Adopted Levels, Gammas

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Christian Ouellet, Balraj Singh	NDS 112,2199 (2011)	24-Aug-2011

Q(β^-)=−12680.9 *6*; S(n)=15044.33 *23*; S(p)=8864; Q(α)=−6948 2012Wa38
Note: Current evaluation has used the following Q record −12680.4 9 *15043*.8 *10* 8863.96 *1*−6947.65 *1* 2011AuZZ.
S(2n)=28096 *3*, S(2p)=16160.51 *2* (2011AuZZ).
Values in 2003Au03: Q(β^-)=−12686 *7*, S(n)=15042.4 *15* S(p)=8863.78 *21*, Q(α)=−6947.82 *14*, S(2n)=28096 *3*, S(2p)=16160.71 *14*.

Following corrections made by B. Singh (McMaster), Sept 20, 2022: ^{29}Si(α,n) dataset from 1975Ba01 removed as it leads to resonances in ^{33}S from 9699 to 11175 keV, not in ^{32}S. ^{33}S(p,d) dataset from 1974ShZZ (BAPS abstract) added as cited by 1978Ka18 for levels up to 9976. Resulting, mostly minor changes, made in the Adopted Levels (B. Singh, Sept 17, 2022), for example: 1. *7882*.9, J^π=4$^+$, not 4$^-$; added a new level at 7885 *4*, J^π=0$^-$,1$^-$,2$^-$. 2. new level added at 8281 keV with J^π=(0:4)$^+$ from ^{33}S(p,d). 3. Seven levels at 10133, 10182, 10417, 10493, 10678, 10988, 11175 from ^{29}Si(α,n) removed. 4. Widths of the following levels from ^{29}Si(α,n) removed: 9704.8, 9809, 9935, 9997, 10021, 10079, 10310, 10636.4, 10941, 11009.9, 11078. *5*. Missing or unknown γ-branchings in 1997Br07 from the 7921, 7975, 8296, 8407 and 8729 levels from the ^{31}P(p,γ) dataset added.

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^{32}S is one of the most extensively studied nuclei in the sd-shell (1998Ka31).
Four lowest states in ^{32}S appear to be vibrational in character (1971In02), first 2$^+$ is one phonon and 0$^+$,2$^+$,4$^+$ make up a spherical vibrational triplet. Quadrupole moment of first 2$^+$ state is negative and interestingly indicates a large prolate deformation (1998Ka31).
Additional evaluations for ^{32}S include 1997Br07 and specific to lifetimes, 1998Ka31. These are in broad agreement with the current evaluation.
E(p)=811 is a common absolute Resonance Strength by which other relative Resonance Strengths are compared to (1978Pa03).
Mass measurements: 2009Sc29, 2009Kw02.
Mass deduced by IMME analysis: 2010Ka30.
2010Pa18: ^{12}C(^{20}Ne,X),E=145,160 MeV; measured Eγ, Iγ, $\gamma\gamma$-coin. Deduced highest spin and high energy excitations from the shapes of giant dipole resonances (GDR), strength functions and parameters using rotating liquid drop model (RLDM) and thermal shape fluctuation model (TSFM). Calculated liquid drop model free energy surfaces, and equilibrium shapes as a function of quadrupole deformation parameters and spin. Possible connection to molecular structure of ^{16}O+^{16}O in a ^{32}S superdeformed band.
Structure calculations: Intruder levels, spins and parities, shell model: 2009Bo30.

^{32}S Levels

Levels populated in datasets with XREF=Y.
^{32}P β^- decay (14.268 d): 0.
^{33}Ar εp decay (173.0 ms): 0, 2231.
^{36}K $\varepsilon\alpha$ decay (342 ms): 0.
^{16}O(^{20}Ne,α): 11700, 11940, 12760, 13040, 13760, 14000, 14810, 15200.
^{28}Si(^{12}C,^{8}Be): 0, 2230, 5010.
^{28}Si(^{16}O,^{12}C): 0, 2230, 3780, 4280, 4460, 4700, 5010, 5800, 6220, 6850, 7000.
^{32}S(d,d′),(pol d,d′): 0, 2230, 4290, 4470, 5010.
^{32}S(α,α'): 0, 2230, 3777, 4278, 4458.
Coulomb excitation: 0, 2230.
Additional information 1.

