sac		66Ga06	
		3475	10			−0.5	U			Tal		68Ri07	
^{181}Ta(γ,n)^{180}Ta		−7713	25	−7576.8	1.3	5.4	B			Phi		60Ge01	∗
		−7852	26			10.6	B			Phi		60Ge01	
		−7580	5			0.6	U			McM		79Ba06	
		−7579	2			1.1	2			McM		81Co17	
^{181}Ta(d,t)^{180}Ta		−1317.7	1.8	−1319.5	1.3	−1.0	2			NDm		79Ta.B	
^{180}Ta^m(n,γ)^{181}Ta		7651.8	0.5	7652.08	0.19	0.6	2			MMn		81Co17	Z
		7652.13	0.20			−0.2	2			ILn		84Fo.A	Z
^{180}W(n,γ)^{181}W		6669.02	0.16				2			Bdn		15Hu07	
^{180}W(d,p)^{181}W		4468	15	4444.45	0.16	−1.6	U			Kop		72Ca01	
^{181}Hg(εp)^{180}Pt		6150	200	6486	19	1.7	F					72Ho19	∗

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{181}Hf(β^-)^{181}Ta	1023	8	1035.5	1.8	1.6	U					52Fa14	*
	1020	5			3.1	B					53Ba81	*
^{181}W(ε)^{181}Ta	184	12	204.5	1.9	1.7	U					66Ra03	
	190	6			2.4	U					83Se17	
^{181}Os(β^+)^{181}Re	2990	200	2967	28	−0.1	U					67Go25	*
^{181}Hg^m(IT)^{181}Hg	212	50				2					09An17	*
*^{181}Os−u	$M-A$=–43450(100) keV for mixture gs+m at 49.20 keV										Nub16b	**
*^{181}Os−u	$M-A$=–43529(28) keV for mixture gs+m at 49.20 keV										Nub16b	**
*^{181}Au(α)^{177}Ir	E_α=5609(8), 5462(4) to ground state and (3/2$^-$) level at 148.00 keV										Ens035	**
*	F : all lines in ^{181}Au and ^{183}Au shifted by 16−20keV										GAu	**
*^{181}Au(α)^{177}Ir	E_α=5626(5) to gs; favored 5479(5) to (3/2$^-$) level at 148.00 keV										Ens035	**
*^{181}Hg(α)^{177}Pt	E_α=6147.0(10,Z), 6005.0(5,Z) to ground state and 1/2$^-$ isomer at 147.4 keV										Nub16c	**
*^{181}Hg(α)^{177}Pt	E_α=6136.6(10,Z), 6005.6(10,Z) to ground state and 1/2$^-$ isomer at 147.4 keV										Nub16c	**
*^{181}Hg(α)^{177}Pt	E_α=5986(13) to 1/2$^-$ isomer at 147.4 keV										Nub16c	**
*^{181}Tl(α)^{177}Au^m	E_α=6566(20) Q_α=6956.2 from ^{181}Tl^m at 835.9 to 241.5 above ^{177}Au^m										Nub16b	**
*^{181}Tl(α)^{177}Au^m	E_α=6578(10) Q_α=6968.5 from ^{181}Tl^m at 835.9 to 241.5 above ^{177}Au^m										Nub16b	**
*^{181}Tl(α)^{177}Au^m	E_α=6818(15), 6578(7) from ^{181}Tl^m to ^{177}Au^m and level 241.5 above ^{177}Au^m										09An14	**
*^{181}Pb(α)^{177}Hg	F : This α-line not found in same reaction										96To01	**
*^{181}Pb(α)^{177}Hg	Seen in correlation with ^{177}Hg E_α=6580 keV										96To01	**
*^{181}Pb(α)^{177}Hg	E_α=7015(10) to level at 77.2 keV										09An20	**
*^{181}Pb(α)^{177}Hg	E_α=7016(15) to level at 77.2 keV										09An20	**
*^{181}Ta(γ,n)^{180}Ta	Q =–7640(25) to ^{180}Ta^m at 75.3(1.4) keV										Nub16b	**
*^{181}Hg(εp)^{180}Pt	F : retracted by authors in PrvCom										AHW	**
*^{181}Hf(β^-)^{181}Ta	E_{β^-}=408(8) 405(5) respectively, to ^{181}Ta^n at 615.19 keV										Nub16b	**
*^{181}Os(β^+)^{181}Re	E_{β^+}=1750(200) from ^{181}Os^m at 49.20 to ^{181}Re^m at 262.91 keV										Nub16b	**
*^{181}Hg^m(IT)^{181}Hg	From cascade x+90.3+71.4, with x estimated 50#										09An17	**
^{182}Re−u	−48311	65	−48790	110	−7.3	C			GS2	1.0	03Li.A	*
^{182}Os−u	−47883	30	−47890	23	−0.2	1	61	61 ^{182}Os	GS2	1.0	05Li24	
^{182}Ir−u	−41942	30	−41924	23	0.6	1	56	56 ^{182}Ir	GS2	1.0	05Li24	
^{182}Pt−u	−38870	104	−38828	14	0.4	U			GS1	1.0	00Ra23	
	−38860	30			1.1	1	22	22 ^{182}Pt	GS2	1.0	05Li24	
^{182}Au−u	−30420	110	−30382	22	0.3	U			GS1	1.0	00Ra23	
	−30412	30			1.0	R			GS2	1.0	05Li24	
^{182}Hg−u	−25297	30	−25311	11	−0.5	1	12	12 ^{182}Hg	GS2	1.0	05Li24	
^{182}Hg−^{208}Pb$_{.875}$	−4893	19	−4881	11	0.6	–			MA6	1.0	01Sc41	
	−4898	21			0.8	–			MA6	1.0	01Sc41	
ave.	−4895	14			1.0	1	56	55 ^{182}Hg			average	
^{182}Pt(α)^{178}Os	4928.5	30.	4951	5	0.7	U					63Gr08	
	4948.9	20.			0.1	U					66Si08	
	4952.0	5.			−0.2	1	97	76 ^{178}Os	ORa		95Bi01	
^{182}Au(α)^{178}Ir	5529	10	5526	4	−0.3	3					79Ha10	*
	5525.5	5.			0.1	3			ORa		95Bi01	*
^{182}Hg(α)^{178}Pt	5998.1	5.	5996	5	−0.5	–					79Ha10	Z
	5989.9	13.3			0.4	–			Lvn		94Wa23	
ave.	5997	5			−0.3	1	95	62 ^{178}Pt			average	
^{182}Tl(α)^{178}Au	6550.2	10.	6551	6	0.1	F			GSa		86Ke03	*
	6593.1	15.			−2.8	B					04Ra28	*
	6550.9	6.2				2			ISa		16Va01	*
^{182}Tl(α)^{178}Au^p	6186.2	20.				3					92Bo.D	
^{182}Pb(α)^{178}Hg	7076.8	10.	7066	6	−1.1	4			GSa		86Ke03	
	7074.8	15.			−0.6	4			ORa		87To09	
	7050.2	10.			1.5	4			Ara		99To11	
	7066.6	10.			−0.1	4			Jya		00Je09	
^{180}Hf(t,p)^{182}Hf	3931	6				2			McM		83Bu03	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{180}W(t,p)^{182}W		6265	5	6270.8	1.6	1.2	U			LAl		76Ca10	*
^{182}W(p,t)^{180}W		−6261	10	−6270.8	1.6	−1.0	U			Min		73Oo01	
^{181}Ta(n,γ)^{182}Ta		6063.0	0.4	6062.94	0.11	−0.2	–					71He13	Z
		6063.1	0.5			−0.3	–					77St15	Z
		6063.1	0.5			−0.3	–			MMn		81Co17	Z
		6062.95	0.2			−0.1	–			ILn		83Fo.B	
		6062.89	0.14			0.4	–			Bdn		06Fi.A	
^{181}Ta(d,p)^{182}Ta		3832	8	3838.37	0.11	0.8	U			MIT		64Er02	
^{181}Ta(n,γ)^{182}Ta	ave.	6062.93	0.11	6062.94	0.11	0.1	1	100	74 ^{182}Ta			average	
^{182}W(d,t)^{181}W		−1809	10	−1826.3	1.6	−1.7	U			Kop		72Ca01	
^{182}Hf(β^-)^{182}Ta		431	50	380	6	−1.0	U					74Wa14	*
^{182}Ta(β^-)^{182}W		1809	5	1816.1	1.4	1.4	–					64Da15	*
		1813	3			1.0	–					67Ba01	*
	ave.	1811.9	2.6			1.6	1	30	26 ^{182}Ta			average	
^{182}Re^m(β^+)^{182}W		2860	20				2					63Ba37	*
^{182}Re^m(IT)^{182}Re		60	100				3					63Ba37	
^{182}Os(ε)^{182}Re^m		848	15	777	30	−4.7	B					70Ak02	*
^{182}Ir(β^+)^{182}Os		5700	200	5560	30	−0.7	U					72We.A	
^{182}Pt(β^+)^{182}Ir		2900	200	2883	25	−0.1	U					72We.A	
^{182}Au(β^+)^{182}Pt		6850	200	7868	24	5.1	C					72We.A	
^{182}Hg(β^+)^{182}Au		4950	200	4724	23	−1.1	U					72We.A	
*^{182}Re−u	$M-A$=–44972(29) keV for mixture gs+m at 60(100) keV											Nub16b	**
*^{182}Au(α)^{178}Ir	E_α=5353(10) to 2$^+$ level at 54.4(0.5) keV											Ens097	**
*^{182}Au(α)^{178}Ir	E_α=5403(5), 5352(5) to ground state, 54.4 level											95Bi01	**
*^{182}Tl(α)^{178}Au	F : identification from excitation function assuming 100% α decay											WgM118	**
*^{182}Tl(α)^{178}Au	E_α=6403(15) in coincidence with 46 keV γ											04Ra28	**
*^{182}Tl(α)^{178}Au	E_α=6165(6) in coincidence with 247.2(0.5) keV γ											16Va01	**
*^{180}W(t,p)^{182}W	$Q-Q(^{170}$Y(t,p))=112(5,Ca), Q(170)=–6153(4) keV											AHW	**
*^{182}Hf(β^-)^{182}Ta	E_{β^-}=970(70) 480(50) from ^{182}Hf^m to 651.215 (4)$^-$, 1115.96 (7$^-$) levels											Ens15c	**
*^{182}Ta(β^-)^{182}W	E_{β^-}=520(5) to 2$^-$ level at 1289.1498 keV											Ens15c	**
*^{182}Ta(β^-)^{182}W	E_{β^-}=1713(3) to 2$^+$ level at 100.10598 keV											Ens15c	**
*^{182}Re^m(β^+)^{182}W	E_{β^+}=1740(20), 550(20) to 2$^+$ level at 100.10598, 2$^-$ at 1289.1498 keV											Ens15c	**
*^{182}Os(ε)^{182}Re^m	pK=0.47(0.07) to 1$^+$ level at 726.97 keV above ^{182}Re^m, recalculated Q											Ens15c	**
^{183}Lu−u		−42637	86				2			GS3	1.0	13Sh30	
^{183}W O−C$_2$ ^{35}Cl$_5$		100858.0	2.7	100875.6	0.8	2.6	U			H29	2.5	77Sh04	
		100873.6	0.8			1.0	1	16	15 ^{183}W	H48	2.5	03Ba49	
^{183}Re−u		−49151	30	−49179	9	−0.9	U			GS2	1.0	05Li24	
^{183}Os−u		−46879	61	−46880	50	0.1	1	77	77 ^{183}Os	GS2	1.0	05Li24	*
^{183}Ir−u		−43160	104	−43160	26	0.0	U			GS1	1.0	00Ra23	
		−43145	30			−0.5	1	76	76 ^{183}Ir	GS2	1.0	05Li24	
^{183}Pt−u		−38440	107	−38403	17	0.3	U			GS1	1.0	00Ra23	
		−38400	32			−0.1	1	27	27 ^{183}Pt	GS2	1.0	05Li24	*
^{183}Au−u		−32440	104	−32412	10	0.3	U			GS1	1.0	00Ra23	
		−32371	30			−1.4	1	11	11 ^{183}Au	GS2	1.0	05Li24	
^{183}Hg−u		−25537	35	−25555	8	−0.5	U			GS2	1.0	05Li24	*
^{183}Hg−^{208}Pb$_{.880}$		−5009	19	−5009	8	0.0	–			MA6	1.0	01Sc41	
		−5002	19			−0.4	–			MA6	1.0	01Sc41	
	ave.	−5006	13			−0.3	1	32	32 ^{183}Hg			average	
^{183}Tl−^{133}Cs$_{1.376}$		112286	11	112291	10	0.5	1	83	83 ^{183}Tl	MA8	1.0	08We02	
^{183}W O$_2$−^{178}Hf ^{37}Cl		30455.7	5.0	30442.7	1.7	−1.0	U			H35	2.5	80Sh06	
^{183}W O$_2$−^{180}W ^{35}Cl		24421	9	24487.6	1.7	3.0	B			H24	2.5	73Ba40	
		24509	6			−1.4	U			H28	2.5	77Sh04	
^{183}W ^{35}Cl−^{181}Ta ^{37}Cl		5177.2	1.2	5175.3	1.5	−0.6	1	25	22 ^{181}Ta	H35	2.5	80Sh06	
^{183}W O$_2$ ^{37}Cl−^{182}W ^{35}Cl$_2$		20045.6	1.8	20045.21	0.11	−0.1	U			H28	2.5	77Sh04	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.		Lab	F	Reference	
^{183}Pt(α)^{179}Os		4846.1	30.	4822	9	−0.8	U						63Gr08	
		4835.9	20.0			−0.7	–						66Si08	
		4819.6	10.2			0.2	–				ORa		95Bi01	
	ave.	4823	9			−0.1	1	93	65	^{179}Os			average	
^{183}Au(α)^{179}Ir		5462.6	5.	5465.3	2.9	0.5	–						68Si01	Z
		5465.5	5.			0.0	–				Bka		82Bo04	Z
		5449.3	10.			1.6	F						84Br.A	*
		5468.8	5.			−0.7	–				ORa		95Bi01	
	ave.	5465.6	3.0			−0.1	1	99	88	^{179}Ir			average	
^{183}Hg(α)^{179}Pt		6043.4	6.	6039	4	−0.8	–				ORa		76To06	
		6036.2	5.			0.5	–						79Ha10	Z
	ave.	6039	4			−0.1	1	98	93	^{179}Pt			average	
^{183}Tl^m(α)^{179}Au		6593.4	30.	6605	9	0.4	U				GSa		80Sc09	*
		6600.6	30.			0.2	U				Jya		04Ra28	*
		6609.5	10.			−0.4	1	84	67	^{179}Au	Anv		11Ve01	*
^{183}Pb(α)^{179}Hg		6928	7				2				Anv		02Je09	*
^{183}Pb^m(α)^{179}Hg		6950.1	25.	7022	4	2.9	B				GSa		80Sc09	
		7029	20			−0.3	U				GSa		84Sc.A	*
		7026.9	10.			−0.5	2				GSa		86Ke03	
		6868.4	10.			15.4	B				ORa		87To09	
		7034	10			−1.2	2				ORa		89To01	*
		7018	5			0.8	2				Anv		02Je09	*
^{183}W(p,t)^{181}W		−5810	10	−5792.6	1.6	1.7	U				Min		73Oo01	
^{182}Ta(n,γ)^{183}Ta		6934.18	0.20				2				ILn		83Fo.B	
^{182}W(n,γ)^{183}W		6191.6	2.0	6190.84	0.04	−0.4	U						67Sp03	Z
		6190.1	1.5			0.5	U						70Or.A	
		6190.76	0.12			0.6	–				Ltn		93Pr.A	
		6190.89	0.13			−0.4	o				Bdn		06Fi.A	
		6190.81	0.06			0.4	–				ILn		11Bo09	
		6190.88	0.06			−0.7	–				Bdn		14Hu02	
^{183}W(γ,n)^{182}W		−6290	50	−6190.84	0.04	2.0	U				Phi		60Ge01	
^{182}W(d,p)^{183}W		3967	5	3966.27	0.04	−0.1	U				ANL		65Er03	
		3979	10			−1.3	U				Kop		72Ca01	
^{183}W(d,t)^{182}W		57	15	66.39	0.04	0.6	U				Kop		72Ca01	
^{182}W(n,γ)^{183}W	ave.	6190.84	0.04	6190.84	0.04	0.0	1	100	100	^{182}W			average	
^{182}W(^{3}He,d)^{183}Re		−610	40	−641	8	−0.8	U				Roc		71Lu01	
^{183}Hg(εp)^{182}Pt		5000	200	5075	15	0.4	F						72Ho19	
^{183}Hf(β^-)^{183}Ta		2010	30				3						67Mo13	*
^{183}Ta(β^-)^{183}W		1068	10	1072.8	1.4	0.5	U						55Mu19	*
^{183}Re(ε)^{183}W		556	8				2						69Ku03	*
^{183}Ir(β^+)^{183}Os		3450	100	3460	50	0.1	1	28	23	^{183}Os			70Be.A	*
^{183}Tl^m(IT)^{183}Tl		628.7	0.5	628.7	0.5	0.0	1	100	83	^{183}Tl^m			11Ve.A	

*^{183}Os−u	$M-A$=–43582(28) keV for mixture gs+m at 170.73 keV	Nub16b	**
*^{183}Pt−u	$M-A$=–35752(28) keV for mixture gs+m at 34.74 keV	Nub16c	**
*^{183}Hg−u	Existence of isomeric state under discussion (see Nubase); not corrected	Nub16b	**
*^{183}Au(α)^{179}Ir	F : all lines in ^{181}Au and ^{183}Au shifted by 16−20keV	GAu	**
*^{183}Tl^m(α)^{179}Au	E_α=6449(15), error increased since partially summed with electrons	GAu	**
*^{183}Tl^m(α)^{179}Au	E_α=6456(15), error increased since partially summed with electrons	GAu	**
*^{183}Tl^m(α)^{179}Au	E_α=6400(10), 6378(10) summed with e$^-$, in coinc. with 62.4, 89.5 γ	GAu	**
*^{183}Pb(α)^{179}Hg	E_α=6775(7), 6570(10) to ground state, 217 level	02Je09	**
*^{183}Pb^m(α)^{179}Hg	E_α=6868(20), 6715(20) to ground state, 171.4 isomer	02Je09	**
*	original assignment to ^{182}Pb changed	AHW	**
*^{183}Pb^m(α)^{179}Hg	E_α=6874(15), 6712(10) to ground state, 171.4 isomer; and an 6784(15) line	Nub16b	**
*^{183}Pb^m(α)^{179}Hg	E_α=6860(11), 6698(5) to ground state, 171.4 isomer	Nub16b	**
*^{183}Hg(εp)^{182}Pt	F : retracted by authors in PrvCom	AHW	**
*^{183}Hf(β^-)^{183}Ta	E_{β^-}=1540(30) to (5/2$^+$) level at 459.062 keV, and other E_{β^-}	Ens164	**
*^{183}Ta(β^-)^{183}W	E_{β^-}=615(10) to 7/2$^-$ level at 453.0695 keV	Ens164	**
*^{183}Re(ε)^{183}W	pK=0.40(0.07) to 7/2$^-$ level at 453.0695 keV	Ens164	**
*^{183}Ir(β^+)^{183}Os	Q_{β^+}=3190(100) mainly to 3/2$^-$ level at 258.34 keV	Ens164	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{184}W−u		−49066.76	0.99	−49066.7	0.8	0.0	1	28	28 ^{184}W	TG1	1.5	12Sm07	
^{184}Os−u		−47504.3	1.2	−47507.1	0.9	−1.5	1	24	24 ^{184}Os	TG1	1.5	12Sm07	
^{184}Ir−u		−42460	110	−42520	30	−0.6	U			GS1	1.0	00Ra23	
		−42524	30				2			GS2	1.0	05Li24	
^{184}Pt−u		−40120	104	−40080	17	0.4	U			GS1	1.0	00Ra23	
		−40068	30			−0.4	1	31	31 ^{184}Pt	GS2	1.0	05Li24	
^{184}Au−u		−32540	104	−32548	24	−0.1	U			GS1	1.0	00Ra23	∗
		−32557	37			0.2	R			GS2	1.0	05Li24	∗
^{184}Hg−u		−28230	110	−28287	11	−0.5	U			GS1	1.0	00Ra23	
		−28296	30			0.3	–			GS2	1.0	05Li24	
	ave.	−28279	17			−0.4	1	39	39 ^{184}Hg			average	
^{184}Hg−^{204}Pb$_{.902}$		−3986	20	−3972	11	0.7	1	29	29 ^{184}Hg	MA6	1.0	01Sc41	
^{184}Hg−^{208}Pb$_{.885}$		−7620	19	−7624	11	−0.2	1	32	32 ^{184}Hg	MA6	1.0	01Sc41	
^{184}Tl−u		−18115	112	−18125	11	−0.1	U			GS2	1.0	05Li24	∗
^{184}Tl−^{133}Cs$_{1.383}$		112645.4	23.2	112635	11	−0.4	1	21	21 ^{184}Tl	MA8	1.0	14Bo26	∗
^{184}W O$_2$−^{181}Ta ^{35}Cl		23917.5	2.8	23910.5	1.5	−1.0	U			H35	2.5	80Sh06	
^{184}W ^{35}Cl−^{182}W ^{37}Cl		5675	3	5677.65	0.16	0.4	U			H22	2.5	70Mc03	
		5676.3	2.2			0.2	U			H28	2.5	77Sh04	
^{184}W O$_2$ ^{37}Cl−^{183}W ^{35}Cl$_2$		18734.7	3.0	18735.19	0.17	0.1	U			H28	2.5	77Sh04	
^{184}Os−^{184}W		1560.59	0.70	1559.7	0.7	−0.9	1	46	31 ^{184}Os	TG1	1.5	12Sm07	
^{184}Pt(α)^{180}Os		4579.8	20.	4599	8	0.9	–					63Gr08	
		4600.2	20.			−0.1	–					66Si08	
		4602.2	10.			−0.4	–			ORa		95Bi01	
	ave.	4598	8			0.1	1	94	66 ^{180}Os			average	
^{184}Au(α)^{180}Ir		5218.6	15.	5234	5	1.0	U			ISa		70Ha18	∗
		5233.9	5.				3			ORa		95Bi01	∗
^{184}Hg(α)^{180}Pt		5658.2	15.	5662	4	0.2	2					70Ha18	
		5662.3	5.1			−0.1	2			ORa		76To06	
		5662.3	10.2			0.0	2			Lvn		93Wa03	Z
^{184}Tl(α)^{180}Au		6299.4	5.	6317	9	0.4	U			ORa		76To06	Z
		6292.9	10.			0.5	U			GSa		80Sc09	Z
		6315.2	10.2			0.2	1	83	79 ^{184}Tl	ISa		16Va01	∗
^{184}Pb(α)^{180}Hg		6765.4	10.	6774	3	0.8	–					80Du02	
		6779.6	10.			−0.6	–			GSa		80Sc09	
		6773.6	10.			0.0	–			GSa		84Sc.A	
		6781.7	10.2			−0.8	–			ORa		87To09	
		6773.6	6.			0.1	–			Jya		98Co27	
		6772.5	10.			0.1	–			Ara		99To11	
		6773.6	6.			0.1	–			Anv		04An07	
	ave.	6774	3			0.0	1	99	70 ^{184}Pb			average	
^{184}Bi(α)^{180}Tl		8024.8	50.				7			Anv		03An27	
^{182}W(t,p)^{184}W		5127	7	5120.15	0.14	−1.0	U			LAl		76Ca10	
^{184}W(p,t)^{182}W		−5124	5	−5120.15	0.14	0.8	U			Min		73Oo01	
^{183}W(n,γ)^{184}W		7411.2	0.5	7411.11	0.13	−0.2	U					74Gr11	Z
		7411.8	0.3			−2.3	B					75Bu01	Z
		7411.15	0.16			−0.2	o			Bdn		06Fi.A	
		7411.11	0.13			0.0	1	99	72 ^{183}W	Bdn		14Hu02	
^{183}W(d,p)^{184}W		5187	15	5186.54	0.13	0.0	U			Kop		72Ca01	
^{184}W(d,t)^{183}W		−1154	10	−1153.88	0.13	0.0	U			Kop		72Ca01	
^{184}Hf(β^-)^{184}Ta		1340	30				3					73Wa18	∗
^{184}Ta(β^-)^{184}W		2866	26				2					73Ya02	∗
^{184}Ir(β^+)^{184}Os		5100	250	4642	28	−1.8	U					70Be.A	∗
		4300	100			3.4	B					73Ho09	∗
		4285	70			5.1	B					89Po09	∗

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{184}Au(β^+)^{184}Pt	6380	50	7016	27	12.7	C					84Da.A	*
^{184}Hg(β^+)^{184}Au	3760	30	3970	24	7.0	C					84Da.A	
*^{184}Au−u	$M-A$=–30280(100) keV for mixture gs+m at 68.46 keV										Nub16b	**
*^{184}Au−u	$M-A$=–30292(28) keV for mixture gs+m at 68.46 keV										Nub16b	**
*^{184}Tl−u	$M-A$=–16899(102) keV for mixture gs+m at –50(30) keV										Nub16b	**
*^{184}Tl−^{133}Cs$_{1.383}$	D_M=112618.6(6.2) μu for mixture gs+m at –50(30) keV; $M-A$=–16898.5(5.8) keV										Nub16b	**
*^{184}Au(α)^{180}Ir	E_α=5172(15) from ^{184}Au^m at 68.6(0.1) keV										94Ib01	**
*	transition to ground state in ^{180}Ir										95Bi01	**
*^{184}Au(α)^{180}Ir	E_α=5187(5) from ^{184}Au^m at 68.6(0.1) keV										94Ib01	**
*^{184}Tl(α)^{180}Au	E_α=6161(10) to level at 17.1(3) keV										16Va01	**
*^{184}Hf(β^-)^{184}Ta	E_{β^-}=1100(30) to 1$^-$ level at 228.4 keV , and other E_{β^-}										Ens102	**
*^{184}Ta(β^-)^{184}W	E_{β^-}=1165(26) to 6$^+$ level at 1746.03 keV, and other E_{β^-}										Ens102	**
*^{184}Ir(β^+)^{184}Os	Q_{β^+}=4720(250) to 4$^+$ level at 383.68 keV										Ens102	**
*^{184}Ir(β^+)^{184}Os	E_{β^+}=2900(100) to 4$^+$ level at 383.68 keV										Ens102	**
*^{184}Ir(β^+)^{184}Os	E_{β^+}=2320(70) to 2$^+$ level at 942.86 keV										Ens102	**
*^{184}Au(β^+)^{184}Pt	Q_{β^+}=6450(50) from ^{184}Au^m at 68.6(0.1) keV										94Ib01	**
^{185}Hf−u	−41138	69				2			GS3	1.0	13Sh30	
^{185}Os−u	−46037	31	−45954.0	0.9	2.7	F			GS2	1.0	03Li.A	*
^{185}Ir−u	−43340	110	−43300	30	0.3	U			GS1	1.0	00Ra23	
	−43302	30				2			GS2	1.0	05Li24	
^{185}Pt−u	−39334	112	−39386	28	−0.5	U			GS1	1.0	00Ra23	*
	−39381	44			−0.1	1	40	40 ^{185}Pt	GS2	1.0	05Li24	*
^{185}Au−u	−34213	115	−34201.1	2.8	0.1	o			GS1	1.0	00Ra23	*
	−34224	69			0.3	U			GS2	1.0	05Li24	*
^{185}Au−^{133}Cs$_{1.391}$	97315.2	2.8				2			MA8	1.0	16Ma.1	
^{185}Hg−u	−28070	107	−28109	15	−0.4	U			GS1	1.0	00Ra23	
	−28088	44			−0.5	1	11	11 ^{185}Hg	GS2	1.0	05Li24	*
^{185}Hg−^{208}Pb$_{.889}$	−7373	29	−7353	15	0.7	1	26	25 ^{185}Hg	MA6	1.0	01Sc41	*
^{185}Tl−u	−21354	145	−21211	22	1.0	U			GS2	1.0	05Li24	*
^{185}Re ^{16}O$_2$−^{182}W ^{35}Cl	25731	6	25729.2	0.7	−0.1	U			H22	2.5	70Mc03	
^{185}Re ^{35}Cl−^{183}W ^{37}Cl	5695	3	5683.9	0.7	−1.5	U			H22	2.5	70Mc03	
	5678.7	1.0			2.1	U			H28	2.5	77Sh04	
^{185}Re(α,^{8}He)^{181}Re	−26480	14	−26486	13	−0.5	2			INS		90Ka19	
^{185}Pt(α)^{181}Os	4436.6	10.2	4437	10	0.0	1	96	60 ^{185}Pt	ORa		91Bi04	*
^{185}Au(α)^{181}Ir	5180.2	5.	5180	5	0.0	3					68Si01	Z
	5182.9	15.			−0.2	U					70Ha18	Z
	5179	10			0.1	3			ORa		91Bi04	*
^{185}Hg(α)^{181}Pt	5777	15	5773	4	−0.3	–					70Ha18	*
	5775	5			−0.4	–			ORa		76To06	*
	5761	15			0.8	–					76Gr.A	*
ave.	5774	5			−0.2	1	97	52 ^{181}Pt			average	
^{185}Tl^m(α)^{181}Au	6112.6	7.	6143	5	4.4	C					75Co.A	Z
	6143.3	5.				4			ORa		76To06	*
	6145.6	15.			−0.2	U			GSa		80Sc09	Z
^{185}Pb(α)^{181}Hg	6693	15	6695	5	0.1	U			GSa		80Sc09	*
	6555.0	15.			2.8	B			ORa		87To09	
	6695	5				2			Anv		02An15	*
^{185}Pb^m(α)^{181}Hg^m	6622.9	20.	6550	5	−3.7	B			Ora		75Ca06	
	6679.7	20.			−6.5	B			GSa		80Sc09	
	6549.8	5.				3			Anv		02An15	
^{185}Bi^m(α)^{181}Tl	8258.9	30.	8218	12	−1.3	–			Ara		01Po05	*
	8207.8	15.3			0.7	–			Anv		04An07	
ave.	8218	14			0.0	1	76	64 ^{185}Bi^m			average	
^{184}W(n,γ)^{185}W	5753.7	0.3	5753.74	0.05	0.1	U			BNn		87Br05	Z
	5754.62	0.24			−3.7	C			Bdn		06Fi.A	
	5753.74	0.05			−0.1	1	100	85 ^{185}W	Bdn		14Hu02	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.		Lab	F	Reference	
^{184}W(d,p)^{185}W	3524	5	3529.17	0.05	1.0	U				ANL		65Er03	
	3533	10			−0.4	U				Kop		72Ca01	
^{184}W(^{3}He,d)^{185}Re	−98	40	−90.9	0.7	0.2	U				Roc		71Lu01	
^{185}Re(d,t)^{184}Re−^{187}Re()^{186}Re	−310	4	−310	4	0.0	1	100	100	^{184}Re	Roc		76El12	
^{184}Os(n,γ)^{185}Os	6625.4	0.9	6624.66	0.27	−0.8	U						74Pr15	
	6624.52	0.28			0.5	1	95	51	^{185}Os	Bdn		06Fi.A	
^{185}Bi^{m}(p)^{184}Pb	1669	50	1607	13	−1.2	o						95Da.A	*
	1606.8	16.			0.0	1	67	36	^{185}Bi^{m}	Ara		01Po05	*
	1568.6	50.			0.8	o						03An27	*
	1591.7	5.			3.0	F						04An07	*
^{185}Ta(β^-)^{185}W	2013	20	1994	14	−1.0	2						69Ku07	*
^{185}W(β^-)^{185}Re	432.6	1.0	431.2	0.7	−1.4	1	44	28	^{185}Re			67Wi19	
^{185}Os(ε)^{185}Re	1012.7	1.0	1013.1	0.4	0.4	–						67Sc15	*
	1012.8	0.5			0.7	–						70Sc06	*
	ave. 1012.8	0.4			0.8	1	88	49	^{185}Os			average	
^{185}Au(β^+)^{185}Pt	4707	40	4830	26	3.1	F						86Da.A	*
^{185}Tl^{m}(IT)^{185}Tl	454.8	1.5				5						Ens061	
*^{185}Os−u	F : contaminated by isomeric state AND by other nuclides											03Li.B	**
*^{185}Pt−u	$M-A$=–36590(100) keV for mixture gs+m at 103.41 keV											Nub16b	**
*^{185}Pt−u	$M-A$=–36631(28) keV for mixture gs+m at 103.41 keV											Nub16b	**
*^{185}Au−u	$M-A$=–31820(90) keV for mixture gs+m at 100#100 keV											Nub16b	**
*^{185}Au−u	$M-A$=–31829(28) keV for mixture gs+m at 100#100 keV											Nub16b	**
*^{185}Hg−u	$M-A$=–26112(28) keV for mixture gs+m at 103.7 keV											Nub16b	**
*^{185}Hg−^{208}Pb$_{.889}$	Original error (17keV) increased by 20 due to isomer+ground state lines in trap											01Sc41	**
*^{185}Tl−u	$M-A$=–19664(31) keV for mixture gs+m at 454.8(1.5) keV											Nub16b	**
*^{185}Pt(α)^{181}Os	E_α=4444(10) assumed from (1/2$^-$) isomer at 103.41 keV											Nub16b	**
*^{185}Au(α)^{181}Ir	E_α=5069(10), 4826(10) to ground state, 243.3 level											91Bi04	**
*	unhindered E_α=5069(10) to ground state or very low level; from coinc.											95Bi01	**
*^{185}Hg(α)^{181}Pt	E_α=5653.4(15,Z), 5576.4(15,Z) to ground state, 3/2$^-$ level at 79.41 keV											Ens061	**
*	and E_α=5376.4(15,Z) from ^{185}Hg^{m} at 103.8 to 13/2$^+$ level at 380.92 keV											Ens061	**
*^{185}Hg(α)^{181}Pt	E_α=5653(5), 5569(5) to ground state, 3/2$^-$ level at 79.41 keV											Ens061	**
*	and 5371(10) from ^{185}Hg^{m} at 103.8 to 13/2$^+$ level at 380.92 keV											Ens061	**
*^{185}Hg(α)^{181}Pt	E_α=5365(15) from ^{185}Hg^{m} at 103.8 to 13/2$^+$ level at 380.92 keV											Ens061	**
*^{185}Tl^{m}(α)^{181}Au	E_α=6010.2(5,Z); also an E_α=5975.2(5,Z), 4 times stronger branch											76To06	**
*^{185}Tl^{m}(α)^{181}Au	E_α=6012.5(15,Z); also an E_α=5970.5(15,Z), 4 times stronger branch											80Sc09	**
*^{185}Pb(α)^{181}Hg	E_α=6485(15) to 64 level											02An15	**
*^{185}Pb(α)^{181}Hg	E_α=6486(5),6288(5) to 64, 269 levels											02An15	**
*^{185}Bi^{m}(α)^{181}Tl	E_α=8030, by same authors, from only one event											96Da06	**
*^{185}Bi^{m}(p)^{184}Pb	Read from graph											AHW	**
*^{185}Bi^{m}(p)^{184}Pb	Average by authors of E_p=1618(11), and 1585(9) in reference											96Da06	**
*^{185}Bi^{m}(p)^{184}Pb	As read from graph											GAu	**
*^{185}Bi^{m}(p)^{184}Pb	F : rejected by authors: no dedicated calibration with known proton activity											04An07	**
*^{185}Ta(β^-)^{185}W	E_{β^-}=1770(20) to 7/2$^-$ level at 243.62 keV											Ens061	**
*^{185}Os(ε)^{185}Re	L/K=0.600(0.006) to 3/2$^+$ level at 874.81 and 1/2$^+$ at 880.33 keV											Ens061	**
*^{185}Os(ε)^{185}Re	pK=0.109(0.005) to 3/2$^+$ level at 931.06 keV, and other pK, recalculated											Ens061	**
*^{185}Au(β^+)^{185}Pt	F : insufficient information											GAu	**
^{186}Hf−u	−39103	55				2				GS3	1.0	13Sh30	
^{186}W O−C ^{13}C ^{35}Cl$_4$ ^{37}Cl	104592.7	3.2	104611.6	1.3	2.4	U				H29	2.5	77Sh04	
^{186}Ir−u	−42063	30	−42053	18	0.3	2				GS2	1.0	05Li24	*
^{186}Pt−u	−40656	30	−40649	23	0.2	1	61	61	^{186}Pt	GS2	1.0	05Li24	
^{186}Au−u	−34029	30	−34047	23	−0.6	1	56	56	^{186}Au	GS2	1.0	05Li24	
^{186}Hg−u	−30660	104	−30638	13	0.2	U				GS1	1.0	00Ra23	
	−30630	30			−0.3	1	17	17	^{186}Hg	GS2	1.0	05Li24	
^{186}Hg−^{204}Pb$_{.912}$	−6065	20	−6054	13	0.6	–				MA6	1.0	01Sc41	
	ave. −6058	17			0.2	1	56	56	^{186}Hg			average	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{186}Tl−u		−21653	218	−21349	24	1.4	o			GS1	1.0	00Ra23	*
		−21513	105			1.6	U			GS2	1.0	05Li24	*
^{186}Tl−^{133}Cs$_{1.398}$		110831	24	110829	24	−0.1	o			MA8	1.0	08We02	*
		110829	24				2			MA8	1.0	14Bo26	*
^{186}Tl^{n}−^{133}Cs$_{1.398}$		111254	34				2			MA8	1.0	14Bo26	
^{186}W O$_2$−^{183}W ^{35}Cl		25122	5	25117.3	1.3	−0.4	U			H28	2.5	77Sh04	
^{186}W ^{35}Cl−^{184}W ^{37}Cl		6374	3	6382.1	1.2	1.1	U			H22	2.5	70Mc03	
		6382.0	1.4			0.0	1	13	11 ^{186}W	H28	2.5	77Sh04	
^{186}Os(α)^{182}W		2820.6	50.	2821.2	0.9	0.0	U					75Vi01	
^{186}Pt(α)^{182}Os		4323.2	20.	4320	18	−0.2	1	79	39 ^{182}Os			63Gr08	
^{186}Au(α)^{182}Ir		4907	15	4912	14	0.3	1	87	44 ^{182}Ir	ORa		90Ak04	*
^{186}Hg(α)^{182}Pt		5206.2	15.	5204	10	−0.1	–					70Ha18	
		5204.2	15.			0.0	–					96Ri12	
	ave.	5205	11			−0.1	1	83	57 ^{182}Pt			average	
^{186}Tl^{m}(α)^{182}Au^{p}		5891.9	7.	5892	5	0.0	4					75Co.A	
		5891.9	7.			0.0	4			ORa		77Ij01	
^{186}Pb(α)^{182}Hg		6458.2	20.	6470	6	0.6	2			Ora		74Le02	Z
		6470.1	10.			0.0	2			GSa		80Sc09	Z
		6474.7	10.			−0.5	2			ORa		84To09	Z
		6476.5	15.			−0.4	2			ORa		97Ba25	
		6459.2	15.			0.7	2			Anv		97An09	
^{186}Bi(α)^{182}Tl		7760	20	7757	12	−0.2	3			Ara		97Ba21	*
		7755	15			0.1	3			Anv		03An27	*
^{186}Bi^{m}(α)^{182}Tl^{p}		7349.3	25.	7423	5	2.9	U			GSa		84Sc.A	
		7420.9	20.			0.1	U			Ara		97Ba21	
		7422.9	5.				4			Anv		03An27	
^{186}Po(α)^{182}Pb		8493	30	8501	14	0.3	5					05Hu.A	
		8503.2	15.3			−0.1	5					13An13	
^{186}W(p,t)^{184}W		−4474	5	−4464.0	1.2	2.0	U			Min		73Oo01	
^{186}W(p,t)^{184}W−^{184}W()^{182}W		660.1	1.6	656.2	1.2	−2.5	o					09Le03	
		657.0	1.8			−0.5	1	42	35 ^{186}W			09Le.A	
^{186}W(t,α)^{185}Ta		11430	20	11411	14	−1.0	R			LAl		80Lo10	
^{186}W(γ,n)^{185}W		−7120	60	−7192.1	1.2	−1.2	U			Phi		60Ge01	
^{186}W(d,t)^{185}W		−939	10	−934.8	1.2	0.4	U			Kop		72Ca01	
^{185}Re(n,γ)^{186}Re		6179.8	0.8	6179.38	0.17	−0.5	–			Tal		69La11	Z
		6178.6	1.5			0.5	U					70Or.A	
		6179.34	0.18			0.2	–			Bdn		06Fi.A	
^{185}Re(d,p)^{186}Re		3939	25	3954.81	0.17	0.6	U			Tal		69La11	
^{185}Re(n,γ)^{186}Re	ave.	6179.36	0.18	6179.38	0.17	0.1	1	99	72 ^{186}Re			average	
^{186}Ta(β^-)^{186}W		3901	60				2					69Mo16	*
^{186}Re(β^-)^{186}Os		1064	2	1072.9	0.8	4.4	B					56Jo05	
		1071.5	1.3			1.0	–					56Po28	
		1076	3			−1.0	–					64Ma36	
		1064	3			3.0	B					68An11	
	ave.	1072.2	1.2			0.5	1	49	28 ^{186}Re			average	
^{186}Ir(β^+)^{186}Os		3760	200	3828	17	0.3	U					62Bo22	*
		3831	20			−0.2	R					63Em02	
^{186}Au(β^+)^{186}Pt		5950	200	6150	30	1.0	U					72We.A	
^{186}Hg(β^+)^{186}Au		3250	200	3176	24	−0.4	U					72We.A	
^{186}Tl^{n}(IT)^{186}Tl^{m}		373.9	0.5	374.00	0.20	0.2	o			Lvn		91Va04	
		374.0	0.2				3					Ens036	

