Table I. The 2016 Atomic mass table

EXPLANATION OF TABLE

Elt. Element symbol (for $Z \ge 113$ see Part I, Section 6.8, p. 030002-31).

Orig.

Origin of values for secondary nuclides.

 $\begin{array}{ccc} & zp \; nn & \text{mass of } ^AZ \text{ derived from mass of } ^{A+z+n}(Z+z). \\ \text{Special notations:} & & \\ & \text{IT} & \text{when } z=0, n=0; \end{array}$

when z = 0, n = 0;+ when z = +1, n = -1;- when z = -1, n = +1;++ when z = +2, n = -2;-- when z = -2, n = +2; ϵp when z = -2, n = +1;+ α when z = +2, n = +2;when z = -2, n = -2;x for distant connection.

Mass excess

Mass excess [M(in u)-A], in keV, and its uncertainty (one-standard deviation).

In cases where the furthest-left significant digit in the uncertainty was larger than 3, values and uncertainties were rounded off, but not to more than tens of keV. (Examples: $2345.67 \pm 2.78 \rightarrow 2345.7 \pm 2.8, 2345.67 \pm 4.68 \rightarrow 2346 \pm 5$, but $2346.7 \pm 468.2 \rightarrow 2350 \pm 470$).

in place of decimal point: value and uncertainty derived not from purely experimental data, but at least partly from TMS (see Part I, Section 4, p. 030002-9).

Binding energy per nucleon

Tabulated binding energy per nucleon (in keV):

$$B/A = 1/A[ZM(^{1}H) + NM(^{1}n) - M(A,Z)].$$
 and its uncertainty.

and its uncertainty.

in place of decimal point: see above.

a in place of uncertainty: uncertainty smaller than 0.5 eV.

Beta-decay energy

Direction of decay, value and uncertainty in keV:

for
$$\beta^-$$
: $Q^- = M(A,Z) - M(A,Z+1)$;
for β^+ : $Q^+ = M(A,Z) - M(A,Z-1)$.

For a few odd-odd nuclides near maximum β -stability decaying both β^- and β^+ , the Q^+ values are given as negative Q^- values for the preceding even-even isobar.

* in place of value: not calculable.

in place of decimal point: see above.

a in place of uncertainty: uncertainty smaller than 0.5 eV.

Atomic mass

Atomic mass M and its uncertainty in μu .

in place of decimal point: see above.