Cross Reference (XREF) Flags

A	^{32}Cl ε decay (298 ms)	M	^{31}P(p,α):resonances	Y	^{32}P β^- decay (14.268 d)
B	^{4}He(^{28}Si,α):resonances	N	^{31}P(d,n),^{2}H(^{31}P,N)	Z	^{33}Ar εp decay (173.0 ms)
C	^{28}Si(α,γ)	O	^{31}P(^{3}He,d)	Others:	
D	^{28}Si(α,α):resonances	P	^{32}S(γ,γ'),(pol γ,γ')	AA	^{36}K $\varepsilon\alpha$ decay (342 ms)
E	^{28}Si(^{6}Li,pnγ)	Q	^{32}S(e,e′)	AB	^{16}O(^{20}Ne,α)
F	^{28}Si(^{6}Li,d)	R	^{32}S(π^+,$\pi^{+\prime}$),(π^-,$\pi^{-\prime}$)	AC	^{28}Si(^{12}C,^{8}Be)
G	^{28}Si(^{7}Li,t)	S	^{32}S(n,n′γ),(n,n′)	AD	^{28}Si(^{16}O,^{12}C)

H	^{28}Si(^{18}O,^{14}C)	T	^{32}S(p,p′),(pol p,p′)	AE	^{32}S(d,d′),(pol d,d′)
I	^{29}Si(α,nγ)	U	^{32}S(p,p′γ)	AF	^{32}S(α,α′)
J	^{30}Si(^{16}O,^{14}C)	V	^{33}S(p,d)	AG	Coulomb excitation
K	^{31}P(p,γ)	W	^{33}S(^{3}He,α)		
L	^{31}P(p,p′)	X	^{34}S(p,t)		

E(level)†	J$^\pi$	T$_{1/2}$	XREF	Comments
0	0$^+$	stable	A C FGHIJK NOP STUVWXYZ	XREF: Others: AA, AC, AD, AE, AF, AG <r^2>$^{1/2}$=3.2611 fm *18* (2008 update of 2004An14 evaluation by I. Angeli: available at http://cdfe.sinp.msu.ru.). J$^\pi$: measurements by optical spectroscopy (1936Ol01,1931Na01).
2230.57 *15*	2$^+$	169 fs *11*	A C FGHI K NOPQ STUVWX Z	XREF: Others: AC, AD, AE, AF, AG μ=+0.94 *18* (1979Za01,1989Ra17) Q=−0.154 *20* (1981Sp07,1989Ra17) E(level): from ^{32}S(γ,γ′). J$^\pi$: E2 γ to 0$^+$. T$_{1/2}$: weighted average of 175 fs *28* (1998Ka31), 135 fs *49* (1974Ch09), 128 fs *52* (1972Co12), 243 fs *42* (1971In02), 180 fs *55* (1969Th03), 121 fs *21* (1971Re15), 147 fs *24* (2002Ba28), 228 fs *55* (1964Ma01), 250 fs *27* (1964Lo08), 240 fs *40* (1971In02), 164 fs *11* (1971Ga04), 160 fs *40* (1980Ba40). 2001Ra27 evaluation gives 171 fs *8* from a set of 22 quoted measurements from 1956 to 1980 using DSA, Coul. ex., (γ,γ′) and (e,e′). μ: transient-fields (1979Za01). See also 2005St24 compilation. Q: reorientation in Coulomb ex. (recalculated by 1981Sp07). Measurements: −0.160 *22* or −0.133 *22* (1982Ve09), −0.18 *4* or −0.15 *4* (1981Da08), −0.12 *5* (1980Ba40). See also 2005St24 compilation.
3778.4 *10*	0$^+$	0.89 ps *9*	A C EFG I K NO Q STUVWX	XREF: Others: AD, AF J$^\pi$: from ^{34}S(p,t) L=0 angular distribution. T$_{1/2}$: from ^{28}Si(^{6}Li,pnγ).
4281.8 *3*	2$^+$	42 fs *4*	A C E HI K NOPq STUVWX	XREF: Others: AD, AE, AF E(level): from ^{32}S(γ,γ′). J$^\pi$: from ^{32}S(p,t) L=2, ^{31}P(p,γ) $\gamma\gamma(\theta)$, ^{32}S(p,p′γ) $\gamma\gamma(\theta)$. T$_{1/2}$: from weighted average of all available data. Additional information 2.
4459.1 *8*	4$^+$	124 fs *27*	C FGHI K NO STUVWX	XREF: Others: AD, AE, AF μ=+1.6 *6* (1988Si14,1989Ra17) E(level): from ^{31}P(p,γ). J$^\pi$: from ^{31}P(p,γ) $\gamma\gamma(\theta)$, ^{32}S(p,p′) Ay(θ), ^{32}S(p,p′γ), $\gamma\gamma(\theta)$ and L=4 in ^{34}S(p,t). T$_{1/2}$: from ^{32}S(α,α′). μ: transient-fields (1988Si14). See also 2005St24 compilation.
4695.3 *4*	1$^+$	286 fs *74*	A C I K NO TUVWX	XREF: Others: AD E(level): from ^{31}P(p,γ). J$^\pi$: from ^{32}S(p,p′γ) $\gamma\gamma(\theta)$; L(p,d)=0+2 from 3/2$^+$. T$_{1/2}$: from ^{29}Si(α,nγ).
5006.2 *3*	3$^-$	0.52 ps *3*	C FGHI K NO Q STUVWX	XREF: Others: AC, AD, AE B(E3)↑=0.0127 *20* (2002Ki06) E(level): from ^{31}P(p,γ). J$^\pi$: from ^{31}P(p,γ) $\gamma(\theta)$ and polarization, ^{28}Si(α,γ) $\gamma\gamma(\theta)$, ^{32}S(p,p′) angular distributions and L=3 in ^{31}P(d,n) from 1/2$^+$ and ^{33}S(p,d) from 3/2$^+$. T$_{1/2}$: from weighted average of all available data. Additional information 3.
5412.6 *10*	3$^+$	148 fs *19*	C EF I K NO UVWX	E(level): from ^{31}P(p,γ).