*^{186}Ir−u	$M-A$=–39181(28) keV for mixture gs+m at 0.8 keV	Nub16b	**
*^{186}Tl−u	$M-A$=–20030(180) keV for mixture gs+m+n at 20(40) and 400(40) keV	Nub16b	**
*^{186}Tl−u	$M-A$=–19900(29) keV for mixture gs+m+n at 20(40) and 400(40) keV	Nub16b	**
*^{186}Tl−^{133}Cs$_{1.398}$	D_M=110842.1(9.2) μu for mixture gs+m at 20(40) keV; $M-A$=–19874.4(8.6) keV	Nub16b	**
*^{186}Tl−^{133}Cs$_{1.398}$	D_M=110840.4(8.6) μu for mixture gs+m at 20(40) keV; $M-A$=–19876.0(8.0) keV	Nub16b	**
*^{186}Au(α)^{182}Ir	E_α=4653(15) to 3$^-$ level at 152.3 keV	95Sa42	**
*^{186}Bi(α)^{182}Tl	E_α=7158(20) followed by E(γ)=444 keV	03An27	**
*^{186}Bi(α)^{182}Tl	E_α=7152(15), 7085(15) followed by E(γ)=444, 520 keV	03An27	**
*^{186}Ta(β^-)^{186}W	E_{β^-}=2240(60) to (2$^-$,3$^-$) level at 1661.3817 keV	Ens036	**
*^{186}Ir(β^+)^{186}Os	E_{β^+}=2600(200) assumed to 2$^+$ level at 137.159 keV, also other E_{β^+}	Ens036	**
*^{186}Ir(β^+)^{186}Os	E_{β^+}=1940(20) to 6$^+$ level at 868.94 keV	Ens036	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{187}Ta−u	−39609	60				2			GS3	1.0	13Sh30	
^{187}Ir−u	−42458	30				2			GS2	1.0	05Li24	
^{187}Pt−u	−39500	110	−39383	26	1.1	U			GS1	1.0	00Ra23	
	−39413	30			1.0	1	74	74 ^{187}Pt	GS2	1.0	05Li24	
^{187}Au−u	−35470	114	−35457	24	0.1	U			GS1	1.0	00Ra23	∗
	−35441	30			−0.5	1	64	64 ^{187}Au	GS2	1.0	05Li24	
^{187}Hg−u	−30188	109	−30186	15	0.0	U			GS1	1.0	00Ra23	∗
	−30155	36			−0.9	1	17	17 ^{187}Hg	GS2	1.0	05Li24	∗
^{187}Hg−^{208}Pb$_{.899}$	−9210	20	−9196	15	0.7	1	56	56 ^{187}Hg	MA6	1.0	01Sc41	
^{187}Hg^m−^{208}Pb$_{.899}$	−9152	19	−9132	21	1.0	o			MA6	1.0	01Sc41	∗
^{187}Tl−u	−24120	107	−24095	9	0.2	U			GS1	1.0	00Ra23	
	−23928	109			−1.5	U			GS2	1.0	05Li24	∗
^{187}Tl^m−^{133}Cs$_{1.406}$	109151	24	109198	8	1.9	F			MA8	1.0	08We02	∗
^{187}Pb−u	−16076	45	−16089	5	−0.3	U			GS2	1.0	05Li24	∗
^{187}Pb−^{133}Cs$_{1.406}$	116843.5	5.9	116845	5	0.3	1	86	86 ^{187}Pb	MA8	1.0	05We11	∗
^{187}Pb^m−^{133}Cs$_{1.406}$	116871.6	5.6	116866	12	−1.0	o			MA8	1.0	05We11	∗
^{187}Re O$_2$−^{184}W ^{35}Cl	25797.4	3.5	25795.6	0.9	−0.2	U			H28	2.5	77Sh04	
^{187}Re ^{35}Cl−^{185}Re ^{37}Cl	5737	3	5744.1	0.9	0.9	U			H22	2.5	70Mc03	
	5744.2	1.2			0.0	1	10	6 ^{185}Re	H28	2.5	77Sh04	
^{187}Re−^{187}Os	2.676	0.036	2.6481	0.0017	−0.8	U			SH1	1.0	14Ne15	
^{187}Au(α)^{183}Ir	4792.7	20.	4751	29	−0.8	1	35	19 ^{183}Ir			68Si01	∗
^{187}Hg(α)^{183}Pt	5229.9	20.	5230	14	0.0	1	49	30 ^{183}Pt	ISa		70Ha18	∗
^{187}Hg^m(α)^{183}Pt	5293.4	20.	5289	16	−0.2	1	64	49 ^{187}Hg^m	ISa		70Ha18	∗
^{187}Tl^m(α)^{183}Au	5643	20	5656	6	0.6	–			ORa		76To06	∗
	5661.5	10.			−0.6	–			GSa		80Sc09	∗
	5645.1	12.			0.9	o			Lvn		85Co06	∗
	5661.5	10.			−0.6	–			Lvn		91Wa21	∗
ave.	5659	7			−0.6	1	91	77 ^{183}Au			average	
^{187}Pb(α)^{183}Hg	6393.0	10.	6393	6	0.0	–			Ora		75Ca06	∗
	6395.0	19.			−0.1	o			GSa		80Sc09	
	6398.4	10.			−0.6	–			GSa		81Mi12	∗
ave.	6396	7			−0.4	1	77	63 ^{183}Hg			average	
^{187}Pb^m(α)^{183}Hg^m	6213.1	20.	6208	7	−0.2	o			Ora		74Le02	
	6213.1	10.			−0.5	2			Ora		75Ca06	
	6223.3	10.			−1.5	o			GSa		80Sc09	
	6206.0	10.2			0.2	2			GSa		81Mi12	
	6202.9	15.			0.4	2			Anv		99An36	
^{187}Bi(α)^{183}Tl^m	7139.0	10.	7150	4	1.1	2			GSa		84Sc.A	
	7153.3	8.			−0.4	2			ORa		99Ba45	∗
	7158.4	10.			−0.8	o			Anv		03An27	
	7147.2	8.			0.4	2			Jya		03Ke08	∗
	7153.3	10.			−0.3	o			Anv		04An07	
	7153.3	5.			−0.6	2			Anv		06An11	∗
^{187}Bi^m(α)^{183}Tl	7749.1	10.	7887	7	13.8	F			GSa		84Sc.A	∗
	7890.1	15.			−0.2	2			ORa		99Ba45	
	7882.9	11.			0.4	2			Jya		03Ke08	
	7890.1	10.			−0.3	2			Anv		06An11	
^{187}Po(α)^{183}Pb	7978.9	15.				3			Anv		06An11	∗
^{187}Po^m(α)^{183}Pb^m	7889.1	20.				3			Anv		06An11	
^{186}W(n,γ)^{187}W	5466.3	0.3	5466.76	0.04	1.5	U			BNn		87Br05	Z
	5467.22	0.3			−1.5	U			Ltn		92Be17	∗
	5466.59	0.12			1.4	o			Bdn		06Fi.A	
	5466.83	0.05			−1.4	–			Prn		08Bo26	
	5466.62	0.07			2.0	–			Bdn		14Hu02	
^{186}W(d,p)^{187}W	3236	5	3242.19	0.04	1.2	U			ANL		65Er03	
	3240	10			0.2	U			Kop		72Ca01	
^{186}W(n,γ)^{187}W ave.	5466.76	0.04	5466.76	0.04	0.0	1	100	55 ^{186}W			average	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{186}W(^{3}He,d)^{187}Re		530	40	503.4	1.1	−0.7	U			Roc		71Lu01	
^{187}Re(γ,n)^{186}Re		−7180	80	−7360.7	0.9	−2.3	U			Phi		60Ge01	
^{187}Re(d,t)^{186}Re		−1055	25	−1103.5	0.9	−1.9	U			Tal		69La11	
^{186}Os(n,γ)^{187}Os		6291.1	1.0	6290.3	0.5	−0.8	–					74Pr15	Z
		6289.4	0.8			1.1	–			Bdn		06Fi.A	
	ave.	6290.1	0.6			0.4	1	70	40 ^{186}Os			average	
^{187}W(β^-)^{187}Re		1314	2	1312.5	1.1	−0.7	–					69Na03	
		1310	2			1.3	–					70He14	
	ave.	1312.0	1.4			0.4	1	63	55 ^{187}W			average	
^{187}Re(β^-)^{187}Os		2.62	0.09	2.4667	0.0016	−1.7	U					65Br12	
		2.64	0.05			−3.5	B					67Hu05	
		2.667	0.020			−10.0	B					92Co23	
		2.70	0.09			−2.6	U					93As02	
		2.460	0.011			0.6	U					99Al20	
		2.470	0.004			−0.8	–					01Ga01	
		2.4661	0.0017			0.4	–					03Ar36	
	ave.	2.4667	0.0016			0.0	1	100	89 ^{187}Re			average	
^{187}Ir(β^+)^{187}Os		1550	200	1670	28	0.6	U					71Ma24	*
^{187}Os(^{3}He,t)^{187}Ir		−1521	6	−1688	28	−27.9	B			INS		90Ka27	
^{187}Au(β^+)^{187}Pt		3600	40	3657	27	1.4	1	47	26 ^{187}Pt			83Gn01	*
^{187}Hg^m(IT)^{187}Hg		54	21	59	16	0.2	1	60	51 ^{187}Hg^m	MA6		01Sc41	*
^{187}Tl^m(IT)^{187}Tl		330	5	334	3	0.7	1	45	31 ^{187}Tl			77Sc03	
^{187}Pb^m(IT)^{187}Pb		33	13	19	10	−1.1	1	61	61 ^{187}Pb^m	MA8		05We11	
*^{187}Au−u		$M-A$=–32980(100) keV for mixture gs+m at 120.33 keV										Nub16b	**
*^{187}Hg−u		$M-A$=–28090(100) keV for mixture gs+m at 59(16) keV										Nub16b	**
*^{187}Hg−u		$M-A$=–28060(28) keV for mixture gs+m at 59(16) keV										Nub16b	**
*^{187}Hg^m−^{208}Pb$_{.899}$		Use instead their difference between ground state and ^{187}Hg^m lines										GAu	**
*^{187}Tl−u		$M-A$=–22121(28) keV for mixture gs+m at 334(3) keV										Nub16b	**
*^{187}Tl^m−^{133}Cs$_{1.406}$		F : contamination from ground state not resolved										08We02	**
*^{187}Pb−u		$M-A$=–14965(41) keV for mixture gs+m at 19(10) keV										Nub16b	**
*^{187}Pb−^{133}Cs$_{1.406}$		D_M=116851.3(4.3) μu for mixture gs+m at 19(10) keV with R=0.62(0.02);										Nub16b	**
*		$M-A$=–14981.5(4.0) keV										GAu	**
*^{187}Pb^m−^{133}Cs$_{1.406}$		D_M=116869.5(5.5) for mixture gs+m at 19(10) R=8.7(0.7); $M-A$=–14964.5(5.1) keV										Nub16b	**
*		used are only the equations for the ^{187}Pb doublet and ^{187}Pb^m(IT)^{187}Pb										GAu	**
*^{187}Au(α)^{183}Ir		Assignment uncertain										Ens095	**
*^{187}Hg(α)^{183}Pt		E_α=5035(20) to 3/2$^-$ level at 84.73 keV										Ens164	**
*^{187}Hg^m(α)^{183}Pt		E_α=4870(20) to (13/2$^+$) level at 316.9 level										Ens164	**
*^{187}Tl^m(α)^{183}Au		E_α=5510(20) 5528(10) 5512(12) 5528(10) respectively, to (9/2)$^-$ at 12.4(0.4)keV										Ens164	**
*^{187}Pb(α)^{183}Hg		E_α=6190(10) to 3/2$^-$ level at 67.16 keV										Ens164	**
*^{187}Pb(α)^{183}Hg		E_α=6194(10) 5993(10) to 3/2$^-$ levels at 67.16 and 275.33 keV										Ens164	**
*^{187}Bi(α)^{183}Tl^m		Also E_α=7612(15) keV to ground state										99Ba45	**
*^{187}Bi(α)^{183}Tl^m		Also E_α=7605(16) keV to ground state										03Ke08	**
*^{187}Bi(α)^{183}Tl^m		Also E_α=7612(5), 7342(15) keV to ground state, 273(1) keV										06An11	**
*^{187}Bi^m(α)^{183}Tl		F : for T=700 μs instead of Nubase=370(20) μs										Nub16b	**
*^{187}Po(α)^{183}Pb		E_α=7528(15) to 286(1) keV level; also 1 event E_α=7796(15) to ground state										06An11	**
*^{186}W(n,γ)^{187}W		Only statistical error 0.04 keV given; Z recalibrated										GAu	**
*^{187}Ir(β^+)^{187}Os		p$^+$ <0.15(0.05), resulting Q_i(1550 keV										Ens095	**
*^{187}Au(β^+)^{187}Pt		K/β^+=31.6(2.8) to 1/2$^+$ level at 1341.07 keV, recalculated										Ens095	**
*^{187}Hg^m(IT)^{187}Hg		Original error (7 keV) increased by 20 due to isomer+ground state lines in trap										01Sc41	**
^{188}Ta−u		−36084	59				2			GS3	1.0	13Sh30	
^{188}Au−u		−34750	104	−34752.0	2.9	0.0	U			GS1	1.0	00Ra23	
		−34674	30			−2.6	B			GS2	1.0	05Li24	
^{188}Au−^{133}Cs$_{1.414}$		98938.9	2.9				2			MA8	1.0	16Ma.1	
^{188}Hg−u		−32500	104	−32423	13	0.7	U			GS1	1.0	00Ra23	
		−32428	30			0.2	1	19	19 ^{188}Hg	GS2	1.0	05Li24	
^{188}Hg−^{208}Pb$_{.904}$		−11330	20	−11316	13	0.7	–			MA6	1.0	01Sc41	
	ave.	−11317	17			0.0	1	63	62 ^{188}Hg			average	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{188}Tl−u	−23827	110	−23980	30	−1.4	U			GS1	1.0	00Ra23	*
	−23994	38			0.4	2			GS2	1.0	05Li24	*
^{188}Pb−u	−19070	110	−19125	11	−0.5	U			GS1	1.0	00Ra23	
	−19144	30			0.6	R			GS2	1.0	05Li24	
^{188}Os ^{35}Cl−^{186}W ^{37}Cl	4426	3	4422.3	1.2	−0.5	U			H22	2.5	70Mc03	
^{188}Pt(α)^{184}Os	4015.7	10.	4007	5	−0.9	–					63Gr08	
	4000.3	10.			0.6	–			ORa		78El11	
	3990.1	15.			1.1	–					79Ha10	
ave.	4005	7			0.3	1	65	65 ^{188}Pt			average	
^{188}Hg(α)^{184}Pt	4710.4	20.	4707	16	−0.1	1	59	40 ^{184}Pt			79Ha10	
^{188}Pb(α)^{184}Hg	6110.3	10.	6109	3	−0.1	2			Ora		74Le02	Z
	6109.2	10.			0.0	2			Ora		77De32	Z
	6120.5	15.			−0.8	2			GSa		80Sc09	Z
	6110.5	5.			−0.3	2			ORa		81To02	Z
	6109.3	10.			0.0	2			Lvn		93Wa03	Z
	6100.0	8.			1.1	2			Jya		03Ke04	
^{188}Bi(α)^{184}Tl	7274.5	25.	7264	5	−0.4	o			GSa		80Sc09	*
	7279.7	10.			−1.6	2			GSa		84Sc.A	*
	7255.2	7.			1.2	2			Lvn		97Wa05	*
	7259.3	5.			0.9	o			Anv		03An26	*
	7264.8	10.			−0.1	2			Anv		06An04	*
^{188}Bi^n(α)^{184}Tl^m	7462.9	5.				5			Anv		03An26	*
^{188}Bi^n(α)^{184}Tl^n	6968.5	20.	6965	5	−0.2	o			GSa		80Sc09	
	6968.5	10.			−0.4	5			GSa		84Sc.A	
	6963.5	6.			0.2	5			Lvn		97Wa05	
	6961.3	5.			0.6	o			Anv		03An26	
	6963.5	5.			0.1	5			Anv		06An04	
^{188}Po(α)^{184}Pb	8087.4	25.	8082	15	−0.2	o			Anv		99An52	
	8080.2	15.			0.1	o			Anv		01Va.B	
	8082.3	15.				2			Anv		03Va16	
^{188}Os(p,t)^{186}Os	−5802	5	−5798.1	0.5	0.8	U			Min		73Oo01	
	−5803	4			1.2	U			McM		75Th04	
^{187}Re(n,γ)^{188}Re	5871.77	0.3	5871.65	0.04	−0.4	U					72Sh13	Z
	5871.75	0.13			−0.8	U			Bdn		06Fi.A	
	5871.65	0.04				2			Prn		10Ba48	
^{188}Os(t,α)^{187}Re	12604	10	12604.14	0.15	0.0	U			McM		76Hi08	
^{187}Os(n,γ)^{188}Os	7989.6	0.3	7989.61	0.15	0.0	–					83Fe06	Z
	7989.58	0.17			0.1	–			Bdn		06Fi.A	
ave.	7989.58	0.15			0.1	1	98	57 ^{187}Os			average	
^{188}W(β^-)^{188}Re	349	3				3					64Bu10	
^{188}Re(β^-)^{188}Os	2116	2	2120.42	0.15	2.2	U					56Jo05	
	2111	3			3.1	B					68An11	
^{188}Ir(β^+)^{188}Os	2833	10	2792	9	−4.1	B					62Wa20	*
	2781	20			0.6	–					69Ya02	*
	2827	30			−1.2	–					70Ag03	*
ave.	2795	17			−0.2	1	32	32 ^{188}Ir			average	
^{188}Pt(ε)^{188}Ir	525	10	524	9	−0.1	1	75	68 ^{188}Ir	ORa		78El11	*
^{188}Au(β^+)^{188}Pt	5520	30	5450	6	−2.3	U					84Da.A	
^{188}Hg(β^+)^{188}Au	2040	20	2169	13	6.5	B					84Da.A	
*^{188}Tl−u	$M-A$=–22180(100) keV for mixture gs+m at 30(40) keV										GAu	**
*^{188}Tl−u	$M-A$=–22335(28) keV for mixture gs+m at 30(40) keV										GAu	**
*^{188}Bi(α)^{184}Tl	E_α=7005(25) 7010(10) 6987(6) respectively, to (3$^+$) level at 117.5(0.5) keV										Ens102	**
*	E_α=7029(7) 3 times weaker exists too, possible mixture in older results										97Wa05	**
*^{188}Bi(α)^{184}Tl	E_α=7106(5), 6992(5), 6889(10) to ground state, 117.5, 216 levels										03An26	**
*^{188}Bi(α)^{184}Tl	E_α=6995(10) to 117.5 level										06An04	**
*^{188}Bi^n(α)^{184}Tl^m	E_α=7302(5), 7232(10), 6995(15) to ground state, 70.5, 320 levels										03An26	**
*^{188}Ir(β^+)^{188}Os	$E_{\beta+}$=1656(10) 1605(20) 1650(30) respectively, to 2$^+$ level at 155.021 keV										Ens024	**
*^{188}Pt(ε)^{188}Ir	pL=0.67(0.05) to 1$^+$ level at 478.17 keV										Ens024	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{189}W−u	−38237	43				2			GS3	1.0	13Sh30	
C_{14} H_{21}−^{189}Os	206188.3	6.2	206179.7	0.7	−0.3	U			M23	4.0	79Ha32	
^{189}Au−u	−36080	140	−36052	22	0.2	U			GS1	1.0	00Ra23	*
	−36045	31			−0.2	2			GS2	1.0	05Li24	
	−36058	30			0.2	2			GS2	1.0	05Li24	*
^{189}Hg−u	−31788	111	−31810	30	−0.2	U			GS1	1.0	00Ra23	*
	−31791	42			−0.3	1	65	65 ^{189}Hg	GS2	1.0	05Li24	*
^{189}Hg^m−^{208}Pb$_{.909}$	−10501	20	−10498	19	0.2	1	92	92 ^{189}Hg^m	MA6	1.0	01Sc41	
^{189}Tl−u	−26497	139	−26426	9	0.5	U			GS1	1.0	00Ra23	*
	−26313	93			−1.2	U			GS2	1.0	05Li24	*
^{189}Pb−u	−19206	97	−19156	15	0.5	U			GS1	1.0	00Ra23	*
	−19193	34			1.1	1	20	20 ^{189}Pb	GS2	1.0	05Li24	*
^{189}Os ^{35}Cl−^{187}Re ^{37}Cl	5341	3	5343.8	0.5	0.4	U			H22	2.5	70Mc03	
^{189}Pb(α)^{185}Hg	5954.2	10.	5915	4	−3.9	B			Ora		72Ga27	*
	5943.9	10.			−2.9	B			Ora		74Le02	*
	5915	10			0.0	–					05Fr.A	*
	5914.8	5.4			0.0	–			ISa		13Sa43	*
ave.	5915	5			0.0	1	82	67 ^{189}Pb			average	
^{189}Pb^m(α)^{185}Hg	5958	10	5955	5	−0.3	1	28	25 ^{189}Pb^m			05Fr.A	*
	5955	5			0.0	o			ISa		13Sa43	*
^{189}Bi(α)^{185}Tl	7269.4	10.	7268.2	2.7	−0.1	6			Ora		74Le02	*
	7274.5	10.			−0.6	6			GSa		84Sc.A	*
	7271.2	5.			−0.6	6			Lvn		85Co06	*
	7271.8	15.			−0.2	U			Anv		97An09	*
	7268.1	6.			0.0	6			Lvn		97Wa05	
	7271.5	5.			−0.7	o			Jya		02Hu14	*
	7264.2	4.5			0.9	6			Jya		03Ke08	*
^{189}Bi^m(α)^{185}Tl	7362.1	20.	7452	4	1.8	U			GSa		84Sc.A	*
	7499.0	30.			−1.6	U			Dbb		93An19	
	7458.2	40.			−0.2	U			ORa		95Ba75	
	7458.2	15.			−0.4	6			Anv		97An09	
	7450.0	6.			0.4	6			Lvn		97Wa05	
	7453.1	6.			−0.2	6			Jya		03Ke08	
^{189}Po(α)^{185}Pb	7699.4	15.	7694	15	−0.3	o			Anv		99An52	*
	7694.3	15.				3			Anv		05Va04	*
^{189}Os(p,t)^{187}Os	−5431	5	−5428.6	0.5	0.5	U			Min		73Oo01	
	−5432	4			0.8	U			McM		75Th04	
^{188}Os(n,γ)^{189}Os	5920.8	2.	5920.8	0.4	0.0	U					76Be50	
	5920.6	0.5			0.5	1	80	59 ^{188}Os	ILn		92Br17	
	5922.0	0.4			−2.9	C			Bdn		06Fi.A	
^{188}Os(d,p)^{189}Os	3689	10	3696.3	0.4	0.7	U			Kop		75Mo29	
^{189}Os(d,t)^{188}Os	335	15	336.4	0.4	0.1	U			Tal		75Th06	
^{189}W(β^-)^{189}Re	2500	200	2360	40	−0.7	U					65Ka07	
^{189}Re(β^-)^{189}Os	1000	20	1008	8	0.4	R					63Cr06	
	1015	20			−0.4	R					65Bl06	
^{189}Pt(β^+)^{189}Ir	1950	20	1980	14	1.5	1	46	30 ^{189}Ir			71Pl08	*
^{189}Au(β^+)^{189}Pt	3160	300	2887	22	−0.9	U					75Un.A	
^{189}Hg(β^+)^{189}Au	4200	200	3960	40	−1.2	U					75Un.A	
^{189}Hg^m(IT)^{189}Hg	100	50	80	30	−0.4	1	43	35 ^{189}Hg	MA6		01Sc41	
^{189}Tl^m(β^+)^{189}Hg	5460	200	5300	30	−0.8	U					75Un.A	*
^{189}Pb^m(IT)^{189}Pb	40	4	40	4	0.1	1	88	75 ^{189}Pb^m	ISa		13Sa43	
*^{189}Au−u	$M-A$=–33490(100) keV for mixture gs+m at 247.23 keV										Nub16b	**
*^{189}Au−u	$M-A$=–33341(28) keV for ^{189}Au^m at 247.23 keV										Nub16b	**
*^{189}Hg−u	$M-A$=–29570(100) keV for mixture gs+m at 80(30) keV										Nub16b	**
*^{189}Hg−u	$M-A$=–29573(28) keV for mixture gs+m at 80(30) keV										Nub16b	**
*^{189}Tl−u	$M-A$=–24540(100) keV for mixture gs+m at 285(6) keV										Nub16b	**
*^{189}Tl−u	$M-A$=–24369(28) keV for mixture gs+m at 285(6) keV										Nub16b	**
*^{189}Pb−u	$M-A$=–17870(90) keV for mixture gs+m at 40(4) keV										Nub16b	**
*^{189}Pb−u	$M-A$=–17858(29) keV for mixture gs+m at 40(4) keV										Nub16b	**
*^{189}Pb(α)^{185}Hg	E_α=5730.1(10,Z) possibly from ground state, to 3/2$^-$ level at 26.1 keV										Ens061	**
*^{189}Pb(α)^{185}Hg	E_α=5720(10) possibly from ground state, to 3/2$^-$ level at 26.1 keV										Ens061	**
*^{189}Pb(α)^{185}Hg	E_α=5761 to 3/2$^-$ level at 26.1 and E_α=5623 to 173.8 level										05Fr.A	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
$*^{189}$Pb(α)^{185}Hg	E_α=5764(3)(5) to 3/2$^-$ level at 26.02 and E_α=5619(2)(5) to 173.9 level										13Sa43	**
$*^{189}$Pb^m(α)^{185}Hg	E_α=5730 to 103.8 level										05Fr.A	**
$*^{189}$Pb^m(α)^{185}Hg	E_α=5727(2)(5) to 103.7(0.4) level										13Sa43	**
$*^{189}$Pb^m(α)^{185}Hg	use instead ^{189}Pb^m(IT)^{189}Pb where systematic errors cancel										GAu	**
$*^{189}$Bi(α)^{185}Tl	E_α=6670.1(10,Z) to ^{185}Tl^m at 454.8(1.5) keV										Nub16b	**
$*^{189}$Bi(α)^{185}Tl	E_α=6675(10) to ^{185}Tl^m at 454.8(1.5) keV										Nub16b	**
$*^{189}$Bi(α)^{185}Tl	E_α=7115.6(15,Z) and 6671.6(5,Z) to ^{185}Tl^m at 454.8(1.5) keV										Nub16b	**
$*^{189}$Bi(α)^{185}Tl	E_α=7120(15), 6670(15) to ground state and ^{185}Tl^m at 454.8(1.5) keV										Nub16b	**
$*^{189}$Bi(α)^{185}Tl	E_α=6674(5) to ^{185}Tl^m at 452.8(2.0) keV										77Sc03	**
$*^{189}$Bi(α)^{185}Tl	E_α=6667(4) to ^{185}Tl^m at 452.8(2.0) keV										77Sc03	**
*	and also E_α=7114(6) to ground state										03Ke08	**
$*^{189}$Bi^m(α)^{185}Tl	Only one event; not seen in reference										93An19	**
$*^{189}$Po(α)^{185}Pb	E_α=7264(15) to 278(1) level										99An52	**
$*^{189}$Po(α)^{185}Pb	E_α=7259(15) to 278(1) level										05Va04	**
$*^{189}$Pt(β^+)^{189}Ir	E_{β^+}=885(10) to ground state, 1/2$^+$ level at 94.34 and 3/2$^+$ at 176.53 keV										Ens039	**
$*^{189}$Tl^m(β^+)^{189}Hg	E_{β^+}=4140(200) to several levels around 300 keV										75Un.A	**
^{190}W−u	−36917	44	−36910	40	0.1	1	94	94 ^{190}W	GS3	1.0	13Sh30	
^{190}Au−u	−35213	106	−35248	4	−0.3	U			GS2	1.0	05Li24	*
^{190}Au−^{133}Cs$_{1.429}$	99860.9	3.7				2			MA8	1.0	16Ma.1	
^{190}Hg−u	−33670	107	−33678	17	−0.1	U			GS1	1.0	00Ra23	
^{190}Hg−^{208}Pb$_{.913}$	−12361	20	−12361	17	0.0	1	73	73 ^{190}Hg	MA6	1.0	01Sc41	
^{190}Tl^m−u	−26055	107	−26076	7	−0.2	o			GS1	1.0	00Ra23	*
	−26048	30			−0.9	U			GS2	1.0	05Li24	*
^{190}Tl^m−^{133}Cs$_{1.429}$	109033.5	6.9				2			MA8	1.0	14Bo26	
^{190}Pb−u	−21940	104	−21918	13	0.2	U			GS1	1.0	00Ra23	
	−21905	30			−0.4	R			GS2	1.0	05Li24	
^{190}Bi^m−^{133}Cs$_{1.429}$	123800	27	123870	30	2.4	F			MA8	1.0	08We02	*
^{186}Os−^{190}Pt$_{.979}$	−6953.13	0.86	−6953.3	0.6	−0.2	1	53	39 ^{186}Os	MS1	1.0	16Ei01	
^{190}Os ^{35}Cl−^{188}Os ^{37}Cl	5557	3	5558.2	0.5	0.2	U			H22	2.5	70Mc03	
^{190}Os−^{190}Pt	−1504.31	0.59	−1504.4	0.5	−0.1	1	62	33 ^{190}Pt	MS1	1.0	16Ei01	
^{190}Os−C$_{14}$ H$_{21}$	−205897.8	5.8	−205880.2	0.7	0.8	U			M23	4.0	79Ha32	
^{190}Os−^{189}Os	285.2	5.2	299.49	0.20	1.1	U			M24	2.5	79Ha32	
^{190}Pt(α)^{186}Os	3238.3	20.	3268.6	0.6	1.5	U					61Pe23	
	3248.5	20.			1.0	U					63Gr08	
^{190}Pb(α)^{186}Hg	5699.8	10.	5698	5	−0.2	2			Ora		74Le02	Z
	5697.0	5.			0.1	2			ORa		81El03	Z
^{190}Bi(α)^{186}Tl	6862.2	5.	6862	3	0.0	3			Lvn		91Va04	*
	6863.3	5.			−0.2	3			Anv		03An26	*
	6860.3	6.			0.3	3			Jya		13Ny01	*
^{190}Bi^m(α)^{186}Tl^m	6967.9	5.	6966.4	2.8	−0.3	4			Lvn		91Va04	*
	6969.1	5.			−0.5	4			Anv		03An26	*
	6963.1	5.			0.7	4			Jya		13Ny01	*
^{190}Bi^m(α)^{186}Tl^n	6589.0	10.	6592.4	2.8	0.3	R			Ora		74Le02	
^{190}Po(α)^{186}Pb	7643.2	20.	7693	7	2.5	C			GSa		88Qu.A	
	7651.4	40.			1.0	U			ORa		96Ba35	
	7691.2	10.			0.2	3			ORa		97Ba25	
	7695.3	10.			−0.2	3			Anv		00An14	*
^{190}Os(p,t)^{188}Os	−5234	5	−5231.4	0.5	0.5	U			Min		73Oo01	
	−5237	4			1.4	U			McM		75Th04	
^{190}Pt(p,t)^{188}Pt	−7150	10	−7146	5	0.4	1	28	28 ^{188}Pt	Ors		78Ve10	
^{190}Os(t,α)^{189}Re	11796	10	11796	8	0.0	2			McM		76Hi08	
^{189}Os(n,γ)^{190}Os	7791.8	1.0	7792.34	0.19	0.5	U			BNn		79Ca02	Z
	7792.31	0.19			0.2	1	97	79 ^{189}Os	Bdn		06Fi.A	
^{190}Os(d,t)^{189}Os	−1541	10	−1535.11	0.19	0.6	U			Kop		75Mo29	
	−1530	4			−1.3	U			Tal		76Be50	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.		Lab	F	Reference	
^{190}Pt(p,d)^{189}Pt		−6693	11	−6684	10	0.8	1	84	84	^{189}Pt	Ors		80Ka19	
^{190}W(β^-)^{190}Re		1270	70	1250	60	−0.2	1	82	76	^{190}Re			76Ha39	∗
^{190}Re(β^-)^{190}Os		3090	300	3070	70	−0.1	–						55At21	∗
		3190	300			−0.4	–						69Ha44	∗
		3146	200			−0.4	–						64Fl02	∗
	ave.	3140	150			−0.5	1	24	24	^{190}Re			average	
^{190}Ir(β^+)^{190}Os		2000	200	1954.2	1.2	−0.2	U						60Ka14	∗
^{190}Au(β^+)^{190}Pt		4442	15	4473	4	2.1	U						73Jo11	
		4380	55			1.7	U						74Di.A	
		4380	200			0.5	U						75Un.A	
^{190}Hg(β^+)^{190}Au		2105	80	1463	16	−8.0	C						74Di.A	
^{190}Tl(β^+)^{190}Hg		7000	400	6999	18	0.0	U						75Un.A	∗
^{190}Tl^m(β^+)^{190}Hg		6975	300	7081	17	0.4	U						76Bi09	∗
^{190}Bi(β^+)^{190}Pb		8700	500	9817	26	2.2	F						76Bi09	∗
∗^{190}Au−u	$M-A$=–32701(28) keV for mixture gs+m at 200#150 keV												Nub16b	∗∗
∗^{190}Tl^m−u	Assumed by evaluator to be the 7$^+$ excited isomer												GAu	∗∗
∗^{190}Bi^m−^{133}Cs$_{1.429}$	F : contamination due to ground state not resolved												08We02	∗∗
∗^{190}Bi(α)^{186}Tl	E_α=6716(5), 6507(5), 6431(5) to ground state, 215.2, 293.7 levels												91Va04	∗∗
∗^{190}Bi(α)^{186}Tl	E_α=6431(5) to 293.7 level												03An26	∗∗
∗^{190}Bi(α)^{186}Tl	E_α=6428(6) to 293.7 level												13Ny01	∗∗
∗^{190}Bi^m(α)^{186}Tl^m	E_α=6819(5), 6734(5), 6456(5) to levels 0, 89.5, 373.9 above ^{186}Tl^m												91Va04	∗∗
∗^{190}Bi^m(α)^{186}Tl^m	E_α=6456(5) to 374.0 level above ^{186}Tl^m												03An26	∗∗
∗^{190}Bi^m(α)^{186}Tl^m	E_α=6450(5) to 374.0 level above ^{186}Tl^m												Nub16b	∗∗
∗^{190}Po(α)^{186}Pb	E_α=7545(15) same dataset as in reference 2000An14												97An09	∗∗
∗^{190}W(β^-)^{190}Re	E_{β^-}=950(70) to 1$^+$ level at 319.7 keV												Ens036	∗∗
∗^{190}Re(β^-)^{190}Os	E_{β^-}=1700(300) 1800(300) respectively, to 3$^-$ level at 1387.00 keV												Ens036	∗∗
∗^{190}Re(β^-)^{190}Os	E_{β^-}=1600(200) from isomer at 204(10) to several levels around 1750 keV												Nub16b	∗∗
∗^{190}Ir(β^+)^{190}Os	p$^+$ =6(1)×10^{-5} to 4$^+$ levels at 1163.19 and 955.37 keV, level at 1872.15 keV fed												Ens036	∗∗
∗^{190}Tl(β^+)^{190}Hg	E_{β^+}=5700(400) to ground state and 2$^+$ level at 416.32 keV												Ens036	∗∗
∗^{190}Tl^m(β^+)^{190}Hg	E_{β^+}=4180(300) to 6$^+$ level at 1772.94 keV												Ens036	∗∗
∗^{190}Bi(β^+)^{190}Pb	F : E_{β^+}=5700(300) to a level around 2000 at least												AHW	∗∗
^{191}W−u		−33469	45				2				GS3	1.0	13Sh30	
^{191}Au−u		−36180	88	−36284	5	−1.2	U				GS2	1.0	05Li24	∗
^{191}Au−^{133}Cs$_{1.436}$		99487.3	5.3	99487	5	0.0	1	100	100	^{191}Au	MA8	1.0	13Kr15	
^{191}Hg−u		−32811	51	−32842	24	−0.6	1	22	22	^{191}Hg	GS2	1.0	05Li24	∗
^{191}Hg−^{208}Pb$_{.918}$		−11414	29	−11408	24	0.2	1	68	68	^{191}Hg	MA6	1.0	01Sc41	∗
^{191}Tl−u		−28340	130	−28216	8	1.0	U				GS1	1.0	00Ra23	∗
		−28234	30			0.6	U				GS2	1.0	05Li24	
		−28192	31			−0.8	U				GS2	1.0	05Li24	∗
^{191}Pb−u		−21770	110	−21720	40	0.5	U				GS1	1.0	00Ra23	∗
		−21719	40				2				GS2	1.0	05Li24	∗
^{191}Bi−^{133}Cs$_{1.436}$		121552.1	8.6	121558	8	0.7	1	87	87	^{191}Bi	MA8	1.0	08We02	
^{191}Pb^m(α)^{187}Hg^m		5403.4	20.				2				Ora		74Le02	
^{191}Bi(α)^{187}Tl		6780.8	5.	6780	3	−0.1	–				Lvn		85Co06	Z
		6785.3	10.2			−0.5	–				ORa		98Bi.A	
		6782.3	10.2			−0.2	–				Anv		99An36	
		6783.3	7.2			−0.4	–				Jya		13Ny01	
	ave.	6782	4			−0.5	1	71	69	^{187}Tl			average	
^{191}Bi(α)^{187}Tl^m		6440.0	5.	6446.6	2.5	1.3	–						67Tr06	Z
		6455.0	10.			−0.8	U				Ora		74Le02	Z
		6445.9	5.			0.2	–				Lvn		85Co06	Z
		6447	10			0.0	U				ORa		98Bi.A	
		6458.5	20.			−0.6	U				RIa		99Ta20	
		6445	10			0.2	U				Anv		99An36	
		6443.2	3.			1.1	o				Jya		03Ke04	
		6445.2	10.			0.1	U				Jya		13Uu01	
		6450.3	4.			−0.9	–				Jya		13Ny01	
	ave.	6446.2	2.7			0.2	1	83	72	^{187}Tl^m			average	
^{191}Bi^m(α)^{187}Tl		7022.8	5.	7023	3	0.0	2				Lvn		85Co06	Z
		7023.4	10.			−0.1	U				ORa		98Bi.A	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{191}Bi^m(α)^{187}Tl	7016.2	20.	7023	3	0.3	U			RIa		99Ta20	
	7017.2	3.			1.7	o			Jya		03Ke04	
	7031.0	15.			−0.6	U			Jya		13Uu01	*
	7022.4	4.			0.0	2			Jya		13Ny01	
^{191}Po(α)^{187}Pb	7470.8	20.	7493	5	1.1	F			GSa		93Qu03	*
	7487.1	15.			0.4	U			ORa		97Ba25	
	7491.2	5.			0.4	1	94	94 ^{191}Po	Anv		02An19	*
^{191}Po(α)^{187}Pb^m	7493.2	15.	7474	10	−1.2	1	45	39 ^{187}Pb^m	Anv		02An19	
^{191}Po^m(α)^{187}Pb^m	7535	5				2			Anv		02An19	*
^{191}At(α)^{187}Bi^m	7713.9	11.				3			Jya		03Ke08	
^{191}At^m(α)^{187}Bi	7880.4	15.				3			Jya		03Ke08	
^{191}Ir(p,t)^{189}Ir	−5903	15	−5920	13	−1.1	1	70	70 ^{189}Ir	McM		78Lo07	
^{190}Os(n,γ)^{191}Os	5758.2	2.	5758.73	0.11	0.3	U					77Be15	
	5759.1	1.5			−0.2	U					77Ca19	
	5758.67	0.16			0.4	–			ILn		91Bo35	Z
	5758.81	0.15			−0.5	–			Bdn		06Fi.A	
ave.	5758.74	0.11			−0.1	1	100	99 ^{191}Os			average	
^{190}Os(α,t)^{191}Ir	−14569	15	−14523.9	1.1	3.0	B			McM		71Pr13	
^{191}Ir(d,t)^{190}Ir	−1769.3	0.4				2					95Ga04	*
^{191}Os(β^-)^{191}Ir	313.3	3.	313.6	1.1	0.1	–					48Sa18	*
	314.3	2.			−0.4	–					51Ko17	*
	316.3	3.			−0.9	–					58Na15	*
	314.3	3.			−0.2	–					60Fe03	*
	318.3	3.			−1.6	–					63Pl01	*
ave.	315.1	1.2			−1.3	1	90	90 ^{191}Ir			average	
^{191}Pt(ε)^{191}Ir	1000	15	1011	4	0.7	U					70Sc20	*
^{191}Au(β^+)^{191}Pt	1830	50	1900	6	1.4	U					76Vi.A	*
^{191}Hg(β^+)^{191}Au	3430	200	3206	23	−1.1	U					75Un.A	*
	3180	70			0.4	1	11	10 ^{191}Hg			76Vi.A	*
^{191}Tl^m(β^+)^{191}Hg	5178	200	4606	23	−2.9	C					75Un.A	*
*^{191}Au−u	$M-A$=–33568(28) keV for mixture gs+m at 266.2 keV										Nub16b	**
*^{191}Hg−u	$M-A$=–30499(28) keV for mixture gs+m at 128(22) keV										Nub16b	**
*^{191}Hg−^{208}Pb$_{.918}$	Original error (19keV) increased by 20 due to isomer+ground state lines in trap										01Sc41	**
*^{191}Tl−u	$M-A$=–26250(90) keV for mixture gs+m at 297(7) keV										Nub16b	**
*^{191}Tl−u	$M-A$=–25964(28) keV for ^{191}Tl^m at 297(7) keV										Nub16b	**
*^{191}Pb−u	Possible isomeric contamination										00Ra23	**
*^{191}Pb−u	$M-A$=–20226(28) keV for mixture gs+m at 10(50) keV										Nub16b	**
*^{191}Bi^m(α)^{187}Tl	average 6882(20) 6885(15)										13Uu01	**
*^{191}Po(α)^{187}Pb	F : probably mainly ^{189}Bi^m										97Ba25	**
*^{191}Po(α)^{187}Pb	E_α=7334(10), 6960(15) to ground state, 375(1) superseded by 02An19										99An10	**
*^{191}Po^m(α)^{187}Pb^m	E_α=7376(5), 6888(5) to ^{187}Pb^m and 494(1) above										02An19	**
*^{191}Po^m(α)^{187}Pb^m	E_α=7378(10), 6888(15) superseded by 02An19										99An10	**
*^{191}Ir(d,t)^{190}Ir	Feeds ground state										96Ga30	**
*^{191}Os(β^-)^{191}Ir	E_{β^-}=142(3) 143(2) 145(3) 143(3) 147(3) respectively, to 11/2$^-$ level at 171.29 keV										Ens07a	**
*^{191}Pt(ε)^{191}Ir	pL=0.73(0.12) to (1/2$^+$,3/2,5/2$^+$) at 935.46 keV , no K capture										Ens07a	**
*^{191}Au(β^+)^{191}Pt	E_{β^+}=850(30) to ground state and (5/2$^-$,7/2$^-$) level at 9.547 keV; also E_{β^+}=470(60) to										Ens07a	**
*	(3/2$^-$,5/2$^-$) level at 277.88 and 5/2$^-$ level at 293.458 keV										Ens07a	**
*^{191}Hg(β^+)^{191}Au	Reassigned by evaluator to mainly ground state, partly 3/2$^+$ 207.9 level										Ens07a	**
*^{191}Tl^m(β^+)^{191}Hg	E_{β^+}=3820(200) to level(5/2$^-$) at 336.32 keV										Ens07a	**
^{192}Re−u	−33912	76				2			GS3	1.0	13Sh30	
^{192}Hg−u	−34440	104	−34366	17	0.7	U			GS1	1.0	00Ra23	
	−34342	30			−0.8	R			GS2	1.0	05Li24	
^{192}Hg−^{208}Pb$_{.923}$	−12826	20	−12816	17	0.5	2			MA6	1.0	01Sc41	
^{192}Tl−u	−27804	125	−27780	30	0.2	U			GS1	1.0	00Ra23	*
	−27775	34				2			GS2	1.0	05Li24	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{192}Pb−u	−24280	104	−24215	14	0.6	U			GS1	1.0	00Ra23	
	−24185	30			−1.0	R			GS2	1.0	05Li24	
^{192}Bi−u	−14783	128	−14530	30	2.0	U			GS1	1.0	00Ra23	*
	−14489	60			−0.7	R			GS2	1.0	05Li24	*
^{192}Bi^m−^{133}Cs$_{1.444}$	122143.5	9.6				2			MA8	1.0	08We02	
^{192}Os O$_2$−^{189}Os ^{35}Cl	24301	6	24309.4	2.4	0.6	U			H22	2.5	70Mc03	
^{192}Os ^{35}Cl−^{190}Os ^{37}Cl	5984	3	5983.5	2.4	−0.1	U			H22	2.5	70Mc03	
^{192}Pb(α)^{188}Hg	5221.0	5.				2			ORa		79To06	Z
^{192}Bi(α)^{188}Tl	6376.0	5.	6377	4	0.2	3			Lvn		91Va04	*
	6377.9	5.			−0.2	3			Jya		13Ny01	*
^{192}Bi^m(α)^{188}Tl^m	6481.4	5.	6485	3	0.7	3					67Tr06	*
	6491.6	10.			−0.7	3			Ora		74Le02	*
	6483.3	5.			0.3	3			Lvn		91Va04	*
	6494	8			−1.1	3			Jya		03Ke04	*
^{192}Po(α)^{188}Pb	7322.8	20.	7320	3	−0.2	U					81Le23	
	7319.8	7.			0.0	3			Lvn		93Wa04	
	7364.6	35.			−1.3	U			RIa		95Mo14	
	7349.4	30.			−1.0	U			RIa		97Pu01	
	7319.8	11.			0.0	o			Jya		01Ke06	
	7318.8	8.			0.1	3			Jya		03Ke04	
	7319.8	4.			0.0	3			Anv		03Va16	
^{192}At(α)^{188}Bi	7695.6	25.				3			Anv		06An04	
^{192}At(α)^{188}Bi^m	7629.3	15.				4			Anv		06An04	*
^{192}At^m(α)^{188}Bi	7695.6	25.				3			Anv		06An04	
^{192}At^m(α)^{188}Bi^n	7542.4	15.				4			Anv		06An04	*
^{192}Os(p,t)^{190}Os	−4835	5	−4835.3	2.2	−0.1	–			Min		73Oo01	
	−4837	4			0.4	–			McM		75Th04	
ave.	−4836	3			0.3	1	51	51 ^{192}Os			average	
^{192}Pt(p,t)^{190}Pt	−6629	7	−6642.8	2.5	−2.0	1	13	13 ^{192}Pt	Ors		80Ka19	
^{192}Os(t,α)^{191}Re	10993	10				2			McM		76Hi08	
^{192}Os(d,t)^{191}Os	−1265	15	−1301.1	2.2	−2.4	U			Tal		77Be15	
^{191}Ir(n,γ)^{192}Ir	6197.7	0.3	6198.12	0.11	1.4	o			ILn		87Ke.A	
	6198.1	0.2			0.1	–			ILn		91Ke10	
	6198.14	0.13			−0.1	–			Bdn		06Fi.A	
ave.	6198.13	0.11			−0.1	1	100	91 ^{192}Ir			average	
^{192}Pt(p,d)^{191}Pt	−6448	6	−6437.0	2.9	1.8	1	23	26 ^{191}Pt	Ors		80Ka19	
^{192}Pt(p,d)^{191}Pt−^{194}Pt()^{193}Pt	−307	3	−309.8	2.7	−0.9	1	81	74 ^{191}Pt	Ors		78Be09	
^{192}Ir(β^+)^{192}Os	1468	10	1046.6	2.4	−42.1	B					60An04	*
^{192}Ir(β^-)^{192}Pt	1456.7	4.	1452.9	2.3	−1.0	–					65Jo04	*
	1453.3	3.			−0.1	–					77Ra17	*
ave.	1454.5	2.4			−0.7	1	90	87 ^{192}Pt			average	
^{192}Au(β^+)^{192}Pt	3514	20	3516	16	0.1	2					66Ny01	
	3520	25			−0.1	2					74Di.A	
^{192}Hg(β^+)^{192}Au	1745	30	761	22	−32.8	F					74Di.A	*
^{192}Tl(β^+)^{192}Hg	6380	200	6140	40	−1.2	U					75Un.A	*
*^{192}Tl−u	$M-A$=–25830(100) keV for mixture gs+m at 138(45) keV										Nub16b	**
*^{192}Bi−u	$M-A$=–13700(110) keV for mixture gs+m at 140(30) keV										Nub16b	**
*^{192}Bi−u	$M-A$=–13426(31) keV for mixture gs+m at 140(30) keV										Nub16b	**
*^{192}Bi(α)^{188}Tl	E_α=6245(5), 6060(5) to ground state, 184.6 level										91Va04	**
*^{192}Bi(α)^{188}Tl	E_α=6064(5) to 184.6 level										Ens024	**
*^{192}Bi^m(α)^{188}Tl^m	E_α=6050(5) to (10$^-$) level, 302.4 above ^{188}Tl^m										91Va04	**
*^{192}Bi^m(α)^{188}Tl^m	E_α=6060(10) to (10$^-$) level, 302.4 above ^{188}Tl^m										91Va04	**
*^{192}Bi^m(α)^{188}Tl^m	E_α=6348(5), 6253(5), 6081(10), 6052(5) to ^{188}Tl^m and										91Va04	**
*	to levels 103.2, 268.8, 302.4 above ^{188}Tl^m										91Va04	**
*^{192}Bi^m(α)^{188}Tl^m	E_α=6062(5) to level 302.4 above ^{188}Tl^m										03Ke04	**
*^{192}At(α)^{188}Bi^m	Also E_α=7435(15) keV followed by 36 keV γ										06An04	**
*^{192}At^m(α)^{188}Bi^n	Also E_α=7224(15), 7195(15) keV followed by 165 and 188 keV γ										06An04	**
*^{192}Ir(β^+)^{192}Os	E_{β^+}=240(10) to 2$^+$ level at 205.7944 keV										Ens129	**
*^{192}Ir(β^-)^{192}Pt	E_{β^-}=672(4) 666(2) respectively, to 4$^+$ level at 784.5759, and other E_{β^-}										Ens129	**
*^{192}Hg(β^+)^{192}Au	F : most probably due to backscattering of 2.5 MeV Au positons										AHW	**
*^{192}Tl(β^+)^{192}Hg	E_{β^+}=4940(200) to 2$^+$ level at 422.79 keV										Ens129	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{193}Re−u		−32455	42				2			GS3	1.0	13Sh30	
^{193}Au−u		−35736	96	−35862	9	−1.3	U			GS2	1.0	05Li24	*
^{193}Hg−u		−33288	53	−33347	17	−1.1	U			GS2	1.0	05Li24	*
^{193}Hg−^{208}Pb$_{.928}$		−11673	29	−11680	17	−0.2	1	33	33 ^{193}Hg	MA6	1.0	01Sc41	*
^{193}Tl−u		−29690	158	−29498	7	1.2	U			GS1	1.0	00Ra23	*
		−29329	120			−1.4	U			GS2	1.0	05Li24	*
^{193}Tl−^{133}Cs$_{1.451}$		107691.2	7.2				2			MA8	1.0	14Bo26	*
^{193}Pb−u		−23865	125	−23830	50	0.3	o			GS1	1.0	00Ra23	*
		−23846	66			0.3	2			GS2	1.0	05Li24	*
^{193}Bi−u		−16980	110	−17053	8	−0.7	U			GS1	1.0	00Ra23	
		−17025	30			−0.9	R			GS2	1.0	05Li24	
^{193}Bi−^{133}Cs$_{1.451}$		120147	11	120136	8	−1.0	–			MA8	1.0	08We02	
	ave.	120149	10			−1.2	1	62	62 ^{193}Bi			average	
^{193}Bi(α)^{189}Tl		6304.5	5.	6307	5	0.4	1	92	70 ^{189}Tl	Lvn		85Co06	Z
^{193}Bi(α)^{189}Tl^m		6017.8	5.	6021	3	0.7	2					67Tr06	Z
		6024.6	10.			−0.3	2			Ora		74Le02	Z
		6023.7	5.			−0.5	2			Lvn		85Co06	Z
^{193}Bi^m(α)^{189}Tl		6617.4	10.	6611	4	−0.6	–			Ora		74Le02	
		6611.9	5.			−0.1	–			Lvn		85Co06	Z
		6618.4	14.			−0.5	U			Jya		05Uu02	
	ave.	6613	5			−0.4	1	94	64 ^{193}Bi^m			average	
^{193}Po(α)^{189}Pb		7128.1	20.	7094	4	−1.7	U					67Si09	
		7087.1	20.			0.3	U			Ora		77De32	
		7096.4	5.			−0.5	2			Lvn		93Wa04	
		7093.3	30.			0.0	U			RIa		95Mo14	
		7089.2	6.			0.8	2			Jya		96En02	
		7096.4	10.			−0.3	2			Anv		02Va13	
^{193}Po^m(α)^{189}Pb^m		7143.3	10.	7154	3	1.0	2			Ora		77De32	
		7148.4	20.			0.3	U					81Le23	
		7152.5	5.			0.2	2			Lvn		93Wa04	
		7139.2	30.			0.5	U			RIa		95Mo14	
		7159.7	6.			−1.0	2			Jya		96En02	
		7152.5	10.			0.1	2			Anv		02Va13	
^{193}At(α)^{189}Bi^m		7388.5	5.				7			Jya		03Ke08	
^{193}At^m(α)^{189}Bi		7556.9	20.	7580	5	1.1	o			Jya		95Le15	
		7490	6			15.1	C			Jya		98En.A	
		7580.4	5.				7			Jya		03Ke08	*
^{193}At^n(α)^{189}Bi		7614.3	5.				7			Jya		03Ke08	*
^{193}Rn(α)^{189}Po		8040.0	12.				4			Anv		06An36	*
^{193}Ir(p,t)^{191}Ir		−5490	15	−5488.32	0.23	0.1	U			McM		78Lo07	
^{192}Os(n,γ)^{193}Os		5583.5	2.	5583.42	0.20	0.0	U					78Be22	
		5583.40	0.20			0.1	1	100	81 ^{193}Os			79Wa04	
		5584.01	0.16			−3.7	C			Bdn		06Fi.A	
^{192}Os(α,t)^{193}Ir		−13923	15	−13870.8	2.4	3.5	B			McM		71Pr13	
^{193}Ir(t,α)^{192}Os−^{191}Ir()^{190}Os		−661	4	−653.1	2.2	2.0	1	31	31 ^{192}Os	LAl		82La22	
^{192}Ir(n,γ)^{193}Ir		7772.0	0.2	7771.99	0.20	0.0	1	100	94 ^{193}Ir			85Co.B	Z
^{193}Ir(γ,n)^{192}Ir		−7790	50	−7771.99	0.20	0.4	U			Phi		60Ge01	
^{192}Pt(n,γ)^{193}Pt		6247	3	6262.5	2.3	5.2	B					68Sa13	
^{193}Os(β^-)^{193}Ir		1132	5	1141.9	2.4	2.0	1	23	19 ^{193}Os			58Na15	
^{193}Pt(ε)^{193}Ir		56.6	0.3	56.63	0.30	0.1	1	100	96 ^{193}Pt			83Jo04	
^{193}Au(β^+)^{193}Pt		1355	20	1075	9	−14.0	B					76Di15	*
^{193}Hg(β^+)^{193}Au		2341	30	2343	14	0.1	–					58Br88	*
		2340	20			0.1	–					76Di15	*
	ave.	2340	17			0.1	1	75	67 ^{193}Hg			average	

*^{193}Au−u	$M-A$=–33143(29) keV for mixture gs+m at 290.19 keV	Nub16c	**
*^{193}Hg−u	$M-A$=–30937(28) keV for mixture gs+m at 140.76 keV	Nub16c	**
*^{193}Hg−^{208}Pb$_{.928}$	Original error (18keV) increased by 20 due to isomer+ground state lines in trap	01Sc41	**
*^{193}Tl−u	$M-A$=–27470(100) keV for mixture gs+m at 372(4) keV	Nub16b	**
*^{193}Tl−u	$M-A$=–27134(28) keV for mixture gs+m at 372(4) keV	Nub16b	**
*^{193}Tl−^{133}Cs$_{1.451}$	D_M=108091.5(5.6) μu for ^{193}Tl^m at 372(4) keV; $M-A$=–27104.3(5.2) keV	Nub16b	**
*^{193}Pb−u	$M-A$=–22160(100) keV for mixture gs+m at 130#80 keV	Nub16b	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
$*{}^{193}$Pb−u	$M-A$=–22147(28) keV for mixture gs+m at 130#80 keV										Nub16b	**
$*{}^{193}$At^m(α)^{189}Bi	E_α=7423(5), 7325(5) to ground state and 99.6(5) level										03Ke08	**
$*{}^{193}$At^n(α)^{189}Bi	E_α=7106(5) to 357.6(0.5) ^{189}Bi^n level										03Ke08	**
$*{}^{193}$Rn(α)^{189}Po	E_α=7875(20), 7685(15) to ground state and 194 level										06An36	**
$*{}^{193}$Au(β^+)^{193}Pt	$E_{\beta+}$=153(15) to 3/2$^-$ level at 187.81 keV, and other $E_{\beta+}$										Ens062	**
$*{}^{193}$Hg(β^+)^{193}Au	$E_{\beta-}$=1170(30) from ^{193}Hg^m at 140.76 to 11/2$^-$ level at 290.19 keV										Ens062	**
$*{}^{193}$Hg(β^+)^{193}Au	$E_{\beta+}$=1287(15) reinterpreted by AHW as going to ground state and 1/2$^+$ level at 38.22keV										Ens062	**
^{194}Pt−u	−37315.72	0.67	−37316.5	0.5	−1.1	1	63	63 ^{194}Pt	MS1	1.0	16Ei01	
^{194}Au−u	−34768	114	−34580.9	2.3	1.6	U			GS2	1.0	05Li24	*
^{194}Hg−u	−34527	30	−34551	3	−0.8	U			GS2	1.0	05Li24	
^{194}Hg−^{133}Cs$_{1.459}$	103394.7	3.1				2			MA8	1.0	10El11	
^{194}Hg−^{208}Pb$_{.933}$	−12766	19	−12767	3	−0.1	U			MA6	1.0	01Sc41	
^{194}Tl−u	−28803	135	−28919	15	−0.9	o			GS1	1.0	00Ra23	*
	−28778	87			−1.6	U			GS2	1.0	05Li24	*
^{194}Tl−^{133}Cs$_{1.459}$	109027	15				2			MA8	1.0	14Bo26	
^{194}Tl^m−^{133}Cs$_{1.459}$	109306.4	4.1	109306	4	0.0	o			MA8	1.0	14Bo26	
	109306.4	4.1				2			MA8	1.0	13St25	
^{194}Pb−u	−25980	104	−25988	19	−0.1	U			GS1	1.0	00Ra23	
^{194}Bi−u	−17162	128	−17208	7	−0.4	o			GS1	1.0	00Ra23	*
	−17178	76			−0.4	U			GS2	1.0	05Li24	*
^{194}Bi^m−^{133}Cs$_{1.459}$	120900	54				2			MA8	1.0	08We02	*
^{190}Os−^{194}Pt$_{.979}$	−5022.45	0.68	−5021.7	0.5	1.1	1	57	52 ^{190}Os	MS1	1.0	16Ei01	
^{190}Pt−^{194}Pt$_{.979}$	−3516.95	0.68	−3517.3	0.5	−0.5	1	58	53 ^{190}Pt	MS1	1.0	16Ei01	
^{194}Pt−^{197}Au$_{.985}$	−4396.4	3.2	−4388.0	0.6	2.6	U			CP1	1.0	05Sh52	
^{194}Au−^{197}Au$_{.985}$	−1652.5	2.2				2			MA8	1.0	10El11	
^{194}Pb(α)^{190}Hg	4737.9	20.	4738	17	0.0	1	67	40 ^{194}Pb	ORa		87El09	
^{194}Bi(α)^{190}Tl	5918.3	5.				4			Lvn		91Va04	*
^{194}Bi^n(α)^{190}Tl^m	6015.7	5.				3			Lvn		91Va04	*
^{194}Po(α)^{190}Pb	6991.5	10.	6987	3	−0.4	3					67Si09	Z
	6990.9	7.			−0.5	3					67Tr06	Z
	6984.4	5.			0.5	3			Ora		77De32	Z
	6990.0	5.			−0.6	o			Lvn		85Va03	Z
	6986.3	6.			0.1	3			Lvn		93Wa04	
	6993.4	4.			−1.6	o			Jya		96En02	
	6987.3	14.			0.0	3			Jya		05Uu02	
^{194}At(α)^{190}Bi	7412.5	20.	7454	11	2.1	o			Jya		95Le15	*
	7462.5	15.			−0.5	4			Anv		09An11	*
	7446.5	15.			0.5	4			Jya		13Ny01	*
^{194}At^m(α)^{190}Bi^m	7362.1	20.	7309	5	−2.6	o					80Ya.A	
	7351.9	20.			−2.1	U					84Ya.A	
	7341.7	20.			−1.6	o			Jya		95Le15	
	7329.4	15.3			−1.3	5			Anv		09An11	
	7306.9	5.1			0.4	5			Jya		13Ny01	
^{194}Rn(α)^{190}Po	7862.5	10.				4			Anv		06An36	
^{193}Ir(n,γ)^{194}Ir	6067.0	0.4	6066.79	0.11	−0.5	2					82Ra.A	
	6066.9	0.2			−0.6	2					98Ba85	
	6066.71	0.14			0.6	2			Bdn		06Fi.A	
^{194}Pt(t,α)^{193}Ir	12286	20	12301.1	1.3	0.8	U			Tal		78Ya07	
^{194}Pt(d,t)^{193}Pt	−2126	20	−2094.6	1.3	1.6	U			Pit		64Co11	
^{194}Pt(p,d)^{193}Pt−^{196}Pt()^{195}Pt	−445	3	−429.8	1.3	5.1	B			Ors		78Be09	
^{194}Os(β^-)^{194}Ir	96.6	2.				3					64Wi07	*
^{194}Ir(β^-)^{194}Pt	2254	4	2228.4	1.3	−6.4	B					76Ra33	
^{194}Ir^n(β^-)^{194}Pt	2600	70				2					68Su02	*
^{194}Au(β^+)^{194}Pt	2465	20	2548.1	2.1	4.2	B					56Th11	
	2509	15			2.6	U					60Ba17	
	2485	30			2.1	U					70Ag03	*

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{194}Hg(ε)^{194}Au		40	20	28	4	−0.6	U					81Ho18	
*^{194}Au−u	$M-A$=–32192(29) keV for mixture gs+m+n at 107.4 and 475.8 keV											Nub16b	**
*^{194}Tl−u	$M-A$=–26700(100) keV for mixture gs+m at 260(14) keV											Nub16b	**
*^{194}Tl−u	$M-A$=–26677(28) keV for mixture gs+m at 260(14) keV											Nub16b	**
*^{194}Bi−u	$M-A$=–15870(100) keV for mixture gs+m+n at 150(50) and 180(10) keV											Nub16b	**
*^{194}Bi−u	$M-A$=–15885(28) keV for mixture gs+m+n at 150(50) and 180(10) keV											Nub16b	**
*^{194}Bi^m−^{133}Cs$_{1.459}$	Original error 16 μu increased to include possible 3$^+$ and 10$^-$ contam.											08We02	**
*^{194}Bi(α)^{190}Tl	E_α=5799(5), 5645(5) to ground state, 151.3 level											91Va04	**
*^{194}Bi^n(α)^{190}Tl^m	E_α=5892(5), 5781(5) to levels 0, 112.2 above ^{190}Tl^m											91Va04	**
*^{194}At(α)^{190}Bi	E_α=7140(20) to 121(15)											09An11	**
*^{194}At(α)^{190}Bi	E_α=7190(15) to 121(15); further E_α: 7310(15), 7266(15), 7145(15) keV											09An11	**
*^{194}At(α)^{190}Bi	E_α=7174(8) to 121(15)											13Ny01	**
*^{194}Os(β^-)^{194}Ir	E_{β^-}=54.5(2.0) to 0$^-$ level at 43.119 keV, and other E_{β^-}											Ens066	**
*^{194}Ir^n(β^-)^{194}Pt	E_{β^-} <250 to 10$^+$ level at 2438.41 keV											Ens066	**
*^{194}Au(β^+)^{194}Pt	E_{β^+}=1230(30) to 2$^+$ level at 328.464 keV, and other E$^+$											Ens066	**
^{195}Os−u		−31682	60				2			GS3	1.0	13Sh30	
^{195}Hg−u		−33283	62	−33294	25	−0.2	U			GS2	1.0	05Li24	*
^{195}Hg−^{208}Pb$_{.938}$		−11381	28	−11394	25	−0.5	1	79	79 ^{195}Hg	MA6	1.0	01Sc41	*
^{195}Tl−u		−30320	200	−30226	12	0.5	U			GS1	1.0	00Ra23	*
		−30209	40			−0.4	–			GS2	1.0	05Li24	
		−30264	33			1.2	–			GS2	1.0	05Li24	*
	ave.	−30242	25			0.6	1	22	22 ^{195}Tl			average	
^{195}Tl−^{133}Cs$_{1.466}$		108375	27	108382	12	0.2	–			MA8	1.0	14Bo26	
		108472	79			−1.1	–			MA8	1.0	14Bo26	*
	ave.	108385	26			−0.1	1	22	22 ^{195}Tl			average	
^{195}Pb−u		−25423	150	−25451	19	−0.2	o			GS1	1.0	00Ra23	*
		−25461	70			0.1	–			GS2	1.0	05Li24	*
	ave.	−25457	25			0.2	1	59	59 ^{195}Pb			average	
^{195}Bi−u		−19320	100	−19351	6	−0.3	U			GS1	1.0	00Ra23	
		−19537	128			1.5	U			GS2	1.0	05Li24	*
^{195}Bi−^{133}Cs$_{1.466}$		119258.2	6.0	119256	6	−0.3	1	89	89 ^{195}Bi	MA8	1.0	08We02	
^{195}Pt−^{197}Au$_{.990}$		−2119.9	3.2	−2110.1	0.6	3.1	B			CP1	1.0	05Sh52	
^{195}Bi(α)^{191}Tl		5832.5	5.				2			Lvn		85Co06	Z
^{195}Bi(α)^{191}Tl^m		5542.9	10.	5535	5	−0.8	2			Ora		74Le02	Z
		5533.3	5.			0.4	2			Lvn		85Co06	Z
^{195}Bi^m(α)^{191}Tl		6228.1	5.	6232	3	0.7	3					67Tr06	Z
		6238.4	10.			−0.6	3			Ora		74Le02	Z
		6233.7	5.			−0.4	3			Lvn		85Co06	Z
^{195}Po(α)^{191}Pb		6763.1	8.	6749.9	2.8	−1.6	3					67Si09	Z
		6747.4	5.			0.5	3					67Tr06	Z
		6744.6	5.			1.0	3			Lvn		93Wa04	
		6752.8	14.			−0.2	o			Jya		96Le09	
		6744.6	10.			0.5	3			Anv		02Va13	
		6755.9	6.			−1.0	3			Jya		05Uu02	
^{195}Po^m(α)^{191}Pb^m		6850.8	10.	6840.6	2.9	−1.0	3					67Si09	
		6839.4	5.			0.2	3					67Tr06	Z
		6839.6	5.			0.2	3			Lvn		93Wa04	
		6852.8	10.			−1.2	o			Jya		96Le09	
		6839.6	10.			0.1	3			Anv		02Va13	
		6840.6	6.			0.0	3			Jya		05Uu02	
^{195}At(α)^{191}Bi^m		7095.8	20.	7102	4	0.3	U			Jya		95Le15	
		7105	20			−0.2	U			RIa		99Ta20	
		7098.9	3.			1.0	o			Jya		03Ke04	*
		7113.2	10.			−1.1	o			Jya		13Uu01	
		7101.9	4.				3			Jya		13Ny01	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.		Lab	F	Reference	
^{195}At^m(α)^{191}Bi		7340.9	30.	7373	4	1.1	o				Jya		83Le.A	*
		7371.5	30.			0.1	o				Jya		95Le.A	
		7403	30			−1.0	U				RIa		99Ta20	*
		7372.5	4.0			0.2	o				Jya		03Ke04	*
		7373.5	4.0				2				Jya		13Ny01	*
^{195}Rn(α)^{191}Po		7694.1	11.				2				Jya		01Ke06	
^{195}Rn^m(α)^{191}Po^m		7713.5	11.				3				Jya		01Ke06	
^{194}Ir(n,γ)^{195}Ir		7231.92	0.11	7231.86	0.06	−0.5	o				ILn		87Ci.A	
		7231.86	0.06				3				ILn		87Co08	Z
^{194}Pt(n,γ)^{195}Pt		6105.06	0.12	6105.10	0.12	0.3	1	99	72	^{195}Pt	ILn		81Ho.B	Z
		6109.17	0.13			−31.3	F				Bdn		06Fi.A	
^{195}Pt(γ,n)^{194}Pt		−6205	44	−6105.10	0.12	2.3	U				Phi		60Ge01	
^{194}Pt(d,p)^{195}Pt		3908	20	3880.53	0.12	−1.4	U				Pit		64Co11	
^{195}Pt(d,t)^{194}Pt		140	20	152.13	0.12	0.6	U				Pit		64Co11	
^{195}Os(β^-)^{195}Ir		2000	500	2180	60	0.4	U						57Ba08	
^{195}Ir(β^-)^{195}Pt		1116	20	1101.6	1.3	−0.7	U						73Ja10	*
^{195}Au(ε)^{195}Pt		226.8	1.0	226.8	1.0	0.0	1	100	100	^{195}Au			Averag	*
^{195}Hg(β^+)^{195}Au		1510	50	1554	23	0.9	1	21	21	^{195}Hg			71Fr03	*
^{195}Tl(β^+)^{195}Hg		3000	300	2858	26	−0.5	U						78Go15	*
^{195}Pb^m(IT)^{195}Pb		202.9	0.7	202.9	0.7	0.0	1	100	59	^{195}Pb^m	Oak		91Gr12	
^{195}Bi(β^+)^{195}Pb		4850	550	5682	19	1.5	U				Oak		91Gr12	
*^{195}Hg−u		$M-A$=–30914(28) keV for mixture gs+m at 176.07 keV											Nub16b	**
*^{195}Hg−^{208}Pb$_{.938}$		Corrected 40(20) keV for isomeric mixture R=0.3(0.2) E=176.07 keV											Nub16b	**
*^{195}Tl−u		$M-A$=–28000(100) keV for mixture gs+m at 482.63 keV											Nub16b	**
*^{195}Tl−u		$M-A$=–27708(31) keV for ^{195}Tl^m at 482.63 keV											Nub16b	**
*^{195}Tl−^{133}Cs$_{1.466}$		D_M=108990(79) μu for ^{195}Tl^m at 482.63 keV; $M-A$=–27589(73) keV											Nub16b	**
*^{195}Pb−u		$M-A$=–23580(100) keV for mixture gs+m at 202.9 keV											Nub16b	**
*^{195}Pb−u		$M-A$=–23615(28) keV for mixture gs+m at 202.9 keV											Nub16b	**
*^{195}Bi−u		$M-A$=–17999(28) keV for mixture gs+m at 399(6) keV											Nub16b	**
*^{195}At(α)^{191}Bi^m		Correlated with E_α=6313 of ^{191}Bi^m											03Ke04	**
*^{195}At^m(α)^{191}Bi		E_α=7190(30) to 148.7(0.5) level											03Ke04	**
*		correlated with α of 12 s ^{191}Bi ground state											95Le15	**
*^{195}At^m(α)^{191}Bi		E_α=7105(30) to 148.7(0.5) level											03Ke04	**
*^{195}At^m(α)^{191}Bi		E_α=7221(4) and 7075(4) to 148.7(0.5) level											03Ke04	**
*^{195}At^m(α)^{191}Bi		E_α=7222(4) and 7076(5) to 148.7(0.5) level											13Ny01	**
*^{195}Ir(β^-)^{195}Pt		E_{β^-}=980(30) to 3/2$^-$ level at 98.880 keV and 5/2$^-$ level at 129.772 keV,											Ens148	**
*		and E_{β^-}=410(20) from ^{195}Ir^m at 100(5) to 9/2$^-$ at 814.50, and other E_{β^-}											Ens148	**
*^{195}Au(ε)^{195}Pt		Average pK=0.179(0.006) to 5/2$^-$ level at 129.772 from the following references:											Ens148	**
*		pK=0.195(0.015) to 129.78 level											65De20	**
*		pK=0.166(0.020) to 129.78 level											68Ja11	**
*		pK=0.160(0.017) to 129.78 level											73Go05	**
*		pK=0.183(0.009) to 129.78 level											80Sa11	**
*		pK=0.176(0.012) to 129.78 level											82Be.A	**
*^{195}Hg(β^+)^{195}Au		Assuming 511 γ is annihilation of β^+ to ground state and 1/2$^+$ level at 61.434											Ens148	**
*^{195}Tl(β^+)^{195}Hg		K/β^+=6(1) to ground state and 3/2$^-$ level at 37.083 keV											Ens148	**
^{196}Hg−^{208}Pb$_{.942}$		−12178	20	−12173	3	0.3	U				MA6	1.0	01Sc41	
^{196}Tl−u		−29188	126	−29519	13	−2.6	U				GS2	1.0	05Li24	*
^{196}Tl−^{133}Cs$_{1.474}$		109845	13				2				MA8	1.0	08We02	*
^{196}Pb−^{208}Pb$_{.942}$		−5228	22	−5219	8	0.4	–				MA6	1.0	01Sc41	
	ave.	−5231	18			0.7	1	21	21	^{196}Pb			average	
^{196}Pb−u		−27200	104	−27213	8	−0.1	U				GS1	1.0	00Ra23	
		−27232	30			0.6	R				GS2	1.0	05Li24	
^{196}Bi−u		−19309	137	−19333	26	−0.2	o				GS1	1.0	00Ra23	*
		−19325	30			−0.3	2				GS2	1.0	05Li24	
		−19361	54			0.5	2				MA8	1.0	08We02	*

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{196}Pt$-^{197}$Au$_{.995}$		−1781.1	3.0	−1782.6	0.6	−0.5	U			CP1	1.0	05Sh52	
^{196}Bi(α)^{192}Tl^p		5260.6	5.				3			Lvn		91Va04	
^{196}Po(α)^{192}Pb		6662.3	8.2	6658.1	2.4	−0.5	3					67Si09	Z
		6653.7	5.			0.8	3					67Tr06	Z
		6658.4	8.			0.0	3					71Ho01	Z
		6656.7	5.			0.3	o			Lvn		85Va03	Z
		6656.7	5.			0.3	3			Lvn		93Wa04	
		6653.1	18.			0.3	o			Ara		95Le04	
		6657.1	10.			0.1	o			Jya		96Le09	
		6654.0	5.0			0.8	3			Ara		96Ta18	∗
		6669.4	6.			−1.8	3			Jya		05Uu02	
		6658.2	25.			0.0	U			Anv		10He25	
^{196}At(α)^{192}Bi		7202.3	7.	7195	3	−1.0	4					67Tr06	
		7187.0	25.			0.3	U			Jya		95Le15	
		7200.2	30.			−0.2	U			RIa		95Mo14	
		7191.0	7.			0.5	o			Jya		96En01	
		7195.1	5.			0.0	o			Jya		00Sm06	
		7202.3	12.			−0.6	o			Anv		05De01	
		7195.1	12.			0.0	o			Jya		13Uu01	∗
		7194.1	5.			0.2	4			Jya		13Ny01	
		7192.1	5.			0.6	4			Anv		14Ka23	
^{196}At^m(α)^{192}Bi^m		7023.6	15.				3			Jya		96En01	∗
^{196}Rn(α)^{192}Po		7583.1	35.	7617	9	0.9	o			RIa		95Mo14	
		7648.4	30.			−1.1	U			RIa		97Pu01	
		7616.7	9.				4			Jya		01Ke06	
^{196}Pt(t,α)^{195}Ir		11565	20	11572.6	1.3	0.4	U			Tal		78Ya07	
		11545	20			1.4	U			LAl		81Fl.A	
^{195}Pt(n,γ)^{196}Pt		7921.96	0.20	7921.98	0.13	0.1	–			ILn		81Ho.B	Z
		7921.92	0.17			0.3	–			Bdn		06Fi.A	
^{196}Pt(γ,n)^{195}Pt		−8290	140	−7921.98	0.13	2.6	U			Phi		60Ge01	
^{195}Pt(d,p)^{196}Pt		5712	25	5697.41	0.13	−0.6	U			Pit		64Co11	
^{196}Pt(d,t)^{195}Pt		−1686	20	−1664.75	0.13	1.1	U			Pit		64Co11	
^{195}Pt(n,γ)^{196}Pt	ave.	7921.94	0.13	7921.98	0.13	0.3	1	99	71 ^{196}Pt			average	
^{196}Os(β^-)^{196}Ir		900	40	1160	60	6.5	B					77Ha32	∗
^{196}Ir(β^-)^{196}Pt		3150	60	3210	40	1.0	2					66Vo05	∗
		3250	50			−0.8	2					67Mo10	
^{196}Ir^m(β^-)^{196}Pt		3418	20				2					65Bi04	∗
		3630	100	3418	20	−2.1	U					68Ja06	∗
^{196}Au(β^+)^{196}Pt		1498	7	1505.8	3.0	1.1	1	18	18 ^{196}Au			63Ik01	∗
^{196}Au(ε)^{196}Pt		1490	10			1.6	U					62Wa16	∗
^{196}Au(β^-)^{196}Hg		685	4	687	3	0.6	1	61	31 ^{196}Au			62Li03	∗
∗^{196}Tl−u		$M-A$=–26991(28) keV for mixture gs+m at 394.2 keV										Nub16b	∗∗
∗^{196}Tl−^{133}Cs$_{1.474}$		Q =110268(13) μu $M-A$=–27103(12) keV for ^{196}Tl^m at 394.2 keV										Nub16b	∗∗
∗^{196}Bi−u		$M-A$=–17850(100) keV for mixture gs+n at 272(3) keV										Nub16b	∗∗
∗^{196}Bi−u		Q =120182(15) μu for ^{196}Bi$^m-^{133}$Cs$_{1.474}$, $M-A$(^{196}Bi^m)=–17868(14) keV at										08We02	∗∗
∗		167(3) keV; error increased to include possible 3$^+$ and 10$^-$ contam.										08We02	∗∗
∗^{196}Po(α)^{192}Pb		Including systematic uncertainty 5 keV										96Ta18	∗∗
∗^{196}At(α)^{192}Bi		Same group, but much less events than in 00Sm06										WgM151	∗∗
∗^{196}At^m(α)^{192}Bi^m		Correlated with E_α=7550 of ^{200}Fr(α)										96En01	∗∗
∗^{196}Os(β^-)^{196}Ir		E_{β^-}=435(20) to (0,1)$^+$ levels at 407.88, 522.37 keV										Ens076	∗∗
∗^{196}Ir(β^-)^{196}Pt		Original value 3170(60) recalibrated using ^{62}Cu										AHW	∗∗
∗^{196}Ir^m(β^-)^{196}Pt		E_{β^-}=950(20) to (10$^-$,11$^-$) level at 2468.0 keV										Ens076	∗∗
∗^{196}Ir^m(β^-)^{196}Pt		E_{β^-}=1160(100) to (10$^-$,11$^-$) level at 2468.0 keV										Ens076	∗∗
∗^{196}Au(β^+)^{196}Pt		KL/β^+=2.0(0.4)×10^{+6} to 2$^+$ level at 355.68 keV, recalculated										Ens076	∗∗
∗^{196}Au(ε)^{196}Pt		pL=0.64(0.06) to 3$^-$ level at 1447.043 keV										Ens076	∗∗
∗^{196}Au(β^-)^{196}Hg		E_{β^-}=259(4) to 2$^+$ level at 425.98 keV										Ens076	∗∗

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.		Lab	F	Reference	
^{197}Hg−u		−32766	30	−32786	3	−0.7	U				GS2	1.0	05Li24	
		−32765	30			−0.7	U				GS2	1.0	05Li24	*
^{197}Hg−^{208}Pb$_{.947}$		−10664	30	−10676	4	−0.4	U				MA6	1.0	01Sc41	
^{197}Tl−u		−30450	30	−30426	18	0.8	R				GS2	1.0	05Li24	
^{197}Pb−u		−26520	110	−26565	5	−0.4	U				GS1	1.0	00Ra23	
		−26609	30			1.5	U				GS2	1.0	05Li24	
		−26543	30			−0.7	U				GS2	1.0	05Li24	*
^{197}Pb^m−^{133}Cs$_{1.481}$		113799.6	6.0	113803	5	0.6	1	74	74	^{197}Pb^m	MA8	1.0	08We02	
^{197}Bi−^{208}Pb$_{.947}$		982	22	976	9	−0.3	R				MA6	1.0	01Sc41	
^{197}Bi−u		−21381	192	−21135	9	1.3	U				GS1	1.0	00Ra23	*
		−21187	31			1.7	U				GS2	1.0	05Li24	
^{197}Bi−^{133}Cs$_{1.481}$		118870	26	118891	9	0.8	R				MA8	1.0	08We02	*
^{197}Po−u		−14434	145	−14340	50	0.6	o				GS1	1.0	00Ra23	*
		−14305	90			−0.4	R				GS2	1.0	05Li24	*
^{197}At−^{133}Cs$_{1.481}$		133186	20	133203	9	0.8	1	18	18	^{197}At	MA8	1.0	16Ma.1	
^{197}At^m−^{133}Cs$_{1.481}$		133234	15	133251	10	1.1	1	42	42	^{197}At^m	MA8	1.0	16Ma.1	
^{197}Au−C$_{16}$		−33432.5	7.3	−33429.9	0.6	0.2	o				TG1	1.5	09Ke.A	
		−33432.9	5.4			0.4	U				TG1	1.5	10Ke09	
^{197}Au(α,^{8}He)^{193}Au		−26919	9	−26920	9	−0.1	1	93	93	^{193}Au			89Ka04	
^{197}Bi^m(α)^{193}Tl		5890.8	10.	5898	5	0.7	o				Ora		72Ga27	
		5889.7	10.			0.8	3				Ora		74Le02	Z
		5899.6	5.			−0.4	3				Lvn		85Co06	Z
^{197}Po(α)^{193}Pb		6420.7	10.	6412	3	−0.9	3						67Si09	Z
		6410.1	5.			0.3	3						67Tr06	Z
		6409.4	9.			0.2	3						71Ho01	Z
		6411.4	5.0			0.0	3				Ara		96Ta18	*
^{197}Po^m(α)^{193}Pb^m		6510.1	5.	6514.7	2.1	0.9	4						67Tr06	Z
		6511.4	9.			0.4	U						71Ho01	Z
		6518.0	3.			−1.1	4				Bka		82Bo04	Z
		6512.4	5.0			0.4	4				Ara		96Ta18	*
		6517.6	10.			−0.3	o				Anv		02Va13	
		6516.6	30.			−0.1	U				Anv		10He25	
		6513.0	4.6			0.4	4				Tex		12Fo09	
^{197}At(α)^{193}Bi		7103.0	5.	7104	3	0.3	–						67Tr06	Z
		7100.5	5.			0.8	o				Jya		96En01	
		7104.5	5.			0.0	o				Jya		99Sm07	
		7103.5	6.			0.1	–				Jya		05Uu02	
		7107.5	5.			−0.6	–				Anv		14Ka23	
	ave.	7105	3			−0.1	1	98	82	^{197}At			average	
^{197}At^m(α)^{193}Bi^m		6846.2	10.	6844	4	−0.2	o				Lvn		86Co12	
		6846.2	5.			−0.4	–				Jya		99Sm07	
		6845.2	9.			−0.1	–				Jya		05Uu02	
		6837.0	16.			0.5	U				Anv		14Ka23	
	ave.	6846	4			−0.4	1	94	58	^{197}At^m			average	
^{197}Rn(α)^{193}Po		7410.8	20.	7411	7	0.0	o				RIa		95No.A	
		7411.8	30.			0.0	U				RIa		95Mo14	
		7410.8	7.				3				Jya		96En02	
^{197}Rn^m(α)^{193}Po^m		7523.1	30.	7509	6	−0.5	U				RIa		95Mo14	
		7508.7	7.			0.1	3				Jya		96En02	
		7510.7	14.			−0.1	3				Jya		05Uu02	
^{197}Fr(α)^{193}At^m		7888.4	15.				8				Anv		13Ka16	
^{196}Pt(n,γ)^{197}Pt		5846.4	0.4	5846.56	0.26	0.4	–						78Ya07	Z
		5846.0	0.9			0.6	–				ILn		81Ho.B	Z
		5846.6	0.5			−0.1	–				BNn		83Ca04	Z
		5846.0	0.7			0.8	–				Bdn		06Fi.A	
^{196}Pt(d,p)^{197}Pt		3627	20	3621.99	0.26	−0.3	U				Pit		64Co11	
		3606	20			0.8	U				Tal		78Ya07	
^{196}Pt(n,γ)^{197}Pt	ave.	5846.36	0.27	5846.56	0.26	0.7	1	94	65	^{197}Pt			average	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{197}Au(γ,n)^{196}Au		−8057	22	−8072.3	2.9	−0.7	U			Phi		60Ge01	
		−8080	5			1.5	–			McM		79Ba06	
		−8072	7			0.0	–					79Be.A	
^{197}Au(d,t)^{196}Au		−1820	30	−1815.1	2.9	0.2	U			Pit		64Co11	
^{197}Au(γ,n)^{196}Au	ave.	−8077	4	−8072.3	2.9	1.2	1	52	52 ^{196}Au			average	
^{196}Hg(n,γ)^{197}Hg		6785.3	1.5	6785.6	1.5	0.2	1	97	84 ^{197}Hg	BNn		78Zg.A	Z
^{197}Ir(β^-)^{197}Pt		2000	200	2156	20	0.8	U					61Ho10	
^{197}Pt(β^-)^{197}Au		719.0	0.6	720.0	0.5	1.6	1	70	36 ^{197}Au			71Pr03	
^{197}Hg(ε)^{197}Au		415	20	600	3	9.2	B					65De20	*
		610	100			−0.1	U					92Da14	*
^{197}Tl(β^+)^{197}Hg		2220	100	2199	17	−0.2	U					61Ju05	
^{197}Pb^m(IT)^{197}Pb		319.31	0.11	319.31	0.11	0.0	1	100	74 ^{197}Pb			Ens053	
*^{197}Hg−u		$M-A$=–30221(28) keV for ^{197}Hg^m at 298.93 keV										Nub16b	**
*^{197}Pb−u		$M-A$=–24405(28) keV for ^{197}Pb^m at 319.31 keV										Nub16b	**
*^{197}Bi−u		$M-A$=–19650(90) keV for mixture gs+m at 532(12) keV										Nub16b	**
*^{197}Bi−^{133}Cs$_{1.481}$		Q =118887(12) μu $M-A$=–19690(11) keV corrected by –16(22) keV due to possible										08We02	**
*		contamination from ^{197}Bi^m										08We02	**
*^{197}Po−u		$M-A$=–13330(110) keV for mixture gs+m at 230#80 keV										Nub16b	**
*^{197}Po−u		$M-A$=–13210(32) keV for mixture gs+m at 230#80 keV										Nub16b	**
*^{197}Po(α)^{193}Pb		Also E_α=6283(5) keV from uncorrelated decays										96Ta18	**
*^{197}Po^m(α)^{193}Pb^m		Also E_α=6381(5) keV from uncorrelated decays										96Ta18	**
*^{197}Hg(ε)^{197}Au		pK=0.54(0.06) to 3/2$^+$ level at 268.788 keV										Ens053	**
*^{197}Hg(ε)^{197}Au		pK=0.746(0.033) to 268.75 level $\rightarrow$ Q =574(+139–62) keV										Ens053	**
^{198}Hg−^{161}Dy ^{37}Cl		74130	60	73927.5	1.0	−0.8	U			R04	4.0	64De15	
^{198}Hg−^{163}Dy ^{35}Cl		68979	37	69179.6	1.0	1.4	U			R04	4.0	64De15	
^{198}Hg−u		−33231.6	0.6	−33230.8	0.5	1.3	1	67	67 ^{198}Hg	ST2	1.0	02Bf02	
^{198}Tl−^{133}Cs$_{1.489}$		111228.7	8.1				2			MA8	1.0	14Bo26	*
^{198}Pb−^{208}Pb$_{.952}$		−5748	23	−5757	9	−0.4	–			MA6	1.0	01Sc41	
	ave.	−5739	18			−1.0	1	26	26 ^{198}Pb			average	
^{198}Pb−u		−27990	104	−27985	9	0.1	U			GS1	1.0	00Ra23	
		−27951	30			−1.1	R			GS2	1.0	05Li24	
^{198}Bi−u		−21063	162	−20790	30	1.7	o			GS1	1.0	00Ra23	*
		−20794	30				2			GS2	1.0	05Li24	
^{198}Bi^n−u		−20222	30				2			GS2	1.0	05Li24	
^{198}Po−^{208}Pb$_{.952}$		5616	24	5616	19	0.0	1	61	61 ^{198}Po	MA6	1.0	01Sc41	
^{198}Po−u		−16600	104	−16611	19	−0.1	U			GS1	1.0	00Ra23	
^{198}At−^{133}Cs$_{1.489}$		133570.0	7.3	133574	6	0.5	o			MA8	1.0	13Ma.A	
		133573.7	6.3				2			MA8	1.0	13St25	
^{198}At^m−^{133}Cs$_{1.489}$		133898	39	133879	9	−0.5	U			MA8	1.0	13St25	
^{198}Hg ^{35}Cl−^{196}Hg ^{37}Cl		3885.91	1.66	3886	3	0.0	1	57	57 ^{196}Hg	H33	2.5	80Ko25	
^{198}Pt−^{197}Au$_{1.005}$		1494.7	3.0	1493.8	2.2	−0.3	1	54	53 ^{198}Pt	CP1	1.0	05Sh52	
^{198}Po(α)^{194}Pb		6312.8	5.	6309.7	1.4	−0.6	U					67Si09	Z
		6305.7	5.			0.8	U					67Tr06	Z
		6301.2	8.			1.1	U					71Ho01	Z
		6311.1	3.			−0.5	–			Bka		82Bo04	Z
		6307.7	5.			0.4	U			Lvn		93Wa04	
		6309.7	5.0			0.0	U			Ara		96Ta18	*
		6309.3	1.7			0.2	–			Tex		12Fo09	
	ave.	6309.7	1.4			0.0	1	100	60 ^{194}Pb			average	
^{198}At(α)^{194}Bi		6887.5	5.	6889.4	1.9	0.4	3					67Tr06	Z
		6904.9	7.			−2.2	U			Ora		75Ba.B	Z
		6889.4	15.			0.0	U					80Ew03	Z
		6893.3	3.5			−1.1	3			Lvn		92Hu04	*
		6892.5	4.			−0.8	o			Jya		96En01	
		6887.4	6.			0.3	3			Jya		05Uu02	
		6888.4	3.6			0.3	3			Tex		12Fo09	
		6886.4	5.			0.6	3			Anv		14Ka23	
^{198}At^m(α)^{194}Bi^n		6990.0	5.	6993.4	2.4	0.7	4					67Tr06	Z
		6997.5	10.			−0.4	4					80Ew03	Z

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{198}At^m(α)^{194}Bi^n		6997.6	4.	6993.4	2.4	−1.0	4			Lvn		92Hu04	
		6996.6	4.			−0.8	o			Jya		96En01	
		6991.5	6.			0.3	4			Jya		05Uu02	
		6990.5	5.			0.6	4			Anv		14Ka23	
^{198}Rn(α)^{194}Po		7344.7	10.	7349	4	0.5	4					84Ca32	
		7353.8	5.			−0.9	4			Lvn		95Bi17	
		7344.7	6.			0.8	4			Jya		96En02	
^{198}Fr(α)^{194}At		7869.2	20.4				5			Anv		13Ka16	*
^{198}Fr^m(α)^{194}At^m		7889.6	20.4				6			Anv		13Ka16	
^{198}Pt(^{14}C,^{16}O)^{196}Os		6130	40				2			BNL		83Bo29	
^{198}Pt(t,α)^{197}Ir		10885	20				2			LAl		83Ci01	
^{198}Pt(p,d)^{197}Pt		−5332	3	−5331.0	2.1	0.3	1	47	47 ^{198}Pt	Ors		78Be09	*
^{198}Pt(d,t)^{197}Pt		−1305	20	−1298.3	2.1	0.3	U			Pit		64Co11	
		−1311	20			0.6	U			Tal		78Ya07	
^{197}Au(n,γ)^{198}Au		6512.35	0.11	6512.36	0.09	0.1	–			ILn		79Br26	Z
		6512.32	0.16			0.2	–			Bdn		06Fi.A	
^{197}Au(d,p)^{198}Au		4282	30	4287.79	0.09	0.2	U			Pit		64Co11	
		4298	5			−2.0	U			MIT		67Sp09	
^{197}Au(n,γ)^{198}Au	ave.	6512.34	0.09	6512.36	0.09	0.2	1	99	63 ^{197}Au			average	
^{198}Au(β^-)^{198}Hg		1372.3	0.7	1373.5	0.5	1.8	–					65Ke04	*
		1372.8	1.2			0.6	–					65Pa08	*
	ave.	1372.4	0.6			1.8	1	66	44 ^{198}Au			average	
^{198}Tl(β^+)^{198}Hg		3460	80	3426	8	−0.4	U					61Gu02	
^{198}Bi^n(IT)^{198}Bi^m		248.5	0.5				3			Lvn		92Hu04	
*^{198}Tl−^{133}Cs$_{1.489}$		D_M=111812.3(8.1) μu for ^{198}Tl^m at 543.6(0.4) keV; $M-A$=–26985.1(7.5) keV										Nub16b	**
*^{198}Bi−u		$M-A$=–19350(100) keV for mixture gs+m+n at 280(40) and 530(40) keV										Nub16b	**
*^{198}Po(α)^{194}Pb		Also E_α=6182(5) keV from uncorrelated decays										96Ta18	**
*^{198}At(α)^{194}Bi		E_α=6755(4), 6539(10), 6360(10) to ground state, 218, 396 levels										92Hu04	**
*^{198}Fr(α)^{194}At		Evaluator's interpretation of Fig. 3d, no 210 keV γ										GAu	**
*^{198}Pt(p,d)^{197}Pt		$Q-Q$(^{196}Pt(p,d))=365(3) keV										AHW	**
*^{198}Au(β^-)^{198}Hg		E_{β^-}=960.5(0.7) 961.0(1.2) respectively, to 2$^+$ level at 411.80251 keV										Ens163	**
^{199}Hg−C$_2$ ^{35}Cl$_5$		124023.43	0.53	124017.5	0.6	−4.5	B			H34	2.5	80Ko25	
		124017.21	0.37			0.3	1	38	35 ^{199}Hg	H48	2.5	03Ba49	
^{199}Hg−^{183}W O		23144.4	0.9	23141.9	0.9	−1.1	1	16	11 ^{183}W	H48	2.5	03Ba49	
^{199}Hg−^{162}Dy ^{37}Cl		75661	41	75574.2	1.0	−0.5	U			R04	4.0	64De15	
^{199}Hg−^{164}Dy ^{35}Cl		70087	31	70247.8	1.0	1.3	U			R04	4.0	64De15	
^{199}Hg−^{164}Er ^{35}Cl		70310	80	70220.9	1.0	−0.3	U			R04	4.0	64De15	
^{199}Tl−u		−30123	30				2			GS2	1.0	05Li24	
^{199}Pb−u		−27028	137	−27087	11	−0.4	U			GS2	1.0	05Li24	*
^{199}Bi−u		−22328	31	−22327	11	0.0	–			GS2	1.0	05Li24	
		−22263	30			−2.1	–			GS2	1.0	05Li24	*
	ave.	−22294	22			−1.5	1	28	28 ^{199}Bi			average	
^{199}Po−u		−16249	144	−16327	19	−0.5	U			GS1	1.0	00Ra23	*
		−16327	38			0.0	R			GS2	1.0	05Li24	
		−16339	38			0.3	R			GS2	1.0	05Li24	*
^{199}Bi^m(α)^{195}Tl		5598.7	6.	5600	6	0.1	1	93	56 ^{195}Tl			66Ma51	
^{199}Po(α)^{195}Pb		6074.1	2.	6074.3	1.9	0.1	2			Dba		68Go.B	Z
		6075.3	5.0			−0.2	2			Ara		96Ta18	
^{199}Po^m(α)^{195}Pb^m		6190.7	5.	6183.3	1.7	−1.5	–					67Si09	Z
		6177.6	5.1			1.1	–					67Tr06	Z
		6182.3	3.1			0.3	–			Dba		68Go.B	Z
		6183.5	3.			−0.1	–			Bka		82Bo04	Z
		6183.5	5.0			0.0	–			Ara		96Ta18	*
		6173.3	3.6			2.8	B			Tex		12Fo09	
	ave.	6183.3	1.7			0.0	1	100	59 ^{199}Po^m			average	
^{199}At(α)^{195}Bi		6775.1	5.	6777.3	1.2	0.4	–					67Tr06	Z
		6781.3	3.			−1.3	–			Ora		75Ba.B	Z
		6775.4	5.0			0.4	–			Ara		96Ta18	
		6779.4	6.			−0.4	U			Jya		05Uu02	
		6776.8	1.5			0.3	–			Tex		12Fo09	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{199}At(α)^{195}Bi	ave.	6777.4	1.2	6777.3	1.2	−0.1	1	100	89 ^{199}At			average	
^{199}Rn(α)^{195}Po		7133.7	15.	7132	4	−0.1	4					80Di07	
		7132.7	10.			−0.1	4					82Hi14	
		7138.8	10.			−0.7	4					84Ca32	
		7112.2	15.			1.3	o			Jya		96Le09	
		7132.6	6.			−0.1	4			Jya		05Uu02	
		7121.4	10.2			1.0	4			Anv		14Ka23	
^{199}Rn^m(α)^{195}Po^m		7205.1	15.	7203	4	−0.1	4					80Di07	
		7205.1	10.			−0.2	4					82Hi14	
		7204.1	10.			−0.1	4					84Ca32	
		7205.1	15.			−0.1	o			Jya		96Le09	
		7205.1	6.			−0.3	4			Jya		05Uu02	
		7194.9	10.2			0.8	4			Anv		14Ka23	
^{199}Fr(α)^{195}At		7812.3	40.	7817	10	0.1	U					99Ta20	
		7821.5	11.			−0.4	4			Anv		13Ka16	
		7801.1	20.			0.8	4			Jya		13Uu01	
^{199}Fr^m(α)^{195}At^m		7833.7	6.	7833	6	−0.2	3			Anv		13Ka16	
		7825.6	15.3			0.5	3			Jya		13Uu01	
^{199}Fr^n(α)^{195}At^p		7968.4	20.				4			Jya		13Uu01	
^{199}Hg(p,t)^{197}Hg		−6734	29	−6667	3	2.3	U			Pri		81Ko13	
		−6658	8			−1.1	1	16	16 ^{197}Hg	Ors		82Be21	
^{198}Pt(^{18}O,^{17}F)^{199}Ir		−8240	41				2					95Zh10	
^{198}Pt(n,γ)^{199}Pt		5602	3	5556.0	0.5	−15.3	B					68Sa13	
		5556.0	0.5				2			BNn		83Ca04	Z
^{198}Pt(d,p)^{199}Pt		3347	20	3331.4	0.5	−0.8	U			Pit		64Co11	
^{198}Au(n,γ)^{199}Au		7584.27	0.15	7584.28	0.06	0.1	o			ILn		79Br26	Z
		7584.28	0.06			0.0	1	100	80 ^{199}Au	ILn		91Ma65	
^{198}Hg(n,γ)^{199}Hg		6665.2	0.5	6663.1	0.6	−4.3	B			CRn		75Lo03	
^{199}Hg(γ,n)^{198}Hg		−6590	90	−6663.1	0.6	−0.8	U			Phi		60Ge01	
^{199}Pt(β^-)^{199}Au		1690	50	1705.1	2.1	0.3	U					64Jo09	
^{199}Au(β^-)^{199}Hg		453.0	1.0	452.3	0.6	−0.7	1	38	20 ^{199}Au			68Be06	
^{199}Tl(β^+)^{199}Hg		1420	150	1487	28	0.4	U					75Ma05	∗
^{199}Pb(β^+)^{199}Tl		2870	110	2828	30	−0.4	U					70Do.A	∗
^{199}Bi^m(IT)^{199}Bi		667	5	667	3	−0.1	–					80Br23	
		667	5			−0.1	–					85St02	
	ave.	667	4			−0.1	1	98	64 ^{199}Bi^m			average	
^{199}At^m(IT)^{199}At		255	20	244.0	1.0	−0.5	o			Jya		13Ja06	∗
		244	1				2			Jya		14Au03	
∗^{199}Pb−u	$M-A$=–24961(28) keV for mixture gs+m at 429.5(2.7) keV											Nub16b	∗∗
∗^{199}Bi−u	$M-A$=–20071(28) keV for ^{199}Bi^m at 667(3) keV											Nub16b	∗∗
∗^{199}Po−u	$M-A$=–14980(100) keV for mixture gs+m at 311.9(2.7) keV											Nub16b	∗∗
∗^{199}Po−u	$M-A$=–14909(35) keV for ^{199}Po^m at 311.9(2.7) keV											Nub16b	∗∗
∗^{199}Po^m(α)^{195}Pb^m	Also E_α=6059(5) keV from uncorrelated decays											96Ta18	∗∗
∗^{199}Tl(β^+)^{199}Hg	KL+<500(100) giving Q_i(1620, (1/2$^-$,3/2$^-$) level at 1221.17 fed. Reanalyzed											Ens073	∗∗
∗^{199}Pb(β^+)^{199}Tl	p$^+$ =0.04(0.01) to 3/2$^+$ level at 366.89 keV, recalculated											Ens073	∗∗
∗^{199}At^m(IT)^{199}At	Combining lines 110(20) 160(20) 240(30) as read from Fig. 8a											GAu	∗∗
^{200}Au−u		−29237	34	−29243	29	−0.2	1	71	71 ^{200}Au	GS3	1.0	08Ch.A	
^{200}Au^m−u		−28135	33	−28163	28	−0.8	1	73	73 ^{200}Au^m	GS3	1.0	08Ch.A	
^{200}Hg−C ^{13}C ^{35}Cl$_5$		120707.97	1.22	120708.6	0.6	0.2	U			H34	2.5	80Ko25	
^{200}Hg−^{165}Ho ^{35}Cl		69116	33	69146.2	1.2	0.2	U			R04	4.0	64De15	
^{200}Hg−^{163}Dy ^{37}Cl		73527	42	73687.5	1.0	1.0	U			R04	4.0	64De15	
^{200}Pb−u		−28179	30	−28182	12	−0.1	R			GS2	1.0	05Li24	
^{200}Bi−u		−21888	57	−21869	24	0.3	R			GS2	1.0	05Li24	∗
^{200}Po−u		−18170	104	−18188	8	−0.2	U			GS1	1.0	00Ra23	
		−18204	30			0.5	U			GS2	1.0	05Li24	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{200}Hg$-^{208}$Pb$_{.962}$		−9205	28	−9212.2	1.2	−0.3	U			MA6	1.0	01Sc41	
^{200}Hg ^{35}Cl$-^{198}$Hg ^{37}Cl		4525	2	4507.9	0.6	−2.1	U			H17	4.0	64Mc07	
		4508.80	0.48			−0.8	1	28	17 ^{200}Hg	H33	2.5	80Ko25	
^{200}Po(α)^{196}Pb		5979.8	5.	5981.6	1.8	0.4	–					67Si09	Z
		5980.0	3.			0.5	–					67Tr06	Z
		5983.4	3.			−0.6	–					70Ra14	Z
		5981.8	5.0			0.0	–			Ara		96Ta18	∗
	ave.	5981.5	1.9			0.1	1	99	79 ^{196}Pb			average	
^{200}At(α)^{196}Bi		6594.9	5.	6596.2	1.3	0.3	3					67Tr06	Z
		6596.9	2.			−0.4	3			Ora		75Ba.B	Z
		6593.1	5.			0.6	o			Lvn		87Va09	
		6596.1	2.			0.0	3			Lvn		92Hu04	
		6593.1	5.0			0.6	3			Ara		96Ta18	
		6599.1	6.			−0.5	U			Jya		05Uu02	
^{200}At^m(α)^{196}Bi		6708.3	5.	6709.1	2.6	0.2	3			Ora		75Ba.B	Z
		6705.4	5.			0.7	o			Lvn		87Va09	
		6709.5	3.			−0.1	3			Lvn		92Hu04	
^{200}At^m(α)^{196}Bi^m		6542.8	5.	6542.7	1.3	0.0	4					67Tr06	Z
		6542.9	2.			−0.1	4			Ora		75Ba.B	Z
		6540.0	5.			0.5	o			Lvn		87Va09	
		6542.1	2.			0.3	4			Lvn		92Hu04	
		6545.1	5.0			−0.5	4			Ara		96Ta18	
		6544.1	6.			−0.2	U			Jya		05Uu02	
^{200}At^m(α)^{196}Bi^n		6439.5	5.	6437.5	2.0	−0.4	4					67Tr06	∗
		6438.5	5.			−0.2	4			Ora		75Ba.B	∗
		6433.8	5.			0.7	o			Lvn		87Va09	∗
		6439.2	3.			−0.6	4			Lvn		92Hu04	∗
		6430.5	5.0			1.4	4			Ara		96Ta18	∗
		6436.7	6.			0.1	4			Jya		05Uu02	∗
^{200}Rn(α)^{196}Po		7020.6	10.	7043.4	2.1	2.3	U					67Va.A	
		7050.3	8.			−0.9	U					71Ho01	
		7040.1	10.			0.3	U			Lvn		84Co.A	
		7043.5	2.5			−0.1	4			Lvn		93Wa04	
		7042.1	12.			0.1	o			Ara		95Le04	
		7039.0	10.			0.4	o			Jya		96Le09	
		7042.1	5.1			0.2	4			Ara		96Ta18	
		7044.1	6.			−0.1	4			Jya		05Uu02	
		7055.4	30.			−0.4	U			Anv		10He25	
^{200}Fr(α)^{196}At		7653.4	30.	7622	4	−1.0	U			RIa		95Mo14	
		7620.7	9.			0.2	5			Jya		96En01	
		7625.8	12.			−0.3	o			Anv		05De01	
		7620.7	15.			0.1	o			Jya		13Uu01	∗
		7622.7	5.			−0.1	5			Anv		14Ka23	
^{200}Fr^m(α)^{196}At^m		7704.4	15.				4			Jya		96En01	∗
^{198}Pt(t,p)^{200}Pt		4356	20				2					81Ci01	
^{199}Hg(n,γ)^{200}Hg		8029.1	0.3	8028.52	0.11	−1.9	–			BNn		67Sc30	Z
		8029.6	0.5			−2.2	U			CRn		75Lo03	Z
		8028.51	0.18			0.1	–			ILn		79Br25	Z
		8028.37	0.17			0.9	–			Bdn		06Fi.A	
	ave.	8028.53	0.11			−0.1	1	98	64 ^{200}Hg			average	
^{200}Au(β^-)^{200}Hg		2273	100	2263	27	−0.1	–					59Ro53	∗
		2200	100			0.6	–					60Gi01	
		2260	70			0.0	–					72He36	∗
	ave.	2250	50			0.3	1	29	29 ^{200}Au			average	
^{200}Au^m(β^-)^{200}Hg		3202	50	3270	26	1.4	1	27	27 ^{200}Au^m			72Cu07	∗
^{200}Tl(β^+)^{200}Hg		2450	10	2456	6	0.6	2					57He43	∗
		2459	7			−0.4	2					62Va10	∗