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Adopted Levels, Gammas (continued)

^{32}S Levels (continued)

E(level)†	Jπ	$T_{1/2}$	XREF	Comments
				Jπ: from ^{31}P(p,γ) γ(θ); L=2 in ^{31}P(^{3}He,d) from 1/2+; and in ^{33}S(p,d) from 3/2+.
				$T_{1/2}$: from weighted average of all available data.
5548.5 *10*	2+	57 fs *8*	A C I K NO TUVWX	E(level): from ^{29}Si(α,n).
				Jπ: from ^{32}S(p,p′) Ay(θ), ^{34}S(p,t) angular distribution and L=2 in ^{31}P(^{3}He,d) from 1/2+; L=0+2 in ^{33}S(p,d) from 3/2+.
				$T_{1/2}$: from ^{31}P(p,γ).
5796.8 *3*	1−	5.6 fs *9*	C FGHI K NOPQ STUVWX	XREF: Others: AD
				E(level): from ^{32}S(γ,γ′).
				Jπ: from ^{32}S(p,p′γ) γγ(θ) and L=1 in ^{31}P(^{3}He,d) from 1/2+ and in ^{33}S(p,d) from 3/2+.
				$T_{1/2}$: from ^{32}S(γ,γ′).
6222.9 *8*	2−	66 fs *12*	F I K NO S U WX	XREF: Others: AD
				E(level): from ^{31}P(p,γ).
				Jπ: from ^{31}P(p,γ) γ(θ) and RUL, ^{32}S(p,p′γ) γγ(θ); L=1 in ^{31}P(^{3}He,d) from 1/2+.
				$T_{1/2}$: from weighted average of all available data.
6411 *2*	4+	24.3 fs *35*	C E I K NO STU WX	E(level): weighted average of ^{31}P(p,γ) and ^{29}Si(α,n).
				Jπ: from ^{32}S(p,p′),(pol p,p′) Ay(θ).
				$T_{1/2}$: from ^{28}Si(^{6}Li,pnγ).
6582 *5*	(2+,3−)		O q T V X	XREF: V(?).
				E(level): from weighted average of ^{31}P(^{3}He,d) and ^{34}S(p,t).
				Jπ: from ^{32}S(p,p′),(pol p,p′) Ay(θ).
6621.7 *3*	4−	0.36 ps *6*	I K NO q S VW	E(level): from ^{31}P(p,γ).
				Jπ: from ^{31}P(p,γ) γ(θ) and RUL, and L=3 in ^{31}P(^{3}He,d) from 1/2+ and in ^{33}S(p,d) from 3/2+.
				$T_{1/2}$: from ^{31}P(p,γ); note that the single ^{29}Si(α,nγ) disagrees significantly.
6666.1 *10*	2+	40 fs *10*	A I K NO UVWX	E(level): from ^{31}P(p,γ).
				Jπ: from ^{31}P(p,γ) γ(θ), ^{34}S(p,t) angular distributions and L=2 in ^{31}P(^{3}He,d) from 1/2+; L=0+2 in ^{33}S(p,d) from 3/2+.
				$T_{1/2}$: from ^{31}P(p,γ).
6761.6 *10*	5−	260 fs *35*	GHI K NO ST VWX	E(level): from ^{31}P(p,γ).
				Jπ: from ^{29}Si(α,nγ) nγ(θ).
				$T_{1/2}$: from ^{31}P(p,γ).
6851.5 *15*	4+	66 fs *17*	I K NO VWX	XREF: Others: AD
				E(level): from ^{31}P(p,γ).
				Jπ: from ^{29}Si(α,nγ) n-γ(θ) correlation.
				$T_{1/2}$: from ^{31}P(p,γ).
7001.4 *4*	1+	1.5 fs *5*	A K NO Q T VWX	XREF: Others: AD
				E(level): from ^{31}P(p,γ).
				Jπ: from ^{31}P(p,γ) γ(θ) and L=2 in ^{31}P(^{3}He,d) from 1/2+; L=0+2 in ^{33}S(p,d) from 3/2+; isobar analog state of g.s. 1+ in ^{32}p and ^{32}Cl.
				$T_{1/2}$: from ^{31}P(p,γ).
7115.3 *10*	2+	1.73 fs *35*	A C H K NO VWX	E(level): from ^{31}P(p,γ).
				Jπ: from ^{31}P(p,γ) γ(θ) and decay multipolarity, ^{34}S(p,t) angular distribution; L=2 in ^{31}P(^{3}He,d) from