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{200}At^n(IT)^{200}At^m	230.9	0.2				4			Lvn		92Hu04	
$*^{200}$Bi−u	$M-A$=–20338(28) keV for mixture gs+m at 100#70 keV										Nub16b	**
$*^{200}$Po(α)^{196}Pb	Also E_α=5863(5) keV from uncorrelated decays										96Ta18	**
$*^{200}$At^m(α)^{196}Bi^n	E_α=6536.7(5,Z) from ^{200}At^n 230.9 above ^{200}At^m										92Hu04	**
$*^{200}$At^m(α)^{196}Bi^n	E_α=6535.8(5,Z) from ^{200}At^n 230.9 above ^{200}At^m										92Hu04	**
$*^{200}$At^m(α)^{196}Bi^n	E_α=6301(5); 6535(5) from ^{200}At^n 230.9 above ^{200}At^m										92Hu04	**
$*^{200}$At^m(α)^{196}Bi^n	E_α=6306(5); 6538(3) from ^{200}At^n 230.9 above ^{200}At^m										92Hu04	**
$*^{200}$At^m(α)^{196}Bi^n	E_α=6528(5) from ^{200}At^n 230.9 above ^{200}At^m										92Hu04	**
$*^{200}$At^m(α)^{196}Bi^n	E_α=6534(6) from ^{200}At^n 230.9 above ^{200}At^m										92Hu04	**
$*^{200}$Fr(α)^{196}At	Same group, but much less events than preceding item										WgM151	**
$*^{200}$Fr^m(α)^{196}At^m	Correlated with ^{196}At^m E_α=6880(15); two events only										96En01	**
$*^{200}$Au(β^-)^{200}Hg	E_{β^-}=2250(200) to ground state, and 700(100) to levels 1$^+$ at 1570.275,										Ens077	**
*	2$^+$ at 1573.663, 2$^+$ at 1593.423 keV										Ens077	**
$*^{200}$Au(β^-)^{200}Hg	E_{β^-}=2260(100), 670(70) to ground state, 2$^+$ level at 1593.423 keV										Ens077	**
$*^{200}$Au^m(β^-)^{200}Hg	E_{β^-}=560(50) to 11$^-$ level at 2641.54 keV										Ens077	**
$*^{200}$Tl(β^+)^{200}Hg	E_{β^+}=1052(10) 1069(7) respectively, to 2$^+$ level at 367.943 keV, and other E_{β^+}										Ens077	**
^{201}Hg−^{185}Re O	22440	5	22430.1	1.1	−0.8	U			H48	2.5	03Ba49	
^{201}Hg−C$_2$ ^{35}Cl$_4$ ^{37}Cl	128995.43	0.61	128989.7	0.8	−3.8	B			H34	2.5	80Ko25	
^{201}Hg−^{164}Dy ^{37}Cl	75086	42	75220.0	1.1	0.8	U			R04	4.0	64De15	
^{201}Hg−^{166}Er ^{35}Cl	71186	35	71151.3	1.5	−0.2	U			R04	4.0	64De15	
^{201}Pb−u	−27418	198	−27130	15	1.5	U			GS2	1.0	05Li24	*
^{201}Bi−u	−22935	30	−22991	16	−1.9	R			GS2	1.0	05Li24	
	−22995	30			0.1	R			GS2	1.0	05Li24	*
^{201}Po−u	−17760	190	−17736	5	0.1	U			GS1	1.0	00Ra23	*
	−17649	30			−2.9	U			GS2	1.0	05Li24	
^{201}Po^m−u	−17305	30	−17281	5	0.8	U			GS2	1.0	05Li24	
^{201}At−u	−11573	31	−11583	9	−0.3	U			GS2	1.0	05Li24	
^{201}Hg ^{35}Cl−^{199}Hg ^{37}Cl	4981	2	4972.2	0.6	−1.1	U			H17	4.0	64Mc07	
	4972.65	0.37			−0.5	1	47	39 ^{201}Hg	H33	2.5	80Ko25	
	4971.8	1.0			0.1	U			H48	2.5	03Ba49	
^{201}Bi(α)^{197}Tl	4500.3	6.				5					66Ma51	*
^{201}Po(α)^{197}Pb	5793.9	5.	5799.3	1.7	1.1	–					67Tr06	Z
	5799.4	2.			−0.1	–			Dba		68Go.B	Z
	5800.4	4.			−0.3	–					70Ra14	Z
ave.	5799.0	1.7			0.2	1	98	71 ^{201}Po			average	
^{201}Po^m(α)^{197}Pb^m	5899.0	5.1	5903.8	1.7	0.9	2					67Tr06	Z
	5904.5	2.0			−0.4	2			Dba		68Go.B	Z
	5903.9	4.1			0.0	2					70Ra14	Z
^{201}At(α)^{197}Bi	6470.7	3.	6472.8	1.6	0.7	4					67Tr06	Z
	6476.2	5.			−0.7	U					74Ho27	Z
	6474.0	2.			−0.6	4			Ora		75Ba.B	Z
	6471.0	5.0			0.4	U			Ara		96Ta18	
	6472.0	4.			0.2	4			Anv		05De01	
^{201}Rn(α)^{197}Po	6862.8	8.	6860.7	2.3	−0.3	U					67Va.A	
	6858.8	8.			0.2	U					71Ho01	
	6866.9	20.			−0.3	U			GSa		87He10	
	6860.5	2.5			0.1	4			Lvn		93Wa04	
	6863.8	7.			−0.4	o			Ara		95Le04	
	6861.8	5.0			−0.2	4			Ara		96Ta18	
^{201}Rn^m(α)^{197}Po^m	6906.8	5.	6909.5	2.1	0.5	5					67Va17	Z
	6909.0	8.			0.1	U					71Ho01	Z
	6907.7	20.			0.1	U			GSa		87He10	
	6909.9	2.5			−0.1	5			Lvn		93Wa04	
	6915.9	7.			−0.9	o			Ara		95Le04	
	6910.7	5.0			−0.3	5			Ara		96Ta18	
	6925.1	30.			−0.5	U			Anv		10He25	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{201}Fr(α)^{197}At		7538.0	15.	7519	4	−1.3	U					80Ew03	
		7510.8	7.			1.1	o			Jya		96En01	
		7529.1	7.			−1.4	o			Anv		05De01	
		7519.0	8.			0.0	2			Jya		05Uu02	
		7519.0	5.			0.0	2			Anv		14Ka23	
^{201}Fr^m(α)^{197}At^m		7605.7	8.	7601	6	−0.6	2			Jya		05Uu02	
		7596.4	8.			0.6	2			Anv		14Ka23	
^{201}Ra(α)^{197}Rn		8001.5	12.				4			Anv		14Ka23	
^{201}Ra^m(α)^{197}Rn^m		8065.8	20.				4			Jya		05Uu02	
^{201}Hg(γ,n)^{200}Hg		−6210	70	−6230.6	0.6	−0.3	U			Phi		60Ge01	
^{201}Pt(β^-)^{201}Au		2660	50				2					63Go06	
^{201}Au(β^-)^{201}Hg		1270	100	1262	3	−0.1	U					72Pa24	
^{201}Tl(ε)^{201}Hg		470	70	482	14	0.2	U					60Gu05	∗
^{201}Pb(β^+)^{201}Tl		1900	40	1910	19	0.2	1	21	11 ^{201}Tl			79Do09	∗
∗^{201}Pb−u	$M-A$=–25225(28) keV for mixture gs+m at 629.1 keV											Nub16b	∗∗
∗^{201}Bi−u	$M-A$=–20573(28) keV for ^{201}Bi^m at 846.35 keV											Nub16b	∗∗
∗^{201}Po−u	$M-A$=–16330(100) keV for mixture gs+m at 423.8(2.4) keV											Nub16b	∗∗
∗^{201}Bi(α)^{197}Tl	E_α=5240(6) from ^{201}Bi^m at 846.35 keV											Nub16b	∗∗
∗^{201}Tl(ε)^{201}Hg	pK=0.70(0.04)to 1/2$^-$ level at 167.47 keV, recalculated											Ens073	∗∗
∗^{201}Pb(β^+)^{201}Tl	p$^+$ =10(2)×10^{-3} to 3/2$^+$ level at 331.16 keV											Ens073	∗∗
^{202}Pt−u		−24425	34	−24361	27	1.9	o			GS3	1.0	08Ch.A	
		−24361	27				2			GS3	1.0	12Ch19	
^{202}Au−u		−26202	34	−26144	25	1.7	o			GS3	1.0	08Ch.A	
		−26144	25				2			GS3	1.0	12Ch19	
^{202}Hg−C ^{13}C ^{35}Cl$_4$ ^{37}Cl		125976.01	1.32	125975.4	0.8	−0.2	U			H34	2.5	80Ko25	
C$_{16}$ H$_{10}$−^{202}Hg		107663	40	107606.7	0.8	−0.9	U			R08	1.5	69De19	
C$_{15}$ ^{13}C H$_9$−^{202}Hg		103102	60	103136.5	0.8	0.4	U			R08	1.5	69De19	
^{202}Hg−^{167}Er ^{35}Cl		69740	60	69736.8	1.5	0.0	U			R04	4.0	64De15	
^{202}Hg−^{165}Ho ^{37}Cl		74470	50	74413.0	1.3	−0.3	U			R04	4.0	64De15	
^{202}Tl−^{133}Cs$_{1.519}$		115727.2	3.7	115727.6	1.7	0.1	1	22	22 ^{202}Tl	MA8	1.0	16We.A	
^{202}Pb−u		−27823	30	−27848	4	−0.8	U			GS2	1.0	05Li24	∗
^{202}Pb−^{133}Cs$_{1.519}$		115773.4	3.6	115770	4	−0.9	o			MA8	1.0	10Bo.A	
		115769.2	4.4			0.2	1	86	86 ^{202}Pb	MA8	1.0	14Bo26	
^{202}Bi−u		−22282	30	−22267	17	0.5	1	30	30 ^{202}Bi	GS2	1.0	05Li24	
^{202}Po−u		−19270	104	−19261	9	0.1	U			GS1	1.0	00Ra23	
		−19243	30			−0.6	U			GS2	1.0	05Li24	
^{202}Hg ^{35}Cl$_2$−^{198}Hg ^{37}Cl$_2$		9774.87	1.06	9774.6	0.8	−0.1	U			H33	2.5	80Ko25	
^{202}Hg ^{35}Cl−^{200}Hg ^{37}Cl		5271	3	5266.8	0.6	−0.4	U			H17	4.0	64Mc07	
		5266.76	0.43			0.0	1	35	28 ^{202}Hg	H33	2.5	80Ko25	
^{202}Tl−^{203}Tl$_{.995}$		−372.4	2.1	−373.2	1.7	−0.4	1	63	48 ^{202}Tl	MA8	1.0	16We.A	
^{202}Po(α)^{198}Pb		5700.9	2.	5701.0	1.7	0.0	–			Dba		68Go.B	Z
		5701.6	3.			−0.2	–					70Ra14	Z
	ave.	5701.1	1.7			−0.1	1	99	74 ^{198}Pb			average	
^{202}At(α)^{198}Bi		6355.8	3.	6353.8	1.3	−0.6	3					63Ho18	Z
		6351.7	3.			0.7	3					67Tr06	Z
		6353.2	5.			0.1	3					74Ho27	Z
		6353.9	2.			0.0	3			Ora		75Ba.B	Z
		6354	5			0.0	3			Lvn		92Hu04	∗
		6355.0	6.0			−0.2	3			Ara		96Ta18	
^{202}At^m(α)^{198}Bi^m		6259.9	2.	6259.0	1.3	−0.5	4					63Ho18	Z
		6256.8	3.			0.7	4					67Tr06	Z
		6257.2	5.			0.4	U					74Ho27	Z
		6259.0	2.			0.0	4			Ora		75Ba.B	∗
		6260.0	5.			−0.2	U			Lvn		92Hu04	∗
		6257.1	6.0			0.3	U			Ara		96Ta18	
^{202}Rn(α)^{198}Po		6771.0	3.	6773.8	1.8	0.9	2					67Va17	Z
		6772.3	10.			0.2	U			GSa		87He10	
		6775.3	2.5			−0.6	2			Lvn		93Wa04	
		6773.4	7.			0.1	o			Ara		95Le04	
		6775.4	5.0			−0.3	2			Ara		96Ta18	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.		Lab	F	Reference	
^{202}Fr(α)^{198}At		7397.7	15.	7386	4	−0.8	3						80Ew03	*
		7382.5	11.			0.3	3				Lvn		92Hu04	*
		7389.6	6.			−0.6	o				Jya		96En01	*
		7387.6	8.			−0.2	3				Jya		05Uu02	
		7384.5	5.1			0.3	3				Anv		14Ka23	
^{202}Fr^m(α)^{198}At^m		7382.5	11.	7376	4	−0.6	5				Lvn		92Hu04	*
		7388.6	6.			−2.1	o				Jya		96En01	
		7381.5	8.			−0.7	5				Jya		05Uu02	
		7372.2	5.			0.7	5				Anv		14Ka23	
^{202}Ra(α)^{198}Rn		8019.1	60.	7880	7	−2.3	o				Jya		96Le09	
		7896.7	20.			−0.8	5				Jya		05Uu02	
		7878.3	7.1			0.3	5				Anv		14Ka23	
^{202}Hg(t,α)^{201}Au		11567	15	11580	3	0.9	U				LAl		81Fl05	
^{202}Hg(d,^{3}He)^{201}Au−^{206}Pb()^{205}Tl		−979.9	3.1	−980	3	0.0	1	100	100	^{201}Au			94Gr07	
^{201}Hg(n,γ)^{202}Hg		7754.9	0.5	7754.10	0.20	−1.6	–				BNn		75Br02	Z
		7756.4	0.5			−4.6	B				CRn		75Lo03	Z
		7753.93	0.22			0.8	–				Bdn		06Fi.A	
^{202}Hg(γ,n)^{201}Hg		−7600	130	−7754.10	0.20	−1.2	U				Phi		60Ge01	
^{201}Hg(n,γ)^{202}Hg	ave.	7754.09	0.20	7754.10	0.20	0.1	1	97	59	^{201}Hg			average	
^{202}Au(β^-)^{202}Hg		3500	300	2992	23	−1.7	U						67Wa23	
		2700	300			1.0	U						72Bu05	
^{202}Tl(ε)^{202}Hg		1245	25	1365.1	1.6	4.8	B						66Le06	*
^{202}Pb(ε)^{202}Tl		55	20	40	4	−0.8	U						54Hu61	
^{202}At^n(IT)^{202}At^m		391.7	0.2				5				Lvn		92Hu04	
*^{202}Pb−u		$M-A$=–23747(28) keV for ^{202}Pb^m at 2169.85 keV											Nub16b	**
*^{202}At(α)^{198}Bi		E_α=6228(5), 6070(10), 5929(10) to ground state, 164, 303 levels											92Hu04	**
*^{202}At^m(α)^{198}Bi^m		Assignment to ^{202}At^m in reference; Z recalibrated											92Hu04	**
*^{202}At^m(α)^{198}Bi^m		E_α=6135(5); and 6277(5) from ^{202}At^n(α)^{198}Bi^n, with											92Hu04	**
*		^{202}At^n(IT)^{202}At^m=391.7(0.5) and ^{198}Bi^n(IT)^{198}Bi^m=248.5(0.5) keV											Nub16b	**
*^{202}Fr(α)^{198}At		E_α=7251(10) has a doublet structure											92Hu04	**
*^{202}Fr(α)^{198}At		E_α=7237(8), is a doublet											92Hu04	**
*^{202}Fr(α)^{198}At		^{202}Fr E_α's in correlation with At daughters											96En01	**
*^{202}Fr^m(α)^{198}At^m		E_α=7237(8), is a doublet											92Hu04	**
*^{202}Tl(ε)^{202}Hg		pK=0.305(0.020) to 2$^+$ level at 959.94 keV											Ens083	**
C$_{16}$ H$_{11}$−^{203}Tl		113735	43	113731.3	1.3	−0.1	U				R08	1.5	69De19	
C$_{15}$ ^{13}C H$_{10}$−^{203}Tl		109216	95	109261.1	1.3	0.3	U				R08	1.5	69De19	
C$_{14}$ N$_2$ H$_7$−^{203}Tl		88540	48	88579.2	1.3	0.5	U				R08	1.5	69De19	
^{203}Tl−^{166}Er ^{37}Cl		76190	48	76142.4	1.8	−0.7	U				R08	1.5	69De19	
^{203}Tl−^{168}Er ^{35}Cl		71069	36	71115.1	1.8	0.9	U				R08	1.5	69De19	
^{203}Tl−^{133}Cs$_{1.526}$		116622.5	3.8	116624.3	1.3	0.5	U				MA8	1.0	16We.A	
^{203}Pb−u		−26594	30	−26609	7	−0.5	U				GS2	1.0	05Li24	
^{203}Po−u		−18581	30	−18584	9	−0.1	U				GS2	1.0	05Li24	
^{203}At−u		−13042	30	−13057	11	−0.5	1	14	14	^{203}At	GS2	1.0	05Li24	
^{203}Fr−^{133}Cs$_{1.526}$		145205	17	145221	7	1.0	1	15	15	^{203}Fr	MA8	1.0	08We02	
^{203}At−^{208}Pb$_{.976}$		9690	25	9731	11	1.6	1	21	21	^{203}At	MA6	1.0	01Sc41	
^{203}Rn^m−^{208}Pb$_{.976}$		16579	30	16571	19	−0.3	1	41	41	^{203}Rn^m	SH1	1.0	13Dr04	
^{203}Tl ^{35}Cl−^{201}Hg ^{37}Cl		4997	3	4991.1	1.2	−0.5	U				H17	4.0	64Mc07	
		4995.23	1.49			−1.1	1	10	8	^{203}Tl	H36	2.5	85De40	
^{202}Hg H−^{203}Tl		6154	34	6124.6	1.2	−0.6	U				R08	1.5	69De19	
^{203}Tl−^{167}Er ^{35}Cl		71436	36	71437.2	1.8	0.0	U				R08	1.5	69De19	
^{167}Er ^{37}Cl−^{203}Tl		−74404	33	−74387.3	1.8	0.3	U				R08	1.5	69De19	
^{169}Tm ^{35}Cl−^{203}Tl		−69257	29	−69273.0	1.5	−0.4	U				R08	1.5	69De19	
^{203}Tl−^{202}Hg		1722	20	1700.4	1.2	−0.7	U				R08	1.5	69De19	
^{203}Tl−^{201}Hg		1999	29	2041.0	1.2	1.0	U				R08	1.5	69De19	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{203}Po(α)^{199}Pb		5496	5				5			Dba		68Go.B	*
^{203}At(α)^{199}Bi		6210.3	1.	6210.1	0.8	−0.2	–					63Ho18	Z
		6208.7	3.			0.5	–					67Tr06	Z
		6209.4	2.			0.3	–			Dba		68Go.B	Z
		6211.7	3.			−0.5	–			Ora		75Ba.B	
		6210.6	5.0			−0.1	U			Ara		96Ta18	
	ave.	6210.1	0.8			0.0	1	100	61 ^{203}At			average	
^{203}Rn(α)^{199}Po		6628.6	5.	6629.9	2.1	0.3	3					67Va17	Z
		6630.2	2.5			−0.1	3			Lvn		93Wa04	
		6630	10			0.0	U			Jya		95Uu01	
		6629.8	5.0			0.0	3			Ara		96Ta18	
^{203}Rn^m(α)^{199}Po^m		6679.5	3.	6680.5	1.6	0.3	–					67Va17	Z
		6681.9	10.			−0.1	U			GSa		87He10	
		6680.9	2.5			−0.2	–			Lvn		93Wa04	
		6683.9	7.			−0.5	o			Ara		95Le04	
		6679.8	3.			0.2	–			Jya		96Le09	
		6682.9	5.0			−0.5	–			Ara		96Ta18	
	ave.	6680.5	1.6			0.0	1	100	59 ^{203}Rn^m			average	
^{203}Fr(α)^{199}At		7275.6	5.	7275	4	−0.1	–					67Va20	Z
		7281.7	10.			−0.7	–					80Ew03	Z
		7263.4	25.			0.5	o			Jya		94Le05	
		7273.6	6.			0.2	–			Jya		05Uu02	
	ave.	7276	4			−0.2	1	95	85 ^{203}Fr			average	
^{203}Fr^m(α)^{199}At^m		7391.9	5.				3			Jya		13Ja06	
^{203}Ra(α)^{199}Rn		7729.6	20.	7736	6	0.3	o			Jya		96Le09	
		7741.8	8.			−0.7	5			Jya		05Uu02	
		7727.6	10.			0.9	5			Anv		14Ka23	
^{203}Ra^m(α)^{199}Rn^m		7768.4	20.	7763	6	−0.3	o			Jya		96Le09	
		7765.3	8.			−0.3	5			Jya		05Uu02	
		7760.2	8.2			0.3	5			Anv		14Ka23	
^{203}Tl(p,t)^{201}Tl		−6240	15	−6241	14	−0.1	1	89	89 ^{201}Tl	Yal		71Ki01	
^{202}Hg(d,p)^{203}Hg−^{204}Hg()^{205}Hg		325	5	326	4	0.3	1	52	48 ^{205}Hg	Pit		72Mo12	
^{203}Tl(p,d)^{202}Tl		−5630	20	−5627.9	1.6	0.1	U			Yal		71Ki01	
^{203}Au(β^-)^{203}Hg		2040	60	2126	3	1.4	U					94We02	
^{203}Hg(β^-)^{203}Tl		489.2	2.	492.1	1.2	1.5	–					54Th17	*
		493.2	2.			−0.5	–					55Ma40	*
		493.2	3.			−0.4	–					58Ni28	*
	ave.	491.6	1.3			0.4	1	92	85 ^{203}Hg			average	
^{203}Pb(ε)^{203}Tl		940	50	975	6	0.7	U					55Ha.A	*
		980	20			−0.3	1	10	10 ^{203}Pb			65Le07	*
^{203}Bi(β^+)^{203}Pb		3260	50	3262	14	0.0	U					58No30	*
^{203}At(β^+)^{203}Po		5060	200	5148	14	0.4	U					87Se04	
*^{203}Po(α)^{199}Pb	E_α=5383.8(3,Z) to 4(4) level (this is level x<9.3 in Ensdf)											Ens073	**
*^{203}Hg(β^-)^{203}Tl	E_{β^-}=210(2) 214(2) 214(3) respectively, to 3/2$^+$ level at 279.1958 keV											Ens057	**
*^{203}Pb(ε)^{203}Tl	pK=0.36(0.07) 0.71(0.01) respectively, to 5/2$^+$ level at 680.5164 keV											Ens057	**
*^{203}Bi(β^+)^{203}Pb	E_{β^+}=1350(50), 740(50) to levels around 840, 1550 keV											Ens057	**
^{204}Hg−C ^{13}C ^{35}Cl$_3$ ^{37}Cl$_2$		131776.05	1.25	131775.9	0.6	0.0	U			H34	2.5	80Ko25	
^{204}Hg−^{169}Tm ^{35}Cl		70420	100	70423.0	1.0	0.0	U			R04	4.0	64De15	
^{204}Hg−^{167}Er ^{37}Cl		75430	60	75537.3	1.4	0.4	U			R04	4.0	64De15	
^{204}Hg−u		−26505.8	0.6	−26506.0	0.5	−0.3	1	79	79 ^{204}Hg	ST2	1.0	02Bf02	
^{204}Po−u		−19689	30	−19690	12	0.0	R			GS2	1.0	05Li24	
^{204}At−u		−12748	30	−12749	24	0.0	–			GS2	1.0	05Li24	
	ave.	−12752	27			0.1	1	81	81 ^{204}At			average	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.		Lab	F	Reference	
^{204}Rn$-^{133}$Cs$_{1.534}$		136394	60	136480	8	1.4	U				SH1	1.0	13Dr04	
^{204}Hg ^{35}Cl$_2-^{200}$Hg ^{37}Cl$_2$		11066.85	0.55	11067.3	0.7	0.3	1	24	12	^{200}Hg	H33	2.5	80Ko25	
^{204}Pb$-^{208}$Pb$_{.981}$		−4047	21	−4052.11	0.18	−0.2	U				MA6	1.0	01Sc41	
^{204}Rn$-^{208}$Pb$_{.981}$		14358.1	9.4	14348	8	−1.1	–				SH1	1.0	13Dr04	
		14303	25			1.8	–				SH1	1.0	13Dr04	
	ave.	14351	9			−0.4	1	81	81	^{204}Rn			average	
^{204}Hg ^{35}Cl$-^{202}$Hg ^{37}Cl		5807	2	5800.6	0.8	−0.8	U				H17	4.0	64Mc07	
		5800.67	0.53			−0.1	1	35	26	^{202}Hg	H33	2.5	80Ko25	
^{204}Hg$-^{203}$Tl		1161	25	1150.0	1.3	−0.3	U				R08	1.5	69De19	
^{204}Pb(α)^{200}Hg		2650	100	1968.5	1.1	−6.8	B						58Ri23	
^{204}Pb(α,^{8}He)^{200}Pb		−28043	13	−28044	11	0.0	2				INS		90Ka10	
^{204}Po(α)^{200}Pb		5484.6	1.5	5484.9	1.4	0.2	3				Dba		69Go23	∗
		5486.3	3.			−0.5	3						70Ra14	Z
^{204}At(α)^{200}Bi		6069.9	3.	6070.4	1.2	0.2	2						63Ho18	Z
		6066.2	3.			1.4	2						67Tr06	Z
		6071.3	3.			−0.3	2				Ora		75Ba.B	
		6071.3	2.0			−0.4	2						79Sc.A	
		6072.0	3.			−0.5	2				Dba		81Va27	Z
^{204}Rn(α)^{200}Po		6544.3	3.	6546.7	1.8	0.8	–						67Va17	Z
		6547.5	2.5			−0.3	–				Lvn		93Wa04	
		6537.4	7.			1.3	o				Ara		95Le04	
		6548.6	5.0			−0.4	–				Ara		96Ta18	
	ave.	6546.5	1.8			0.1	1	99	80	^{200}Po			average	
^{204}Fr(α)^{200}At		7170.4	5.	7170.3	2.4	0.0	4						67Va20	Z
		7169.4	5.			0.2	4						74Ho27	Z
		7170.6	5.			−0.1	4				Lvn		92Hu04	∗
		7179.0	6.			−1.4	o				Jya		94Le05	
		7167.8	7.			0.3	4				Ara		95Le04	
		7173.9	6.			−0.6	o				Jya		05Uu02	
		7171.9	5.			−0.3	4				Jya		13Ja06	
^{204}Fr^{m}(α)^{200}At		7218.8	8.	7221	4	0.2	o				Lvn		92Hu04	
^{204}Fr^{m}(α)^{200}At^{m}		7108.2	5.	7107.6	2.0	−0.1	4						74Ho27	Z
		7105.5	3.			0.7	4				Bka		82Bo04	Z
		7108.4	5.			−0.2	4				Lvn		92Hu04	∗
		7115.6	7.			−1.1	o				Jya		94Le05	∗
		7114.7	7.			−1.0	4				Ara		95Le04	
		7117.7	6.			−1.7	o				Jya		05Uu02	∗
		7108.7	5.			−0.2	4				Jya		13Ja06	
^{204}Fr^{n}(α)^{200}At^{n}		7157.6	6.1	7152.8	2.1	−0.8	o				Jya		05Uu02	
		7153.5	5.			−0.1	o				Jya		13Ja06	
^{204}Ra(α)^{200}Rn		7638.1	12.	7637	7	−0.1	5				Ara		95Le04	
		7638.1	25.			−0.1	o				Jya		95Le15	
		7634.0	10.			0.3	o				Jya		96Le09	
		7636.1	8.			0.1	5				Jya		05Uu02	
		7638.1	25.			−0.1	U				Anv		10He25	
^{204}Pb(p,t)^{202}Pb		−6835	10	−6830	4	0.5	1	15	14	^{202}Pb	Yal		71Ki01	
^{204}Hg(t,α)^{203}Au		10962	15	10978	3	1.1	U				LAl		81Fl05	
^{204}Hg(d,^{3}He)^{203}Au$-^{206}$Pb()^{205}Tl		−1582.0	3.0	−1582.0	3.0	0.0	1	100	100	^{203}Au			94Gr07	
^{204}Hg(d,t)^{203}Hg		−1242	5	−1235.0	1.6	1.4	1	11	10	^{203}Hg	Ald		70An14	
^{203}Tl(n,γ)^{204}Tl		6656.0	0.3	6656.08	0.29	0.3	1	94	65	^{203}Tl	MMn		74Co21	Z
		6654.88	0.14			8.6	C				Bdn		06Fi.A	
^{204}Pb(p,d)^{203}Pb		−6165	10	−6170	6	−0.5	–				Yal		71Ki01	
^{204}Pb(d,t)^{203}Pb		−2160	20	−2137	6	1.1	–				Ald		67Bj01	
^{204}Pb(p,d)^{203}Pb	ave.	−6171	9	−6170	6	0.0	1	52	52	^{203}Pb			average	
^{204}Au(β^-)^{204}Hg		4500	300	4040#	200#	−1.5	F						67Wa23	∗
^{204}Tl(ε)^{204}Hg		314	20	344.0	1.2	1.5	U						64Ch17	
		332	20			0.6	U						66Kl02	
		385	20			−2.0	U						73La17	
^{204}Tl(β^-)^{204}Pb		764.24	0.31	763.75	0.18	−1.6	–						67Pa08	
		763.47	0.22			1.3	–						68Wo02	
	ave.	763.73	0.18			0.1	1	97	68	^{204}Tl			average	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{204}At(β^+)^{204}Po	6220	160	6466	25	1.5	U					86Ve.B	*
^{204}Fr^n(IT)^{204}Fr^m	276.1	0.5				5					95Bi.A	
*^{204}Po(α)^{200}Pb	Printing error in reference: ^{204}Po not ^{206}Po; Z recalibrated										AHW	**
*^{204}Fr(α)^{200}At	E_α=7031(5), 6916(8) to ground state, 113 level										92Hu04	**
*^{204}Fr^m(α)^{200}At^m	E_α=6969(5); and 7013(5) from ^{204}Fr^n 276.1 above ^{204}Fr^m to ^{200}At^n										95Bi.A	**
*	230.9 above ^{200}At^m										92Hu04	**
*^{204}Fr^m(α)^{200}At^m	E_α=7020(7) from ^{204}Fr^n 276.1 above Fr^m to ^{200}At^n 230.9 above ^{200}At^m										95Bi.A	**
*^{204}Fr^m(α)^{200}At^m	E_α=6976(6); and 7017(6) from ^{204}Fr^n 276.1 above ^{204}Fr^m to ^{200}At^n										GAu	**
*^{204}Au(β^-)^{204}Hg	F : reported 4 s activity does not exist										Ens87a	**
*^{204}At(β^+)^{204}Po	E_{β^+}=2950(160) to 8$^+$ level at 2248.17 keV										Ens102	**
C$_{16}$ H$_{13}$$-$^{205}Tl	127345	29	127298.2	1.3	$-$1.1	U			R08	1.5	69De19	
C$_{14}$ N$_2$ H$_9$$-$^{205}Tl	102091	36	102146.1	1.3	1.0	U			R08	1.5	69De19	
^{205}Tl$-$^{168}Er ^{37}Cl	76198	44	76148.5	1.8	$-$0.8	U			R08	1.5	69De19	
^{205}Tl$-$^{170}Er ^{35}Cl	70034	23	70103.9	2.1	2.0	U			R08	1.5	69De19	
^{205}Tl$-$^{133}Cs$_{1.541}$	120129	11	120125.8	1.3	$-$0.3	U			MA8	1.0	08We02	
^{205}Bi$-$u	$-$22559	30	$-$22614	5	$-$1.8	U			GS2	1.0	05Li24	
^{205}Po$-$u	$-$18773	30	$-$18810	11	$-$1.2	–			GS2	1.0	05Li24	
ave.	$-$18790	25			$-$0.8	1	19	19 ^{205}Po			average	
^{205}Rn$-$^{133}Cs$_{1.541}$	137456	50	137422	5	$-$0.7	U			SH1	1.0	13Dr04	
	137458	29			$-$1.3	U			SH1	1.0	13Dr04	
^{205}Fr$-$^{133}Cs$_{1.541}$	144293.8	9.7	144292	8	$-$0.1	2			MA8	1.0	08We02	
^{205}Rn$-$^{208}Pb$_{.986}$	14748	11	14744	6	$-$0.3	–			SH1	1.0	13Dr04	
	14772	20			$-$1.4	–			SH1	1.0	13Dr04	
ave.	14754	10			$-$1.0	1	33	32 ^{205}Rn			average	
^{205}Tl ^{35}Cl$-$^{203}Tl ^{37}Cl	5040	4	5033.3	0.6	$-$0.4	U			H17	4.0	64Mc07	
	5031.43	1.07			0.7	–			H36	2.5	85De40	
	5032.88	1.01			0.3	–			H42	1.5	93Si05	
ave.	5032.5	1.3			0.6	1	19	15 ^{205}Tl			average	
^{205}Po$-$^{205}Fr	$-$18450	2050	$-$17404	14	0.5	U			RI1	1.0	16Sc.A	
^{205}At$-$^{205}Fr	$-$12420	450	$-$12520	18	$-$0.2	U			RI1	1.0	16Sc.A	
^{205}Rn$-$^{205}Fr	$-$6640	330	$-$6871	10	$-$0.7	U			RI1	1.0	16Sc.A	
^{205}Tl$-$^{167}Er ^{37}Cl	76426	47	76470.5	1.8	0.6	U			R08	1.5	69De19	
^{205}Tl$-$^{169}Tm ^{35}Cl	71355	25	71356.2	1.6	0.0	U			R08	1.5	69De19	
^{169}Tm ^{37}Cl$-$^{205}Tl	$-$74316	32	$-$74306.3	1.6	0.2	U			R08	1.5	69De19	
^{205}Tl$-$^{204}Hg	938	27	933.2	1.4	$-$0.1	U			R08	1.5	69De19	
^{205}Tl$-$^{203}Tl	2092	20	2083.2	0.6	$-$0.3	U			R08	1.5	69De19	
^{205}Po(α)^{201}Pb	5324.1	10.	5325	10	0.1	1	95	90 ^{201}Pb			67Ti04	
^{205}At(α)^{201}Bi	6016.3	4.	6019.6	1.7	0.8	4					63Ho18	Z
	6020.5	2.			$-$0.5	4			Dba		68Go.B	Z
	6018.9	5.			0.1	4					74Ho27	Z
^{205}Rn(α)^{201}Po	6386.6	3.	6386.5	1.8	0.0	–					67Va17	Z
	6386.6	6.			0.0	–					71Ho01	Z
	6385.7	2.5			0.3	–			Lvn		93Wa04	
ave.	6386.1	1.9			0.2	1	97	68 ^{205}Rn			average	
^{205}Fr(α)^{201}At	7056.5	5.	7054.7	2.4	$-$0.3	3					67Va20	Z
	7052.2	5.			0.5	3					74Ho27	Z
	7057.3	5.			$-$0.5	3			ORa		81Ri04	Z
	7052.9	7.			0.3	3			Ara		95Le04	
	7053.9	5.			0.2	3			Anv		05De01	
^{205}Ra(α)^{201}Rn	7506.7	20.	7490	50	$-$0.4	F			GSa		87He10	*
	7496.6	25.			$-$0.2	o			Jya		95Le15	
	7486.4	20.				5			Jya		96Le09	
^{205}Ra^m(α)^{201}Rn^m	7501.7	10.	7505	9	0.3	6			Ara		95Le04	
	7522.1	25.			$-$0.7	o			Jya		95Le15	
	7517.0	20.			$-$0.6	6			Jya		96Le09	
	7526.1	30.			$-$0.7	U			Anv		10He25	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{205}Ac(α)^{201}Fr		8093.2	30.6				3			Lza		14Zh03	
^{204}Hg(d,p)^{205}Hg		3443	5	3444	4	0.3	1	52	52 ^{205}Hg	Ald		70An14	
^{205}Tl(γ,n)^{204}Tl		−7515	29	−7546.0	0.5	−1.1	U			Phi		60Ge01	
		−7548	3			0.7	U			McM		79Ba06	
^{205}Tl(d,t)^{204}Tl		−1288.7	0.6	−1288.8	0.5	−0.2	1	64	60 ^{205}Tl	Mun		90Li40	
^{204}Pb(n,γ)^{205}Pb		6731.53	0.15	6731.66	0.11	0.9	–			ILn		83Hu13	Z
		6731.80	0.16			−0.9	–			Bdn		06Fi.A	
^{204}Pb(d,p)^{205}Pb		4516	20	4507.10	0.11	−0.4	U			Ald		67Bj01	
^{204}Pb(n,γ)^{205}Pb	ave.	6731.66	0.11	6731.66	0.11	0.1	1	99	69 ^{204}Pb			average	
^{205}Hg(β^-)^{205}Tl		1620	200	1533	4	−0.4	U					40Kr08	
		1750	200			−1.1	U					51Ly10	
^{205}Pb(ε)^{205}Tl		41.4	1.1	50.6	0.5	8.4	B					78Pe08	
^{205}Bi(β^+)^{205}Pb		2701.4	10.	2706	5	0.4	–					62Bo25	*
		2715.4	10.			−1.0	–					62Pe08	*
	ave.	2708	7			−0.4	1	52	51 ^{205}Bi			average	
^{205}Po(β^+)^{205}Bi		3390	150	3543	11	1.0	U					69Ho37	*
*^{205}Ra(α)^{201}Rn	F : possibly mixed with ^{205}Ra^m(α)^{201}Rn^m											87He10	**
*^{205}Bi(β^+)^{205}Pb	E_{β^+}=976(10) 990(10) respectively, to 7/2$^-$ level at 703.427 keV											Ens044	**
*^{205}Po(β^+)^{205}Bi	p$^+$ =3(1)$\times10^{-3}$ to 7/2$^-$ level at 849.84 and 7/2$^-$ at 1001.22 keV											Ens044	**
^{206}Bi−u		−21429	30	−21501	8	−2.4	U			GS2	1.0	05Li24	
^{206}Po−u		−19471	30	−19526	4	−1.8	U			GS2	1.0	05Li24	
^{206}At−u		−13305	30	−13344	16	−1.3	1	29	29 ^{206}At	GS2	1.0	05Li24	
^{206}Rn−^{133}Cs$_{1.549}$		136641	15	136650	9	0.6	1	38	38 ^{206}Rn	SH1	1.0	13Dr04	
^{206}Pb ^{35}Cl$_2$−^{202}Hg ^{37}Cl$_2$		9722.09	0.57	9721.8	1.1	−0.2	1	62	54 ^{206}Pb	H36	2.5	85De40	
^{206}Pb ^{35}Cl−^{204}Hg ^{37}Cl		3929	4	3921.2	1.3	−0.5	U			H17	4.0	64Mc07	
^{206}Pb ^{35}Cl−^{204}Pb ^{37}Cl		4378	3	4371.81	0.15	−0.5	U			H17	4.0	64Mc07	
		4370.72	1.17			0.4	U			H36	2.5	85De40	
		4371.29	0.81			0.4	U			H42	1.5	93Si05	
^{206}Rn−^{208}Pb$_{.990}$		13307	15	13310	9	0.2	1	38	37 ^{206}Rn	SH1	1.0	13Dr04	
^{206}At−^{205}Fr$_{1.005}$		−12110	2260	−11931	18	0.1	U			RI1	1.0	16Sc.A	
^{206}Rn−^{205}Fr$_{1.005}$		−7800	620	−8391	13	−1.0	U			RI1	1.0	16Sc.A	
^{206}Fr−^{205}Fr$_{1.005}$		130	140	80	30	−0.4	U			RI1	1.0	16Sc.A	*
^{206}Po(α)^{202}Pb		5327.4	4.	5327.0	1.3	−0.1	2					67Ti04	Z
		5327.4	1.5			−0.3	2			Dba		69Go23	*
		5325.1	3.			0.6	2					70Ra14	Z
^{206}At(α)^{202}Bi		5884.4	3.6	5887	5	0.7	o			Dba		68Go.B	*
		5886.4	5.			0.1	1	98	70 ^{202}Bi	Dba		81Va27	*
^{206}Rn(α)^{202}Po		6381.8	3.	6383.7	1.6	0.6	–					67Va17	Z
		6384.6	3.			−0.3	–			Dba		71Go35	Z
		6384.8	2.5			−0.4	–			Lvn		93Wa04	
	ave.	6383.9	1.6			−0.1	1	99	75 ^{202}Po			average	
^{206}Fr(α)^{202}At		6925.9	7.	6923	4	−0.4	4					67Va20	*
		6918.9	7.			0.6	4					74Ho27	*
		6924.0	7.			−0.1	4			ORa		81Ri04	*
		6924.8	7.			−0.2	4			Lvn		92Hu04	*
^{206}Fr^n(α)^{202}At^n		7068.8	5.	7068	4	−0.2	6			ORa		81Ri04	Z
		7067.1	5.			0.2	6			Lvn		92Hu04	*
^{206}Ra(α)^{202}Rn		7416.3	5.	7415	4	−0.2	3					67Va22	Z
		7414.3	10.			0.1	3			GSa		87He10	
		7412.2	10.			0.3	o			Jya		95Le15	
		7406	15			0.6	o			Jya		95Uu01	
		7412.2	10.			0.3	3			Jya		96Le09	
^{206}Ac(α)^{202}Fr		7944.6	30.	7960	50	0.3	4			Jya		98Es02	
		7972.0	30.			−0.3	4			Lza		14Zh03	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{206}Ac^{m}(α)^{202}Fr^{m}	7903.8	30.				6			Jya		98Es02	
^{204}Pb(t,p)^{206}Pb	6322	20	6336.53	0.12	0.7	U			Ald		67Ha.A	
^{204}Pb(α,d)^{206}Bi	−15798.	11.5	−15792	8	0.5	R			Pit		76Da20	
^{205}Tl(n,γ)^{206}Tl	6503.7	0.4	6503.8	0.4	0.3	1	93	84 ^{206}Tl	MMn		74Co21	Z
	6502.87	0.27			3.5	C			Bdn		06Fi.A	
^{205}Tl(d,p)^{206}Tl	4276	5	4279.2	0.4	0.6	U			ANL		65Er02	
^{205}Tl(^{3}He,d)^{206}Pb	1761.7	1.4	1760.2	0.5	−1.1	1	13	12 ^{205}Tl	Mun		90Li40	
^{205}Pb(n,γ)^{206}Pb	8086.66	0.06	8086.66	0.06	0.0	1	100	69 ^{205}Pb			96Ra16	Z
^{206}Pb(γ,n)^{205}Pb	−8090	70	−8086.66	0.06	0.0	U			Phi		60Ge01	
	−8087	3			0.1	U			McM		79Ba06	
^{206}Pb(d,t)^{205}Pb	−1830	100	−1829.43	0.06	0.0	U			MIT		53Ha66	
	−1831.2	0.5			3.5	B			Mun		90Li40	
^{206}Hg(β^-)^{206}Tl	1240	62	1308	20	1.1	U					68Wo09	∗
^{206}Tl(β^-)^{206}Pb	1534	5	1532.2	0.6	−0.4	U					71Pe23	
	1527	4			1.3	U					72Wi18	
^{206}Bi(β^+)^{206}Pb	3683	33	3757	8	2.3	U					62Pe08	∗
^{206}Bi(ε)^{206}Pb	3753	10			0.4	2					74Go20	∗
^{206}At(β^+)^{206}Po	5687	150	5759	16	0.5	U					77Li16	∗
^{206}Fr^{n}(IT)^{206}Fr^{m}	531	2				7			ORa		81Ri04	
^{206}Fr^{x}(IT)^{206}Fr	100	100				5					AHW	∗
∗^{206}Fr−^{205}Fr$_{1.005}$	D_M=230(110) μu for mixture gs+m at 190(40) keV; $M-A$=–1100(110) keV										Nub16b	∗∗
∗^{206}Po(α)^{202}Pb	Printing error in reference: ^{206}Po not ^{211}Po; Z recalibrated										AHW	∗∗
∗^{206}At(α)^{202}Bi	E_α=5702.8(2,Z) to (5)$^+$ level at 68(3) keV										Ens044	∗∗
∗^{206}At(α)^{202}Bi	E_α=5773.8(5,Z), 5702.8(5,Z) to ground state and (5)$^+$ level at 68(3) keV										Ens044	∗∗
∗^{206}Fr(α)^{202}At	E_α=6793.1(5,Z); correction –2 for being a doublet										AHW	∗∗
∗^{206}Fr(α)^{202}At	E_α=6786.3(5,Z); correction –2 for being a doublet										AHW	∗∗
∗^{206}Fr(α)^{202}At	E_α=6791.3(5,Z); correction –2 for being a doublet										AHW	∗∗
∗^{206}Fr(α)^{202}At	E_α=6792(5); correction –2 for being a doublet										AHW	∗∗
∗^{206}Fr^{n}(α)^{202}At^{n}	E_α=6930(5) and 6792(7) combined with E(γ)'s 531, 391.7 keV										92Hu04	∗∗
∗^{206}Hg(β^-)^{206}Tl	E_{β^-}=935(62) to 1$^-$ level at 304.896 keV										Ens085	∗∗
∗^{206}Bi(β^+)^{206}Pb	E_{β^+}=977(33) to 4$^+$ level at 1683.99 keV										Ens085	∗∗
∗^{206}Bi(ε)^{206}Pb	LK=0.509(0.015) to 5$^-$ level at 3562.92 keV, original error 22, recalculated										Ens085	∗∗
∗^{206}At(β^+)^{206}Po	E_{β^+}=3092(150) to 6$^+$ level at 1573.38 keV										Ens085	∗∗
∗^{206}Fr^{x}(IT)^{206}Fr	Assuming a 0.15(0.20)% isomeric mixture										AHW	∗∗
^{207}Hg−u	−17721	33	−17700	30	0.6	o			GS3	1.0	08Ch.A	
	−17700	32				2			GS3	1.0	12Ch19	
^{207}Rn−^{133}Cs$_{1.556}$	137794	28	137847	9	1.9	U			SH1	1.0	13Dr04	
^{207}Fr−^{133}Cs$_{1.556}$	144062	20	144063	19	0.1	1	88	88 ^{207}Fr	MA8	1.0	14Bo26	
^{207}Pb ^{35}Cl−^{205}Tl ^{37}Cl	4413	4	4419.6	0.6	0.4	U			H17	4.0	64Mc07	
	4415.60	2.40			0.7	U			H36	2.5	85De40	
	4417.32	1.40			1.1	U			H42	1.5	93Si05	
^{206}Pb H−^{207}Pb	6394.2	1.1	6393.42	0.10	−0.3	U			C4	2.5	71Ke02	
^{206}Fr^{x}−^{207}Fr$_{.498}$ ^{205}Fr$_{.502}$	930	90	930	100	0.0	U			P24	2.5	82Au01	
^{207}Po(α)^{203}Pb	5216.0	2.5	5215.9	2.5	0.0	1	96	59 ^{207}Po	Dba		70Af.A	
^{207}At(α)^{203}Bi	5872.5	3.				3			Dba		69Go23	Z
^{207}Rn(α)^{203}Po	6256.3	3.	6251.2	1.6	−1.6	4					67Va20	Z
	6247.3	3.			1.3	4			Dba		71Go35	Z
	6250.4	2.5			0.3	4			Lvn		93Wa04	
^{207}Fr(α)^{203}At	6907.8	5.	6893	20	−0.3	–					67Va20	Z
	6895.8	5.			−0.1	–					74Ho27	Z
	6900.9	5.			−0.2	–			ORa		81Ri04	Z
ave.	6901.5	2.9			−0.2	1	16	12 ^{207}Fr			average	
^{207}Ra(α)^{203}Rn	7273.8	5.	7270	50	0.0	4					67Va22	Z
	7268.7	10.			0.1	4			GSa		87He10	
	7276.9	12.2			−0.1	4			Jya		95Uu01	
^{207}Ra^{m}(α)^{203}Rn^{m}	7464.5	10.2	7468	8	0.3	2			GSa		87He10	
	7474.7	15.			−0.4	o			Jya		95Le15	
	7475.7	15.			−0.5	2			Jya		96Le09	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{207}Ac(α)^{203}Fr		7864.3	25.	7840	50	−0.4	o			Jya		94Le05	
		7844.9	25.				2			Jya		98Es02	
^{205}Tl(t,p)^{207}Tl		4880	15	4874	5	−0.4	1	13	13 ^{207}Tl	Ald		69Ha11	
^{207}Pb(t,α)^{206}Tl		12321	25	12326.2	0.6	0.2	U			Ald		67Ha.A	
^{206}Pb(n,γ)^{207}Pb		6737.85	0.15	6737.78	0.10	−0.5	–			MMn		81Ke11	Z
		6737.72	0.18			0.3	–			ILn		83Hu13	Z
		6737.74	0.17			0.2	–			Bdn		06Fi.A	
^{207}Pb(γ,n)^{206}Pb		−6742	3	−6737.78	0.10	1.4	U			McM		79Ba06	
^{206}Pb(d,p)^{207}Pb		4480	30	4513.21	0.10	1.1	U			MIT		53Ha66	
		4510	20			0.2	U					58Mc64	
		4526	30			−0.4	U			Pit		64Co11	
^{206}Pb(n,γ)^{207}Pb	ave.	6737.78	0.10	6737.78	0.10	0.0	1	100	87 ^{207}Pb			average	
^{207}Hg(β^-)^{207}Tl		4815	150	4550	30	−1.8	U					81Jo.B	∗
^{207}Tl(β^-)^{207}Pb		1431	8	1418	5	−1.7	1	46	45 ^{207}Tl			67Da10	
^{207}Bi(ε)^{207}Pb		2392	10	2397.4	2.1	0.5	U					Averag	∗
^{207}Po(β^+)^{207}Bi		2907	10	2909	7	0.2	1	44	41 ^{207}Po			58Ar56	∗
^{207}Rn(β^+)^{207}At		4617	70	4593	15	−0.3	U					75Ze.A	∗
∗^{207}Hg(β^-)^{207}Tl	E_{β^-}=1800(150), 14%, 32%, 16%, 7% to (7/2$^-$,9/2) level at 2911.83 keV											81Jo.B	∗∗
∗	(9/2)$^+$ at 2985.23 and 3104.43, (7/2$^-$,9/2,11/2) at 3143.1 keV											Ens112	∗∗
∗^{207}Bi(ε)^{207}Pb	Average pL=0.61(0.05) to 7/2$^-$ level at 2339.921 keV from two references:											Ens112	∗∗
∗	pL=0.663(0.014)											64De16	∗∗
∗	pL=0.56(0.04); original error 0.08 is 2σ											82Ta18	∗∗
∗^{207}Po(β^+)^{207}Bi	E_{β^+}=893(10) to 7/2$^-$ level at 992.43 keV, and other E_{β^+}											Ens112	∗∗
∗^{207}Rn(β^+)^{207}At	E_{β^+}=3250(70) to 7/2$^-$ level at 344.55 keV											Ens112	∗∗
^{208}Hg−u		−14241	33	−14240	30	0.0	o			GS3	1.0	08Ch.A	
		−14241	33				2			GS3	1.0	09Ch08	
^{208}Pb−^{133}Cs$_{1.564}$		124532.0	5.6	124525.1	1.2	−1.2	U			MA8	1.0	08We02	
		124524.3	5.5			0.1	U			MA8	1.0	14Bo26	
^{208}Po−u		−18710	31	−18754.4	1.9	−1.4	U			GS2	1.0	05Li24	
^{208}Fr−^{133}Cs$_{1.564}$		144984	20	145011	13	1.4	o			MA8	1.0	12Bo.A	
		145030	16			−1.2	o			MA8	1.0	12Bo.A	
		145012	13			−0.1	1	95	95 ^{208}Fr	MA8	1.0	14Bo26	
^{208}Pb ^{35}Cl−^{206}Pb ^{37}Cl		5136	2	5136.90	0.14	0.1	U			H17	4.0	64Mc07	
		5136.23	1.08			0.2	U			H36	2.5	85De40	
		5136.93	0.41			0.0	U			H42	1.5	93Si05	
^{207}Fr−^{208}Fr$_{.498}$ ^{206}Fr$^x_{.502}$		−890	60	−940	60	−0.4	U			P24	2.5	82Au01	
^{208}Po(α)^{204}Pb		5216.3	2.	5215.4	1.3	−0.5	2			Dba		69Go23	Z
		5214.0	3.			0.5	2					70Ra14	Z
		5215.1	2.			0.1	2					89Ma05	
^{208}At(α)^{204}Bi		5750.6	3.	5751.1	2.2	0.2	3			Dba		69Go23	Z
		5751.6	3.			−0.2	3			Dba		81Va27	Z
^{208}Rn(α)^{204}Po		6269.3	4.	6260.7	1.7	−2.1	4					55Mo69	Z
		6260.0	3.			0.2	4			Dba		71Go35	Z
		6257.5	5.			0.6	4					74Ho27	
		6258.7	2.5			0.8	4			Lvn		93Wa04	
^{208}Fr(α)^{204}At		6778.3	5.	6785	24	0.1	–					67Va20	Z
		6767.7	5.			0.3	–					74Ho27	Z
		6767.7	5.			0.3	–			ORa		81Ri04	Z
		6739.8	51.0			0.9	–			GSa		15De22	
	ave.	6771.1	2.9			0.3	1	23	19 ^{204}At			average	
^{208}Ra(α)^{204}Rn		7273.1	5.				2					67Va22	Z
^{208}Ac(α)^{204}Fr		7720.8	15.	7720	50	0.0	5			Jya		94Le05	
		7769.7	40.			−1.0	5			JAa		96Ik01	
		7707.5	21.4			0.3	5			Lza		14Ya19	
^{208}Ac^m(α)^{204}Fr^n		7892.1	20.	7899	14	0.3	6			Dbb		94An01	
		7910.4	20.			−0.6	6			Jya		94Le05	
		7871.7	50.			0.5	6			JAa		96Ik01	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{208}Th(α)^{204}Ra		8202.0	30.				6			Anv		10He25	
^{206}Pb(t,p)^{208}Pb		5622	30	5623.85	0.11	0.1	U			Ald		67Ha.A	
^{207}Pb(n,γ)^{208}Pb		7367.95	0.15	7367.87	0.05	−0.5	–			MMn		81Ke11	Z
		7367.96	0.10			−0.9	–					81Su.A	Z
		7367.81	0.11			0.5	–			ILn		83Hu13	Z
		7367.774	0.098			1.0	–					98Be19	Z
		7367.92	0.16			−0.3	–			Bdn		06Fi.A	
^{208}Pb(γ,n)^{207}Pb		−7370	3	−7367.87	0.05	0.7	U			McM		79Ba06	
^{208}Pb(d,t)^{207}Pb		−1114	25	−1110.64	0.05	0.1	U			Pit		64Co11	
^{207}Pb(n,γ)^{208}Pb	ave.	7367.87	0.05	7367.87	0.05	0.0	1	100	87 ^{208}Pb			average	
^{208}Tl(β^-)^{208}Pb		4989.7	7.	4998.5	1.7	1.3	U					48Ma29	*
		4997.7	10.			0.1	U					54El24	*
^{208}Bi(ε)^{208}Pb		2810	4	2878.4	2.0	17.1	B					59Mi19	*
*^{208}Tl(β^-)^{208}Pb		E_{β^-}=1792(7) 1800(10) respectively, to 5$^-$ level at 3197.711 keV										Ens077	**
*^{208}Bi(ε)^{208}Pb		pK=0.24(0.01) to 3$^-$ level at 2614.522 keV, recalculated										Ens077	**
^{209}Bi−^{133}Cs$_{1.571}$		128937.6	4.7	128933.5	1.5	−0.9	U			MA8	1.0	08We02	
^{209}Fr−^{226}Ra$_{.925}$		−27584	36	−27550	16	1.0	2			MA3	1.0	92Bo28	
^{209}Bi ^{35}Cl−^{207}Pb ^{37}Cl		7444	3	7451.9	0.8	0.7	U			H17	4.0	64Mc07	
		7454.13	1.51			−0.6	U			H36	2.5	85De40	
^{208}Fr−^{209}Fr$_{.498}$ ^{207}Fr$_{.502}$		720	60	639	16	−0.5	U			P24	2.5	82Au01	
^{209}Bi(α)^{205}Tl		3137.0	2.2	3137.3	0.8	0.1	1	12	10 ^{209}Bi			03De11	
^{209}Po(α)^{205}Pb		4974	5	4979.2	1.4	1.0	2					66Ha29	*
		4980.0	2.			−0.4	2			Dba		69Go23	*
		4979.3	2.			0.0	2					89Ma05	*
^{209}At(α)^{205}Bi		5757.2	2.	5757.0	2.0	−0.1	1	96	49 ^{205}Bi	Dba		69Go23	Z
^{209}Rn(α)^{205}Po		6157.5	3.	6155.4	2.0	−0.7	–			Dba		71Go35	Z
		6154.2	2.5			0.5	–			Lvn		93Wa04	
	ave.	6155.5	2.0			−0.1	1	99	75 ^{205}Po			average	
^{209}Fr(α)^{205}At		6777.7	5.	6777	4	0.0	3					67Va20	Z
		6777.3	5.			0.0	3					74Ho27	Z
^{209}Ra(α)^{205}Rn		7147.0	5.	7143.1	2.7	−0.8	2					67Va22	Z
		7141	5			0.4	2			GSa		03He06	*
		7142.0	4.			0.3	2					08Ha12	
^{209}Ac(α)^{205}Fr		7733.3	15.	7730	50	−0.1	3					68Va04	
		7738.4	20.			−0.2	3			Dbb		94An01	
		7729.2	15.			0.0	3			Jya		94Le05	
		7728.2	40.			0.0	U			JAa		96Ik01	
		7725.1	10.			0.1	3			GSa		00He17	
		7723.0	23.			0.1	3			Lza		14Ya19	
^{209}Th^m(α)^{205}Ra^m		8238.0	50.	8273	23	0.7	7			JAa		96Ik01	*
		8281.8	25.			−0.3	7			Anv		10He25	*
^{207}Pb(t,p)^{209}Pb		2814	12	2823.4	1.3	0.8	U			Ald		68Bj03	
^{209}Bi(p,t)^{207}Bi		−5864.8	2.0	−5864.9	2.0	0.0	1	98	97 ^{207}Bi	MSU		76Be.B	*
^{208}Pb(d,p)^{209}Pb		1705	15	1712.8	1.3	0.5	U			MIT		64Sp12	
		1700	10			1.3	U					67Mu16	
		1718	4			−1.3	1	11	11 ^{209}Pb	Pit		72Ko03	*
		1715	10			−0.2	U			Yal		74Ko20	
^{209}Bi(t,α)^{208}Pb		16003	25	16014.8	0.8	0.5	U			Ald		68Bj01	
^{209}Bi(γ,n)^{208}Bi		−7432	10	−7459.8	1.9	−2.8	U			Phi		60Ge01	
		−7460	2			0.1	2			McM		79Ba06	
^{209}Bi(d,t)^{208}Bi		−1216	30	−1202.5	1.9	0.4	U			Pit		64Co11	
		−1201	5			−0.3	2			ANL		64Er06	
^{209}Pb(β^-)^{209}Bi		644.6	1.2	644.0	1.1	−0.5	1	91	87 ^{209}Pb			72Be44	
^{209}Rn(β^+)^{209}At		3928	40	3942	11	0.3	R					74Vy01	*
*^{209}Po(α)^{205}Pb		E_α=4876.8(5,Z) 4882.8(2,Z) respectively, to (20% ground state + 80% ^{205}Pb^m at 2.329 keV)										Ens044	**
*^{209}Po(α)^{205}Pb		E_α=4882.6(2.0) 4622(5) to (ground state + 80% ^{205}Pb^m at 2.329), 3/2$^-$ at 262.8keV										Ens044	**
*^{209}Ra(α)^{205}Rn		E_α=7003(10) to ground state, 6625(5) to 387.0 level										03He06	**
*^{209}Th^m(α)^{205}Ra^m		the decay is from ^{209}Th isomer, following Ea$_1$−Ea$_2$−Ea$_3$−Ea$_4$ correlations										FGK141	**
*^{209}Bi(p,t)^{207}Bi		$Q-Q$(^{208}Pb(p,t))=–241(2,Be), Q(Pb)=–5623.82(0.20) keV										AHW	**
*^{208}Pb(d,p)^{209}Pb		$Q-Q$(^{209}Bi(d,p))=–662(4),Q(Bi)=2380.01(0.14) keV										AHW	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
$*^{209}$Rn(β^+)^{209}At	E_{β^+}=2160(40) to 7/2$^-$ level at 745.81 keV											Ens156	**
^{210}Fr$-^{226}$Ra$_{.929}$		−27198	24	−27183	16	0.6	1	46	46 ^{210}Fr	MA3	1.0	92Bo28	
^{209}Fr$-^{210}$Fr$_{.498}$ ^{208}Fr$_{.502}$		−770	50	−771	17	0.0	U			P24	2.5	82Au01	
^{210}Pb(α)^{206}Hg		3792.4	20.				2					62Ka27	
^{210}Bi(α)^{206}Tl		5042.8	2.	5036.5	0.8	−3.2	B			Orm		60Wa14	*
		5037.3	1.1			−0.8	1	50	33 ^{210}Bi			76Tu.A	*
^{210}Po(α)^{206}Pb		5407.53	0.07	5407.53	0.07	0.0	1	100	98 ^{210}Po			73Go39	Z
		5407.7	2.			−0.1	U					89Ma05	
^{210}At(α)^{206}Bi		5630.9	1.5	5631.2	1.0	0.2	3			Dba		69Go23	*
		5631.4	1.3			−0.2	3			Dba		81Va27	*
^{210}Rn(α)^{206}Po		6162.1	3.	6159.0	2.2	−1.0	3					55Mo69	Z
		6155.9	3.			1.0	3			Dba		71Go35	Z
^{210}Fr(α)^{206}At		6699.9	5.	6672	5	−5.7	B					67Va20	*
		6672.3	5.			−0.1	1	97	54 ^{210}Fr	GSa		05Ku06	
^{210}Ra(α)^{206}Rn		7156.6	5.	7151	3	−1.1	2					67Va22	Z
		7147	5			0.8	2			GSa		03He06	*
		7146.4	5.			0.5	2			Jya		07Le14	
^{210}Ac(α)^{206}Fr		7607.2	8.	7610	50	0.0	5					68Va04	
		7607.2	10.			0.0	5			GSa		00He17	
^{210}Th(α)^{206}Ra		8052.7	17.	8069	6	0.9	4			Jya		95Uu01	
		7962.0	50.			2.1	F			JAa		96Ik01	*
		8071.0	6.			−0.3	4			Anv		10He25	
^{208}Pb(t,p)^{210}Pb		628	12	640.7	0.9	1.1	U			Ald		68Bj03	
^{209}Bi(n,γ)^{210}Bi		4604.5	0.3	4604.63	0.08	0.4	–					71Mo03	
		4604.68	0.14			−0.3	–			MMn		83Ts01	Z
		4604.63	0.10			0.0	–			Bdn		06Fi.A	
^{209}Bi(d,p)^{210}Bi		2369	10	2380.07	0.08	1.1	U			MIT		64Sp12	
^{209}Bi(n,γ)^{210}Bi	ave.	4604.64	0.08	4604.63	0.08	0.0	1	100	86 ^{209}Bi			average	
^{210}Tl(β^-)^{210}Pb		5500	100	5482	12	−0.2	U					64We06	*
^{210}Pb(β^-)^{210}Bi		63.5	0.5	63.5	0.5	0.0	1	100	97 ^{210}Pb			67Ha03	*
^{210}Bi(β^-)^{210}Po		1160.5	1.5	1161.2	0.8	0.4	–					62Da03	
		1161.5	1.5			−0.2	–					67Hs01	
	ave.	1161.0	1.1			0.1	1	52	50 ^{210}Bi			average	
^{210}At(ε)^{210}Po		3870	30	3981	8	3.7	B					63Sc15	*
$*^{210}$Bi(α)^{206}Tl	E_α=4685.3(2,Z), 4648.3(2,Z) to 2$^-$ level at 265.832, 1$^-$ at 304.896 keV											Ens085	**
$*^{210}$Bi(α)^{206}Tl	E_α=4946(1), 4909(1) from ^{210}Bi^m at 271.31 keV											Nub16b	**
*	to 2$^-$ level at 265.832, 1$^-$ level at 304.896 keV											Ens085	**
$*^{210}$At(α)^{206}Bi	E_α=5523.8, 5464.8, 5441.8(1.5,Z) to ground state, 4$^+$ at 59.897, 5$^+$ at 82.818											Ens085	**
$*^{210}$At(α)^{206}Bi	E_α=5524.1, 5465.3, 5442.8(1.3,Z) to ground state, 4$^+$ at 59.897, 5$^+$ at 82.818											Ens085	**
$*^{210}$Fr(α)^{206}At	E_α=6572.0(5,Z) 6542(5,Z) to ground state and level at 31.05 keV											Ens085	**
$*^{210}$Ra(α)^{206}Rn	E_α=7003(10) to ground state, 6447(5) to 574.9 level											03He06	**
$*^{210}$Th(α)^{206}Ra	F : Low energy; may be escape											96Ik01	**
$*^{210}$Tl(β^-)^{210}Pb	E_{β^-}=1870(100) to 3625(19) level, and other E_{β^-}											Ens148	**
$*^{210}$Pb(β^-)^{210}Bi	E_{β^-}=17.0(0.5) to 0$^-$ level at 46.5390 keV											Ens148	**
$*^{210}$At(ε)^{210}Po	pK=0.46(0.10) to (6)$^-$ level at 3727.34 keV											Ens148	**
^{211}Tl$-$u		−6525	45				2			GS3	1.0	08Ch.A	
^{211}Fr$-^{133}$Cs$_{1.586}$		145517	15	145508	13	−0.6	1	74	74 ^{211}Fr	MA8	1.0	09Ko35	
^{211}Fr$-^{226}$Ra$_{.934}$		−28200	25	−28176	13	1.0	1	27	26 ^{211}Fr	MA3	1.0	92Bo28	
^{211}Ra$-^{133}$Cs$_{1.586}$		150846.4	8.5				2			MA8	1.0	09Ko35	
^{211}Po$^m-^{211}$Po		1580	129	1570	5	0.0	U				2.5	15Di03	
^{207}Fr$-^{211}$Fr$_{.327}$ ^{205}Fr$_{.673}$		−930	100	−609	19	1.3	U			P24	2.5	82Au01	
^{208}Fr$-^{211}$Fr$_{.394}$ ^{206}Fr$^x_{.606}$		−260	50	−340	60	−0.7	U			P24	2.5	82Au01	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{210}Fr$-^{211}$Fr$_{.498}$ ^{209}Fr$_{.502}$		580	50	621	18	0.3	U			P24	2.5	82Au01	
^{211}Bi(α)^{207}Tl		6749.5	0.7	6750.4	0.5	1.2	–					61Ry02	Z
		6751.1	0.6			−1.2	–					71Gr17	Z
	ave.	6750.4	0.5			−0.1	1	100	57 ^{211}Bi			average	
^{211}Po(α)^{207}Pb		7594.5	0.5				2			Orm		62Wa18	Z
		7594.3	3.	7594.6	0.5	0.1	U			Dba		69Go23	Z
		7600.6	2.			−3.0	B					85La17	Z
		7586.0	15.3			0.6	U					15Di03	
^{211}Po^m(α)^{207}Pb		9057.1	5.1				2			Bka		82Bo04	
		9049.0	15.	9057	5	0.5	U					89Ku08	∗
		9043.0	15.			0.9	U					15Di03	∗
^{211}At(α)^{207}Bi		5979.4	2.	5982.4	1.3	1.5	2			Dba		69Go23	Z
		5981.6	3.			0.3	2			Bka		82Bo04	∗
		5985.9	2.			−1.7	2					85La17	Z
^{211}Rn(α)^{207}Po		5967.9	2.	5965.5	1.4	−1.2	2					55Mo69	Z
		5963.1	2.			1.2	2			Dba		71Go35	Z
^{211}Fr(α)^{207}At		6660.2	5.1	6662	3	0.4	2					67Va20	Z
		6663.5	4.			−0.3	2			GSa		05Ku06	
^{211}Ra(α)^{207}Rn		7045.3	5.	7042	3	−0.7	3					67Va22	Z
		7040	5			0.4	3			GSa		03He06	∗
		7039.7	6.			0.4	3			Jya		07Le14	
^{211}Ac(α)^{207}Fr		7624.8	8.	7620	50	−0.1	2					68Va04	
		7616.7	10.			0.1	2			GSa		00He17	
^{211}Th(α)^{207}Ra		7942.9	14.	7940	50	0.0	5			Jya		95Uu01	
		7930.6	30.6			0.2	5			Lza		15Ya13	
^{211}Pb(β^-)^{211}Bi		1378	8	1366	5	−1.5	1	47	43 ^{211}Bi			65Co06	
∗^{211}Po^m(α)^{207}Pb	E_α=7275(15) to 13/2$^+$ level at 1633.356 keV											Ens112	∗∗
∗^{211}Po^m(α)^{207}Pb	E_α=7269(15) to 13/2$^+$ level at 1633.356 keV											Ens112	∗∗
∗^{211}At(α)^{207}Bi	Recalibrated as in reference											91Ry01	∗∗
∗^{211}Ra(α)^{207}Rn	Average of E_α=6907(5) and several branches to known levels											03He06	∗∗
^{212}Bi$^n-$u		−7127	32				2			GS3	1.0	08Ch.A	
^{212}Fr$-^{133}$Cs$_{1.594}$		146938	10	146935	9	−0.3	1	89	89 ^{212}Fr	MA8	1.0	09Ko35	
^{212}Fr$-^{226}$Ra$_{.938}$		−27631	28	−27608	10	0.8	1	12	11 ^{212}Fr	MA3	1.0	92Bo28	
^{209}Fr$-^{212}$Fr$_{.563}$ ^{205}Fr$_{.437}$		−1270	70	−1218	16	0.3	U			P24	2.5	82Au01	
^{206}Fr$^x-^{212}$Fr$_{.139}$ ^{205}Fr$_{.861}$		340	130	470	100	0.4	U			P24	2.5	82Au01	
^{207}Fr$-^{212}$Fr$_{.163}$ ^{206}Fr$^x_{.837}$		−1150	70	−1320	90	−0.9	U			P24	2.5	82Au01	
^{212}Bi(α)^{208}Tl		6207.12	0.04	6207.262	0.028	3.5	B			BIP		61Ry02	Z
		6207.09	0.08			2.1	o			BIP		69Gr28	∗
		6207.262	0.028				2			BIP		72Go.A	∗
^{212}Bi^m(α)^{208}Tl		6458.1	30.				3					78Ba44	
^{212}Po(α)^{208}Pb		8953.6	0.8	8954.20	0.11	0.7	U					61Ry02	Z
		8953.85	0.31			1.1	–					71De52	Z
		8953.3	0.6			1.5	U					71Gr17	Z
		8954.25	0.12			−0.5	–					74Hu15	Z
	ave.	8954.20	0.11			0.0	1	100	91 ^{212}Po			average	
^{212}Po^m(α)^{208}Pb		11874.6	20.	11877	4	0.1	2					62Pe15	
		11859.3	15.			1.2	o					75Fr.B	
		11884.8	10.2			−0.7	2					76Fr.A	
		11875.6	5.1			0.3	2			GSa		12Ho12	
^{212}At(α)^{208}Bi		7829.0	9.	7817.1	0.6	−1.3	U					70Re02	∗
		7817.0	0.6				3					76Fr.A	∗
		7828.0	10.			−1.1	U					96Li37	∗
^{212}At^m(α)^{208}Bi		8049.3	10.	8040.0	0.6	−0.9	U					68Va18	
		8054.3	9.			−1.6	U					70Re02	∗
		8040.00	0.61				3					76Fr.A	∗
		8051.2	10.			−1.1	U					96Li37	∗
^{212}Rn(α)^{208}Po		6392.3	5.	6385.1	2.6	−1.4	3					55Mo69	Z
		6382.5	3.			0.9	3			Dba		71Go35	Z
^{212}Fr(α)^{208}At		6531.3	3.	6529.0	1.6	−0.7	2					66Va.A	Z
		6528.0	3.			0.3	2			Dba		81Va27	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{212}Fr(α)^{208}At		6527.5	3.	6529.0	1.6	0.5	2			Bka		82Bo04	*
		6529.5	4.			−0.1	2			GSa		05Ku06	
^{212}Ra(α)^{208}Rn		7030.0	5.	7031.7	1.7	0.3	5					67Va22	Z
		7034.0	5.			−0.4	5					74Ho27	Z
		7032.2	2.			−0.3	5			Bka		82Bo04	Z
		7028	5			0.7	5			GSa		03He06	*
		7040	24			−0.3	U			Lza		14Ya19	
^{212}Ac(α)^{208}Fr		7521.2	8.	7520	50	−0.1	2					68Va04	
		7515.1	10.			0.1	2			GSa		00He17	
		7514.0	18.			0.1	2			Lza		14Ya19	
^{212}Th(α)^{208}Ra		7952.3	10.	7958	5	0.6	3					80Ve01	
		7959.5	5.			−0.3	3			Anv		10He25	
		7980.8	20.4			−1.1	U			GSa		15De22	
^{212}Pa(α)^{208}Ac		8429.4	30.	8420	50	−0.3	6			JAa		97Mi03	
		8408.9	20.			0.1	6			Lza		14Ya19	
^{210}Pb(t,p)^{212}Pb		515	25	481.2	2.1	−1.4	U					71El05	
^{212}Pb(β^-)^{212}Bi		569.3	2.5	569.1	1.8	−0.1	–					48Ma30	*
		576.6	5.			−1.5	–					58Se71	*
	ave.	570.8	2.2			−0.7	1	67	34 ^{212}Bi			average	
^{212}Bi(β^-)^{212}Po		2256	3	2251.5	1.7	−1.5	–					48Fe09	
		2250.5	2.5			0.4	–					48Ma30	
	ave.	2252.8	1.9			−0.6	1	75	66 ^{212}Bi			average	
*^{212}Bi(α)^{208}Tl	E_α=6089.86(0.08,Z), 6050.57(0.07,Z) to ground state, 4^+ level at 39.858 keV											Ens077	**
*^{212}Bi(α)^{208}Tl	E_α=6089.883(0.037,Z), 6050.837(0.028,Z) to ground state, 4^+ level at 39.858 keV											72Go.A	**
*^{212}At(α)^{208}Bi	Original E_α=7679(8); calibration ^{211}Po 7448(1), now 7450.3(0.5) keV											AHW	**
*^{212}At(α)^{208}Bi	Original E_α=7669.0(0.2); calibration ^{211}Po 7450(2), now 7450.3(0.5)											05Ma.A	**
*^{212}At(α)^{208}Bi	E_α=7679(10) to ground state, 7618(10) to 63.3 level											96Li37	**
*	error estimated by the evaluators											GAu	**
*^{212}At^m(α)^{208}Bi	Original E_α=7900(8); calibration ^{211}Po 7448(1), now 7450.3(0.5) keV											GAu	**
*^{212}At^m(α)^{208}Bi	Original E_α=7887.7(0.2); calibration ^{211}Po 7450(2), now 7450.3(0.5)											GAu	**
*^{212}At^m(α)^{208}Bi	E_α=7897(10) to ground state, 7837(10) to 63.3 level											96Li37	**
*	error estimated by the evaluators											GAu	**
*^{212}Fr(α)^{208}At	E_α=6341(3) (recalibrated as in reference) to 63.70 level											91Ry01	**
*^{212}Ra(α)^{208}Rn	E_α=6898(5) to ground state, 6269(5) to 635.1 level											03He06	**
*^{212}Pb(β^-)^{212}Bi	E_{β^-}=330.7(2.5) 338(5) respectively to 0^- level at 238.632 keV											Ens053	**
^{213}Tl−u		1893	65	1915	29	0.3	o			GS3	1.0	10Ch19	
		1915	29				2			GS3	1.0	12Ch19	
^{213}Fr−^{133}Cs$_{1.602}$		147649.1	7.4	147652	5	0.4	1	55	55 ^{213}Fr	MA8	1.0	09Ko35	
^{213}Ra−^{133}Cs$_{1.602}$		151833	12	151837	11	0.3	1	77	77 ^{213}Ra	SH1	1.0	13Dr04	
^{207}Fr−^{213}Fr$_{.324}$ ^{204}Fr$_{.676}$		−2540	330	−2104	24	0.5	U			P24	2.5	82Au01	*
^{208}Fr−^{213}Fr$_{.279}$ ^{206}Fr$^{x}_{.721}$		−700	60	−850	80	−1.0	U			P24	2.5	82Au01	
^{209}Fr−^{213}Fr$_{.327}$ ^{207}Fr$_{.673}$		−670	60	−694	19	−0.2	U			P24	2.5	82Au01	
^{209}Fr−^{213}Fr$_{.196}$ ^{208}Fr$_{.804}$		−980	60	−930	17	0.3	U			P24	2.5	82Au01	
^{211}Fr−^{213}Fr$_{.330}$ ^{210}Fr$_{.670}$		−830	60	−735	16	0.6	U			P24	2.5	82Au01	
^{212}Fr−^{213}Fr$_{.498}$ ^{211}Fr$_{.502}$		270	50	332	11	0.5	U			P24	2.5	82Au01	
^{213}Bi(α)^{209}Tl		5982.6	6.	5988	3	0.9	2					64Gr11	
		5990.7	4.			−0.6	2			Gea		13Ma13	
^{213}Po(α)^{209}Pb		8537.1	5.	8536.1	2.6	−0.2	–					64Va20	Z
		8536.5	3.			−0.1	–			Bka		82Bo04	Z
	ave.	8536.7	2.6			−0.2	1	95	93 ^{213}Po			average	
^{213}At(α)^{209}Bi		9254.2	12.	9254	5	0.0	2					70Bo13	
		9254.2	5.			0.0	2			Lvn		87De.A	
^{213}Rn(α)^{209}Po		8245.1	8.	8245.2	2.9	0.0	3					67Va20	
		8240.0	10.			0.5	U					70Va13	
		8242	10			0.3	U			GSa		00He17	*
		8245.2	3.1			0.0	3			Jya		01Ku07	
		8218.6	44.			0.6	U					05Li17	
^{213}Fr(α)^{209}At		6904.0	5.	6904.9	1.2	0.2	–					67Va20	Z
		6908.0	5.			−0.6	–					74Ho27	Z
		6904.6	2.			0.1	–			Bka		82Bo04	Z

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{213}Fr(α)^{209}At		6904.9	1.7	6904.9	1.2	0.0	–			GSa		05Ku06	
		6880	20			1.2	U			GSa		15De22	
	ave.	6904.9	1.2			−0.1	1	99	53 ^{209}At			average	
^{213}Ra(α)^{209}Rn		6860.3	5.	6861.7	2.3	0.3	–					67Va22	∗
		6862.4	5.			−0.1	–					76Ra37	∗
		6862.2	3.			−0.2	–			GSa		06Ku26	∗
	ave.	6861.8	2.3			−0.1	1	99	76 ^{209}Rn			average	
^{213}Ra^m(α)^{209}Rn		8630.3	5.1	8630	4	−0.1	2					76Ra37	
		8629.3	5.			0.1	2			GSa		06Ku26	∗
^{213}Ac(α)^{209}Fr		7505.2	8.	7499	4	−0.7	3					68Va04	∗
		7497.0	10.			0.2	o			GSa		00He17	
		7497.0	5.			0.4	3			GSa		02He.A	
^{213}Th(α)^{209}Ra		7837.4	10.	7837	7	−0.1	3					68Va18	∗
		7836.5	10.			0.0	3					80Ve01	
^{213}Pa(α)^{209}Ac		8393.9	15.				4			GSa		00He17	
^{213}Bi(β^-)^{213}Po		1430	10	1422	5	−0.8	1	30	23 ^{213}Bi			68Va17	∗
∗^{207}Fr−^{213}Fr$_{.324}$ ^{204}Fr.	D_M=–2470(330) keV for ^{204}Fr mixture gs+m+n at 50(4), 326(4) keV											Nub171	∗∗
∗^{213}Rn(α)^{209}Po	E_α=8088(10), 7550(15) to ground state, 540.3 level											00He17	∗∗
∗^{213}Ra(α)^{209}Rn	E_α=6730.7, 6623.7, 6520.7(3,Z) to ground state, 1/2$^-$ at 110.25, 3/2$^-$ at 214.93											Ens156	∗∗
∗^{213}Ra(α)^{209}Rn	E_α=6731.9, 6624.9, 6523.9(5,Z) to ground state, 1/2$^-$ at 110.25, 3/2$^-$ at 214.93											Ens156	∗∗
∗^{213}Ra(α)^{209}Rn	E_α=6733(3), 6625(3) to ground state and 1/2$^-$ level at 110.25 keV											Ens156	∗∗
∗^{213}Ra^m(α)^{209}Rn	E_α=8467 (5) 8358(10) to ground state and 1/2$^-$ level at 110.25 keV											Ens156	∗∗
∗^{213}Ac(α)^{209}Fr	Original Q increased by 2 keV, as in reference											91Ry01	∗∗
∗^{213}Th(α)^{209}Ra	Original Q decreased by 0.5 keV, as in reference											91Ry01	∗∗
∗^{213}Bi(β^-)^{213}Po	E_{β^-}=1420(10) 1018(15) to ground state and 7/2$^+$ level at 440.45 keV											Ens074	∗∗
^{214}Ra−^{133}Cs$_{1.609}$		152235	22	152227	6	−0.3	U			MA8	1.0	08We02	
^{214}Bi(α)^{210}Tl		5621.3	3.0				2					91Ry01	∗
^{214}Po(α)^{210}Pb		7833.54	0.06	7833.54	0.06	0.0	1	100	97 ^{214}Po			71Gr17	Z
^{214}At(α)^{210}Bi		8987.2	4.				2			Bka		82Bo04	Z
^{214}At^m(α)^{210}Bi		9046.4	8.				2					82Ew01	
^{214}At^n(α)^{210}Bi		9220.8	5.				2					82Ew01	∗
^{214}Rn(α)^{210}Po		9212.6	20.	9208	9	−0.2	2					70To07	
		9207.5	10.			0.1	2					70Va13	
^{214}Fr(α)^{210}At		8585.5	8.	8589	4	0.4	4					68Va18	∗
		8590.9	5.			−0.5	4					70To18	∗
		8583.8	10.			0.5	4			Dbb		89An.A	
		8590.8	20.			−0.1	U			GSa		90Ni05	
		8578.7	48.			0.2	U					05Li17	
^{214}Fr^m(α)^{210}At		8711.7	8.	8710	3	−0.2	4					68Va04	Z
		8711.7	5.			−0.3	4					70To18	∗
		8708.1	5.			0.4	4			GSa		05Ku06	
^{214}Ra(α)^{210}Rn		7271.7	5.	7272.6	2.6	0.2	4					67Va22	Z
		7275.6	5.			−0.6	4					74Ho27	Z
		7273.2	10.			−0.1	4			GSa		00He17	∗
		7271.2	4.			0.3	4			GSa		06Ku26	∗
^{214}Ra(α)^{210}Rn^m		5563.9	30.				5			GSa		06Ku26	∗
^{214}Ac(α)^{210}Fr		7351.7	5.	7352.1	2.5	0.1	2					68Va04	Z
		7347.6	10.			0.4	2			Dbb		89An13	
		7347.6	10.			0.5	o			GSa		00He17	∗
		7349.6	5.			0.5	o			GSa		02He.A	
		7352.7	3.			−0.2	2			GSa		04Ku24	∗
^{214}Th(α)^{210}Ra		7828.6	10.	7827	5	−0.1	3					68Va18	
		7823.5	10.			0.4	3					80Ve01	
		7828.6	8.			−0.2	3			Jya		07Le14	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{214}Pa(α)^{210}Ac		8270.9	15.				6			GSa		00He17	
^{214}Pb(β^-)^{214}Bi		1024	20	1018	11	−0.3	1	32	31 ^{214}Bi			52Be78	*
^{214}Bi(β^-)^{214}Po		3260	30	3269	11	0.3	–					56Da06	
		3275	15			−0.4	–					60Lu07	
	ave.	3272	13			−0.2	1	69	69 ^{214}Bi			average	
*^{214}Bi(α)^{210}Tl	E_α=5516(3) recommended in place of the following E_α:											91Ry01	**
*	E_α=5510.5(1.0) keV											34Le01	**
*	E_α=5515.8(3.0) keV											60Wa14	**
*^{214}At^n(α)^{210}Bi	E_α=8782(5) to 9$^-$ level at 271.31 keV											Ens148	**
*^{214}Fr(α)^{210}At	E_α=8425.5, 8352.5(8,Z) to ground state, (4)$^+$ level at 72.65 keV											Ens148	**
*^{214}Fr(α)^{210}At	E_α=8428.3, 8360.3(5,Z) to ground state, (4)$^+$ level at 72.65 keV											Ens148	**
*^{214}Fr^m(α)^{210}At	E_α=8546.8, 8477.8(5,Z) to ground state, (4)$^+$ level at 72.65 keV											Ens148	**
*^{214}Ra(α)^{210}Rn	E_α=7137(10), 6505(15) to ground state, 641.9 level											00He17	**
*^{214}Ra(α)^{210}Rn	Also E_α=8950(30) keV Q_α=9120.9 keV from ^{214}Ra^n at 1865.2 keV											Nub16b	**
*^{214}Ra(α)^{210}Rn^m	E_α=7290(30) Q_α=7429.1 from ^{214}Ra^n at 1865.2 keV											Nub16b	**
*^{214}Ac(α)^{210}Fr	E_α=7210(10), 7080(15) to ground state, 138.6 level											00He17	**
*^{214}Ac(α)^{210}Fr	Also E_α=7081(4) keV to 139.0(1) level											04Ku24	**
*^{214}Pb(β^-)^{214}Bi	E_{β^-}=670(20) to (0$^-$,1$^-$) level at 351.9324 keV, and another branch											Ens092	**
^{215}Bi−^{133}Cs$_{1.617}$		154654	16	154633	6	−1.3	1	14	14 ^{215}Bi	MA8	1.0	08We02	
^{215}Po(α)^{211}Pb		7526.45	0.8	7526.3	0.8	−0.2	1	99	96 ^{211}Pb			71Gr17	Z
^{215}At(α)^{211}Bi		8178.5	4.				2			Bka		82Bo04	Z
^{215}Rn(α)^{211}Po		8834.7	20.	8839	8	0.2	3			ORa		69Ha32	
		8839.8	8.			−0.1	3					70Va13	
^{215}Fr(α)^{211}At		9543.0	15.	9540	7	−0.2	3					70Bo13	
		9532.7	10.			0.8	3					74No02	
		9546.9	10.			−0.6	3					84De16	
^{215}Ra(α)^{211}Rn		8862.7	5.	8864	3	0.3	3					68Va18	Z
		8865.5	5.			−0.2	3					70To18	Z
		8865.3	10.			−0.1	3			GSa		00He17	
		8865.3	46.			0.0	U					05Li17	
^{215}Ac(α)^{211}Fr		7748.4	5.	7746	3	−0.5	2					68Va04	Z
		7746	10			0.0	o			GSa		00He17	*
		7740.3	5.			1.1	o			GSa		02He.A	
		7744.4	4.			0.4	2			GSa		04Ku24	
^{215}Th(α)^{211}Ra		7664.9	8.	7665	4	0.0	3					68Va18	
		7667.0	10.			−0.2	o			GSa		89He03	
		7664	15			0.0	o			GSa		00He17	*
		7665	5			−0.1	3			GSa		05Ku31	*
		7662.8	10.			0.2	3			Jya		07Le14	*
^{215}Pa(α)^{211}Ac		8238.6	15.	8240	50	0.0	3					79Sc09	
		8244.7	15.			−0.2	o			GSa		00He17	
		8233.5	20.4			0.1	3			GSa		15De22	
^{215}U(α)^{211}Th		8588.0	30.6				6			Lza		15Ya13	
*^{215}Ac(α)^{211}Fr	E_α=7602(10) 7026(15) 6960(15) to ground state, 11/2$^-$ at 583.28, 13/2$^-$ at 652.62											Ens136	**
*^{215}Th(α)^{211}Ra	E_α=7520(15), 7387(15), 7336(15) to ground state, 133.6, 192.4 levels											00He17	**
*^{215}Th(α)^{211}Ra	E_α=7523(5), 7392(4), 7335(5), 7236(7) to ground state, 133.9, 194.5, 295.1 levels											05Ku31	**
*^{215}Th(α)^{211}Ra	Also E_α=7399(20) keV to 133.9 level											07Le14	**
^{216}Bi−^{133}Cs$_{1.624}$		159852	12				2			MA8	1.0	08We02	
^{216}Po(α)^{212}Pb		6906.44	0.5	6906.4	0.5	−0.2	1	98	67 ^{212}Pb			71Gr17	Z
^{216}At(α)^{212}Bi		7949.7	3.				2			Bka		82Bo04	Z
^{216}At^m(α)^{212}Bi		8110.5	10.				2					71Br13	
^{216}Rn(α)^{212}Po		8199.2	10.	8197	6	−0.2	2					61Ru06	
		8201.2	10.			−0.4	2					70Va13	
		8192.0	10.2			0.5	2					71Br13	
^{216}Fr(α)^{212}At		9175.3	12.	9174	3	−0.1	4					70Bo13	
		9174.1	5.			0.0	4					96Li37	*
		9174.3	5.			0.0	4			GSa		07Ku30	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{216}Fr^m(α)^{212}At^m	9170.2	5.				4			GSa		07Ku30	
^{216}Ra(α)^{212}Rn	9525.8	8.				4					73No09	
^{216}Ac(α)^{212}Fr	9243.3	8.	9235	6	−1.0	2					70To18	Z
	9223.1	10.			1.2	2			GSa		00He17	
	9241.4	50.9			−0.1	U					05Li17	
^{216}Ac^m(α)^{212}Fr	9280.0	5.	9279	4	−0.2	2					70To18	Z
	9284	10			−0.5	o			GSa		00He17	*
	9278.2	5.			0.2	o			GSa		02He.A	
	9277.2	7.			0.3	2			GSa		04Ku24	*
^{216}Th(α)^{212}Ra	8070.7	8.	8072	4	0.2	6					68Va18	
	8071	10			0.1	o			GSa		00He17	*
	8073	5			−0.1	6			GSa		05Ku31	*
	8069.7	44.			0.1	U					05Li17	
	8070.7	23.			0.1	U			Lza		14Ya19	
^{216}Th^m(α)^{212}Ra	10099.4	20.	10116	8	0.8	6					83Hi08	
	10107.4	40.			0.2	U			Dbb		93An07	
	10120.8	15.			−0.3	6			GSa		00He17	
	10117.5	10.			−0.2	6					05Ku31	*
^{216}Pa(α)^{212}Ac	8013.7	20.	8097	15	4.2	B					79Sc09	
	8110.5	50.			−0.3	U			JAa		98Ik01	
	8097	15				3			GSa		00He17	*
^{216}U(α)^{212}Th	8542.5	30.6	8531	26	−0.4	4			Lza		15Ma37	
	8497.6	50.9			0.6	4			GSa		15De22	
^{216}U^m(α)^{212}Th	10782.0	30.6				4			Lza		15Ma37	
*^{216}Fr(α)^{212}At	E_α=9004(5); and E_α=8933(8) from 133.3 level to 205.6 keV										96Li37	**
*^{216}Ac^m(α)^{212}Fr	E_α=9110(10), 9026(15), 8586(15) to ground state, 82.4, 542.2 levels										00He17	**
*^{216}Ac^m(α)^{212}Fr	Also E_α=9029(7) keV to 82.6(1) level										04Ku24	**
*^{216}Th(α)^{212}Ra	E_α=7923(10), 7302(15) to ground state, 618.3 level										00He17	**
*^{216}Th(α)^{212}Ra	E_α=7923(5), 7304(4) to ground state, 629.3(1) level										05Ku31	**
*^{216}Th^m(α)^{212}Ra	E_α=9930(10), 9312(12) to ground state, 629.3(1) level										05Ku31	**
*^{216}Pa(α)^{212}Ac	E_α=7948(15), 7815(15) to ground state, 133.6 level										00He17	**
^{217}Bi−u	9420	32	9372	19	−1.5	o			GS3	1.0	08Ch.A	
	9372	19				2			GS3	1.0	12Ch19	
^{217}Po(α)^{213}Pb	6660.3	4.	6662.1	2.4	0.4	4			Dba		77Vy02	Z
	6660.0	4.			0.5	4			Orm		97Li23	
	6666.1	4.1			−1.0	4			Anv		03Ku25	
^{217}At(α)^{213}Bi	7200.3	3.	7201.4	1.2	0.4	–					60Vo05	Z
	7200.3	2.			0.5	–			Orm		62Wa28	Z
	7204.6	5.			−0.6	–					64Va20	Z
	7193.1	5.			1.6	–			Dba		77Vy02	Z
	7204.0	2.			−1.3	–			Bka		82Bo04	
ave.	7201.5	1.2			−0.1	1	99	77 ^{213}Bi			average	
^{217}Rn(α)^{213}Po	7887.5	4.	7887.2	2.9	−0.1	2					61Ru06	Z
	7886.9	4.			0.1	2			Bka		82Bo04	Z
^{217}Fr(α)^{213}At	8471.5	8.	8469	4	−0.3	3					70Bo13	
	8468.4	5.			0.2	3			Lvn		87De.A	
^{217}Ra(α)^{213}Rn	9159.1	8.	9161	6	0.2	4					70To07	
	9163.2	10.			−0.2	4					70Va13	
^{217}Ac(α)^{213}Fr	9831.6	10.				2					73No09	
^{217}Ac^m(α)^{213}Fr	11843.8	17.				2					85De14	
^{217}Th(α)^{213}Ra	9424.1	10.	9435	4	1.1	2					68Va18	
	9424.1	20.			0.6	U					73Ha32	
	9421.1	15.			0.9	U					00Ni02	
	9442	15			−0.4	o			GSa		00He17	*
	9435.6	5.			−0.1	2			GSa		02He29	*
	9443.5	9.			−0.9	2			GSa		05Ku31	
	9424.1	47.			0.2	U					05Li17	
^{217}Pa(α)^{213}Ac	8486.7	10.	8489	4	0.2	4					68Va18	
	8489.8	15.			−0.1	U					79Sc09	
	8486.7	50.			0.0	U			JAa		98Ik01	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{217}Pa(α)^{213}Ac	8490.8	15.	8489	4	−0.1	U			GSa		00He17	
	8489.3	5.			−0.1	4			GSa		02He29	*
^{217}Pa^m(α)^{213}Ac	10351	20	10349	5	−0.1	U					79Sc09	
	10330.8	50.			0.4	U			JAa		98Ik01	
	10346.1	15.			0.2	o			GSa		00He17	
	10349.1	5.				4			GSa		02He29	*
^{217}U(α)^{213}Th^p	8155.6	20.	8170	50	0.3	5					00Ma65	
	8175.0	14.3			−0.1	5			Jya		05Le42	*
*^{217}Th(α)^{213}Ra	E_α=9268(15), 8731(15), 8459(15) to ground state, 546.35, 822.7 levels										00He17	**
*^{217}Th(α)^{213}Ra	E_α=9261(5), 8725(5), 8455(5) to ground state, 546.35, 822.7 levels										02He29	**
*^{217}Pa(α)^{213}Ac	E_α=8337(5), 7873(5), 7728(5), 7710(5) to ground state,466.1,612.5,634.3 levels										02He29	**
*^{217}Pa^m(α)^{213}Ac	Average of 5 E_α's to known levels										02He29	**
*^{217}U(α)^{213}Th^p	Only one event. Not reported in later publication 07Le14										WgM115	**
^{218}Bi−u	14178	34	14188	29	0.3	o			GS3	1.0	08Ch.A	
	14188	29				2			GS3	1.0	12Ch19	
^{218}Po(α)^{214}Pb	6114.76	0.09	6114.75	0.09	0.0	1	100	99 ^{214}Pb			71Gr17	Z
^{218}At(α)^{214}Bi	6874	3				2			Orm		58Wa.A	*
^{218}Rn(α)^{214}Po	7265.0	5.	7262.5	1.9	−0.5	–					56As38	Z
	7262.4	2.			0.0	–			Bka		82Bo04	Z
ave.	7262.8	1.9			−0.2	1	96	93 ^{218}Rn			average	
^{218}Fr(α)^{214}At	8014.0	2.				3			Bka		82Bo04	Z
^{218}Fr^m(α)^{214}At	8099.9	5.	8100	4	0.1	3					82Ew01	Z
	8100.9	5.			−0.1	3					99Sh03	
^{218}Ra(α)^{214}Rn	8549.1	8.	8546	6	−0.4	3					70To07	
	8541.0	10.			0.5	3					70Va13	
^{218}Ac(α)^{214}Fr	9377.4	15.				5					70Bo13	
^{218}Th(α)^{214}Ra	9861.3	20.4	9849	9	−0.6	5					73Ha32	
	9846.1	10.			0.3	5					73No09	
	9851.0	81.5			0.0	U			GSa		15Kh09	
^{218}Pa(α)^{214}Ac	9794.1	20.	9815	10	1.0	F					79Sc09	*
	9815	10				3			GSa		00He17	*
^{218}U(α)^{214}Th	8786.6	25.	8775	9	−0.5	4			Dbb		92An04	
	8773.2	9.			0.2	4			Jya		07Le14	
^{218}U^m(α)^{214}Th	10878.1	17.	10884	15	0.3	4			Jya		07Le14	
	10901.4	30.6			−0.6	4			Lza		15Ma37	
*^{218}At(α)^{214}Bi	E_α=6696.3(3.0,Z) to (2)$^-$ level at 53.2282 keV										Ens092	**
*^{218}Pa(α)^{214}Ac	E_α=9614(20); F : probably piled-up with e$^-$										00He17	**
*^{218}Pa(α)^{214}Ac	E_α=9544(10) to 91.8 level										00He17	**
^{219}Po−u	13601	32	13614	17	0.4	o			GS3	1.0	08Ch.A	
	13614	17				2			GS3	1.0	12Ch19	
^{219}At−^{133}Cs$_{1.647}$	166879.4	8.4	166881	3	0.2	1	17	17 ^{219}At	MA8	1.0	16Ma.1	
^{219}Po(α)^{215}Pb	5914.2	5.				3			ISa		15Fi07	
^{219}At(α)^{215}Bi	6390.9	50.	6342	5	−1.0	U					53Hy83	
	6344.0	5.			−0.4	1	90	86 ^{215}Bi	ISa		15Fi07	
^{219}Rn(α)^{215}Po	6946.21	0.3	6946.2	0.3	−0.1	1	100	96 ^{215}Po			71Gr17	Z
^{219}Fr(α)^{215}At	7448.7	2.0	7448.6	1.8	−0.1	3			Orm		68Ba73	Z
	7448.2	4.			0.1	3			Bka		82Bo04	Z
^{219}Ra(α)^{215}Rn	8139.0	20.	8138	3	−0.1	U			ORa		69Ha32	
	8128.7	10.			0.9	U					70Va13	
	8128.7	20.			0.5	U			Dbb		89An13	
	8138.0	3.				4					94Sh02	
^{219}Ac(α)^{215}Fr	8826.5	10.				4					70Bo13	
^{219}Th(α)^{215}Ra	9514.1	20.	9510	50	0.0	4					73Ha32	
	9503.9	50.9			0.2	4			GSa		15Kh09	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{219}Pa(α)^{215}Ac		10084.6	50.				3					87Fa.A	
^{219}U(α)^{215}Th		9860.4	40.	9940	50	1.6	4			Dbb		93An07	
		9956.2	18.			−0.3	4			Jya		07Le14	
^{219}Np(α)^{215}Pa		9167.8	203.7				4			GSa		15De22	*
*^{219}Np(α)^{215}Pa	E_α>9000 keV											15De22	**
^{220}Po−u		16420	32	16386	19	−1.1	o			GS3	1.0	08Ch.A	
		16386	19				2			GS3	1.0	12Ch19	
^{220}At−u		15427	32	15433	15	0.2	o			GS3	1.0	08Ch.A	
		15433	15				2			GS3	1.0	12Ch19	
^{220}Rn−^{133}Cs$_{1.654}$		167777	11	167775.0	1.9	−0.2	U			MA8	1.0	09Ne03	
^{210}Fr−^{220}Fr$_{.159}$ ^{208}Fr$_{.841}$		−2930	60	−2917	18	0.1	U			P24	2.5	82Au01	
^{211}Fr−^{220}Fr$_{.240}$ ^{208}Fr$_{.761}$		−4850	70	−4867	15	−0.1	U			P24	2.5	82Au01	
^{212}Fr−^{220}Fr$_{.321}$ ^{208}Fr$_{.679}$		−5450	60	−5392	12	0.4	U			P24	2.5	82Au01	
^{212}Fr−^{220}Fr$_{.263}$ ^{209}Fr$_{.738}$		−3730	60	−3754	14	−0.2	U			P24	2.5	82Au01	
^{213}Fr−^{220}Fr$_{.352}$ ^{209}Fr$_{.649}$		−5170	50	−5148	11	0.2	U			P24	2.5	82Au01	
^{212}Fr−^{220}Fr$_{.193}$ ^{210}Fr$_{.808}$		−3160	60	−3039	15	0.8	U			P24	2.5	82Au01	
^{220}At(α)^{216}Bi^m		6053.3	6.				3					89Bu09	
^{220}Rn(α)^{216}Po		6404.75	0.10	6404.74	0.10	0.0	1	100	69 ^{216}Po			71Gr17	Z
^{220}Fr(α)^{216}At		6799.0	2.	6800.7	1.9	0.9	3			Orm		68Ba73	*
		6811.6	5.			−2.2	3					74Ho27	*
^{220}Ra(α)^{216}Rn		7593.3	10.	7592	6	−0.1	3					61Ru06	
		7595.3	10.			−0.3	3					70Va13	
		7598.4	20.4			−0.3	3			Dbb		90An19	
		7587.2	10.			0.5	3			GSa		00He17	
^{220}Ac(α)^{216}Fr		8347.1	10.	8348	4	0.1	5					70Bo13	
		8348	5			0.0	5					97Sh09	*
^{220}Th(α)^{216}Ra		8953.1	20.				5					73Ha32	
^{220}Pa(α)^{216}Ac		9829.1	50.	9650#	50#	−3.6	D					87Fa.A	*
*^{220}Fr(α)^{216}At	E_α=6675.2, 6631.0, 6570.2(2,Z) to ground state, (2)$^-$ at 44.59, (0)$^-$ at 105.89											Ens075	**
*^{220}Fr(α)^{216}At	E_α=6687.5, 6642.5, 6583.5(2,Z) to ground state, (2)$^-$ at 44.59, (0)$^-$ at 105.89											Ens075	**
*^{220}Ac(α)^{216}Fr	E_α=7792, 7855 to levels at 409.3, 349.3 keV											Ens075	**
*^{220}Pa(α)^{216}Ac	Trends from Mass Surface TMS suggest ^{220}Pa 180 more bound											GAu	**
^{221}Po−u		21238	62	21228	21	−0.2	o			GS3	1.0	10Ch19	
		21228	21				2			GS3	1.0	12Ch19	
^{221}At−u		18028	32	18017	15	−0.3	o			GS3	1.0	08Ch.A	
		18017	15				2			GS3	1.0	12Ch19	
^{221}Fr−^{226}Ra$_{.978}$		−10590	34	−10596	5	−0.2	U			MA3	1.0	92Bo28	
^{211}Fr−^{221}Fr$_{.159}$ ^{209}Fr$_{.841}$		−3080	60	−3081	17	0.0	U			P24	2.5	82Au01	
^{221}Rn(α)^{217}Po		6161.8	5.8	6163	3	0.2	3			Dba		77Vy02	*
		6163.5	5.4			−0.1	3			Orm		97Li23	*
		6163.5	5.4			−0.1	3			Orm		04Li28	*
^{221}Fr(α)^{217}At		6457.3	2.0	6457.7	1.4	0.2	–			Orm		62Wa28	*
		6458.5	2.0			−0.4	–			Orm		68Le07	*
	ave.	6457.9	1.4			−0.1	1	99	78 ^{217}At			average	
^{221}Ra(α)^{217}Rn		6883.7	5.	6880.4	2.0	−0.7	3					61Ru06	*
		6881.3	3.			−0.3	3					95Ch74	*
		6878.3	3.			0.7	3					97Li12	*
^{221}Ac(α)^{217}Fr		7786.2	10.	7780	50	−0.1	4					70Bo13	
		7782.1	5.			0.0	4			Lvn		87De.A	
		7791.3	15.			−0.2	4			Dbb		92An.A	
^{221}Th(α)^{217}Ra		8628.5	5.	8626	4	−0.5	5					70To07	Z
		8626.0	10.			0.0	5					70Va13	Z
		8626.4	10.			−0.1	5			Dbb		90An19	
		8614.2	10.			1.1	5			GSa		00He17	
		8596.9	66.			0.4	U					05Li17	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{221}Pa(α)^{217}Ac	9247.7	30.				3					89Mi17	
^{221}U(α)^{217}Th	9889.3	50.9				3			GSa		15Kh09	
*^{221}Rn(α)^{217}Po	E_α=6035.3(3,Z) to a tentative (11/2$^+$) level at 15(5)keV above (9/2$^+$) ground state										04Li28	**
*^{221}Rn(α)^{217}Po	E_α=6037(2) to a tentative (11/2$^+$) level at 15(5) keV above (9/2$^+$) ground state										04Li28	**
*^{221}Rn(α)^{217}Po	E_α=6037(2) to a tentative (11/2$^+$) level at 15(5) keV above (9/2$^+$) ground state										04Li28	**
*^{221}Fr(α)^{217}At	E_α=6341.1(2,Z), 6125.1(3,Z) to ground state, 5/2$^-$ level at 218.12 keV										Ens039	**
*^{221}Fr(α)^{217}At	E_α=6341.3(2,Z), 6127.2(3,Z) to ground state, 5/2$^-$ level at 218.12 keV										Ens039	**
*^{221}Ra(α)^{217}Rn	E_α=6761.2 6668.2 6613.2 6591.2(5,Z) to ground state, levels at 88.9 149.18 174.3keV										Ens039	**
*^{221}Ra(α)^{217}Rn	E_α=6610(3,Z) to 149.2 level										97Li12	**
*^{221}Ra(α)^{217}Rn	E_α=6754, 6662, 6607(..) to ground state, 93.02, 149.2 level										97Li12	**
^{222}Po−u	24133	72	24140	40	0.1	o			GS3	1.0	10Ch19	
	24140	43				2			GS3	1.0	12Ch19	
^{222}At−u	22459	32	22494	17	1.1	o			GS3	1.0	08Ch.A	
	22494	17				2			GS3	1.0	12Ch19	
^{222}Fr−^{133}Cs$_{1.669}$	175383.3	8.0				2			MA8	1.0	14Kr09	
^{222}Fr−^{226}Ra$_{.982}$	−7410	25	−7368	8	1.7	U			MA3	1.0	92Bo28	
^{213}Fr−^{222}Fr$_{.240}$ ^{210}Fr$_{.761}$	−4810	60	−4947	13	−0.9	U			P24	2.5	82Au01	
^{213}Fr−^{222}Fr$_{.096}$ ^{212}Fr$_{.904}$	−1940	60	−1947	9	0.0	U			P24	2.5	82Au01	
^{221}Fr−^{222}Fr$_{.498}$ ^{220}Fr$_{.502}$	−610	90	−643	6	−0.1	U			P34	2.5	86Au02	
^{222}Rn(α)^{218}Po	5590.39	0.3	5590.4	0.3	0.0	1	100	99 ^{218}Po			71Gr17	Z
^{222}Ra(α)^{218}Rn	6680.0	5.	6678	4	−0.4	1	69	62 ^{222}Ra			56As38	Z
^{222}Ac(α)^{218}Fr	7137.5	2.				4			Bka		82Bo04	Z
^{222}Ac^m(α)^{218}Fr^p	7140.3	20.				5					72Es03	*
^{222}Th(α)^{218}Ra	8127.7	10.	8127	5	−0.1	4					70To07	
	8130.7	8.			−0.5	4					70Va13	
	8126.7	15.			0.0	4			Dbb		92An.A	
	8120.6	10.			0.6	4			GSa		00He17	
	8116.4	48.			0.2	U					05Li17	
^{222}Pa(α)^{218}Ac^m	8697.0	30.	8736	13	1.3	7					70Bo13	
	8745.5	15.			−0.6	7			GSa		95Ho.C	*
^{222}U(α)^{218}Th	9481.1	50.9				6			GSa		15Kh09	
*^{222}Ac^m(α)^{218}Fr^p	E_α=7011.4(20,Z) not to ground state										AHW	**
*^{222}Pa(α)^{218}Ac^m	E_α=8210(15) to ^{218}Ac^n at 384.49 keV above ^{218}Ac^m										Nub16b	**
^{223}At−u	25172	32	25151	15	−0.7	o			GS3	1.0	08Ch.A	
	25151	15				2			GS3	1.0	12Ch19	
^{223}Rn−^{133}Cs$_{1.677}$	180453	11	180446	8	−0.6	1	58	58 ^{223}Rn	MA8	1.0	09Ne03	
^{223}Rn−u	21899	32	21889	8	−0.3	o			GS3	1.0	08Ch.A	
	21880	13			0.7	1	42	42 ^{223}Rn	GS3	1.0	12Ch19	
^{213}Fr−^{223}Fr$_{.087}$ ^{212}Fr$_{.913}$	−1900	60	−1942	9	−0.3	U			P24	2.5	82Au01	
^{222}Fr−^{223}Fr$_{.498}$ ^{221}Fr$_{.502}$	790	100	558	8	−0.9	U			P34	2.5	86Au02	
^{223}Fr(α)^{219}At	5431.6	80.	5561.4	2.8	1.6	U					55Ad10	
	5562	3			−0.2	1	85	79 ^{219}At			01Li44	
^{223}Ra(α)^{219}Rn	5978.9	0.3	5978.99	0.21	0.3	–			Orm		62Wa18	*
	5979.1	0.3			−0.4	–			BIP		71Gr17	*
ave.	5979.00	0.21			0.0	1	100	96 ^{219}Rn			average	
^{223}Ac(α)^{219}Fr	6783.2	1.0				4			Orm		69Le.A	*
^{223}Th(α)^{219}Ra	7602	23	7567	4	−1.5	U			ORa		69Ha32	*
	7589	14			−1.6	U					70Va13	*
	7570	25			−0.1	U					84Mi.A	
	7568	10			−0.1	5					87El02	*
	7567.4	10.			−0.1	5			Dbb		90An19	*
	7566.1	5.			0.1	5					92Li09	*
^{223}Pa(α)^{219}Ac	8345.0	10.	8330	50	−0.4	5					70Bo13	
	8339.9	10.2			−0.3	o			Dbb		89An.A	
	8350.0	15.			−0.5	U			Dbb		90An19	
	8339.9	15.			−0.3	U			GSa		95Ho.C	
	8321.6	5.			0.1	5			Jya		99Ho28	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{223}U(α)^{219}Th	8940.7	40.7				5			Dbb		91An10	
^{223}Fr(β^-)^{223}Ra	1170	10	1149.1	0.8	−2.1	U					75We23	∗
∗^{223}Ra(α)^{219}Rn	E_α=5747.0(0.4,Z), 5715.7(0.3,Z), 5606.7(0.3,Z) keV										62Wa18	∗∗
∗	to 11/2$^+$ level at 126.77, 7/2$^+$ at 158.64, 3/2$^+$ at 269.48 keV										Ens01a	∗∗
∗^{223}Ra(α)^{219}Rn	E_α=5747.0(0.40,Z), 5716.23(0.29,Z), 5606.73(0.30,Z) keV										71Gr17	∗∗
∗	to 11/2$^+$ level at 126.77, 7/2$^+$ at 158.64, 3/2$^+$ at 269.48 keV										Ens01a	∗∗
∗^{223}Ac(α)^{219}Fr	E_α=6661.6, 6646.7, 6563.7(1.0,Z) to ground state, 5/2$^+$ at 15.0, 7/2$^-$ at 98.58										Ens01a	∗∗
∗^{223}Th(α)^{219}Ra	E_α=7330(20) to mixture of excited states at 138(10) keV										GAu	∗∗
∗^{223}Th(α)^{219}Ra	E_α=7317(10) to mixture of excited states at 138(10) keV										GAu	∗∗
∗^{223}Th(α)^{219}Ra	E_α=7324(10) to 113.8, 7285(10) 55% to 140.0, 26% to 152.0 level										92Li09	∗∗
∗^{223}Th(α)^{219}Ra	E_α=7290(10) 55% to 140.0, 26% to 152.0 level										92Li09	∗∗
∗^{223}Th(α)^{219}Ra	E_α=7318(5), 7293(5), 7281(5) to 113.8, 140.0, 152.0 levels										92Li09	∗∗
∗^{223}Fr(β^-)^{223}Ra	E_{β^-}=1120(10) to 3/2$^-$ level at 50.128 keV										Ens01a	∗∗
^{224}At−u	29744	63	29749	24	0.1	o			GS3	1.0	10Ch19	
	29749	24				2			GS3	1.0	12Ch19	
^{224}Rn−^{133}Cs$_{1.684}$	183304	16	183315	11	0.7	1	43	43 ^{224}Rn	MA8	1.0	09Ne03	
^{224}Rn−u	24073	32	24096	11	0.7	o			GS3	1.0	08Ch.A	
	24104	14			−0.6	1	57	57 ^{224}Rn	GS3	1.0	12Ch19	
^{224}Fr−u	23399	32	23348	12	−1.6	o			GS3	1.0	08Ch.A	
	23398	14			−3.6	B			GS3	1.0	12Ch19	
^{224}Fr−^{133}Cs$_{1.684}$	182567	12				2			MA8	1.0	14Kr09	
^{224}Ra−^{133}Cs$_{1.684}$	179430	30	179429.4	1.9	0.0	U			MA8	1.0	14Bo26	
^{223}Fr−^{224}Fr$_{.747}$ ^{220}Fr$_{.253}$	−620	70	−769	9	−0.9	U			P34	2.5	86Au02	
^{222}Fr−^{224}Fr$^x_{.496}$ ^{220}Fr$_{.505}$	10	70	−260#	50#	−1.5	U			P24	2.5	82Au01	
^{223}Fr−^{224}Fr$^x_{.747}$ ^{220}Fr$_{.253}$	−410	70	−840#	80#	−2.5	B			P24	2.5	82Au01	
^{223}Fr−^{224}Fr$_{.664}$ ^{221}Fr$_{.336}$	780	110	−520	8	−4.7	F			P34	2.5	86Au02	∗
^{223}Fr−^{224}Fr$^x_{.664}$ ^{221}Fr$_{.336}$	−110	70	−590#	70#	−2.7	B			P24	2.5	82Au01	
^{224}Ra(α)^{220}Rn	5788.93	0.15	5788.92	0.15	−0.1	1	100	69 ^{220}Rn			71Gr17	Z
^{224}Ac(α)^{220}Fr	6326.9	0.7				4			Orm		69Le.A	∗
^{224}Th(α)^{220}Ra	7304.7	10.	7299	6	−0.6	4					61Ru06	
	7304.7	10.			−0.6	4					70Va13	
	7300.7	20.			−0.1	U			Dbb		89An13	
	7286.4	10.			1.2	4			GSa		00He17	
^{224}Pa(α)^{220}Ac	7695.2	10.	7694	4	−0.2	6					70Bo13	∗
	7692.6	10.			0.1	F			Dbb		90An19	∗
	7680	15			0.9	U			GSa		95Ho.C	
	7693.3	5.			0.1	6					96Li05	∗
^{224}U(α)^{220}Th	8624.3	15.	8628	7	0.3	6			Dbb		91An10	
	8612.1	20.			0.8	6			ORa		92To02	
	8631.9	8.1			−0.5	6			ORm		14Lo10	∗
^{224}Fr(β^-)^{224}Ra	2830	50	2923	11	1.9	U					75We23	∗
∗^{223}Fr−^{224}Fr$_{.664}$ ^{221}Fr.	F : rejection based on line-shape analysis										86Au02	∗∗
∗^{224}Ac(α)^{220}Fr	E_α=6213.8, 6207.0, 6141.7, 6059.8(0.7,Z) keV										69Le.A	∗∗
∗	to ground state, 3$^+$ at 6.92, 3$^+$ at 72.99, 2$^-$ at 156.82 keV										Ens114	∗∗
∗^{224}Pa(α)^{220}Ac	E_α=7490(10) to 5$^-$ level at 68.71 keV										Ens114	∗∗
∗^{224}Pa(α)^{220}Ac	F : intensities in contradiction with reference										96Li05	∗∗
∗^{224}Pa(α)^{220}Ac	E_α=7488(5), 7375(5) to (5$^-$) level at 68.71 keV and 184.21 level										Ens114	∗∗
∗^{224}U(α)^{220}Th	E_α=8479(8), 8095(11) to ground state, 386.7(1.8) 2$^+$ level										14Lo10	∗∗
∗^{224}Fr(β^-)^{224}Ra	E_{β^-}=1780(50) to 1$^-$ level at 1053.041 keV, and other E_{β^-}										Ens15c	∗∗
^{225}Rn−^{133}Cs$_{1.692}$	188484	23	188461	12	−1.0	1	27	27 ^{225}Rn	MA8	1.0	09Ne03	
^{225}Rn−u	28498	32	28486	12	−0.4	o			GS3	1.0	08Ch.A	
	28477	14			0.6	1	73	73 ^{225}Rn	GS3	1.0	12Ch19	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{225}Fr$-$u	25574	14	25572	13	$-$0.1	1	84	84 ^{225}Fr	GS3	1.0	12Ch19	
^{221}Fr$-^{225}$Fr$_{.655}$ ^{213}Fr$_{.346}$	$-$1110	60	$-$1096	9	0.1	U			P24	2.5	82Au01	
^{224}Fr$^x-^{225}$Fr$_{.747}$ ^{221}Fr$_{.253}$	50	80	700#	100#	3.2	B			P24	2.5	82Au01	
^{224}Fr$^x-^{225}$Fr$_{.498}$ ^{223}Fr$_{.502}$	190	80	760#	100#	2.8	B			P24	2.5	82Au01	
^{225}Ra(α)^{221}Rn	5096.7	5.1				2					00Li37	
^{225}Ac(α)^{221}Fr	5936.1	2.	5935.1	1.4	$-$0.5	–			Orm		67Ba51	Z
	5934.5	2.			0.3	–					67Dz02	Z
ave.	5935.3	1.4			$-$0.1	1	99	79 ^{221}Fr			average	
^{225}Th(α)^{221}Ra	6920.7	3.	6921.4	2.1	0.2	4					61Ru06	*
	6922.1	3.			$-$0.2	4					87Li.A	*
^{225}Pa(α)^{221}Ac	7381.5	20.	7390	50	0.2	U			ORa		68Ha14	
	7376.4	10.			0.3	F					70Bo13	*
	7392.7	5.1				5			Lvn		87De.A	
	7383.5	19.			0.2	U					00Sa52	
^{225}U(α)^{221}Th	8012.7	20.	8015	7	0.1	o			Dbb		89An13	
	8022.9	20.			$-$0.4	6			GSa		89He13	
	8021.9	15.			$-$0.5	6			ORa		92To02	
	8012.7	20.4			0.1	6			Dbb		94Ye08	
	8010	10			0.5	6			GSa		00He17	*
^{225}Np(α)^{221}Pa	8786.5	20.				4			Dbb		94Ye08	
^{225}Fr(β^-)^{225}Ra	1820	30	1828	12	0.3	1	16	16 ^{225}Fr			75We23	*
^{225}Ra(β^-)^{225}Ac	360	10	356	5	$-$0.4	1	25	20 ^{225}Ac			55Ma.A	*
	360	30			$-$0.1	U					55Pe24	*

*^{225}Th(α)^{221}Ra	E_α=6800.2, 6746.2, 6503.2, 6480.2, 6443.2(3,Z) keV	61Ru06	**
*	to ground state, 7/2$^+$ 53.14, 7/2$^+$ 299.16, 3/2$^+$ 321.39, 5/2$^+$ 359.02 levels	Ens075	**
*^{225}Th(α)^{221}Ra	E_α=6799.3, 6745.3, 6504.3, 6483.3, 6447.3(3,Z) keV	87Li.A	**
*	to ground state, 7/2$^+$ 53.14, 7/2$^+$ 299.16, 3/2$^+$ 321.39, 5/2$^+$ 359.02 levels	Ens075	**
*^{225}Pa(α)^{221}Ac	F : average of two branches	87De.A	**
*^{225}U(α)^{221}Th	E_α=7868(15), 7621(15) to ground state, 250.9 level	00He17	**
*^{225}Fr(β^-)^{225}Ra	E_{β^-}=1640(10). 28% to 3/2$^-$ level at 225.2	Ens095	**
*^{225}Ra(β^-)^{225}Ac	E_{β^-}=320(10) 320(30) respectively, to 3/2$^+$ level at 40.09 keV	Ens095	**

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{226}Rn$-^{133}$Cs$_{1.699}$	191490	17	191499	11	0.5	1	44	44 ^{226}Rn	MA8	1.0	09Ne03	
^{226}Rn$-$u	30864	32	30861	11	$-$0.1	o			GS3	1.0	08Ch.A	
	30868	15			$-$0.4	1	56	56 ^{226}Rn	GS3	1.0	12Ch19	
^{226}Fr$-$u	29565	32	29545	7	$-$0.6	o			GS3	1.0	08Ch.A	
	29566	13			$-$1.7	1	26	26 ^{226}Fr	GS3	1.0	12Ch19	
^{226}Fr$-^{133}$Cs$_{1.699}$	190173.9	7.8	190182	7	1.0	1	74	74 ^{226}Fr	MA8	1.0	14Kr09	
^{133}Cs$-^{226}$Ra$_{.588}$	$-$109487	9	$-$109488.2	1.2	$-$0.1	U			MA3	1.0	92Bo28	
	$-$109499	13			0.8	U			MA4	1.0	99Am05	
^{223}Fr$-^{226}$Fr$_{.493}$ ^{220}Fr$_{.507}$	$-$800	80	$-$1007	4	$-$1.0	U			P24	2.5	82Au01	
^{225}Fr$-^{226}$Fr$_{.796}$ ^{221}Fr$_{.204}$	$-$570	100	$-$794	13	$-$0.9	U			P24	2.5	82Au01	
^{225}Fr$-^{226}$Fr$_{.498}$ ^{224}Fr$^x_{.502}$	$-$260	90	$-$850#	50#	$-$2.6	B			P24	2.5	82Au01	
^{226}Ra(α)^{222}Rn	4870.70	0.25	4870.70	0.25	0.0	1	100	99 ^{222}Rn			71Gr17	Z
^{226}Ac(α)^{222}Fr	5496.1	5.	5506	8	0.2	U			Dba		75Va.A	Z
^{226}Th(α)^{222}Ra	6448.5	3.0	6452.5	1.0	1.3	U					56As38	*
	6454.8	3.6			$-$0.6	U			Dba		75Va.A	*
	6452.6	1.0			$-$0.1	1	99	61 ^{226}Th	Gea		12Ma30	
^{226}Pa(α)^{222}Ac	6986.9	10.				5					64Mc21	
^{226}U(α)^{222}Th	7747.4	30.	7701	4	$-$1.6	U					73Vi10	*
	7706.6	15.			$-$0.4	5			Dbb		90An22	
	7701.6	5.			$-$0.1	5			Jya		99Gr28	
	7691.4	10.			0.9	o			GSa		00He17	
	7696.5	10.			0.4	5			GSa		01Ca.B	
	7696.4	20.4			0.2	5			RIa		16Ka13	
^{226}Np(α)^{222}Pa	8189.2	20.4	8200	50	0.2	8			GSa		90Ni05	
	8205.5	20.			$-$0.2	8			Dbb		94Ye08	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.		Lab	F	Reference	
^{226}Ra(p,t)^{224}Ra	−2816	15	−2818.9	1.9	−0.2	U				ANL		74Fr01	
^{226}Ra(d,t)^{225}Ra	−146	10	−139.4	2.9	0.7	U						83Ny01	
^{226}Fr(β^-)^{226}Ra	3804	330	3853	7	0.1	U						75We23	*
	3704	100			1.5	U						87Ve.A	*
^{226}Ac(β^-)^{226}Th	1115	7	1112	5	−0.5	–						68Va17	*
ave.	1115	6			−0.5	1	52	39	^{226}Th			average	
*^{226}Th(α)^{222}Ra	E_α=6334.6(3,Z), 6224.6(3,Z) to ground state, 2$^+$ level at 111.12 keV											Ens11b	**
*^{226}Th(α)^{222}Ra	E_α=6337.1(1.0,Z), 6233.6(1.0,Z) to ground state, 2$^+$ level at 111.12 keV											Ens11b	**
*^{226}U(α)^{222}Th	E_α=7430(30) to 2$^+$ level at 183.3(0.3) keV											94Ye08	**
*^{226}Fr(β^-)^{226}Ra	E_{β^-}=3550(330) 3450(100) respectively, to 1$^-$ level at 253.73 keV											Ens964	**
*^{226}Ac(β^-)^{226}Th	E_{β^-}=885(7) to 1$^-$ level at 230.37 keV											Ens964	**
^{227}Rn−^{133}Cs$_{1.707}$	196686	19	196698	15	0.6	1	63	63	^{227}Rn	MA8	1.0	09Ne03	
^{227}Rn−u	35288	33	35304	15	0.5	o				GS3	1.0	08Ch.A	
	35325	25			−0.8	1	37	37	^{227}Rn	GS3	1.0	12Ch19	
^{227}Fr−u	31868	32	31865	6	−0.1	o				GS3	1.0	08Ch.A	
	31869	14			−0.3	1	20	20	^{227}Fr	GS3	1.0	12Ch19	
^{227}Fr−^{133}Cs$_{1.707}$	193258.0	7.1	193259	6	0.1	1	80	80	^{227}Fr	MA8	1.0	14Kr09	
^{225}Fr−^{227}Fr$_{.708}$ ^{220}Fr$_{.292}$	−410	130	−547	13	−0.4	U				P24	2.5	82Au01	
^{224}Fr^x−^{227}Fr$_{.493}$ ^{221}Fr$_{.507}$	−220	80	480#	100#	3.5	B				P24	2.5	82Au01	
^{227}Ac(α)^{223}Fr	5043.0	2.0	5042.27	0.14	−0.4	U						66Ba19	Z
	5042.27	0.14			0.0	1	100	94	^{223}Fr			86Ry04	Z
^{227}Th(α)^{223}Ra	6146.60	0.10	6146.60	0.10	0.0	1	100	96	^{223}Ra	BIP		71Gr17	*
^{227}Pa(α)^{223}Ac	6581.5	3.	6580.4	2.1	−0.4	5						63Su.A	*
	6579.3	3.			0.4	5						90Sh15	*
^{227}U(α)^{223}Th	7230	30	7235	3	0.2	U				ORa		69Ha32	*
	7206	16			1.8	U						91Ho05	
	7234.7	3.1				6				GSa		15Ka24	
^{227}Np(α)^{223}Pa	7818.0	10.	7816	14	0.0	o				Dbb		90An19	
	7815.0	20.			0.1	6				GSa		90Ni05	
	7818.0	20.			−0.1	6				Dbb		94Ye08	
^{226}Ra(n,γ)^{227}Ra	4561.43	0.27				2				ILn		81Vo03	Z
^{227}Fr(β^-)^{227}Ra	2476	100	2505	6	0.3	U						75We23	*
^{227}Ra(β^-)^{227}Ac	1345	20	1328.1	2.3	−0.8	U						53Bu63	*
	1335	15			−0.5	U						71Lo15	*
^{227}Ac(β^-)^{227}Th	45.5	1.0	44.8	0.8	−0.7	–						55Be20	
	43.5	1.5			0.8	–						59No41	
ave.	44.9	0.8			−0.2	1	99	96	^{227}Th			average	
*^{227}Th(α)^{223}Ra	E_α=6038.01(0.15,Z), 5977.72(0.10,Z), 5756.89(0.15,Z) keV											71Gr17	**
*	to ground state, 7/2$^+$ at 61.424, 1/2$^+$ at 286.182 keV											Ens01a	**
*^{227}Pa(α)^{223}Ac	E_α=6465.8(3,Z), 6423.8(3,Z), 6415.8(3,Z), 6401.7(3,Z), 6356.7(3,Z)											63Su.A	**
*	to ground state, 7/2$^-$ at 42.4, 5/2$^-$ at 50.7, 5/2$^+$ at 64.62, 7/2$^+$ at 110.06											Ens01a	**
*^{227}Pa(α)^{223}Ac	E_α=6463, 6421, 6355 keV (all errors 3 keV, estimated by evaluator)											90Sh15	**
*	to ground state, 7/2$^-$ at 42.4, 5/2$^-$ at 50.7, 7/2$^+$ at 110.06 keV											Ens01a	**
*^{227}U(α)^{223}Th	E_α=6860(30) to 3/2$^+$ level at 247(1) keV											Ens01a	**
*^{227}Fr(β^-)^{227}Ra	E_{β^-}=1800(100) to 1/2$^-$ level at 675.863 keV											Ens162	**
*^{227}Ra(β^-)^{227}Ac	E_{β^-}=1310(20) 1300(15) respectively, to 3/2$^+$ level at 27.369 and 5/2$^+$ at 46.354											Ens162	**
^{228}Rn−^{133}Cs$_{1.714}$	199897	24	199891	19	−0.3	1	63	63	^{228}Rn	MA8	1.0	09Ne03	
^{228}Rn−u	37856	33	37835	19	−0.6	o				GS3	1.0	08Ch.A	
	37825	31			0.3	1	37	37	^{228}Rn	GS3	1.0	12Ch19	
^{228}Fr−u	35833	34	35839	7	0.2	o				MA8	1.0	11Kr.A	
	35852	32			−0.4	o				GS3	1.0	08Ch.A	
	35821	16			1.2	1	20	20	^{228}Fr	GS3	1.0	12Ch19	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{228}Fr$-^{133}$Cs$_{1.714}$		197899.5	8.1	197895	7	−0.6	1	80	80 ^{228}Fr	MA8	1.0	14Kr09	
^{224}Fr$^x-^{228}$Fr$_{.491}$ ^{220}Fr$_{.509}$		−540	320	−390#	100#	0.2	U			P24	2.5	82Au01	
^{228}Th(α)^{224}Ra		5520.17	0.22	5520.15	0.22	−0.1	1	100	69 ^{224}Ra			71Gr17	Z
^{228}Pa(α)^{224}Ac		6266.7	3.	6264.5	1.5	−0.7	5					58Hi.A	*
		6264.7	3.			−0.1	5					93Sh07	*
		6263.5	2.			0.5	5					94Ah03	*
^{228}U(α)^{224}Th		6803.6	10.				5					61Ru06	
^{228}Np(α)^{224}Pa		7308.5	36.				7			JAa		03Ni10	
^{228}Pu(α)^{224}U		7949.7	20.	7940	18	−0.5	7			Dbb		94An02	
		7911.0	35.			0.8	7			JAa		03Ni10	
^{228}Ra(β^-)^{228}Ac		46.7	2.	45.5	0.6	−0.6	3					61To10	*
		45.5	0.9			0.0	3					72He.A	*
		45.3	1.0			0.2	3					95So11	*
^{228}Ac(β^-)^{228}Th		2240	20	2123.7	2.6	−5.8	B					53Ky19	*
		2158	20			−1.7	U					57Bj56	*
^{228}Pa(ε)^{228}Th		2109	15	2153	4	2.9	B					73Ku09	*
*^{228}Pa(α)^{224}Ac	E_α=6119.2(3,Z), 6106.2(3,Z), 6079.2(3,Z) to 37.2, 51.9, 78.4 levels											93Sh07	**
*^{228}Pa(α)^{224}Ac	E_α=6118(3) to 37.2 level											93Sh07	**
*^{228}Pa(α)^{224}Ac	E_α=6117(2) to 37.1 level											94Ah03	**
*^{228}Ra(β^-)^{228}Ac	E_{β^-}=40(2) 39(1) respectively, to 1$^-$ level at 6.28 keV, and other E_{β^-}											Ens143	**
*^{228}Ra(β^-)^{228}Ac	E_{β^-}=39.0(1.0) to 1$^+$ level at 6.28 keV											Ens143	**
*^{228}Ac(β^-)^{228}Th	E_{β^-}=2180(20) to 2$^+$ level at 57.773 keV, and other E_{β^-}											Ens143	**
*^{228}Ac(β^-)^{228}Th	E_{β^-}=2100(20), 1760, 1180 to 2$^+$ at 57.773, 3$^-$ at 396.094, 2$^+$ at 968.984											Ens143	**
*^{228}Pa(ε)^{228}Th	pK=0.33(0.08) to 3$^+$ level at 1944.904 keV, recalculated											Ens143	**
^{229}Rn$-^{133}$Cs$_{1.722}$		205069	14				2			MA8	1.0	09Ne03	
^{229}Fr$-^{133}$Cs$_{1.722}$		201262	40	201103	5	−4.0	B			MA8	1.0	08We02	*
		201104.5	6.4			−0.2	1	70	70 ^{229}Fr	MA8	1.0	14Kr09	
^{229}Fr$-$u		38343	32	38291	5	−1.6	o			GS3	1.0	08Ch.A	
		38298	15			−0.4	1	13	13 ^{229}Fr	GS3	1.0	12Ch19	
^{229}Fr$-^{238}$U$_{.962}$		−10576	13	−10566	6	0.8	1	18	17 ^{229}Fr	MA8	1.0	14Kr09	
^{229}Ra$-^{133}$Cs$_{1.722}$		197782	21	197768	17	−0.6	2			MA8	1.0	08We02	
		197746	27			0.8	2			MA8	1.0	05He26	
^{229}Ac$-$u		32947	13				2			GS3	1.0	12Ch19	
^{229}Th(α)^{225}Ra		5167.4	1.2	5167.6	1.0	0.1	–			Kum		71Bb10	*
		5168.2	2.			−0.3	–					87He28	Z
	ave.	5167.6	1.0			−0.1	1	99	95 ^{225}Ra			average	
^{229}Pa(α)^{225}Ac		5835.6	5.	5835	4	−0.2	1	73	60 ^{225}Ac			63Su.A	*
^{229}U(α)^{225}Th		6475.5	3.				5					61Ru06	Z
^{229}Np(α)^{225}Pa		7012.7	20.	7010	50	0.0	6			ORa		68Ha14	
		7015.8	23.			0.0	6					00Sa52	
^{229}Pu(α)^{225}U		7592.9	30.	7590	50	0.0	7			Dbb		94An02	
		7598.0	10.			−0.1	o			GSa		01Ca.B	
		7589.8	20.			0.0	7			GSa		10Kh06	
^{229}Am(α)^{225}Np		8137.4	20.4				5			GSa		15De22	*
^{229}Ra(β^-)^{229}Ac		1760	40	1872	20	2.8	B					75We23	
^{229}Ac(β^-)^{229}Th		1140	150	1104	12	−0.2	U					73Ch24	
		1090	50			0.3	U					75We23	
*^{229}Fr$-^{133}$Cs$_{1.722}$	Could be influenced by ^{229}Rn contaminant											08We02	**
*^{229}Th(α)^{225}Ra	E_α=4978.3(1.2,Z), 4967.3(1.2,Z), 4845.1(1.2,Z) keV											71Gr17	**
*	to 100.60, 111.60, 236.25 levels											71Gr17	**
*^{229}Th(α)^{225}Ra	E_α=4979.3(2,Z), 4968.3(2,Z), 4845.1(2,Z) keV											87He28	**
*	to 9/2$^+$ level at 100.50, 7/2$^+$ at 111.60, 5/2$^+$ at 236.25 keV											Ens095	**
*	calibrated with 71BaB2 value for 4845 level											AHW	**
*^{229}Pa(α)^{225}Ac	E_α=5670.2, 5630.2, 5615.2, 5580.2, 5536.2 (all 3,Z) keV to											63Su.A	**
*	5/2$^+$ 64.70, 7/2$^+$ 105.06, 5/2$^-$ 120.80, 5/2$^+$ 155.65, 7/2$^+$ 199.85											Ens095	**
*^{229}Am(α)^{225}Np	E_α=7990(20) and E_α=8000(20)											15De22	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{230}Fr$-^{133}$Cs$_{1.729}$		205878	32	205864	7	−0.4	o			MA8	1.0	05He26	
		205860.1	7.5			0.6	1	88	88 ^{230}Fr	MA8	1.0	14Kr09	
^{230}Fr$-$u		42401	34	42391	7	−0.3	o			GS3	1.0	08Ch.A	
		42421	20			−1.5	1	12	12 ^{230}Fr	GS3	1.0	12Ch19	
^{230}Ra$-^{133}$Cs$_{1.729}$		200530	13	200528	11	−0.1	2			MA8	1.0	08We02	
		200524	21			0.2	2			MA8	1.0	05He26	
^{230}Ac$-$u		36328	32	36327	17	0.0	o			GS3	1.0	08Ch.A	
		36327	17				2			GS3	1.0	12Ch19	
^{230}Ra$-^{226}$Ra$_{1.018}$		11225	35	11189	11	−1.0	U			MA3	1.0	92Bo28	
^{230}Th(α)^{226}Ra		4770.1	1.5	4769.9	1.5	−0.2	1	99	98 ^{226}Ra	Orm		66Ba14	Z
^{230}Pa(α)^{226}Ac		5439.5	0.7	5439.4	0.7	−0.1	1	99	87 ^{226}Ac	Orm		66Ba14	Z
^{230}U(α)^{226}Th		5992.8	0.7	5992.5	0.5	−0.5	2			Orm		66Ba14	Z
		5992.1	0.7			0.5	2			Gea		12Ma30	
^{230}Np(α)^{226}Pa		6778.1	20.				6			ORa		68Ha14	
^{230}Pu(α)^{226}U		7175.0	15.	7181	7	0.4	6			Dbb		90An22	
		7180.1	17.			0.0	6			Jya		99Gr28	
		7182.2	10.			−0.1	6			GSa		01Ca.B	
		7185.1	20.4			−0.2	6			RIa		16Ka13	
^{230}Th(p,t)^{228}Th		−3550	15	−3569.2	1.1	−1.3	U			ANL		74Fr01	
^{230}Th(p,t)^{228}Th$-^{232}$Th()^{230}Th		−493.5	1.0	−492.6	0.5	0.9	o					91Gr13	
		−492.5	0.5			−0.2	1	98	69 ^{228}Th			94Le22	
^{230}Th(p,t)^{228}Th$-^{184}$W()^{182}W		1564.0	1.6	1550.9	1.2	−8.2	B					09Le03	
		1564.0	1.8			−7.3	C					09Le.A	
^{230}Th(d,t)^{229}Th		−541	6	−537.1	2.2	0.7	–					90Bu17	
		−525	6			−2.0	–			ANL		67Er02	*
	ave.	−533	4			−1.0	1	27	26 ^{229}Th			average	
^{230}Ra(β^-)^{230}Ac		710	300	678	19	−0.1	U					80Gi04	*
^{230}Ac(β^-)^{230}Th		2700	100	2976	16	2.8	U					80Gi04	*
^{230}Pa(ε)^{230}Th		1310.3	3.	1311.0	2.8	0.2	1	89	88 ^{230}Pa			70Lo02	*
^{230}Pa(β^-)^{230}U		561	15	559	5	−0.2	R					70Lo02	
*^{230}Th(d,t)^{229}Th	Q =–525(6) to ^{229}Th^m at 0.0035(0.0010) keV											94He08	**
*^{230}Ra(β^-)^{230}Ac	E_{β^-}=500(200) to level at 211.78 keV											Ens129	**
*^{230}Ac(β^-)^{230}Th	E_{β^-}=1400(100) to 0$^+$ level at 1297.14 keV											Ens129	**
*^{230}Pa(ε)^{230}Th	pK=0.42(0.01) to 3$^-$ level at 1127.789, recalculated											Ens129	**
^{231}Fr$-$u		45191	39	45175	8	−0.4	o			GS3	1.0	08Ch.A	
		45158	27			0.6	U			GS3	1.0	12Ch19	
^{231}Fr$-^{133}$Cs$_{1.737}$		209405.3	8.3				2			MA8	1.0	14Kr09	
^{231}Ra$-^{133}$Cs$_{1.737}$		205267	21	205257	12	−0.5	1	34	34 ^{231}Ra	MA8	1.0	05He26	
^{231}Ra$-$u		41052	32	41027	12	−0.8	o			GS3	1.0	08Ch.A	
		41022	15			0.3	1	66	66 ^{231}Ra	GS3	1.0	12Ch19	
^{231}Ac$-$u		38404	32	38393	14	−0.3	o			GS3	1.0	08Ch.A	
		38393	14				2			GS3	1.0	12Ch19	
^{231}Pa(α)^{227}Ac		5150.2	1.5	5149.9	0.8	−0.2	o			Orm		66Ba14	
		5146.9	1.0			3.0	B			Kum		68Ba25	*
		5150.7	1.5			−0.5	–			Orm		69Le.A	*
		5149.8	1.0			0.1	–			Kum		76Ba99	*
	ave.	5150.1	0.8			−0.2	1	98	91 ^{227}Ac			average	
^{231}U(α)^{227}Th		5551.3	50.	5576.3	1.7	0.5	U					53Cr.A	
		5576.9	3.			−0.2	2					94Li12	*
		5576	2			0.1	2					97Mu08	
^{231}Np(α)^{227}Pa		6368.4	8.				6					73Ja06	
^{231}Pu(α)^{227}U		6838.6	20.				7					99La14	
^{231}Pa(p,t)^{229}Pa		−4133	3	−4133.3	2.8	−0.1	1	90	87 ^{229}Pa	Mun		91Gr13	*
^{230}Th(n,γ)^{231}Th		5118.00	0.20	5118.02	0.20	0.1	1	98	73 ^{231}Th	ILn		87Wh01	Z

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{230}Th(d,p)^{231}Th		2907	7	2893.45	0.20	−1.9	U			ANL		67Er02	
^{231}Ac(β^-)^{231}Th		2100	100	1947	13	−1.5	U					60Ta19	
^{231}Th(β^-)^{231}Pa		389.2	2.	391.5	1.5	1.1	1	53	47 ^{231}Pa			75Ho14	*
*^{231}Pa(α)^{227}Ac	E_α=5057.6(1.0,Z), 4985.9(1.0,Z), 4950.4(1.0,Z) to ground state, 7/2$^-$ at											Ens129	**
*	74.149 keV, and 9/2$^+$ at 109.992 keV											Ens129	**
*^{231}Pa(α)^{227}Ac	E_α=5015.9(1.5,Z),4735.9(1.5,Z) to 5/2$^+$ at 46.354, 3/2$^-$ at 330.040 keV											Ens129	**
*^{231}Pa(α)^{227}Ac	E_α=4736.2(1.0,Z) to 330.040 level											Ens129	**
*^{231}U(α)^{227}Th	E_α=5471(3), 5456(3), 5404(3) to 9.3, 24.4, 77.7 levels											94Li12	**
*^{231}Pa(p,t)^{229}Pa	Q =–4145(3) to 11.6 level											98Le15	**
*^{231}Th(β^-)^{231}Pa	E_{β^-}=305(2) to 5/2$^+$ level at 84.2148 keV											Ens136	**
^{232}Fr−^{133}Cs$_{1.744}$		214353	15				2			MA8	1.0	14Kr09	
^{232}Ra−^{133}Cs$_{1.744}$		208368	13	208367	10	−0.1	1	57	57 ^{232}Ra	MA8	1.0	05He26	
^{232}Ra−u		43518	32	43475	10	−1.3	o			GS3	1.0	08Ch.A	
		43474	15			0.1	1	43	43 ^{232}Ra	GS3	1.0	12Ch19	
^{232}Ac−u		42052	32	42034	14	−0.6	o			GS3	1.0	08Ch.A	
		42034	14				2			GS3	1.0	12Ch19	
C$_{18}$ H$_{16}$−^{232}Th		87142.4	2.	87146.8	1.5	0.9	U			M20	2.5	73Br06	
C$_{24}$ H$_{16}$−^{232}Th ^{37}Cl ^{35}Cl		152393.4	1.8	152391.5	1.5	−0.4	1	12	12 ^{232}Th	M20	2.5	73Br06	
^{232}Th(α)^{228}Ra		4082.5	5.	4081.6	1.4	−0.2	U					57Ha08	Z
		4084.6	5.			−0.6	U					61Ko11	Z
		4083.5	5.			−0.4	U					62Ko12	Z
		4081.6	1.4				2					89Sa01	*
^{232}U(α)^{228}Th		5413.63	0.09	5413.63	0.09	0.0	1	100	99 ^{232}U	BIP		72Go33	*
^{232}Pu(α)^{228}U		6716.0	10.				6					73Ja06	
^{232}Th(p,t)^{230}Th		−3070	15	−3076.6	1.1	−0.4	U			ANL		74Fr01	
^{232}Th(p,t)^{230}Th−^{184}W()^{182}W		2056.4	1.6	2043.5	1.1	−8.1	B					09Le03	
		2056.5	1.8			−7.2	B					09Le.A	
^{232}Th(d,t)^{231}Th		−174	6	−183.2	1.1	−1.5	U			ANL		67Er02	
		−187	10			0.4	U			MIT		72Gr19	
^{232}Ac(β^-)^{232}Th		3700	100	3708	13	0.1	U					90Be.B	
^{232}Pa(β^-)^{232}U		1344	20	1337	7	−0.3	2					63Bj01	*
		1336	8			0.1	2					71Ka42	*
*^{232}Th(α)^{228}Ra	E_α=4012.3(1.4), 3947.2(2.0) to ground state, 2$^+$ level at 63.823 keV											Ens143	**
*^{232}U(α)^{228}Th	E_α=5320.12(0.14,Z), 5263.36(0.09,Z) to ground state, 2$^+$ level at 57.773 level											Ens143	**
*^{232}Pa(β^-)^{232}U	E_{β^-}=1295(20) to 2$^+$ level at 47.573 keV, and other E_{β^-}											Ens06a	**
*^{232}Pa(β^-)^{232}U	E_{β^-}=314(8) to 2$^-$ level at 1016.85 keV, and other E_{β^-}											Ens06a	**
^{233}Fr−^{133}Cs$_{1.752}$		218166	21				2			MA8	1.0	14Kr09	
^{233}Ra−u		47602	32	47595	9	−0.2	o			GS3	1.0	08Ch.A	
		47582	17			0.7	1	30	30 ^{233}Ra	GS3	1.0	12Ch19	
^{233}Ra−^{133}Cs$_{1.752}$		213248	11	213243	9	−0.5	1	70	70 ^{233}Ra	MA8	1.0	14Kr09	
^{233}Ac−u		44363	32	44346	14	−0.5	o			GS3	1.0	08Ch.A	
		44346	14				2			GS3	1.0	12Ch19	
^{233}U(α)^{229}Th		4908.4	1.2	4908.7	1.2	0.2	1	93	70 ^{229}Th	Kum		68Ba25	Z
^{233}Np(α)^{229}Pa		5626.7	50.9				2					50Ma14	
^{233}Pu(α)^{229}U		6416.3	20.				6					57Th10	
^{233}Am(α)^{229}Np^p		6898.6	17.3				8					00Sa52	
^{233}Cm(α)^{229}Pu		7468.5	10.	7470	50	0.1	o			GSa		01Ca.B	
		7473.5	20.				8			GSa		10Kh06	
^{233}Bk(α)^{229}Am^p		7905.9	20.3				7			GSa		15De22	
^{232}Th(n,γ)^{233}Th		4786.69	0.25	4786.39	0.09	−1.2	–					74Ke13	Z
		4786.34	0.10			0.5	–			Bdn		06Fi.A	
^{232}Th(d,p)^{233}Th		2555	10	2561.82	0.09	0.7	U			MIT		72Gr19	
		2567	7			−0.7	U			ANL		72Vo08	
^{232}Th(n,γ)^{233}Th	ave.	4786.39	0.09	4786.39	0.09	0.0	1	100	92 ^{233}Th			average	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{233}Th(β^-)^{233}Pa		1245	3	1242.2	1.1	−0.9	1	14	8 ^{233}Th			57Fr.A	*
^{233}Pa(β^-)^{233}U		568	4	570.3	2.0	0.6	–					54Br37	*
		568	5			0.5	–					55On05	*
		566	5			0.9	–					63Bi03	*
	ave.	567.4	2.6			1.1	1	56	51 ^{233}U			average	
*^{233}Th(β^-)^{233}Pa		PrvCom to reference										58St50	**
*^{233}Pa(β^-)^{233}U		E_{β^-}=568(5), 256(4) to ground state, 3/2$^+$ level at 311.904 keV										Ens057	**
*^{233}Pa(β^-)^{233}U		E_{β^-}=568(5), 257(5) to ground state, 3/2$^+$ level at 311.904 keV										Ens057	**
*^{233}Pa(β^-)^{233}U		E_{β^-}=254(5) to 3/2$^+$ level at 311.904 keV										Ens057	**
^{234}Ra−u		50358	33	50382	9	0.7	o			GS3	1.0	08Ch.A	
		50342	33			1.2	U			GS3	1.0	12Ch19	
^{234}Ra−^{133}Cs$_{1.759}$		216692.1	9.0				2			MA8	1.0	14Kr09	
^{234}Ac−u		48137	32	48139	15	0.1	o			GS3	1.0	08Ch.A	
		48139	15				2			GS3	1.0	12Ch19	
^{234}U(α)^{230}Th		4857.4	1.0	4857.5	0.7	0.1	–					55Go.A	Z
		4860.4	2.			−1.4	–			Kum		67Ba43	Z
	ave.	4858.0	0.9			−0.5	1	55	39 ^{230}Th			average	
^{234}Pu(α)^{230}U		6310.1	5.				3					60Ho.A	*
^{234}Am(α)^{230}Np		6572.6	20.	6800#	150#	11.4	F					90Ha02	*
^{234}Cm(α)^{230}Pu		7365.2	10.	7365	9	0.0	7			GSa		01Ca.B	
		7366.1	20.3			0.0	7			RIa		16Ka13	
^{234}Bk(α)^{230}Am		8087	50	8100	50	0.2	o			RIa		02Mo.B	*
		8098.6	20.3				10			RIa		16Ka13	
^{232}Th(t,p)^{234}Th		2487	20	2494.6	2.6	0.4	U			LAl		69Br11	
^{234}U(p,t)^{232}U		−4099	15	−4125.3	1.6	−1.8	U			ANL		74Fr01	
^{234}U(p,t)^{232}U−^{184}W()^{182}W		1007.6	1.6	994.8	1.6	−8.0	B					09Le03	
		1007.6	1.8			−7.1	C					09Le.A	
^{233}U(d,p)^{234}U		4656	15	4620.9	2.0	−2.3	U			Kop		68Bj05	
^{234}U(d,t)^{233}U		−579	6	−588.2	2.0	−1.5	1	11	11 ^{233}U	ANL		67Er02	
^{234}Th(β^-)^{234}Pa^m		192	2	195.1	1.0	1.5	3					55De40	*
		193	2			1.0	3					63Bj02	*
		198.	1.5			−1.9	3					73Go40	*
^{234}Pa^m(IT)^{234}Pa		79	3				4					Nub16b	
^{234}Pa(β^-)^{234}U		2230	40	2194	4	−0.9	U					62Bj01	
^{234}Pa^m(β^-)^{234}U		2290	20	2272.9	2.6	−0.9	U					63Bj02	
^{234}Np(β^+)^{234}U		1812	10	1810	8	−0.2	2					67Ha04	*
		1805	15			0.3	2					67Wa09	*
*^{234}Pu(α)^{230}U		With correction similar to reference										91Ry01	**
*^{234}Am(α)^{230}Np		F : not believed to be measured in this work, replaced by estimate										GAu	**
*^{234}Bk(α)^{230}Am		E_α=7850(50) to 100 keV excited state										16Ka13	**
*^{234}Th(β^-)^{234}Pa^m		E_{β^-}=100(2) 100(2) 104.0(1.5) respectively, to (1$^-$) 92.38 above ^{234}Pa^m, and other E_{β^-}										Ens074	**
*^{234}Np(β^+)^{234}U		E_{β^+}=790(10) pK=0.48(0.03) respectively, to 1$^+$ at 1570.69 and 1$^+$ at 1601.8 keV										Ens074	**
^{235}Ac−u		50872	32	50840	15	−1.0	o			GS3	1.0	08Ch.A	
		50840	15				2			GS3	1.0	12Ch19	
^{235}Th−u		47252	32	47255	14	0.1	o			GS3	1.0	08Ch.A	
		47255	14				2			GS3	1.0	12Ch19	
^{235}Pa−u		45421	32	45399	15	−0.7	o			GS3	1.0	08Ch.A	
		45399	15				2			GS3	1.0	12Ch19	
^{235}U−^{206}Pb C_2 H_5		30341.0	10.	30337.9	1.6	−0.1	U			C4	2.5	71Ke02	
^{235}U−C_{18} H_{18}		−96932.8	3.8	−96922.4	1.2	1.1	U			M20	2.5	73Br06	
C_{18} H_{20}−^{235}U		112584.2	4.8	112572.5	1.2	−1.0	U			M20	2.5	73Br06	
^{235}U(α)^{231}Th		4678	2	4678.0	0.7	0.0	–			Kum		60Ba44	*
		4681	3			−1.0	–					60Vo07	*
		4675.5	3.0			0.8	–					64Sc27	*
		4677	3			0.3	–					66Ga03	*
	ave.	4677.9	1.3			0.1	1	28	21 ^{231}Th			average	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{235}Np(α)^{231}Pa		5197.2	2.0	5193.8	1.5	−1.7	1	54	42 ^{231}Pa	Bka		73Br12	∗
^{235}Pu(α)^{231}U		5951.5	20.				3					57Th10	
^{235}Am(α)^{231}Np		6559	100	6576	13	0.2	o			JAa		99Sa.D	∗
		6576	15			0.0	o			JAa		04Sa05	∗
		6576	13				7			JAa		04As12	∗
^{233}U(t,p)^{235}U		3668	10	3661.2	2.0	−0.7	U					67Ri.A	∗
^{234}U(n,γ)^{235}U		5297.1	0.5	5297.50	0.23	0.8	–					72Ri08	Z
		5297.4	0.3			0.3	–					77Ko15	Z
^{234}U(d,p)^{235}U		3075	7	3072.93	0.23	−0.3	U			ANL		70Br01	
^{235}U(d,t)^{234}U		935	15	959.73	0.23	1.6	U			Kop		68Bj05	
^{234}U(n,γ)^{235}U	ave.	5297.32	0.26	5297.50	0.23	0.7	1	81	63 ^{234}U			average	
^{235}Th(β^-)^{235}Pa		1470	80	1729	19	3.2	B					89Yu01	
^{235}Pa(β^-)^{235}U		1410	50	1370	14	−0.8	U					68Tr07	
^{235}Np(ε)^{235}U		123.5	2.	124.3	0.9	0.4	–					58Gi05	
		123.6	1.			0.7	–					72Mc25	
	ave.	123.6	0.9			0.8	1	91	88 ^{235}Np			average	
∗^{235}U(α)^{231}Th	E_α=4596 4398 4372(all 2,Z) to ground state, (7/2$^-$) at 205.310, 9/2$^-$ at 236.906											Ens136	∗∗
∗^{235}U(α)^{231}Th	E_α=4598.6(3,Z) , 4402.6(3,Z) to ground state, (7/2$^-$) at 205.310 keV											Ens136	∗∗
∗^{235}U(α)^{231}Th	E_α=4595 4394 4364(all 3,Z) to ground state, (7/2$^-$) at 205.310, 9/2$^-$ at 236.906											Ens136	∗∗
∗^{235}U(α)^{231}Th	E_α=4595.3, 4397.3, 4365.3(all 3,Z) to ground state, (7/2$^-$) level at 205.310 keV											Ens136	∗∗
∗	and 9/2$^-$ at 236.906 keV											Ens136	∗∗
∗^{235}Np(α)^{231}Pa	E_α=5105.2(3), 5097.2(3), 5050.8(2,Z), 5024.8(2,Z), 4924.8(2,Z) to ground state,											AHW	∗∗
∗	1/2$^-$ at 9.206, 7/2$^-$ at 58.5699, 5/2$^+$ at 84.2148, 5/2$^+$ at 183.4962											Ens136	∗∗
∗^{235}Am(α)^{231}Np	E_α=6440(100) to level below 15 keV											04As12	∗∗
∗^{235}Am(α)^{231}Np	E_α=6457(14) to level below 15 keV											04As12	∗∗
∗^{235}Am(α)^{231}Np	E_α=6457(12) to level below 15 keV											04As12	∗∗
∗^{233}U(t,p)^{235}U	Q =3335(10,Ri) to 5/2$^+$ level at 332.845 keV											Ens14b	∗∗
^{236}Ac−u		55037	73	54990	40	−0.7	o			GS3	1.0	10Ch19	
		54988	41				2			GS3	1.0	12Ch19	
^{236}Th−u		49665	32	49657	15	−0.3	o			GS3	1.0	08Ch.A	
		49657	15				2			GS3	1.0	12Ch19	
^{236}Pa−u		48666	32	48668	15	0.1	o			GS3	1.0	08Ch.A	
		48668	15				2			GS3	1.0	12Ch19	
^{236}U(α)^{232}Th		4572.2	3.	4572.9	0.9	0.2	o					60Ko04	Z
		4570.0	3.1			1.0	–					61Ko11	Z
		4573.1	1.0			−0.2	–			Kum		78Ba.C	
	ave.	4572.8	1.0			0.1	1	82	83 ^{232}Th			average	
^{236}Pu(α)^{232}U		5867.15	0.08	5867.15	0.08	0.0	1	100	99 ^{236}Pu			84Ry02	Z
^{236}Am(α)^{232}Np		6256.2	40.				3			JAa		04Sa05	
^{236}Cm(α)^{232}Pu		7074.1	20.	7067	5	−0.4	U			GSa		10Kh06	
		7066.9	5.				7			JAa		10As.A	
^{236}U(p,t)^{234}U		−3330	15	−3361.2	0.3	−2.1	U			ANL		74Fr01	
^{235}U(n,γ)^{236}U		6545	2	6545.52	0.26	0.3	U					70Ka22	
		6545.1	0.5			0.8	–					74Ju.B	Z
		6545.4	0.5			0.2	–					75We.A	Z
^{236}U(d,t)^{235}U		−281	6	−288.29	0.26	−1.2	U			ANL		70Br01	
^{235}U(n,γ)^{236}U	ave.	6545.3	0.4	6545.52	0.26	0.8	1	54	30 ^{235}U			average	
^{236}Pa(β^-)^{236}U		3350	100	2889	14	−4.6	B					63Wo04	
		2900	200			−0.1	U					68Tr07	∗
^{236}Np^m(IT)^{236}Np		60	50				3					Ens06a	
^{236}Np^m(β^-)^{236}Pu		525	10	537	6	1.2	2					56Gr11	∗
		544	8			−0.9	2					69Le05	∗
∗^{236}Pa(β^-)^{236}U	E_{β^-}=2000(200) to 1$^-$ level at 687.59 keV, and other E_{β^-}, reinterpreted											Ens06a	∗∗
∗^{236}Np^m(β^-)^{236}Pu	E_{β^-}=518(10) 537(8) respectively, to ground state and 2$^+$ level at 44.63 keV											Ens06a	∗∗

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{237}Th−u		53690	32	53629	17	−1.9	o			GS3	1.0	08Ch.A	
		53629	17				2			GS3	1.0	12Ch19	
^{237}Pa−u		51038	32	51023	14	−0.5	o			GS3	1.0	08Ch.A	
		51023	14				2			GS3	1.0	12Ch19	
^{237}Np(α)^{233}Pa		4959.9	3.	4957.3	0.7	−0.9	U					61Ba44	*
		4956.7	1.5			0.4	–			Kum		68Ba25	*
		4959.9	3.			−0.9	U					69Va06	*
		4956.9	0.9			0.4	–			Gea		00Si02	*
	ave.	4956.8	0.8			0.6	1	91	90 ^{233}Pa			average	
^{237}Pu(α)^{233}U		5753.3	20.	5747.6	2.3	−0.3	U					57Th10	
		5747	5			0.1	1	20	15 ^{233}U	Dba		93Dm02	
^{237}Am(α)^{233}Np^p		6146.2	5.				4					75Ah05	Z
^{237}Cm(α)^{233}Pu		6774.5	10.	6770	50	−0.1	o			JAa		02As08	
		6770.4	10.				7			JAa		06As03	
^{237}Cf(α)^{233}Cm		8220	20				9			GSa		10Kh06	
^{235}U(t,p)^{237}U		3206	20	3189.5	0.5	−0.8	U			Ald		64Mi.A	*
		3178	20			0.6	U			LAl		69Br11	
^{237}Np(p,t)^{235}Np		−3816	15	−3832.3	0.9	−1.1	U			ANL		74Fr01	
^{236}U(n,γ)^{237}U		5125.9	0.5	5125.8	0.5	−0.3	1	85	84 ^{237}U	BNn		79Vo05	Z
^{236}U(d,p)^{237}U		2898	8	2901.2	0.5	0.4	U			ANL		67Er02	
^{237}Pa(β^-)^{237}U		2250	100	2137	13	−1.1	U					74Ka05	
^{237}U(β^-)^{237}Np		520	5	518.5	0.5	−0.3	U					53Wa05	*
		524	5			−1.1	U					56Ba39	*
		523	5			−0.9	U					57Ra04	*
^{237}Pu(ε)^{237}Np		222	8	220.1	1.3	−0.2	U					58Ho02	*
		207	18			0.7	U					59Gi54	*

*^{237}Np(α)^{233}Pa	E_α=4876.7 4774.2 4769.1(3,Z) to ground state, 7/2$^+$ at 103.635, 9/2$^+$ 109.07 keV	Ens057	**
*^{237}Np(α)^{233}Pa	E_α=4787.9(1.5,Z) to 5/2$^+$ level at 86.48 keV	Ens057	**
*^{237}Np(α)^{233}Pa	E_α=4791.0(3,Z), 4774.0(3,Z), 4770.0(3,Z) keV	69Va06	**
*	to 5/2$^+$ at 86.468, 7/2$^+$ at 103.635, 9/2$^+$ at 109.07 keV	Ens057	**
*^{237}Np(α)^{233}Pa	E_α=4788.0(0.9) keV to 5/2$^+$ at 86.468 keV	00Si02	**
*^{235}U(t,p)^{237}U	Q =2980(20) to 7/2$^+$ level at 426.15 keV	Ens068	**
*^{237}U(β^-)^{237}Np	E_{β^-}=245(5), 249(5), 248(5) respectively, to 53% 3/2$^-$ level at 267.556, and	Ens068	**
*	43% 1/2$^-$ level at 281.356 keV	Ens068	**
*^{237}Pu(ε)^{237}Np	LK=2.8(0.8) capture to 5/2$^-$ level at 59.541 keV, recalculated	Ens068	**
*^{237}Pu(ε)^{237}Np	pK=0.38(0.06) to ground state, 7/2$^+$ level at 33.196, 5/2$^-$ at 59.541 keV	Ens068	**

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{238}Pa−u		54648	32	54637	17	−0.3	o			GS3	1.0	08Ch.A	
		54637	17				2			GS3	1.0	12Ch19	
^{238}U−^{206}Pb ^{32}S		104253.9	10.	104250.7	1.9	−0.1	U			C4	2.5	71Ke02	
C_{18} H_{22}−^{238}U		121366.0	2.4	121363.7	1.6	−0.4	U			M20	2.5	73Br06	
C_{24} H_{20}−^{238}U $^{35}Cl_2$		168010.8	1.4	168008.3	1.6	−0.7	1	21	21 ^{238}U	M20	2.5	73Br06	
^{238}U−^{235}U		6858.6	10.	6858.8	1.3	0.0	U			C4	2.5	71Ke02	
^{238}U(α)^{234}Th		4271.5	5.	4269.9	2.1	−0.3	2					57Ha08	Z
		4265.1	5.			0.9	2					60Vo07	Z
		4272.9	5.			−0.6	2					61Ko11	Z
		4269.9	3.			0.0	2			Gea		14Po02	
^{238}Pu(α)^{234}U		5593.20	0.2	5593.27	0.19	0.4	1	90	69 ^{238}Pu			71Gr17	Z
^{238}Am(α)^{234}Np		6041.7	30.				3					72Ah04	
^{238}Cm(α)^{234}Pu		6611.5	50.	6670	10	1.2	U					48St.A	*
		6632.0	50.			0.8	U					52Hi.A	
		6672.3	10.			−0.2	o			JAa		02As08	
		6670.3	10.				4			JAa		06As03	
^{238}U(n,α)^{235}Th		8700	50	8936	13	4.7	B					81Wa11	
^{236}U(t,p)^{238}U		2900	20	2797.7	1.2	−5.1	F			Ald		64Mi.A	*
		2782	10			1.6	U			ANL		67Er02	
		2780	20			0.9	U			LAl		69Br11	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference
^{238}U(p,t)^{236}U	−2765	15	−2797.7	1.2	−2.2	U			ANL		74Fr01
^{238}U(p,d)^{237}U	−3951	20	−3929.2	1.3	1.1	U			Ald		64Mi.A
^{238}U(d,t)^{237}U	116	6	103.5	1.3	−2.1	U			ANL		67Er02
^{237}Np(n,γ)^{238}Np	5488.32	0.20				2			BNn		79Io01 Z
^{238}Pu(d,t)^{237}Pu	−746	10	−742.6	1.3	0.3	U			Kop		73Gr26
^{238}Pa(β^-)^{238}U	3600	300	3586	16	0.0	U					68Tr07 *
	3460	60			2.1	U					85Ba57 *
^{238}Np(β^-)^{238}Pu	1295	10	1291.4	0.5	−0.4	U					55Ra27 *
	1300	15			−0.6	U					56Ba95 *
*^{238}Cm(α)^{234}Pu	PrvCom to reference										58St50 **
*^{236}U(t,p)^{238}U	F : authors not satisfied with target material										AHW **
*^{238}Pa(β^-)^{238}U	E_{β^-}=1700(300) to (3$^-$) level at 1992.2 keV, and other E_{β^-}, reinterpreted										Ens157 **
*^{238}Pa(β^-)^{238}U	Reports result from thesis										82Gi.A **
*^{238}Np(β^-)^{238}Pu	E_{β^-}=270(10) 280(10) respectively, to 2$^+$ level at 1028.537 keV, and other E_{β^-}										Ens157 **
^{239}Pu(α)^{235}U	5244.60	0.25	5244.52	0.21	−0.3	1	68	41 ^{235}U			79Ry.A *
^{239}Am(α)^{235}Np	5924.6	2.0	5922.4	1.4	−1.1	2			Bka		71Go01 *
	5920.2	2.0			1.1	2					75Ah05 *
^{239}Cm(α)^{235}Pu	6539.7	140.				4			JAa		02Sh.C *
^{239}Cf(α)^{235}Cm^p	7760.1	25.				10			GSa		81Mu12
^{238}U(n,γ)^{239}U	4806.55	0.30	4806.38	0.17	−0.6	2			ANL		72Bo46 Z
	4806.30	0.21			0.4	2			ILn		79Br25 Z
^{238}U(d,p)^{239}U	2588	20	2581.82	0.17	−0.3	U			Ald		64Mi.A
	2579	7			0.4	U			Tal		66Sh16
	2585	6			−0.5	U			ANL		67Er02
^{238}Pu(n,γ)^{239}Pu	5646.7	0.5	5646.2	0.3	−0.9	1	38	31 ^{238}Pu			75Ma.A Z
^{238}Pu(d,p)^{239}Pu	3432	10	3421.7	0.3	−1.0	U			Kop		73Gr26
^{239}Pu(d,t)^{238}Pu	604	10	611.0	0.3	0.7	U			ANL		73Fr01
^{239}U(β^-)^{239}Np	1290	20	1261.7	1.5	−1.4	U					64Bl11 *
^{239}Np(β^-)^{239}Pu	722.5	1.0	722.8	0.9	0.3	1	87	67 ^{239}Np			59Co63 *
*^{239}Pu(α)^{235}U	E_α=5156.59(0.25,Z) to 1/2$^+$ level at 0.0760 keV										Ens14b **
*^{239}Am(α)^{235}Np	E_α=5824.6(4,Z) 5775.6(2,Z) 5733.6(2,Z); ground state, (5/2)$^-$ 49.10, (7/2)$^-$ 91.6										Ens14b **
*^{239}Am(α)^{235}Np	E_α=5772.7(2,Z) to (5/2)$^-$ level at 49.10 keV										Ens14b **
*^{239}Cm(α)^{235}Pu	Private communication to reference										08Qi03 **
*^{239}U(β^-)^{239}Np	E_{β^-}=1211(20) to 5/2$^-$ level at 74.6640 keV, and other E_{β^-}										Ens14b **
*^{239}Np(β^-)^{239}Pu	E_{β^-}=437(1) to 5/2$^+$ level at 285.460 keV, and other E_{β^-}										Ens14b **
^{240}Pu(α)^{236}U	5255.88	0.15	5255.82	0.14	−0.4	1	90	77 ^{236}U			72Go33 Z
^{240}Am(α)^{236}Np^p	5468.9	1.0				3					70Go42 Z
^{240}Cm(α)^{236}Pu	6397.8	0.6	6397.8	0.6	0.0	1	100	99 ^{240}Cm	Kum		71Bb10 *
^{240}Cf(α)^{236}Cm	7718.9	10.	7711	4	−0.8	8					70Si19
	7713.8	20.			−0.1	U			GSa		10Kh06
	7709.7	4.1			0.3	8			JAa		10As.A
^{238}U(t,p)^{240}U	2242	20	2253.1	2.9	0.6	U			Ald		64Mi.A
	2253	20			0.0	U			LAl		69Br11
^{240}Pu(p,t)^{238}Pu	−3692	15	−3698.7	0.4	−0.4	U			ANL		74Fr01
^{239}Pu(n,γ)^{240}Pu	6534.1	1.0	6534.22	0.23	0.1	–					70Ch.A
	6534.3	0.4			−0.2	–					74Ju.B Z
	6534.2	0.4			0.0	–					75We.A Z
^{239}Pu(d,p)^{240}Pu	4300	10	4309.65	0.23	1.0	U			ANL		73Fr01
^{239}Pu(n,γ)^{240}Pu ave.	6534.24	0.27	6534.22	0.23	−0.1	1	72	46 ^{239}Pu			average
^{240}U(β^-)^{240}Np^m	386	20	381	13	−0.2	1	43	42 ^{240}Np^m			53Kn23 *
^{240}Np^m(IT)^{240}Np	20	15	18	14	−0.1	1	83	68 ^{240}Np			81Hs02 *
^{240}Np(β^-)^{240}Pu	2199	30	2191	17	−0.3	1	32	32 ^{240}Np			51Or.A *

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.		Lab	F	Reference	
^{240}Np^m(β^-)^{240}Pu		2210	20	2209	13	−0.1	1	43	43	^{240}Np^m			59Bu20	*
^{240}Am(ε)^{240}Pu		1395	35	1385	14	−0.3	R						72Ah07	*
*^{240}Cm(α)^{236}Pu	E_α=6290.5, 6247.7(0.6,Z) to ground state, 2$^+$ level at 44.63 keV												Ens06a	**
*^{240}U(β^-)^{240}Np^m	E_{β^-}=360(20) to ^{240}Np^m, and 1$^+$ level at 44.17 keV above												Ens08a	**
*^{240}Np^m(IT)^{240}Np	From fraction IT =0.0012(0.0001)												AHW	**
*^{240}Np(β^-)^{240}Pu	E_{β^-}=890(30) to 5$^-$ level at 1308.74 keV												Ens08a	**
*^{240}Np^m(β^-)^{240}Pu	E_{β^-}=2180(20) to ground state and 2$^+$ level at 42.824 keV, and other E_{β^-}												Ens08a	**
*^{240}Am(ε)^{240}Pu	pK=0.635(0.020) to 3$^+$ level at 1030.55 keV, recalculated												Ens08a	**
^{241}Am O−C$_{22}$		51744.8	1.9	51742.0	1.2	−1.0	1	18	18	^{241}Am	TG1	1.5	14Ei01	
^{241}Pu(α)^{237}U		5139.6	3.	5140.1	0.5	0.2	U						68Ah01	*
		5139.3	1.2			0.6	1	16	16	^{237}U	Kum		68Ba25	*
^{241}Am(α)^{237}Np		5637.81	0.12	5637.82	0.12	0.1	1	100	99	^{237}Np			71Gr17	*
^{241}Cm(α)^{237}Pu		6182.8	2.0	6185.2	0.6	1.2	U				Kum		67Ba42	*
		6185.2	0.6			0.0	–				Kum		71Bb10	*
		6185.0	2.0			0.1	–						75Ah05	*
	ave.	6185.2	0.6			0.0	1	99	94	^{237}Pu			average	
^{241}Cf(α)^{237}Cm^p		7459.0	5.	7455	3	−0.9	9						70Si19	
		7451.9	4.1			0.7	9				JAa		10As.A	
^{241}Es(α)^{237}Bk		8064.1	30.	8250	20	6.2	C				GSa		85Hi.A	*
		8250.2	20.				10				GSa		96Ni09	
^{239}Pu(t,p)^{241}Pu		3242	20	3293.95	0.23	2.6	U				LAl		69Br11	
^{240}Pu(n,γ)^{241}Pu		5241.3	0.7	5241.522	0.030	0.3	U						75Ma.A	
		5241.52	0.03			0.1	1	100	61	^{240}Pu	ILn		98Wh01	Z
^{240}Pu(d,p)^{241}Pu		3018	6	3016.956	0.030	−0.2	U				ANL		67Er02	
^{241}Am(d,t)^{240}Am		−388	15	−390	14	−0.1	2				Kop		76Gr19	
^{241}Np(β^-)^{241}Pu		1360	100	1310	70	−0.5	2						59Va32	
		1250	100			0.6	2						66Qa02	
^{241}Pu(β^-)^{241}Am		20.8	0.2	20.78	0.17	−0.1	–						56Sh31	
		20.7	0.3			0.3	–						99Dr13	
		20.78	0.20			0.0	o						99Ya.A	
		21.6	0.5			−1.6	U						10Lo14	*
	ave.	20.77	0.17			0.1	1	99	81	^{241}Am			average	
^{241}Cm(ε)^{241}Am		767.5	1.2	767.4	1.2	−0.1	1	95	94	^{241}Cm			89Su.A	*
*^{241}Pu(α)^{237}U	E_α=4896.6(3,Z), 4853.6(3,Z) to 5/2$^+$ at 159.962, 11/2$^+$ at 204.06 keV												Ens068	**
*^{241}Pu(α)^{237}U	E_α=4896.3(1.2,Z), 4853.3(1.2,Z) to 5/2$^+$ at 159.962, 11/2$^+$ 204.06 keV												Ens068	**
*^{241}Am(α)^{237}Np	E_α=5485.56(0.12,Z) 5442.80(0.13,Z) to 5/2$^-$ at 59.54, 7/2$^-$ at 102.96												Ens068	**
*^{241}Cm(α)^{237}Pu	E_α=6080.6(2,Z), 5926.6(2,Z) to ground state, 3/2$^+$ level at 155.456 keV												Ens068	**
*^{241}Cm(α)^{237}Pu	E_α=5939.0(0.6,Z), 5884.7(0.6,Z) to 1/2$^+$ at 145.543, 5/2$^+$ 201.179 keV												Ens068	**
*^{241}Cm(α)^{237}Pu	E_α=5938.7(2,Z), 5884.7(2,Z) to 1/2$^+$ at 145.543, 5/2$^+$ at 201.179 keV												Ens068	**
*^{241}Es(α)^{237}Bk	C : new data from same group (next item) is more reliable												96Ni09	**
*^{241}Pu(β^-)^{241}Am	No quoted uncertainty, estimated by evaluator												GAu	**
*^{241}Cm(ε)^{241}Am	$Q(\varepsilon)$=5.5(1.2) to 3/2$^-$ level at 636.861 keV												Ens152	**
^{242}Pu(α)^{238}U		4987.3	2.0	4984.2	1.0	−1.5	–						53As.A	*
		4989.5	3.0			−1.8	U						56Ko67	*
		4982.9	1.2			1.1	–				Kum		68Ba25	*
	ave.	4984.1	1.0			0.2	1	92	78	^{238}U			average	
^{242}Am(α)^{238}Np		5587.5	0.8	5588.50	0.25	1.3	U				Kum		79Ba67	*
		5589.9	0.8			−1.7	U						90Ho02	*
^{242}Cm(α)^{238}Pu		6215.63	0.08	6215.63	0.08	0.0	1	100	100	^{242}Cm			71Gr17	Z
^{242}Cf(α)^{238}Cm		7516.9	4.				5						70Si19	Z
^{242}Es(α)^{238}Bk		8160.2	20.				9				GSa		10An08	
^{240}Pu(t,p)^{242}Pu		3043	20	3069.3	0.7	1.3	U				LAl		69Br11	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{242}Pu(p,t)^{240}Pu	−3045	15	−3069.3	0.7	−1.6	U			ANL		74Fr01	
^{241}Pu(n,γ)^{242}Pu	6309.5	0.7	6309.6	0.7	0.1	1	95	81 ^{242}Pu			72Ma.A	
^{242}Pu(d,t)^{241}Pu	−49	7	−52.3	0.7	−0.5	U			ANL		67Er02	
^{241}Am(n,γ)^{242}Am	5541.5	1.5	5537.64	0.10	−2.6	U					75Ij.A	
	5537.64	0.1				2			ILn		88Sa18	Z
^{241}Am(d,p)^{242}Am	3308	15	3313.07	0.10	0.3	U			Kop		76Gr19	
^{242}Np(β^-)^{242}Pu	2700	200				2					79Ha26	
^{242}Am(β^-)^{242}Cm	651	5	664.3	0.4	2.7	U					50Ok52	∗
	667	5			−0.5	U					55Ba.A	
∗^{242}Pu(α)^{238}U	E_α=4904.6, 4860.6(2,Z) to ground state, 2$^+$ level at 44.916 keV										Ens157	∗∗
∗^{242}Pu(α)^{238}U	E_α=4905.2(3,Z), 4863.2(3,Z) to ground state, 2$^+$ level at 44.916 keV										Ens157	∗∗
∗^{242}Pu(α)^{238}U	E_α=4900.4(1.2,Z), 4856.1(1.2,Z) to ground state, 2$^+$ level at 44.916 keV										Ens157	∗∗
∗^{242}Am(α)^{238}Np	E_α=5206.6(0.5,Z), 5141.4(0.5,Z) from ^{242}Am^m at 48.60 to 5$^-$ at 342.439,										Ens157	∗∗
∗	and 6$^-$ at 407.59 keV; error increased due to conflict with next item										GAu	∗∗
∗^{242}Am(α)^{238}Np	E_α=5208.3(0.8,Z), 5144.3(0.9,Z) from ^{242}Am^m to 5$^-$ 6$^-$ levels (see above)										Ens157	∗∗
∗^{242}Am(β^-)^{242}Cm	E_{β^-}=628(5) to ground state and 2$^+$ level at 42.13 keV										Ens026	∗∗
^{243}Am O−C$_{22}$	56295.8	1.5	56294.6	1.5	−0.6	1	44	44 ^{243}Am	TG1	1.5	14Ei01	
^{243}Am(α)^{239}Np	5438.8	1.0	5439.1	0.9	0.3	1	87	54 ^{243}Am	Kum		68Ba25	∗
^{243}Cm(α)^{239}Pu	6165.4	3.0	6168.8	1.0	1.1	U					57As.A	∗
	6165.7	3.0			1.0	U					63Dz07	∗
	6165.4	3.0			1.1	o			Kum		66Ba07	∗
	6168.8	1.0				2					69Ba57	∗
^{243}Bk(α)^{239}Am	6874.4	4.				3			Bka		66Ah.A	Z
^{243}Cf(α)^{239}Cm^p	7178	10				6					67Fi04	∗
^{243}Es(α)^{239}Bk	8072.1	10.				9			RIa		89Ha27	
^{243}Es(α)^{239}Bk^p	8022.3	20.	8030.9	2.9	0.4	U					73Es02	
	8031.4	3.			−0.2	10			RIa		89Ha27	
	8027.3	20.			0.2	o			GSa		93Ho.A	
	8025.4	10.			0.6	10			GSa		10An08	
^{243}Fm(α)^{239}Cf	8689.3	25.4	8690	50	0.1	o			GSa		81Mu12	
	8693.4	20.3				11			GSa		08Kh10	
^{243}Am(p,t)^{241}Am	−3407	15	−3420.2	1.2	−0.9	U			ANL		74Fr01	
^{242}Pu(n,γ)^{243}Pu	5034.2	3.	5033.6	2.4	−0.2	1	63	59 ^{243}Pu			76Ca25	
^{242}Pu(d,p)^{243}Pu	2807	8	2809.1	2.4	0.3	U			ANL		67Er02	
^{243}Am(d,t)^{242}Am	−111	15	−107.1	1.2	0.3	U			Kop		76Gr19	
^{243}Pu(β^-)^{243}Am	578	10	579.6	2.6	0.2	–					69Ho10	
	580	10			0.0	–					77Dr07	
ave.	579	7			0.1	1	14	11 ^{243}Pu			average	
∗^{243}Am(α)^{239}Np	E_α=5275.2(1.0,Z) 5233.3(1.0,Z) to 5/2$^-$ at 74.6640, 7/2$^-$ at 117.715										Ens14b	∗∗
∗^{243}Cm(α)^{239}Pu	E_α=6063.7, 5989.7, 5782.7, 5738.7(3,Z) to ground state, 7/2$^+$ level at 75.705,										57As.A	∗∗
∗	5/2$^+$ at 285.460, and 7/2$^+$ at 330.124 keV										Ens14b	∗∗
∗^{243}Cm(α)^{239}Pu	E_α=5990.5, 5783.5, 5738.5(3,Z) to 7/2$^+$ level at 75.705, 5/2$^+$ at 285.46,										Ens14b	∗∗
∗	and 7/2$^+$ at 330.124 keV										Ens14b	∗∗
∗^{243}Cm(α)^{239}Pu	E_α=6067.4, 5992.4(2,Z) to ground state, 7/2$^+$ at 75.705 keV										Ens14b	∗∗
∗^{243}Cm(α)^{239}Pu	E_α=5785.7(1.0,Z), 5742.8(1.0,Z) to 5/2$^+$ at 285.46, 7/2$^+$ at 330.124keV										Ens14b	∗∗
∗^{243}Cf(α)^{239}Cm^p	Unhindered E_α=7060(10); there is a weaker E_α=7170(10) keV										AHW	∗∗
^{244}Pu O−C$_{22}$	59119.3	1.9	59119.0	2.5	−0.1	1	78	78 ^{244}Pu	TG1	1.5	14Ei01	
^{244}Pu(α)^{240}U	4665.6	1.0	4665.6	1.0	0.0	1	100	99 ^{240}U			69Be06	Z
^{244}Cm(α)^{240}Pu	5901.60	0.03				2			BIP		71Gr17	∗
^{244}Bk(α)^{240}Am	6778.8	4.				3					66Ah.B	∗
^{244}Cf(α)^{240}Cm	7327.1	2.	7329.0	1.8	0.9	–					67Fi04	Z
	7336.4	4.			−1.8	–					67Si08	Z
	7330.4	20.			−0.1	U			GSa		08Kh10	
ave.	7329.0	1.8			0.0	1	99	98 ^{244}Cf			average	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{244}Es(α)^{240}Bk^p		7696.4	20.				4					73Es02	
^{242}Pu(t,p)^{244}Pu		2576	20	2571.7	2.5	−0.2	U			LAl		69Br11	
^{244}Pu(p,t)^{242}Pu		−2560	15	−2571.7	2.5	−0.8	U			ANL		72Ma15	
^{244}Pu(t,α)^{243}Np^p		12405	10				2					79Fl02	
^{244}Pu(d,t)^{243}Pu		234	5	237.3	2.9	0.7	1	34	19 ^{243}Pu	ANL		76Ca25	
^{243}Am(n,γ)^{244}Am^m		5277.90	0.07				2			ILn		84Vo07	Z
^{244}Cm(d,t)^{243}Cm		−530	7	−544.2	1.0	−2.0	U			ANL		67Er02	
^{244}Am^m(IT)^{244}Am		85.0	1.0	89.3	1.6	4.3	F					84Ho02	*
^{244}Am(β^-)^{244}Cm		1427.3	1.0				3					62Va08	*
*^{244}Cm(α)^{240}Pu		E_α=5804.77(0.05,Z), 5762.65(0.03,Z) to ground state, 2$^+$ level at 42.824 keV										Ens08a	**
*^{244}Bk(α)^{240}Am		E_α=6667.5(4,Z), 6625.5(3,Z) to ground state, 2$^+$ level at 42.824 keV										Ens08a	**
*^{244}Am^m(IT)^{244}Am		F : value in Fig. 1 only, no source no error										AHW	**
*^{244}Am(β^-)^{244}Cm		E_{β^-}=387(1) to 6$^+$ level at 1040.188 keV; also E_{β^-}=1498(10) from										Ens036	**
*		^{244}Am^m at 89.3(1.6) to ground state and 2$^+$ at 42.965 keV, not used										Nub16b	**
^{245}Cm(α)^{241}Pu		5621.9	0.5	5624.5	0.5	5.2	B			Kum		75Ba65	*
		5624.8	0.5			−0.6	1	96	68 ^{245}Cm	Ara		16Ko.B	*
^{245}Bk(α)^{241}Am		6454.7	4.	6454.5	1.4	0.0	2					74Po08	*
		6454.5	1.5			0.0	2			Kum		75Ba25	*
^{245}Cf(α)^{241}Cm		7257.5	2.0	7258.5	1.8	0.5	–					67Fi04	*
		7265	5			−1.3	–					96Ma72	*
		7260.8	11.			−0.2	U			GSa		04He28	
	ave.	7258.5	1.9			0.0	1	98	97 ^{245}Cf			average	
^{245}Es(α)^{241}Bk		7858.5	20.	7909	3	1.0	U					73Es01	
		7884.0	20.			0.5	U			GSa		85He22	
		7909.4	3.				3			RIa		89Ha27	
^{245}Es(α)^{241}Bk^p		7827.9	30.	7858.5	1.0	1.0	U					67Mi06	
		7858.5	1.				4			RIa		89Ha27	
^{245}Fm(α)^{241}Cf^p		8285.5	20.				11					67Nu01	
^{245}Md(α)^{241}Es^p		8824.3	20.				12			GSa		96Ni09	*
^{244}Pu(d,p)^{245}Pu		2469	15	2475	13	0.4	2			ANL		75Er.A	*
^{244}Cm(d,p)^{245}Cm		3297	7	3294.1	0.5	−0.4	U			ANL		67Er02	
^{245}Pu(β^-)^{245}Am		1257	30	1278	14	0.7	R					68Da02	*
^{245}Am(β^-)^{245}Cm		905	5	895.9	1.5	−1.8	U					55Br02	
^{245}Es^p(IT)^{245}Es		283	15				4					Nub16b	
*^{245}Cm(α)^{241}Pu		E_α=5529.0, 5488.5, 5436.1(0.5,Z), 5303.6, 5234.4 (1.2,Z) keV										75Ba65	**
*^{245}Cm(α)^{241}Pu		to ground state, 7/2$^+$ 41.9722, 9/2$^+$ 95.7795, 9/2$^+$ 231.935, 11/2$^+$ 301.172 levels										Ens15c	**
*		E_α=5361.8(1.2,Z) to 7/2$^+$ 175.05 level in error in 75Ba65; excluded										FGK169	**
*^{245}Cm(α)^{241}Pu		E_α=5532.7, 5491.3(0.5), 5436.6(2.0), 5360.6, 5305.2, 5624.5(0.5) keV										16Ko.B	**
*		to ground state, 41.97, 95.78, 175.05, 231.94, 301.17 levels										Ens15c	**
*^{245}Bk(α)^{241}Am		E_α=6349.0, 6309.0, 6146.0, 5886.0 (all 4,Z)										91Ry01	**
*		to ground state, 7/2$^-$ at 41.176, 5/2$^+$ at 205.883, 3/2$^-$ at 471.810 keV										Ens15c	**
*^{245}Bk(α)^{241}Am		E_α=6347.8, 6307.8, 6146.8, 5885.8 recalibrated as in reference										91Ry01	**
*		to ground state, 7/2$^-$ at 41.176, 5/2$^+$ at 205.883, 3/2$^-$ at 471.810 keV										Ens15c	**
*^{245}Cf(α)^{241}Cm		E_α=7136.8(2.0,Z),7083.8(2.0,Z) to gs+5.6 and 56.1 level										96Ma72	**
*^{245}Cf(α)^{241}Cm		E_α=7145(5),7090(5) to gs+5.6 and 56.1 level										96Ma72	**
*^{245}Md(α)^{241}Es^p		Second E_α 8635(20) keV										96Ni09	**
*^{244}Pu(d,p)^{245}Pu		Q =2252(15) to 217 level (estimated energy for 15/2$^-$ level)										06Ma.A	**
*^{245}Pu(β^-)^{245}Am		E_{β^-}=1210(40), 930(30) to (9/2$^+$) level at 47.07, 7/2$^+$ at 327.428 keV										Ens112	**
^{246}Cm(α)^{242}Pu		5475.2	4.	5475.1	0.9	0.0	U					63Dz07	Z
		5474.9	2.			0.1	–			Kum		66Ba07	*
		5475.2	1.			−0.1	–					84Sh31	*
	ave.	5475.1	0.9			0.0	1	99	98 ^{246}Cm			average	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{246}Cf(α)^{242}Cm	6871.0	1.0	6861.6	1.0	−9.4	B					63Fr04	*
	6861.6	1.			0.0	1	100	99 ^{246}Cf	Kum		77Ba69	*
^{246}Es(α)^{242}Bk^p	7451.2	30.	7492	4	1.4	U					67Mi06	
	7481.9	30.			0.3	U					73Es01	
	7492.0	4.				4			RIa		89Ha27	
^{246}Fm(α)^{242}Cf	8371.4	20.	8377	8	0.3	6					66Ak01	
	8376.5	20.			0.0	6			Bka		67Nu01	
	8386.7	20.			−0.5	o			GSa		96Ni09	
	8378.4	10.			−0.2	6			GSa		10An08	
^{246}Md(α)^{242}Es	8884.7	20.	8890	40	0.1	o			GSa		96Ni09	*
	8888.8	40.				10			GSa		10An08	
^{246}Md^m(α)^{242}Es	8944.5	50.				10			GSa		10An08	*
^{244}Pu(t,p)^{246}Pu	2085	20	2072	15	−0.6	1	56	55 ^{246}Pu	LAl		79Br19	
^{246}Cm(d,t)^{245}Cm	−196	6	−201.7	1.2	−1.0	U			ANL		67Er02	
^{246}Pu(β^-)^{246}Am^m	374	10	371	9	−0.3	1	89	45 ^{246}Pu			56Ho23	*
^{246}Am^m(β^-)^{246}Cm	2300	100	2407	15	1.1	U					55En16	*
	2420	20			−0.6	1	56	56 ^{246}Am^m			56Sm85	*
^{246}Bk(ε)^{246}Cm	1350	60				2					89Sc.A	
*^{246}Cm(α)^{242}Pu	E_α=5385.3(2,Z), 5342.3(2,Z) to ground state, 2$^+$ level at 44.54 keV										Ens026	**
*^{246}Cm(α)^{242}Pu	E_α=5385.6(1,Z), 5342.6(1,Z) to ground state, 2$^+$ level at 44.54 keV										Ens026	**
*^{246}Cf(α)^{242}Cm	E_α=6757.4(1.0,Z), 6718.4(0.7,Z) to ground state, 2$^+$ level at 42.13 keV										Ens026	**
*^{246}Cf(α)^{242}Cm	E_α=6750.0(1.0,Z), 6708.2(1.0,Z) to ground state, 2$^+$ level at 42.13 keV										Ens026	**
*^{246}Md(α)^{242}Es	Also a lower E_α=8530(30) keV										96Ni09	**
*^{246}Md^m(α)^{242}Es	E_α=8178(10) to level at 531+x; x estimated to be 100#50 keV										10An08	**
*^{246}Pu(β^-)^{246}Am^m	E_{β^-}=150(10) to 1$^+$ level at 223.74 keV above ^{246}Am^m										Ens118	**
*^{246}Am^m(β^-)^{246}Cm	E_{β^-}=1222(100) 1350(20) respectively, to 1$^-$ level at 1078.845, 2$^-$ level at 1104.854										Ens118	**
^{247}Cm(α)^{243}Pu	5354.6	4.	5354	3	−0.2	1	71	60 ^{247}Cm			71Fi01	*
^{247}Bk(α)^{243}Am	5889.6	5.				2					69Fr01	*
^{247}Cf(α)^{243}Cm^p	6399.6	5.				5					84Ah02	Z
^{247}Es(α)^{243}Bk^p	7450.7	30.	7443.8	1.0	−0.2	U					67Mi06	
	7430.5	30.			0.4	U					73Es01	
	7443.8	1.				5			RIa		89Ha27	
^{247}Fm(α)^{243}Cf	8060.8	50.	8258	10	3.9	B			Dba		67Fl15	
	8213	18			2.5	o			GSa		89He03	*
	8287.3	20.			−1.5	o			GSa		04He28	*
	8268.1	10.			−1.0	o			GSa		06He27	*
^{247}Fm^m(α)^{243}Cf	8314.9	30.	8307	5	−0.3	U			Dba		67Fl15	*
	8260.0	30.			1.5	o			GSa		97He29	*
	8304.8	11.			0.2	o			GSa		04He28	
	8306.8	5.				7			GSa		06He27	
^{247}Md(α)^{243}Es	8776.6	25.	8764	10	−0.5	o			GSa		81Mu12	*
	8772.5	20.			−0.4	o			GSa		93Ho.A	*
	8770.5	10.			−0.6	o			GSa		05He27	*
	8764.4	10.				10			GSa		10An08	*
^{247}Md^m(α)^{243}Es	9027.9	40.				10			GSa		10An08	*
^{246}Cm(d,p)^{247}Cm	2931	8	2931	4	−0.1	1	22	21 ^{247}Cm	ANL		67Er02	
^{247}Cf(ε)^{247}Bk	646	6	614	16	−5.3	C					56Ch.A	*
*^{247}Cm(α)^{243}Pu	E_α=5267.3(4,Z) 5212.3(4,Z) 4870.3(4,Z) to ground state, 9/2$^+$ 58.13, 9/2$^-$ 402.6										Ens148	**
*^{247}Bk(α)^{243}Am	E_α=5794, 5710, 5688(5,Z) to ground state, 5/2$^+$ level at 84.00, 7/2$^+$ at 109.22 keV										Ens148	**
*^{247}Fm(α)^{243}Cf	E_α=8060(15) summed with e$^-$										AHW	**
*^{247}Fm(α)^{243}Cf	E_α=7840(20) to 318 level										04He28	**
*^{247}Fm(α)^{243}Cf	E_α=7824(10) to 315 level										06He27	**
*^{247}Fm^m(α)^{243}Cf	Only one event										97He29	**
*^{247}Fm^m(α)^{243}Cf	Not observed in later work on ^{251}No decay										01He35	**
*^{247}Md(α)^{243}Es	E_α=8428(25) to 209.6 level										10An08	**
*^{247}Md(α)^{243}Es	E_α=8424(20) to 209.6 level										10An08	**
*^{247}Md(α)^{243}Es	E_α=8422(10) to 209.6 level										10An08	**
*^{247}Md(α)^{243}Es	E_α=8616(20), 8416(10) to ground state, 209.6 level										10An08	**
*^{247}Md^m(α)^{243}Es	E_α=8783(40) to 1/2$^-$ level at 100 keV										10An08	**
*^{247}Cf(ε)^{247}Bk	LMK=10(3) assuming first-forbidden to (5/2$^-$) level at 447.80 keV, yields 646.8										Ens153	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
*	contradicts LMK=75 allowed to $(5/2)^+$ level at 334.92 keV, yields 550;											WgM10a	**
*	both conflict with 613 from Shiptrap data to ^{255}No plus α chain											WgM10a	**
^{248}Cm(α)^{244}Pu		5161.81	0.25	5161.81	0.25	0.0	1	100	95 ^{248}Cm	Kum		77Ba69	Z
^{248}Cf(α)^{244}Cm		6364.8	5.1	6361	5	−0.7	o					78Gr10	
		6361.2	5.				3					84Ah02	*
^{248}Es(α)^{244}Bk		7165.8	20.	7160#	50#	−0.3	F					84Li.A	*
^{248}Es(α)^{244}Bk^p		6982.8	15.	7020	5	2.5	U					56Ch67	
		6982.8	10.			3.8	B					70Ah01	
		7020.4	5.				5			RIa		89Ha27	
^{248}Fm(α)^{244}Cf		8009.4	30.	7995	8	−0.5	–					66Ak01	
		7999.3	20.			−0.2	–					67Nu01	
		8002.3	15.			−0.5	o			GSa		85He.A	
		7992.2	11.			0.2	–			GSa		04He28	
	ave.	7995	9			−0.1	1	79	77 ^{248}Fm			average	
^{248}Md(α)^{244}Es^p		8497.3	30.				6					73Es01	
^{248}Cm(p,t)^{246}Cm		−2894	15	−2885.1	2.7	0.6	U			ANL		74Fr01	
^{248}Cm(d,t)^{247}Cm		49	8	46	4	−0.4	1	25	19 ^{247}Cm	ANL		67Er02	
^{248}Bk^m(β^-)^{248}Cf		870	20				4					78Gr10	
*^{248}Cf(α)^{244}Cm	E_α=6257.8(5,Z), 6216.8(5,Z) to ground state, 2^+ level at 42.965 keV											Ens036	**
*^{248}Es(α)^{244}Bk	F : this line is not observed in more recent works											AHW	**
^{249}Cf O−C$_{22}$		69760.0	1.4	69765.1	1.3	2.4	1	37	37 ^{249}Cf	TG1	1.5	14Ei01	
^{249}Bk(α)^{245}Am		5520.4	2.0	5521.0	1.4	0.3	3			Bka		66Ah.A	*
		5526.1	1.0			−5.1	B			Kum		71Bb10	*
		5521.6	2.0			−0.3	3			Ara		13Ah03	*
^{249}Cf(α)^{245}Cm		6296.0	0.7	6293.3	0.5	−3.9	B			Kum		71Bb10	*
		6293.6	0.5			−0.6	1	96	63 ^{249}Cf	Ara		15Ah03	*
^{249}Es(α)^{245}Bk^p		6881.3	5.	6886.0	1.9	0.9	4					70Ah01	Z
		6886.8	2.			−0.4	4			RIa		89Ha27	
^{249}Fm(α)^{245}Cf		7718.3	20.	7709	6	−0.5	–					73Es01	*
		7705.1	23.			0.2	o			GSa		85He06	*
		7705.0	14.			0.3	–			GSa		04He28	*
		7710.2	8.1			−0.1	–			Orm		11Lo06	*
	ave.	7710	7			−0.1	1	80	77 ^{249}Fm			average	
^{249}Md(α)^{245}Es^p		8161.3	20.	8158	9	−0.2	5					73Es01	
		8157.3	20.			0.0	o			GSa		85He22	
		8165	20			−0.3	o			GSa		01He35	*
		8157.3	10.			0.1	o			GSa		05He27	
		8157.3	10.			0.1	5			GSa		09He20	
^{249}Md^m(α)^{245}Es^q		8212.2	20.				7			GSa		01He35	
^{248}Cm(n,γ)^{249}Cm		4713.37	0.25				2			ILn		82Ho07	Z
^{248}Cm(d,p)^{249}Cm		2488	6	2488.80	0.25	0.1	U			ANL		67Er02	
^{249}Cm(β^-)^{249}Bk		870	100	904.3	2.6	0.3	U					58Ea06	*
		885	15			1.3	U			ANB		05Ah03	*
^{249}Bk(β^-)^{249}Cf		125	2	123.6	0.4	−0.7	U					59Va02	
		123	2			0.3	U					74Gl10	
		123.6	0.4				2					14Ch47	
*^{249}Bk(α)^{245}Am	E_α=5431.8, 5412.8, 5384.8(all 2,Z) to ground state, $7/2^+$ 19.20, $9/2^+$ 47.07 keV											Ens112	**
*^{249}Bk(α)^{245}Am	E_α=5437.1(1.0,Z) to gs. Energies of higher branches											71Bb10	**
*	rather different from reference, calibrated with same ground state α											75Ba27	**
*^{249}Bk(α)^{245}Am	E_α=5433(2), 5414(2), 5386(2) to ground state, $7/2^+$ 19.20, $9/2^+$ 47.07 keV											Ens112	**
*^{249}Cf(α)^{245}Cm	E_α=6193.8(0.7,Z), 5813.3(1.0,Z) to ground state, $9/2^-$ level at 388.181 keV											Ens112	**
*^{249}Cf(α)^{245}Cm	E_α=6192.4(0.5), 5810.5(0.5) to ground state, $9/2^-$ level at 388.181 keV											Ens112	**
*^{249}Fm(α)^{245}Cf	E_α=7540(20) to corresponding $7/2^+$ [624] level at 55(10) keV											04He28	**
*^{249}Fm(α)^{245}Cf	E_α=7527(23) to corresponding $7/2^+$ [624] level at 55(10) keV											04He28	**
*^{249}Fm(α)^{245}Cf	Also E_α=7530(10) keV to $7/2^+$ [624] level at 57(4) keV											11Lo06	**
*^{249}Fm(α)^{245}Cf	E_α=7530(7) to $7/2^+$ [624] level at 57(4) keV											11Lo06	**
*^{249}Md(α)^{245}Es^p	E_α=8022(20) partly summed with conversion electrons											01He35	**
*^{249}Cm(β^-)^{249}Bk	E_{β^-}=860(100) 876(15) respectively, to $3/2^-$ level at 8.777 keV											Ens118	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{250}Cf(α)^{246}Cm		6129.1	0.6	6128.51	0.19	−1.0	2			Kum		71Bb10	*
		6128.44	0.2			0.3	2					86Ry04	Z
^{250}Fm(α)^{246}Cf		7550.9	50.	7557	8	0.1	U					57Am47	
		7540.9	30.5			0.5	–					66Ak01	
		7561.1	30.			−0.1	–					73Es01	
		7560.1	15.			−0.2	–			ORb		77Be36	
		7556.1	35.6			0.0	o			GSa		81Mu06	
		7555.0	12.			0.2	–			GSa		04He28	
		7544.8	35.			0.3	U			Bka		06Fo02	
	ave.	7556	9			0.1	1	80	80 ^{250}Fm			average	
^{250}Md(α)^{246}Es^p		7947.4	30.	7955	24	0.2	6					73Es01	
		7964.7	20.			−0.5	o			GSa		85He22	
		7967.7	40.			−0.3	6			GSa		08An16	
^{248}Cm(t,p)^{250}Cm		2064	10				2					73Ba72	
^{250}Bk(β^-)^{250}Cf		1760	15	1780	3	1.3	U					59Va02	*
*^{250}Cf(α)^{246}Cm	E_α=6030.6(0.6,Z), 5988.9(0.6,Z) to ground state, 2$^+$ level at 42.852 keV											Ens118	**
*^{250}Bk(β^-)^{250}Cf	E_{β^-}=725(15) to 2$^+$ level at 1031.852 keV and 3$^+$ level at 1071.37 keV											Ens01c	**
^{251}Cf(α)^{247}Cm		6177.2	1.0	6177.0	0.9	−0.2	2			Kum		71Bb10	*
		6176	2			0.5	2					03Ah07	*
^{251}Es(α)^{247}Bk		6593.5	5.	6598	3	0.9	o					70Ah01	*
		6597.8	3.				3					79Ah03	*
^{251}Fm(α)^{247}Cf		7425.1	2.0				4					73Ah02	*
^{251}Md(α)^{247}Es		7965.5	20.	7963	4	−0.1	U					73Es01	*
		7955.2	10.			0.8	4			GSa		05He27	*
		7965.5	5.			−0.4	4			Jya		06Ch52	*
^{251}No(α)^{247}Fm		8739.5	20.	8752	4	0.6	U			Bka		67Gh01	
		8732.4	15.			1.3	o			GSa		89He03	
		8762.9	20.			−0.6	o			GSa		97He29	
		8760.9	20.			−0.9	o			GSa		01He35	
		8747.7	11.			0.4	o			GSa		04He28	
		8751.8	4.				10			GSa		06He27	
^{251}No^m(α)^{247}Fm^m		8619.6	30.	8809	4	6.3	F			GSa		97He29	*
		8805.5	13.			0.2	o			GSa		04He28	
		8808.6	4.				8			GSa		06He27	
^{251}Cm(β^-)^{251}Bk		1420	20				4					78Lo13	
^{251}Bk(β^-)^{251}Cf		1093	10				3					84Li05	*
^{251}No^m(IT)^{251}No		106	6				9			GSa		06He27	
*^{251}Cf(α)^{247}Cm	E_α=5680.1(1.0,Z) to 1/2$^+$ level at 404.90 keV											Ens153	**
*^{251}Cf(α)^{247}Cm	E_α=6078(2), 5679(2) to ground state, 1/2$^+$ level at 404.90 keV, and others											Ens153	**
*^{251}Es(α)^{247}Bk	E_α=6488.5(5,Z), 6458.5(5,Z) to ground state, (5/2$^-$) level at 29.88 keV											Ens153	**
*^{251}Es(α)^{247}Bk	E_α=6492.8(3,Z), 6462.8(3,Z) to ground state, (5/2$^-$) level at 29.88 keV											Ens153	**
*^{251}Fm(α)^{247}Cf	E_α=7305.7(3,Z), 6833.7(2,Z) to ground state and (9/2$^-$) level at 480.40 keV											Ens153	**
*^{251}Md(α)^{247}Es	E_α=7550(20) 7540(10) 7550(1) respectively, to 7/2$^-$ level at 293.7 keV											06Ch52	**
*^{251}Md(α)^{247}Es	Original error 1 keV in third reference increased for calibration											GAu	**
*^{251}No^m(α)^{247}Fm^m	F : not observed in later work on ^{251}No decay											01He35	**
*^{251}Bk(β^-)^{251}Cf	E_{β^-}=915(10) to 3/2$^+$ level at 177.602 keV											Ens139	**
^{252}No−^{133}Cs$_{1.895}$		268111	34	268135	10	0.7	o			SH1	1.0	10Dw01	
		268133	18			0.1	1	31	31 ^{252}No	SH1	1.0	10Mi.A	
^{252}Cf(α)^{248}Cm		6216.9	0.5	6216.95	0.04	0.1	U			Kum		71Bb10	Z
		6216.95	0.04				2					86Ry04	Z
^{252}Es(α)^{248}Bk^p		6739.5	3.				4					73Fi06	*
^{252}Fm(α)^{248}Cf		7152.7	2.				4					84Ah02	*

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item		Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{252}No(α)^{248}Fm		8545.9	20.	8549	5	0.1	U			Bka		67Gh01	
		8545.9	30.			0.1	U			Dba		67Mi03	
		8551.0	6.			−0.4	–					77Be09	
		8542.8	15.			0.4	o			GSa		85He.A	
		8538.7	13.			0.7	–			GSa		04He28	
	ave.	8549	6			0.0	1	92	69 ^{252}No			average	
^{252}Lr(α)^{248}Md		9163.8	20.	9164	17	0.0	7			GSa		01He35	
		9165.8	30.			0.0	7			Bka		08Ne01	*
^{252}Es(ε)^{252}Cf		1260	50				3					73Fi06	*
*^{252}Es(α)^{248}Bk^p	E_α=6632.1(3,Z), 6522.1(3,Z) to 0, 7$^+$ level at 70.65 keV above ^{248}Bk^p											Ens14b	**
*^{252}Fm(α)^{248}Cf	E_α=7038.9(2,Z), 6998.1(2,Z) to ground state, 2$^+$ level at 41.53 keV											Ens14b	**
*^{252}Lr(α)^{248}Md	Other E_α=9610(20) unexplained, and 8990, 8820 keV											08Ne01	**
*^{252}Es(ε)^{252}Cf	pK=0.45(0.10) to 3$^+$ level at 969.8 keV, recalculated for non-unique first											Ens061	**
*	forbidden or allowed transition; unique first forbidden would give 1440(100)											AHW	**
^{253}No$-^{133}$Cs$_{1.902}$		270390	13	270393	7	0.2	1	33	33 ^{253}No	SH1	1.0	10Dw01	
^{253}Cf(α)^{249}Cm		6127.3	5.	6126	4	−0.3	3					66Rg01	*
		6124.6	5.			0.3	3					68Be21	*
^{253}Es(α)^{249}Bk		6739.24	0.05				3					71Gr17	Z
^{253}Fm(α)^{249}Cf		7199	3	7198.0	2.7	−0.3	2					67Ah02	*
		7194.2	6.			0.6	2			Orm		11Lo06	*
^{253}Md(α)^{249}Es		7567.5	15.	7573	8	0.4	o			GSa		05He27	*
		7574.0	10.			−0.1	5			Orm		11Lo06	*
		7571	15			0.1	5			GSa		12He09	*
^{253}No(α)^{249}Fm		8419	20	8415	4	−0.2	U			Bka		67Gh01	*
		8419	30			−0.1	U			Dba		67Mi03	*
		8430	20			−0.8	o			GSa		85He.A	*
		8420	10			−0.5	o			GSa		01He.A	*
		8412.5	11.			0.2	o			GSa		04He28	*
		8411.5	5.			0.6	o			Orm		06Lo12	*
		8415.6	5.0			−0.2	–			Orm		11Lo06	*
		8412.4	11.			0.2	–			GSa		12He09	*
	ave.	8415	5			−0.1	1	90	67 ^{253}No			average	
^{253}Lr(α)^{249}Md		8941.6	20.	8918	20	−1.2	o			GSa		85He22	
		8935.6	10.			−1.7	o			GSa		01He35	
		8927.4	15.			−0.6	o			GSa		09He20	
		8918.3	20.				6			GSa		10He11	
^{253}Lr^m(α)^{249}Md^m		8862.4	20.	8850	20	−0.6	o			GSa		85He22	
		8862.4	10.			−1.2	o			GSa		01He35	
		8859.4	15.			−0.6	o			GSa		09He20	
		8850.2	20.				7			GSa		10He11	
^{253}Cf(β^-)^{253}Es		270	50	291	4	0.4	U					59Gh.A	
^{253}Md^p(IT)^{253}Md		60	30				6					Ens139	
*^{253}Cf(α)^{249}Cm	E_α=5981(5,Z) to 7/2$^+$ level at 48.76 keV											Ens118	**
*^{253}Cf(α)^{249}Cm	E_α=5978.4(5,Z), 5920.4(5,Z) to 7/2$^+$ at 48.76, 7/2$^+$ at 110.173 keV											Ens118	**
*^{253}Fm(α)^{249}Cf	E_α=7083.2(4,Z), 6943.2(3,Z), 6846.2(3,Z), 6673.2(3,Z) keV											67Ah02	**
*	to ground state and levels 5/2$^+$ at 144.98, 9/2$^+$ at 243.13, 1/2$^+$ at 416.8 keV											Ens118	**
*^{253}Fm(α)^{249}Cf	E_α=6670(6) to 416.8 level											11Lo06	**
*^{253}Md(α)^{249}Es	E_α=7100(15) to 353.2(0.4) level											05He27	**
*^{253}Md(α)^{249}Es	E_α=7105(10) to 354.6(0.6) level											11Lo06	**
*^{253}Md(α)^{249}Es	E_α=7103(15) to 353.2(0.4) level											12He09	**
*^{253}No(α)^{249}Fm	E_α=8010(20) to 279.7 level											04He28	**
*^{253}No(α)^{249}Fm	E_α=8010(30) to 279.7 level											04He28	**
*^{253}No(α)^{249}Fm	E_α=8021(20) to 279.7 level											04He28	**
*^{253}No(α)^{249}Fm	E_α=8011(10) to 279.7 level											04He28	**
*^{253}No(α)^{249}Fm	E_α=8004(11) to 279.7(5) level											04He28	**
*^{253}No(α)^{249}Fm	E_α=8003(5) to 279.7(5) level; and 8280(10) to ground state											04He28	**
*^{253}No(α)^{249}Fm	E_α=8007(4) to 279.8(0.2) level; also E_α=7615(30) to 669(3) and											11Lo06	**
*	E_α=8080(10) to 209.5(0.5) levels											11Lo06	**
*^{253}No(α)^{249}Fm	E_α=8004(10) to 279.5(5) level											12He09	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{254}No$-^{133}$Cs$_{1.910}$	271552	15	271541	10	−0.7	o			SH1	1.0	10Dw01	
	271544	16			−0.2	1	42	42 ^{254}No	SH1	1.0	10Mi.A	
^{254}Cf(α)^{250}Cm	5926.9	5.				3					68Be21	Z
^{254}Es(α)^{250}Bk	6615.7	1.5				6			Kum		72Bb24	*
^{254}Es(α)^{250}Bk^n	6531.6	1.5				7			Kum		72Bb24	
^{254}Es^m(α)^{250}Bk	6699.9	2.0				5					73Ah04	*
^{254}Fm(α)^{250}Cf	7306.8	5.	7307.5	1.9	0.1	3			Bka		64As01	Z
	7307.6	2.			−0.1	3					84Ah02	*
^{254}No(α)^{250}Fm	8229.8	20.	8226	8	−0.2	o			Bka		67Gh01	
	8240.0	30.			−0.5	U			Dba		67Mi03	
	8215.6	20.			0.5	o			GSa		85He22	
	8177.0	30.			1.6	U			Bka		06Fo02	
	8225.7	10.			0.0	–			GSa		10He10	
	8222.7	20.3			0.2	–			RIa		15KaZX	
ave.	8225	9			0.1	1	78	58 ^{254}No			average	
^{254}Lr(α)^{250}Md	8804.7	20.	8816	12	0.6	o			GSa		85He22	*
	8804.7	20.			0.6	7			Lza		01Ga20	*
	8820.6	25.7			−0.2	7			Bka		06Fo02	*
	8825.2	20.			−0.4	7			GSa		08An16	*
^{254}Es^m(β^-)^{254}Fm	1172	2				4					62Un01	*
*^{254}Es(α)^{250}Bk	E_α=6415.4(1.5,Z) to 5$^-$ level at 97.49 keV										Ens01c	**
*^{254}Es^m(α)^{250}Bk	E_α=6558.9(2,Z), 6383.9(2,Z) to 4$^+$ at 35.59, 2$^+$ at 211.82 keV										Ens01c	**
*^{254}Fm(α)^{250}Cf	E_α=7192.3(2,Z), 7150.3(2,Z) to ground state, 5$^+$ level at 42.721 keV										Ens01c	**
*^{254}Lr(α)^{250}Md	E_α=8460(20) to 209.1 level										08An16	**
*^{254}Lr(α)^{250}Md	E_α=8460(20) to 209.1 level										08An16	**
*^{254}Lr(α)^{250}Md	E_α=8437(50) to 209.1 and E_α=8394(30) to 306.2 keV										08An16	**
*^{254}Lr(α)^{250}Md	E_α=8480(20) to 209.1 and E_α=8385(20) to 306.2 keV										08An16	**
*^{254}Es^m(β^-)^{254}Fm	E_{β^-}=1127(2) to 2$^+$ level at 45.000 keV										Ens05b	**
^{255}No$-^{133}$Cs$_{1.917}$	274440	16				2			SH1	1.0	10Mi.A	
^{255}Lr$-^{133}$Cs$_{1.917}$	277811	19				2			SH1	1.0	10Mi.A	*
^{255}Es(α)^{251}Bk	6439.3	3.0	6436.3	1.3	−1.0	4					66Rg01	*
	6435.6	1.5			0.5	4			Kum		71Bb10	*
^{255}Fm(α)^{251}Cf	7237.0	4.	7239.7	1.8	0.7	3					64As01	*
	7240.4	2.			−0.3	3					75Ah01	*
^{255}Md(α)^{251}Es	7901.8	5.	7905.9	2.6	0.8	4					70Fi12	*
	7910.7	5.			−1.0	4					71Ho16	*
	7905.4	4.			0.1	4			Ara		00Ah02	*
	7891.2	15.			1.0	U			GSa		05He27	*
^{255}No(α)^{251}Fm	8451.1	6.	8428	3	−3.8	B			ORb		71Di03	*
	8426.4	20.			0.1	o			GSa		98Ho13	*
	8391.9	35.			1.0	U			RIa		04Mo40	*
	8449.3	20.			−1.0	U			Bka		04Fo08	*
	8426.4	10.			0.2	U			GSa		06He20	*
	8403.8	60.			0.4	U			Bka		06Gr24	*
	8428.4	3.				3			JAa		11As03	*
^{255}Lr(α)^{251}Md	8563.6	18.	8556	7	−0.4	3			ORb		76Be.A	*
	8534.1	30.			0.7	U			Lza		01Ga20	*
	8554.4	10.			0.1	3			Jya		06Ch52	
	8554.4	10.			0.1	3			Orm		08Ha31	*
^{255}Lr(α)^{251}Md^p	8503.6	18.	8503	4	0.0	3			ORb		76Be.A	*
	8442.7	50.			1.2	F			Bka		95Gh04	*
	8493.5	30.			0.3	U			Lza		01Ga20	*
	8498.6	5.			0.8	3			Jya		06Ch52	
	8506.7	11.			−0.3	3			GSa		08An16	*
	8509.7	10.2			−0.7	3			Orm		08Ha31	
	8509.7	10.2			−0.7	3			RIa		11As.A	*
^{255}Lr^m(α)^{251}Md	8592.0	5.	8597	4	0.9	4			Jya		06Ch52	*
	8602.2	11.			−0.5	4			GSa		08An16	
	8603.1	10.2			−0.6	4			Orm		08Ha31	*
	8604.2	10.2			−0.7	4			RIa		11As.A	*

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{255}Rf(α)^{251}No	9042	20	9055	4	0.7	10			Bka		69Gh01	*
	9053	15			0.2	o			GSa		85He06	*
	9064	20			−0.4	o			GSa		97He29	*
	9062	10			−0.7	o			GSa		01He35	*
	9056	4			−0.1	10			GSa		06He27	*
^{255}Rf^m(IT)^{255}Rf	135	20	150	22	0.7	R					15An05	*
*^{255}Lr−^{133}Cs$_{1.917}$	D_M=277822(17) μu for mixture 71% ground state + 29% ^{255}Lr^m at 41(8); $M-A$=89958(16) keV										Nub16b	**
*^{255}Es(α)^{251}Bk	E_α=6303(3,Z) 6299.3(1.5,Z) respectively, to (7/2$^+$) level at 35.5 keV										Ens139	**
*^{255}Fm(α)^{251}Cf	E_α=7121.5, 7018.5(4,Z) to ground state, 7/2$^+$ level at 106.309 keV										Ens139	**
*^{255}Fm(α)^{251}Cf	E_α=7126.8, 7021.8(2,Z) to ground state, 7/2$^+$ level at 106.309 keV										Ens139	**
*^{255}Md(α)^{251}Es	E_α=7323.5(5,Z) 7332.3(5,Z) 7327(4) 7313(15) respectively, to 7/2$^-$ at 461.5 keV										Ens139	**
*^{255}No(α)^{251}Fm	E_α=8312(9), 8121(6) to ground state and 199.9 level										06He20	**
*^{255}No(α)^{251}Fm	E_α=8296(20), 8092(20) to ground state and 199.9 level										06He20	**
*^{255}No(α)^{251}Fm	E_α=8060 to 199.9 level; also E_α=7800 keV										04Mo40	**
*^{255}No(α)^{251}Fm	E_α=8341, 8092 to ground state and 199.9 level; also E_α=7873 keV										06He20	**
*^{255}No(α)^{251}Fm	E_α=8290(20), 8095(10) to ground state and 199.9 level										06He20	**
*^{255}No(α)^{251}Fm	E_α=8150, 8000 to 199.9 level										06He20	**
*^{255}No(α)^{251}Fm	E_α=8100(3) to ^{251}Fm^m at 200.09(0.11) keV										11As03	**
*^{255}Lr(α)^{251}Md	This is the faint α from long-lived isomer to the 7/2$^-$ ground state										06Ch52	**
*^{255}Lr(α)^{251}Md	Line is mixed with ^{254}Lr's α										01Ga20	**
*^{255}Lr(α)^{251}Md	As interpreted from Fig. 1										08Ha31	**
*^{255}Lr(α)^{251}Md^p	This is the most intense α from long-lived isomer to 1/2$^-$										06Ch52	**
*^{255}Lr(α)^{251}Md^p	F : one event in a questionable ^{267}Ds decay chain										AHW	**
*^{255}Lr(α)^{251}Md^p	No γ observed in coincidence										08An16	**
*^{255}Lr(α)^{251}Md^p	Original E_α=8371(10) corrected for recoil to E_α=8476(10)										16Hu.A	**
*^{255}Lr(α)^{251}Md^p	Uncertainty estimated by evaluator										GAu	**
*^{255}Lr^m(α)^{251}Md	Original error 2 keV increased for calibration										GAu	**
*^{255}Lr^m(α)^{251}Md	Original E_α=8463(10) corrected for recoil to E_α=8468(10)										16Hu.A	**
*^{255}Lr^m(α)^{251}Md	Uncertainty estimated by evaluator										GAu	**
*^{255}Rf(α)^{251}No	E_α=8700(20) to 203 level										01He35	**
*^{255}Rf(α)^{251}No	E_α=8766(15), 8715(15) to 142, 203 levels,										01He35	**
*^{255}Rf(α)^{251}No	E_α=8905(20), 8739(20) to ground state, 203 level										01He35	**
*^{255}Rf(α)^{251}No	E_α=8722(10) to 203(3) level										01He35	**
*^{255}Rf(α)^{251}No	E_α=8716(4) to 203.6(0.2) level										06He27	**
*^{255}Rf^m(IT)^{255}Rf	From 105 keV EC from K shell, error estim. by eval.										WgM164	**
^{256}Lr−^{133}Cs$_{1.925}$	280499	89				2			SH1	1.0	10Mi.A	
^{256}Fm(α)^{252}Cf	7027.3	5.				3					68Ho13	Z
^{256}Md^m(α)^{252}Es	7834.6	20.	7900	50	1.2	B					71Ho16	*
	7896.6	16.				4					93Mo18	*
	7798.0	8.			2.0	B					00Ah02	
^{256}No(α)^{252}Fm	8553.9	30.	8582	5	0.9	U					67Fl05	*
	8553.9	20.			1.4	U			Bka		67Gh01	*
	8578.3	12.			0.3	5					81Be03	
	8582.3	6.			−0.1	5					90Ho03	
^{256}Lr(α)^{252}Md^p	8787.6	20.	8771	11	−0.8	3					71Es01	
	8761.1	25.			0.4	o			ORb		76Be.A	
	8777.4	20.			−0.3	3			ORb		76Di.A	
	8767.2	35.			0.1	3			RIa		04Mo26	
	8749.9	20.			1.0	3			Bka		04Fo08	
^{256}Rf(α)^{252}No	8952.1	23.	8926	15	−1.1	o			GSa		85He06	
	8929.8	20.			−0.2	o			GSa		97He29	
	8925.7	15.2				2			GSa		10St14	
^{256}Db(α)^{252}Lr	9336.2	20.				8			Bka		08Ne01	
^{256}Db(α)^{252}Lr^p	9157.4	20.	9169	14	0.6	9			GSa		01He35	
	9179.7	20.			−0.6	9			Bka		08Ne01	*
*^{256}Md^m(α)^{252}Es	Also E_α=7210(5,Z) keV to 520(20) level										70Fi12	**
*^{256}Md^m(α)^{252}Es	Very weak line; more precise E_α to excited levels										93Mo18	**
*	α summed with electrons										WgM129	**
*^{256}No(α)^{252}Fm	Probably mixture of two branches										AHW	**
*^{256}Db(α)^{252}Lr^p	5 events E_α=9030 9060 9020 9040 9030 keV										08Ne01	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{257}Fm(α)^{253}Cf	6862.7	2.	6863.5	1.4	0.4	4			Bka		67As02	*
	6864.4	2.			−0.4	4					82Ah01	*
^{257}Md(α)^{253}Es	7549.3	5.	7557.6	1.0	1.7	U					70Fi12	*
	7557.6	1.				4					93Mo18	*
^{257}No(α)^{253}Fm	8474.1	30.	8477	6	0.1	U					70Es02	*
	8480	30			−0.1	U			GSa		96Ho13	*
	8476.6	6.				3			JAa		05As05	*
^{257}Lr(α)^{253}Md^p	9020.6	20.	9008	9	−0.6	7					71Es01	
	9001.3	12.			0.5	o			ORb		76Be.A	
	9001.3	12.			0.5	7			ORb		77Be36	
	9015.5	15.2			−0.5	o			GSa		97He29	
	9030.8	50.			−0.5	U			Lza		04Ga29	
	9010.4	15.			−0.2	7			GSa		10St14	
^{257}Rf(α)^{253}No	9079.8	15.	9083	8	0.2	2			ORb		73Be33	*
	9083.7	15.			−0.1	o			GSa		85He06	
	9044.0	15.			2.6	B			GSa		97He29	
	9084.1	20.			−0.1	o			GSa		07St12	*
	9084.1	10.			−0.1	2			GSa		10St14	*
	9106.2	100.			−0.2	U			Ara		09Qi04	*
^{257}Rf^m(α)^{253}No	9142.5	20.	9156	7	0.7	2			Bka		69Gh01	
	9158.8	15.			−0.2	o			ORb		73Be33	
	9155.8	8.			0.0	2			ORb		90Be.A	
	9163.9	15.			−0.5	2			GSa		97He29	
	9144.0	100.			0.1	U			Ara		09Qi04	*
^{257}Db(α)^{253}Lr	9112.1	20.	9207	20	4.7	B			GSa		85He22	
	9218	10			−1.1	o			GSa		01He35	*
	9209.2	20.			−0.1	o			GSa		09He20	*
	9206.6	20.				7			GSa		10He11	
^{257}Db^m(α)^{253}Lr^m	9305.1	20.	9313	20	0.4	o			GSa		85He22	
	9308.2	10.			0.5	o			GSa		01He35	
	9300.0	20.3			0.7	o			GSa		09He20	
	9313.2	20.3				8			GSa		10He11	
^{257}Rf^n(IT)^{257}Rf^m	1082	4				3					10Be16	
*^{257}Fm(α)^{253}Cf	E_α=6518.5(2,Z) to (9/2$^+$) level at 241.01 keV										Ens139	**
*^{257}Fm(α)^{253}Cf	E_α=6756.5(3,Z), 6520.5(2,Z) to ground state, (9/2$^+$) level at 241.01 keV										Ens139	**
*^{257}Md(α)^{253}Es	E_α=7066(5,Z) to 371.4 level										93Mo18	**
*^{257}Md(α)^{253}Es	E_α=7440(2), 7074(1) to ground state, 371.4 level										93Mo18	**
*^{257}No(α)^{253}Fm	E_α=8320(30) to 22.3 keV										05As05	**
*^{257}No(α)^{253}Fm	E_α=8340(20); one event only; may be summing with e$^-$										AHW	**
*^{257}No(α)^{253}Fm	E_α=8222(6) to 124.1(1) level; also E_α=8323(7) to 22.3 keV										05As05	**
*^{257}Rf(α)^{253}No	E_α=8778(15) to 166.7 level										07St12	**
*^{257}Rf(α)^{253}No	E_α=8778(20) and 8495(20) to 166.7 and 455 level										07St12	**
*^{257}Rf(α)^{253}No	E_α=8778(10) to 166.7; and 8950(15) to ground state is sum with conversion e$^-$										10St14	**
*^{257}Rf(α)^{253}No	E_α=8800(100) to 166.7 level										09Qi04	**
*^{257}Rf^m(α)^{253}No	E_α=9000(100) and 8950(100) to ground state and 54(14) level										09Qi04	**
*^{257}Db(α)^{253}Lr	E_α=9074(10) partly summed with conversion e$^-$										01He35	**
*^{257}Db(α)^{253}Lr	E_α=8965(20) coinc. E(γ)=102.2; E_α=9066(20)summed with conversion e-										09He20	**
^{258}Md(α)^{254}Es	7266.8	5.	7271.3	1.9	0.9	7					70Fi12	*
	7272	2			−0.4	7					93Mo18	*
^{258}Lr(α)^{254}Md	8870	50	8904	19	0.7	5			ORb		76Be.A	*
	8910	20			−0.3	5					88Gr30	*
^{258}Rf(α)^{254}No	9192.8	30.5				2					08Ga08	
^{258}Db(α)^{254}Lr	9531.0	50.	9500	50	−0.6	o			GSa		97Ho14	
	9500.6	15.				8			GSa		09He20	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{258}Db(α)^{254}Lr^p	9445.7	15.	9437	14	−0.6	o			GSa		85He22	
	9446.8	20.			−0.5	9			Lza		01Ga20	
	9426.4	20.3			0.5	9			GSa		09He20	
^{258}Db^m(α)^{254}Lr^q	9341.1	10.				10			GSa		09He20	
*^{258}Md(α)^{254}Es	E_α=6713(5) to 447.9 level										93Mo18	**
*^{258}Md(α)^{254}Es	E_α=6763(4), 6718(2) to 403.8, 447.9 levels										93Mo18	**
*^{258}Lr(α)^{254}Md	E_α=8648(10) in concidence with X(L) not X(K) → E(γ)=90(50) keV										AHW	**
*^{258}Lr(α)^{254}Md	E_α=8752 observed as sum of α's and conversion electrons										AHW	**
*^{258}Lr(α)^{254}Md	Mass assignment confirmed										92Gr02	**
^{259}No(α)^{255}Fm	7849.2	15.	7854	5	0.3	U					73Si40	*
	7869.6	15.			−1.0	U					93Mo18	*
	7854	5				4			JAa		13As02	*
^{259}Lr(α)^{255}Md^p	8582.8	20.	8574	9	−0.4	6					71Es01	
	8571.6	10.			0.2	6					92Ha22	
	8577.7	29.			−0.1	U			Bka		92Kr01	
^{259}Rf(α)^{255}No^p	8999.2	20.	9030	11	1.5	o			Bka		69Gh01	
	9030	20			0.0	4					81Be03	*
	9034.7	20.			−0.2	4			GSa		98Ho13	
	9026.6	35.			0.1	4			RIa		04Mo40	
	9026.6	20.3			0.2	4			Bka		04Fo08	
	9017	60			0.2	U			Bka		06Gr24	
	8940.4	11.			8.2	F			GSa		10Ni14	*
	8968.8	50.			1.2	U					12Zh04	
^{259}Db(α)^{255}Lr	9618.8	20.				3			Lza		01Ga20	
^{259}Sg(α)^{255}Rf	9771.2	30.5	9765	8	−0.1	o			GSa		85Mu11	
	9807.7	23.			−0.9	U			Bka		09Fo02	*
	9784	50			−0.4	o			GSa		09He20	*
	9765.0	8.1				11			GSa		15An05	
^{259}Sg^m(α)^{255}Rf	9852.4	20.3				11			GSa		15An05	
^{259}Sg^m(α)^{255}Rf^m	9700.0	8.1	9702	8	0.3	12			GSa		15An05	
*^{259}No(α)^{255}Fm	suffer summing effect; highest E_α seen 7685(10); extra unc. added										WgM147	**
*^{259}No(α)^{255}Fm	suffer summing effect; highest E_α seen 7689(4); extra unc. added										WgM147	**
*^{259}No(α)^{255}Fm	E_α=7505(5) to 231.1 level										13As02	**
*^{259}Rf(α)^{255}No^p	E_α=8870(20); partly summed E_α=8770(20) and e$^-$										AHW	**
*^{259}Rf(α)^{255}No^p	F : lifetime 107 ms is much shorter than T=2.63 s in Nubase										Nub16b	**
*^{259}Sg(α)^{255}Rf	One event only, resolution 23 keV; also a wide group at lower 9593(46)keV										09Fo02	**
*^{259}Sg(α)^{255}Rf	One event with E_α 9050 in coincidence with 593 γ; also groups at										09He20	**
*	E_α=9607(10), 9550(10) keV										09He20	**
^{260}Lr(α)^{256}Md^p	8155.6	20.3				6					71Es01	
^{260}Db(α)^{256}Lr	9191.5	30.	9500#	40#	10.3	F			RIa		04Mo26	*
	9516.5	30.			−0.5	F			RIa		04Mo26	*
	9563.2	20.			−3.1	F			Bka		04Fo08	*
^{260}Db(α)^{256}Lr^p	9283.1	20.	9271	13	−0.6	4			Bka		70Gh02	
	9262.8	17.			0.5	4			ORb		77Be36	
	9316.5	60.			−0.8	U			GSa		95Ho04	*
	9285.1	60.			−0.2	U			GSa		02Ho11	*
	9181.3	60.			1.5	U			Lza		04Ga29	*
	9310.4	60.			−0.7	U			RIa		04Mo26	*
^{260}Sg(α)^{256}Rf	9923.0	30.	9901	10	−0.7	o			GSa		85Mu11	
	9900.6	10.				3			GSa		09He20	
^{260}Bh(α)^{256}Db	10400.3	30.5				9					08Ne01	*
*^{260}Db(α)^{256}Lr	Highest energy event; other two E_α=8810 and 8500 keV										04Mo26	**
*^{260}Db(α)^{256}Lr	F : not observed in experiments with greater statistics										77Be36	**
*^{260}Db(α)^{256}Lr^p	Two events E_α=9200 and 9146; error estimated by evaluator										FGK126	**
*^{260}Db(α)^{256}Lr^p	Two events E_α=9156 and 9129; error estimated by evaluator										FGK126	**
*^{260}Db(α)^{256}Lr^p	Eight events out of 14, E_α=9170 9050 9340 9400 9010 9100 9140 9130 keV										04Mo26	**
*^{260}Db(α)^{256}Lr^p	Two longer-lived α-escapes are assigned to the daughter										FGK126	**
*^{260}Bh(α)^{256}Db	Other events E_α=10170, 10170 and 10190; 10080 and 10030										08Ne01	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{261}Rf(α)^{257}No	8652.9	20.	8650	50	−0.1	o			GSa		96Ho13	
	8652.9	20.			−0.1	o			GSa		02Ho11	
	8659	52			−0.3	o			GSa		03Tu05	*
	8642.6	50.			0.1	4			GSa		08Dv02	
	8652.9	50.			−0.1	4			RIm		11Ha13	*
	8642.6	60.			0.1	4			RIm		12Ha05	*
^{261}Rf^m(α)^{257}No^p	8409.1	20.	8415	15	0.3	6			Bka		70Gh01	
	8388.8	30.			0.9	o			GSa		98Tu01	*
	8429.4	30.5			−0.5	6			Dba		00La34	
	8470.0	50.			−1.1	U					08Ga08	*
	8419.3	50.			−0.1	6			GSa		08Dv02	
	8409.1	50.			0.1	o			RIm		11Ha13	
	8409.1	40.6			0.1	6			RIm		13Mu08	
^{261}Db(α)^{257}Lr^p	9069.2	20.	9068	14	−0.1	9			Bka		71Gh01	
	9069.2	40.			0.0	9			Lza		04Ga29	
	9066.2	20.			0.1	9			GSa		10St14	
^{261}Sg(α)^{257}Rf	9709.0	30.	9714	15	0.2	o			GSa		85Mu11	
	9713.1	20.			0.0	F			GSa		95Ho03	*
	9770.0	20.3			−2.8	o			GSa		07St12	
	9713.7	15.				3			GSa		10St14	*
^{261}Bh(α)^{257}Db	10562.1	25.	10500	50	−1.2	o			GSa		89Mu09	
	10507.3	75.			−0.1	o			Bka		06Fo02	*
	10492.1	75.			0.2	8			Bka		08Ne08	*
	10504.3	40.			−0.1	8			GSa		10He11	*
*^{261}Rf(α)^{257}No	Two events with E_α=8500(+70–30) keV										GAu	**
*^{261}Rf(α)^{257}No	From direct production (fusion-evaporation)										11Ha13	**
*^{261}Rf(α)^{257}No	Decay chain of ^{265}Sg, observation is independent of previous item										12Ha05	**
*^{261}Rf^m(α)^{257}No^p	In addition 60% E_α=8380(30) keV										98Tu01	**
*^{261}Rf^m(α)^{257}No^p	Single event, decay time 103.2 s										08Ga08	**
*^{261}Sg(α)^{257}Rf	F : α's to 157 level summed with conversion electron										FGK10a	**
*^{261}Sg(α)^{257}Rf	E_α=9410(15) to 157(1) level										10St14	**
*^{261}Bh(α)^{257}Db	E_α=10346(75) one event; error estimated by evaluator										06Fo02	**
*^{261}Bh(α)^{257}Db	Highest E_α; error estimated; others 10054, 10285, 10113, 10165, 9989										08Ne08	**
*^{261}Bh(α)^{257}Db	Average of 2 highest 10331, 10355 as read from graph; error estimated										10He11	**
^{262}Db(α)^{258}Lr^p	8794.5	20.	8806	11	0.6	7			Bka		71Gh01	
	8815.8	20.			−0.5	7					88Gr30	
	8804.7	20.			0.1	7			GSa		99Dr09	
	8875.8	20.			−1.4	o			RIa		09Mo12	
	8814.8	30.5			−0.3	7			RIa		14Ha04	
^{262}Sg(α)^{258}Rf	9599.8	15.2				3			GSa		10Ac.A	
^{262}Bh(α)^{258}Db	10216.2	25.	10319	15	4.1	F			GSa		89Mu09	*
	10300.5	25.4			0.7	o			GSa		97Ho14	
	10231.4	25.4			3.5	B			Bka		06Fo02	
	10239.2	30.			2.7	B			Bka		08Ne08	*
	10319.5	15.				9			GSa		09He20	*
^{262}Bh^m(α)^{258}Db	10531.1	25.4	10530	50	0.1	o			GSa		89Mu09	
	10605.2	25.4			−1.4	o			GSa		97Ho14	
	10508.7	76.2			0.5	o			Bka		06Fo02	*
	10544.3	76.2			−0.2	9			Bka		08Ne08	
	10534.1	15.			0.0	9			GSa		09He20	
*^{262}Bh(α)^{258}Db	F : not highest line, see reference										97Ho14	**
*^{262}Bh(α)^{258}Db	E_α=10096, 10025, 10125 keV										08Ne08	**
*^{262}Bh(α)^{258}Db	E_α=10008(15) to 156.5 level										09He20	**
*^{262}Bh^m(α)^{258}Db	Single event, error estimated by evaluator										GAu	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{263}Rf(α)^{259}No^p	8022.2	40.6	8022	29	0.0	6					93Gr.C	
	8022.2	40.6			0.0	6					99Ga.A	
^{263}Db(α)^{259}Lr^p	8484.3	27.				8			Bka		92Kr01	
^{263}Sg(α)^{259}Rf	9393.1	40.	9400	60	0.3	o			Bka		74Gh04	
	9403.3	60.				5			Bka		06Gr24	*
^{263}Sg(α)^{259}Rf^q	9200.2	40.	9200	60	−0.1	o			Bka		74Gh04	
	9149.4	60.9			0.8	o			Bka		94Gr08	
	9198.1	60.9				6			Bka		06Gr24	*
^{263}Sg^m(α)^{259}Rf^p	9391.1	20.	9390	13	−0.1	8			GSa		98Ho13	
	9382.9	50.8			0.1	o			Bka		03Gi05	
	9393.1	35.			−0.1	8			RIa		04Mo40	*
	9388.0	20.			0.1	8			Bka		04Fo08	
	9198.1	11.			17.5	F			GSa		10Ni14	*
^{263}Hs(α)^{259}Sg	10733.5	60.				12			Bka		09Dr02	
^{263}Hs^m(α)^{259}Sg	11058.5	60.				12			Bka		09Dr02	*
*^{263}Sg(α)^{259}Rf	Two events E_α=9290 and 9230 keV										06Gr24	**
*^{263}Sg(α)^{259}Rf^q	Four events E_α=9010, 9100, 9060 and 9060 keV										06Gr24	**
*^{263}Sg^m(α)^{259}Rf^p	Also lower E_α=9130, 9040, 9150 keV										04Mo40	**
*^{263}Sg^m(α)^{259}Rf^p	F : the α chain originating from ^{267}Hs is in conflict with other data										10Ni14	**
*^{263}Hs^m(α)^{259}Sg	Assignment assumed by evaluator										GAu	**
^{264}Bh(α)^{260}Db^p	9767.3	20.	9760	18	−0.4	6			GSa		95Ho04	*
	9636.0	60.			2.1	U			Lza		04Ga29	*
	9737.8	35.5			0.6	6			RIa		04Mo26	*
^{264}Hs(α)^{260}Sg	10870	210	10591	20	−1.3	o			GSa		87Mu15	*
	10590.8	20.				4			GSa		95Ho.B	
	10966.4	80.			−4.7	B			RIa		11Sa41	*
*^{264}Bh(α)^{260}Db^p	Three more events in reference E_α=9365, 9514 and 9113 keV										02Ho11	**
*^{264}Bh(α)^{260}Db^p	Three more events E_α=9501, 9481,9440 keV										04Ga29	**
*^{264}Bh(α)^{260}Db^p	Six events; also two E_α=9830 keV										04Mo26	**
*^{264}Hs(α)^{260}Sg	Q_α=11000(+100–300) derived from T(1/2), one event only										87Mu15	**
*^{264}Hs(α)^{260}Sg	Also E_α=10610(40) keV										11Sa41	**
^{265}Sg(α)^{261}Rf^m	8945.3	60.	8980	50	0.7	F			Dba		94La22	*
	8904.7	30.			1.5	F			GSa		96Ho13	*
	8975.7	30.			0.1	o			GSa		98Tu01	
	9077.3	30.			−1.9	F			GSa		98Tu01	*
	9036.6	50.8			−1.1	o			GSa		03Tu05	
	8985.9	50.			−0.1	6			GSa		08Du09	
	8975.7	50.8			0.1	6			RIm		12Ha05	
^{265}Sg^m(α)^{261}Rf^p	8823.5	50.	8810	40	−0.2	o			GSa		03Tu05	
	8813.3	40.			0.0	o			GSa		06Dv01	
	8823.5	50.			−0.2	6			GSa		08Dv02	
	8843.8	40.			−0.7	o			RIa		08Mo09	
	8823.5	50.			−0.2	o			RIa		12Ha05	
	8792.9	81.2			0.3	6			RIa		13Su04	
^{265}Bh(α)^{261}Db^p	9381.9	50.				11			Lza		04Ga29	
^{265}Hs(α)^{261}Sg	10524.2	25.	10470	15	−2.1	o			GSa		87Mu15	
	10468.3	20.			0.1	o			GSa		95Ho03	
	10459.2	15.			0.7	o			GSa		99He11	*
	10470.3	15.2				4			GSa		09He20	*
^{265}Hs^m(α)^{261}Sg	10712.0	20.	10700	15	−0.6	o			GSa		95Ho03	
	10734.3	15.2			−2.3	o			GSa		99He11	*
	10699.8	15.				4			GSa		09He20	
*^{265}Sg(α)^{261}Rf^m	F : average but probably due to several groups, see reference										98Tu01	**
*^{265}Sg(α)^{261}Rf^m	F : this event is not trusted, see reference from same group										02Ho11	**
*^{265}Sg(α)^{261}Rf^m	F : most probably not from ^{265}Sg										GAu	**
*^{265}Hs(α)^{261}Sg	Also E_α=10426(15) keV										99He11	**
*^{265}Hs(α)^{261}Sg	Most intense line, also E_α=10282(15), 10428(15), 10573(15) keV										09He20	**
*^{265}Hs^m(α)^{261}Sg	Also E_α=10726(15) keV										99He11	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{266}Sg(α)^{262}Rf	8762.0	50.	8800#	100#	0.8	F			Dba		94La22	*
	8904.1	40.			−2.6	F			GSa		98Tu01	*
	8853.4	50.			−1.1	F			GSa		02Tu05	*
^{266}Bh(α)^{262}Db^p	9432	50	9380	30	−1.1	9			Bka		00Wi15	
	9245.3	81.2			1.6	9			Lza		06Qi03	
	9371.2	50.			0.1	9			RIa		09Mo12	*
^{266}Hs(α)^{262}Sg	10335.7	20.3	10346	16	0.5	4			GSa		01Ho06	
	10360	24			−0.6	4			GSa		11Ac.A	
^{266}Hs^m(α)^{262}Sg^p	10592.6	20.				7			GSa		11Ac.A	
^{266}Mt(α)^{262}Bh	10995.7	25.				10			GSa		97Ho14	
^{266}Mt^m(α)^{262}Bh^m	11269.7	50.	11920	50	13.0	B			GSa		84Mu07	*
	11168.1	30.			25.0	B			GSa		89Mu16	
	11918.6	50.				10			GSa		97Ho14	*
*^{266}Sg(α)^{262}Rf	Average of two groups										02Tu05	**
*^{266}Sg(α)^{262}Rf	F : no α decay from ^{266}Sg, all re-assigned to ^{265}Sg										08Dv02	**
*^{266}Bh(α)^{262}Db^p	Also E_α=9770(40), 9080(40) keV from ^{278}Ed decay chain										08Mo09	**
*^{266}Mt^m(α)^{262}Bh^m	One E_α only; may be ground state										AHW	**
*^{266}Mt^m(α)^{262}Bh^m	One E_α=11739(50), one 11306; several smaller										AHW	**
^{267}Sg(α)^{263}Rf^p	8325.0	50.				8			GSa		08Dv02	
^{267}Bh(α)^{263}Db^p	8964.5	30.5	8970	26	0.2	10			Bka		00Wi15	
	8984.8	50.			−0.3	10			GSa		02Tu05	
^{267}Hs(α)^{263}Sg	10015.3	60.	10038	13	0.4	6			Dba		95La20	*
	10032.6	20.			0.2	6			GSa		98Ho13	
	10035.7	50.			0.0	o			Bka		03Gi05	
	10069.1	35.			−0.9	6			RIa		04Mo40	*
	10034.6	20.			0.1	6			Bka		04Fo08	*
	10145.2	50.			−2.2	U			GSa		10Ni14	*
^{267}Hs(α)^{263}Sg^m	9978.8	20.	9987	13	0.4	7			GSa		98Ho13	*
	9979.8	35.			0.2	7			RIa		04Mo40	*
	9997.0	20.			−0.5	7			Bka		04Fo08	*
^{267}Hs^m(α)^{263}Sg^p	9979.8	20.				9			Bka		04Fo08	
^{267}Ds(α)^{263}Hs	11776.8	50.8				13			Bka		95Gh04	*
*^{267}Hs(α)^{263}Sg	Selecting two events at E_α=9860,9870; and one E_α=9740(60) keV										95La20	**
*^{267}Hs(α)^{263}Sg	Selecting four events at E_α=9970, 9890, 9900, 9910 keV										04Mo40	**
*^{267}Hs(α)^{263}Sg	Selecting two events at E_α=9880, 9888 keV										04Fo08	**
*^{267}Hs(α)^{263}Sg	Directly produced ^{267}Hs; daughter and grand-daughter also conflicting										10Ni14	**
*^{267}Hs(α)^{263}Sg^m	And one E_α=9749(20) at 13 ms										98Ho13	**
*^{267}Hs(α)^{263}Sg^m	Selecting 7 events at E_α=9830, 9820, 9820, 9860, 9820, 9830, 9830 keV										04Mo40	**
*^{267}Hs(α)^{263}Sg^m	Selecting 2 events at E_α=9864, 9830 keV										04Fo08	**
*^{267}Ds(α)^{263}Hs	Maybe the upper isomer at about 250 keV excitation energy										AHW	**
^{268}Hs(α)^{264}Sg	9622.9	16.				8			GSa		10Ni14	
^{268}Mt(α)^{264}Bh^p	10395.5	20.	10438	19	2.1	o			GSa		95Ho04	*
	10431.9	20.			0.3	8			GSa		02Ho11	*
	10476.7	50.			−0.8	8			RIa		04Mo26	*
	10268	20			8.5	B			Bka		04Fo08	*
*^{268}Mt(α)^{264}Bh^p	Two events E_α=10221 coinc. E(γ)=93 and 10259; event #3 E_α=10097 keV										95Ho04	**
*	could be decay of an isomer with lifetime=171 ms										02Ho11	**
*^{268}Mt(α)^{264}Bh^p	Average of event 95Ho04 E_α=10259 and present 10294 keV										02Ho11	**
*^{268}Mt(α)^{264}Bh^p	Also E_α=10340 keV										04Mo26	**
*^{268}Mt(α)^{264}Bh^p	One event only										04Fo08	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{269}Sg(α)^{265}Rf	8699.6	100.	8650	50	−1.0	7					10El06	
	8628.5	60.9			0.4	7			Dba		15Ut02	
^{269}Hs(α)^{265}Sg^m	9369.6	30.	9280	30	−3.0	B			GSa		96Ho13	*
	9349.3	30.			−2.3	o			GSa		02Ho11	*
	9278.2	50.8			0.0	o			GSa		03Tu05	*
	9207.1	30.5			2.4	o			GSa		06Dv01	
	9268.0	50.8			0.2	7			GSa		08Dv02	
	9349.2	71.1			−1.0	o			RIa		08Mo09	
	9288.3	40.6			−0.2	7			RIa		13Su04	
^{269}Ds(α)^{265}Hs^m	11280.1	20.				5			GSa		95Ho03	
*^{269}Hs(α)^{265}Sg^m	Event number 2 only; first event rejected, see reference										02Ho11	**
*^{269}Hs(α)^{265}Sg^m	Two events E_α=9230, 9180 both following 300 μs ^{273}Ds										02Ho11	**
*^{269}Hs(α)^{265}Sg^m	Three events E_α=9180, 9100, 8880; latter probably due to energy loss										03Tu05	**
^{270}Db(α)^{266}Lr	8019.0	30.5	8260#	200#	4.8	D			GSa		14Kh04	*
^{270}Bh(α)^{266}Db	9064.5	81.2				10			Dba		07Og02	
^{270}Hs(α)^{266}Sg	9324.3	52.8	9070	40	−4.8	F			GSa		03Tu05	*
	9024	52			1.5	o			GSa		06Dv01	*
	9013.8	50.			1.1	7			GSa		08Dv02	*
	9123.4	77.			−0.7	7			GSa		10Gr04	*
	9155.8	80.			−1.1	7			Dba		13Og03	
^{270}Mt(α)^{266}Bh	10181.1	70.				10			RIa		08Mo09	
^{270}Ds(α)^{266}Hs	11196.2	50.8	11117	28	−1.6	o			GSa		01Ho06	
	11117.0	28.4				5			GSa		11Ac.A	
^{270}Ds^m(α)^{266}Hs	12333	50	12510	50	3.5	B			GSa		01Ho06	
	12508.6	20.				5			GSa		11Ac.A	
^{270}Ds^m(α)^{266}Hs^m	11318	50	11410	50	1.7	o			GSa		01Ho06	
	11405.2	52.				6			GSa		11Ac.A	
*^{270}Db(α)^{266}Lr	Trends from Mass Surface TMS suggest ^{270}Db 240 less bound										GAu	**
*^{270}Hs(α)^{266}Sg	F : re-assigned to ^{269}Hs										06Dv01	**
*^{270}Hs(α)^{266}Sg	4 events at 8850(1.62s), 8900(0.05s), 8920(0.5s), 8880(0.4s)										GAu	**
*^{270}Hs(α)^{266}Sg	2 events at 8760(0.27s), 8810(0.27s); E_α=8880(50) for both experiments										GAu	**
*^{270}Hs(α)^{266}Sg	Symmetrized from E_α=9020(+50–100); independent from previous item										GAu	**
^{271}Sg(α)^{267}Rf^p	8658	80	8670	50	0.2	o			Dba		04Og12	
	8668.2	81.2				10			Dba		06Og05	
^{271}Bh(α)^{267}Db	9490.3	162.4	9420	50	−1.4	8			Dba		12St.A	
	9409.1	71.0			0.3	8			GSa		13Ru11	
^{271}Hs(α)^{267}Sg^p	9439.6	50.7				10			GSa		08Dv02	
^{271}Ds(α)^{267}Hs	10869.8	20.	10870	18	0.0	7			GSa		98Ho13	
	10870.8	35.			0.0	7			RIa		04Mo40	*
^{271}Ds^m(α)^{267}Hs	10937.8	20.				7			Bka		04Fo08	*
	10803.8	50.	10938	20	2.7	F					12Zh04	*
^{271}Ds^m(α)^{267}Hs^m	10899.2	20.	10899	13	0.0	8			GSa		98Ho13	
	10880.8	50.			0.3	o			Bka		03Gi05	
	10883.0	35.			0.4	8			RIa		04Mo40	*
	10903.3	20.			−0.2	8			Bka		04Fo08	*
*^{271}Ds(α)^{267}Hs	Decay chain number 6 for the long-lived isomer, GAu interpretation										04Mo40	**
*^{271}Ds^m(α)^{267}Hs	Decay chain number 6, GAu interpretation										04Fo08	**
*^{271}Ds^m(α)^{267}Hs	F : α escaped ?										GAu	**
*^{271}Ds^m(α)^{267}Hs^m	GAu : average of decay chains number 2, 5, 10, 13 for short-lived isomer										04Mo40	**
*^{271}Ds^m(α)^{267}Hs^m	Decay chains number 5 and 7, GAu interpretation										04Fo08	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{272}Bh(α)^{268}Db	9303.0	20.				8			Bka		15Ga24	*
^{272}Bh(α)^{268}Db^p	9154.9	60.	9160	50	0.0	o			Dba		04Og03	
	9144.7	60.9			0.2	o			Dba		12Og02	
	9126.4	30.4			0.6	9			Dba		13Og01	*
	9187.3	30.4			−0.6	9			GSa		13Ru11	*
^{272}Rg(α)^{268}Mt	10981.9	20.	11197	13	10.8	B			GSa		95Ho04	*
	11191.9	20.			0.3	9			GSa		02Ho11	*
	11184.7	35.			0.4	9			RIa		04Mo26	*
	11207.1	20.3			−0.5	9			Bka		04Fo08	*
*^{272}Bh(α)^{268}Db	Average 9.16(2) 9.20(5) 9.18(5) 9.16(5)										15Ga24	**
*^{272}Bh(α)^{268}Db^p	Average E_α of 20 events; error increased										13Og01	**
*^{272}Bh(α)^{268}Db^p	Average E_α of 8 events; error increased										13Ru11	**
*^{272}Rg(α)^{268}Mt	B : one event only; E(K) in coincidence may explain disagreement										GAu	**
*^{272}Rg(α)^{268}Mt	Two events E_α=11008 and 11046 keV										02Ho11	**
*^{272}Rg(α)^{268}Mt	Also others up to E_α=11560 keV										04Mo26	**
*^{272}Rg(α)^{268}Mt	One event only										04Fo08	**
^{273}Hs(α)^{269}Sg	9732.9	40.	9700	50	−0.6	8					10El06	
	9671.9	40.6			0.6	8			Dba		15Ut02	
^{273}Ds(α)^{269}Hs	9875.0	20.	11370	50	29.8	F			GSa		96Ho13	*
	11248.1	30.			2.4	F			GSa		96Ho13	*
	11519.1	60.			−3.0	F			Dba		96La12	*
	11366.9	20.3				8			GSa		02Ho11	*
	11311.0	70.			1.1	U			RIa		08Mo09	
	11194.3	81.2			3.5	B			RIa		13Su04	
*^{273}Ds(α)^{269}Hs	F : this event is distrusted, see reference										02Ho11	**
*^{273}Ds(α)^{269}Hs	F : event number 2, probably to excited state in ^{269}Hs										GAu	**
*^{273}Ds(α)^{269}Hs	F : this event is distrusted, see reference; average 4 others E_α=11720 keV										02Ho11	**
*^{273}Ds(α)^{269}Hs	And one E_α=11080 keV										02Ho11	**
^{274}Bh(α)^{270}Db	8930.6	101.5	8950	50	0.4	o			Dba		11Og04	*
	8890.0	50.7			1.2	6			Dba		13Og04	
	8971.2	30.5			−0.4	6			GSa		14Kh04	
^{274}Mt(α)^{270}Bh^p	9904.8	101.5				12			Dba		07Og02	
^{274}Rg(α)^{270}Mt	11477.9	70.				11			RIa		08Mo09	*
*^{274}Bh(α)^{270}Db	All results from this work were first published in reference										10Og01	**
*^{274}Rg(α)^{270}Mt	Also one E_α=11150(70) keV										08Mo09	**
^{275}Hs(α)^{271}Sg	9437.5	71.0	9440	50	0.0	o			Dba		04Og12	
	9437.5	60.9				11			Dba		06Og05	
^{275}Mt(α)^{271}Bh	10482.8	90.	10480	50	0.0	U			Dba		04Og03	
	10503.0	60.			−0.4	U			Dba		12St.A	
	10482.7	10.1				9			GSa		13Ru11	
^{276}Mt(α)^{272}Bh	10253	65	10100	9	−2.3	o			Dba		04Og03	*
	10212	84			−1.3	U			Dba		12Og02	*
	10160	16			−3.7	B			Dba		13Og01	*
	10102.3	10.1			−0.2	9			GSa		13Ru11	*
	10093.0	20.			0.4	9			Bka		15Ga24	*
^{276}Mt^m(α)^{272}Bh	10354	84				9			Dba		12Og02	*
*^{276}Mt(α)^{272}Bh	E_α=9710(60) to 434 and 363 keV levels										13Ru11	**
*^{276}Mt(α)^{272}Bh	E_α=9670(80) to 434 and 363 keV levels, and one 9260(64) keV										13Ru11	**
*^{276}Mt(α)^{272}Bh	Average for 18 events E_α=9622(16) to 434 and 363 keV levels										13Ru11	**
*^{276}Mt(α)^{272}Bh	E_α=9530(10) to 434 keV level; also E_α=9600(10) to 362 keV level										13Ru11	**
*^{276}Mt(α)^{272}Bh	Average of 9 events E_α=9570−9630 =9590 to 362 keV level										15Ga24	**
*	also one event E_α=9890(20) to 60 keV level										15Ga24	**
*^{276}Mt^m(α)^{272}Bh	E_α=9810(80) to 434 and 363 keV levels										13Ru11	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{277}Ds(α)^{273}Hs^p	10725.2	40.	10720	50	−0.2	10					10El06	
	10704.8	40.6			0.2	10			Dba		15Ut02	
^{277}Cn(α)^{273}Ds	11622.2	30.				9			GSa		96Ho13	*
	11821.0	30.	11620	50	−4.0	F			GSa		96Ho13	*
	11486.2	40.6			2.7	C			RIa		04MoZU	
	11486.2	40.			2.7	B			RIa		08Mo09	*
	11232.4	81.2			7.8	B			RIa		13Su04	
*^{277}Cn(α)^{273}Ds	And one E_α=11170(20) Q_α=11334.(20.) keV										02Ho11	**
*^{277}Cn(α)^{273}Ds	F : this event is distrusted, see reference										02Ho11	**
*^{277}Cn(α)^{273}Ds	And one E_α=11090(70) keV										08Mo09	**
^{278}Mt(α)^{274}Bh	9689.7	190.	9630	50	−1.2	U			Dba		11Og04	
	9527.3	71.			2.0	7			Dba		12Og06	
	9689.6	30.4			−1.2	7			Dba		13Og04	
	9588.2	30.			0.8	7			GSa		14Kh04	
^{278}Rg(α)^{274}Mt	10846.3	81.2				13			Dba		07Og02	
^{278}Ed(α)^{274}Rg	11850.8	40.				12			RIa		08Mo09	*
	11992.8	61.	11850	50	−2.8	o			RIa		12Mo25	*
*^{278}Ed(α)^{274}Rg	Also one E_α=11520(40) keV										08Mo09	**
*^{278}Ed(α)^{274}Rg	Post-deadline, disagrees with previous result from same group										GAu	**
^{279}Ds(α)^{275}Hs^p	9841.3	60.9	9840	50	0.0	o			Dba		04Og12	
	9841.3	60.9				13			Dba		06Og05	
^{279}Rg(α)^{275}Mt	10521.1	162.3				10			Dba		04Og03	
^{280}Rg(α)^{276}Mt	10128.6	60.	10146	7	0.3	o			Dba		04Og03	*
	10128.6	60.			0.3	U			Dba		12Og02	*
	10148.8	10.2			−0.3	10			GSa		13Ru11	*
	10088.0	15.2			3.8	B			Dba		13Og01	*
	10148.8	10.2			−0.3	10			Bka		15Ga24	*
	10124.8	20.			1.0	10			Bka		15Ga24	*
*^{280}Rg(α)^{276}Mt	E_α=9750(60) to 237 keV level										13Ru11	**
*^{280}Rg(α)^{276}Mt	E_α=9750(60) to 237 keV level										13Ru11	**
*^{280}Rg(α)^{276}Mt	E_α=9770(10) to 237 keV level										13Ru11	**
*^{280}Rg(α)^{276}Mt	Average of 19 events E_α=9710(15) to 237 keV level										13Ru11	**
*^{280}Rg(α)^{276}Mt	E_α=9770(10) to 237 keV level										15Ga24	**
*^{280}Rg(α)^{276}Mt	Highest E_α=9980(20)										15Ga24	**
^{281}Ds(α)^{277}Hs^p	8957.8	180.	8850	50	−2.1	F			Dba		99Og10	*
	8825.9	100.			0.5	F			Dba		04Mo15	*
	8856.3	30.4			−0.1	o			GSt		10Du06	
	8853.3	25.			0.0	5			GSt		11Ga19	
	8853.3	15.			0.0	5			GSa		12Ho12	
^{281}Ds^m(α)^{277}Hs^m	9449.8	15.				5			GSa		12Ho12	*
^{281}Rg(α)^{277}Mt	9454.8	40.6	9900#	400#	9.0	D			Dba		13Og04	*
^{281}Cn(α)^{277}Ds	10459.2	40.	10450	50	−0.1	11					10El06	
	10448.9	40.6			0.1	11			Dba		15Ut02	
*^{281}Ds(α)^{277}Hs^p	F : wrong α chain, see ^{285}Cn and ^{289}Fl										GAu	**
*^{281}Ds(α)^{277}Hs^p	F : non tracable information										GAu	**
*^{281}Ds^m(α)^{277}Hs^m	Assignment of ^{293}Lv^m−^{289}Fl^m−^{285}Cn^m−^{281}Ds^m−^{277}Hs^m chain is tentative										12Ho12	**
*^{281}Rg(α)^{277}Mt	Trends from Mass Surface TMS suggest ^{281}Rg 450 less bound										GAu	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{282}Rg(α)^{278}Mt^p	9129.7	101.4	9170	50	0.8	o			Dba		11Og04	
	9139.8	50.7			0.6	9			Dba		13Og04	
	9180.4	30.4			−0.2	9			GSa		14Kh04	*
^{282}Cn(α)^{278}Ds	9667.4	100.	10170#	200#	10.1	F			Dba		04Mo15	*
^{282}Ed(α)^{278}Rg	10783.2	81.2				14			Dba		07Og02	
*^{282}Rg(α)^{278}Mt^p	also observed E_α=8860(30) keV										14Kh04	**
*^{282}Cn(α)^{278}Ds	F : non tracable information										GAu	**
^{283}Cn(α)^{279}Ds^p	9677	70	9660	50	−0.4	o			Dba		04Og07	
	9677.0	60.9			−0.4	o			Dba		04Og12	
	9677.0	60.9			−0.4	15			Dba		06Og05	
	9606.0	60.9			1.0	15					07Ei02	
	9656.7	15.2			0.0	15			GSa		07Ho18	
	9788.6	100.			−2.7	U			Bka		09St21	
^{283}Ed(α)^{279}Rg^p	10265.4	90.	10380	50	2.2	U			Dba		04Og03	
	10376.9	10.1				12			GSa		13Ru11	
^{284}Cn(α)^{280}Ds	9301.3	50.	9600#	200#	6.0	F			Dba		01Og01	*
	9269.0	100.			3.3	F			Dba		04Mo15	*
^{284}Ed(α)^{280}Rg	10254.6	20.3	10280	50	0.5	11			GSa		13Ru11	*
	10305.3	20.			−0.5	11			Bka		15Ga24	*
*^{284}Cn(α)^{280}Ds	F : no α observed in later work by same group; re-assigned to ^{285}Cn										04Og07	**
*^{284}Cn(α)^{280}Ds	F : non tracable information										GAu	**
*^{284}Ed(α)^{280}Rg	Highest E_α=10110(10), error increased										13Ru11	**
*^{284}Ed(α)^{280}Rg	Highest E_α=10160(20)										15Ga24	**
^{285}Cn(α)^{281}Ds	8793.7	50.	9320	50	10.5	F			Dba		99Og10	*
	8793.7	100.			10.5	F			Dba		04Mo15	*
	9290.6	60.9			0.5	o			Dba		04Og07	
	9280.5	50.			0.7	6			Dba		07Og01	
	9341.3	30.4			−0.5	o			GSt		10Du06	
	9341.3	30.4			−0.5	6			GSt		11Ga19	
	9314.9	15.			0.0	6			GSa		12Ho12	
^{285}Cn^m(α)^{281}Ds^m	9845.4	15.2				6			GSa		12Ho12	*
^{285}Ed(α)^{281}Rg	9878.9	81.1	10010	50	2.6	B			Dba		11Og04	*
	10026.9	62.			−0.4	o			Dba		12Og02	*
	9767.3	183.			4.8	B			Dba		12Og06	
	10031.0	162.			−0.4	o			Dba		13Og01	
	9990.4	41.			0.4	o			Dba		13Og04	
	10008.7	20.3				11			Dba		16Fo16	*
^{285}Fl(α)^{281}Cn	10558.4	50.7				12			Dba		15Ut02	
*^{285}Cn(α)^{281}Ds	F : one event at 15.4 m, later work yields much shorter half-lives										GAu	**
*^{285}Cn(α)^{281}Ds	F : non tracable information										GAu	**
*^{285}Cn^m(α)^{281}Ds^m	Assignment of ^{293}Lv^m−^{289}Fl^m−^{285}Cn^m−^{281}Ds^m−^{277}Hs^m chain is tentative										12Ho12	**
*^{285}Ed(α)^{281}Rg	And E_α=9480(110) keV										11Og04	**
*^{285}Ed(α)^{281}Rg	Also E_α=9740(80) and 9480(110) keV										12Og02	**
*^{285}Ed(α)^{281}Rg	reanalyzed data of 11Og04, 12Og02, 12Og06, 13Og01 and 13Og04										16Fo16	**
*	unweighted average of the 4 highest energy events as selected by										GAu	**
*	the evaluator: s06=9857 s11=9902 s12=9845 s13=9867 in Table 2										GAu	**
^{286}Ed(α)^{282}Rg	9766.9	100.	9790	50	0.5	10			Dba		11Og04	
	9817.5	111.6			−0.6	10			Dba		12Og06	
	9432.1	304.3			7.1	B			GSa		14Kh04	

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{286}Fl(α)^{282}Cn	10142.1	100.	10370	30	2.3	F			Dba		04Mo15	*
	10172.5	314.4			0.6	o			Dba		04Og07	
	10345	60			0.4	o			Dba		04Og12	
	10334.7	60.9			0.6	11			Dba		06Og05	
	10375.4	40.			−0.1	11			Bka		09St21	
	10456.5	100.			−0.8	11			Bka		10El06	
*^{286}Fl(α)^{282}Cn	F : non tracable information										GAu	**
^{287}Fl(α)^{283}Cn	10435.7	20.3	10160	50	−5.5	F			Dba		99Og07	*
	10182.2	70.			−0.4	o			Dba		04Og07	
	10161.9	60.8			0.0	o			Dba		04Og12	
	10161.9	60.8				16			Dba		06Og05	
^{287}Ef(α)^{283}Ed	10740	90	10760	50	0.5	o			Dba		04Og03	
	10740	60			0.5	13			Dba		12St.A	
	10780.5	50.7			−0.3	13			GSa		13Ru11	
*^{287}Fl(α)^{283}Cn	F : 2 evts at 1.32 s, 14.4 s, later work yields T=1.7 s										GAu	**
^{288}Fl(α)^{284}Cn	9968.8	50.	10072	13	2.1	F			Dba		01Og01	*
	9958.8	100.			1.1	F			Dba		04Mo15	*
	10090.3	80.			−0.2	o			Dba		04Og07	
	10090.3	70.			−0.3	o			Dba		04Og12	
	10080.2	60.8			−0.1	11			Dba		07Og01	
	10090.3	30.			−0.6	o			GSt		10Du06	
	10090.3	30.			−0.6	11			GSt		11Ga19	
	10067.0	15.			0.3	11			GSa		12Ho12	
^{288}Ef(α)^{284}Ed	10607.6	60.8	10750	50	2.9	B			Dba		04Og03	
	10627.8	60.			2.5	B			Dba		12Og02	
	10727.2	82.1			0.5	U			Dba		13Og01	*
	10698.8	10.1			1.1	B			GSa		13Ru11	*
	10754.6	20.3				12			Bka		15Ga24	*
*^{288}Fl(α)^{284}Cn	F : T=1800(+2100–600) ms, later work yields shorter half-lives										GAu	**
*	re-assigned to ^{289}Fl										04Og07	**
*^{288}Fl(α)^{284}Cn	F : non tracable information										GAu	**
*^{288}Ef(α)^{284}Ed	Highest E_α=10578(81); average 24 events would yield E_α=10480 Q_α=10627.8										13Og01	**
*^{288}Ef(α)^{284}Ed	Average of 2 highest E_α=10560(10) 10540(10)										13Ru11	**
*^{288}Ef(α)^{284}Ed	Average of 2 highest E_α=10610(20) 10600(20)										15Ga24	**
^{289}Fl(α)^{285}Cn	9846.5	50.7	9970	50	2.4	F			Dba		99Og10	*
	9846.5	101.4			2.4	F			Dba		04Mo15	*
	9958.1	60.			0.2	o			Dba		04Og07	
	9958.1	50.			0.2	7			Dba		07Og01	
	10008.8	30.			−0.9	o			GSt		10Du06	
	10008.8	30.			−0.9	7			GSt		11Ga19	
	9956.0	15.2			0.2	7			GSa		12Ho12	
^{289}Fl^m(α)^{285}Cn^m	10169.9	15.				7			GSa		12Ho12	*
^{289}Ef(α)^{285}Ed	10455.0	90.	10510	50	1.1	o			Dba		11Og04	
	10522.8	62.			−0.2	o			Dba		12Og02	*
	10404.2	71.			2.1	o			Dba		12Og06	
	10546.2	81.			−0.7	o			Dba		13Og01	
	10607.0	152.			−1.9	o			Dba		13Og04	
	10510.7	20.3				12			Dba		16Fo16	*
*^{289}Fl(α)^{285}Cn	F : one event at 30.4 s, later work yields much shorter half-lives										GAu	**
*^{289}Fl(α)^{285}Cn	F : non tracable information										GAu	**
*^{289}Fl^m(α)^{285}Cn^m	Assignment of ^{293}Lv^m−^{289}Fl^m−^{285}Cn^m−^{281}Ds^m−^{277}Hs^m chain is tentative										12Ho12	**
*^{289}Ef(α)^{285}Ed	Also E_α=10310(90) keV										12Og02	**
*^{289}Ef(α)^{285}Ed	reanalyzed data of 11Og04, 12Og02, 12Og06, 13Og01 and 13Og04										16Fo16	**
*	unweighted average of the 3 highest energy events selected by										GAu	**
*	the evaluator: s06=10370 s12=10364 s14=10362 in Table 2										GAu	**

Table I. Comparison of input data and adjusted values (continued, Explanation of Table on page 030002-50)

Item	Input value		Adjusted value		v_i	Dg	Signf.	Main infl.	Lab	F	Reference	
^{290}Ef(α)^{286}Ed	10454.4	40.6				11			GSa		14Kh04	
^{290}Lv(α)^{286}Fl	10920.9	100.	11000	70	1.6	F			Dba		04Mo15	*
	11002.0	81.1			0.0	o			Dba		04Og07	
	10991.8	81.1			0.1	o			Dba		06Og05	
	10999.9	65.9				12			Dba		12Og06	
*^{290}Lv(α)^{286}Fl	F : non tracable information										GAu	**
^{291}Lv(α)^{287}Fl	10890	70	10890	50	0.0	o			Dba		04Og07	
	10890	70				17			Dba		06Og05	
^{292}Lv(α)^{288}Fl	10707.0	50.	10774	15	1.3	F			Dba		01Og01	*
	10676.5	100.			1.0	F			Dba		04Mo15	*
	10808.3	71.0			−0.5	12			Dba		04Og12	
	10772.8	15.2			0.1	12			GSa		12Ho12	
*^{292}Lv(α)^{288}Fl	F : daughter and grand-daughter re-assigned to ^{289}Fl and ^{285}Cn										GAu	**
*^{292}Lv(α)^{288}Fl	F : non tracable information										GAu	**
^{293}Lv(α)^{289}Fl	10676	60	10680	50	0.1	o			Dba		04Og07	
	10686.1	60.8			−0.1	8			Dba		07Og01	
	10679.0	15.2			0.0	8			GSa		12Ho12	
^{293}Lv^m(α)^{289}Fl^m	10647.6	15.2				8			GSa		12Ho12	*
^{293}Eh(α)^{289}Ef	11182.9	81.1	11290	50	2.2	o			Dba		11Og04	*
	10949.7	71.			6.9	B			Dba		12Og06	*
	11253.9	91.2			0.8	o			Dba		13Og04	*
	11293.4	20.3				13			Dba		16Fo16	*
*^{293}Lv^m(α)^{289}Fl^m	Assignment of ^{293}Lv^m–^{289}Fl^m–^{285}Cn^m–^{281}Ds^m–^{277}Hs^m chain is tentative										12Ho12	**
*^{293}Eh(α)^{289}Ef	reanalyzed data of 11Og04, 12Og02, 12Og06, 13Og01 and 13Og04										16Fo16	**
*	unweighted average of the 8 highest energy events selected by										GAu	**
*	the evaluator: s02=11140 s03=11080 s07=11142 s08=11114 s12=11183										GAu	**
*	s13=11203 s14=11059 s16=11190 in Table 2										GAu	**
^{294}Eh(α)^{290}Ef	11202.6	40.6				12			GSa		14Kh04	
^{294}Ei(α)^{290}Lv	11800.9	100.	11840	70	0.4	F			Dba		04Mo15	*
	11810.9	60.			0.5	o			Dba		04Og12	
	11810.9	60.			0.5	o			Dba		06Og05	
	11840.3	65.9				13			Dba		12Og06	
*^{294}Ei(α)^{290}Lv	F : non tracable information										GAu	**
^{295}Ei(α)^{291}Lv	11810.4	71.0	11700#	200#	−2.2	F			Dba		04Og05	*