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Adopted Levels, Gammas (continued)

^{32}S Levels (continued)

E(level)†	Jπ	$T_{1/2}$	XREF	Comments
				$1/2^+$; L=0+2 in ^{33}S(p,d) from $3/2^+$.
				$T_{1/2}$: from ^{31}P(p,γ).
7190.1 *15*	1^+	8.0 fs *21*	A K NO Q T VW	E(level): from ^{31}P(p,γ).
				Jπ: from ^{31}P(p,γ) γ(θ); L=0 in ^{31}P(^{3}He,d) from $1/2^+$; L=0+2 in ^{33}S(p,d) from $3/2^+$.
				$T_{1/2}$: from ^{31}P(p,γ) and ^{31}P(d,n).
7350.0 *6*	$3^{(+)}$		K NO VWX	E(level): from ^{31}P(p,γ).
				Jπ: from ^{31}P(p,γ) γ(θ); L=2 in ^{33}S(p,d) from $3/2^+$.
7367			K	
7434 *3*	1^-	7.7 fs *10*	FGH K NO w	E(level): from ^{31}P(p,γ).
				Jπ: L=1 in ^{31}P(^{3}He,d) and ^{31}P(d,n).
				$T_{1/2}$: from weighted average of ^{31}P(p,γ) and ^{31}P(^{3}He,d).
7484.0 *4*	2^+	4.9 fs *12*	C K NOP VW	E(level): from ^{32}S(γ,γ′),^{32}S(pol γ,γ′).
				Jπ: from ^{31}P(p,γ) γ(θ) and RUL, ^{32}S(γ,γ′) γ(θ), ^{32}S(pol γ,γ′) γ(θ); L=2 in ^{33}S(p,d) from $3/2^+$.
				$T_{1/2}$: weighted average of all available data.
7535.7 *10*	0^+	2.6 fs *7*	C K NO VWX	E(level): from ^{31}P(p,γ).
				Jπ: L=0 in ^{31}P(^{3}He,d) and ^{31}P(d,n); L=2 in ^{33}S(p,d) from $3/2^+$.
				$T_{1/2}$: weighted average of ^{31}P(p,γ) and ^{31}P(d,n).
7566.8 *9*	5^+	150 fs *32*	I K	E(level),Jπ,$T_{1/2}$: from ^{29}Si(α,nγ) from n-γ(θ) correlation.
7637.0 *10*	1		K T X	E(level),Jπ: from ^{32}S(p,p′) angular distribution.
7648 *5*			W	
7701.44 *36*	3^-	66 fs *19*	H K NO Q X	E(level),$T_{1/2}$: from ^{31}P(p,γ).
				Jπ: from ^{31}P(p,γ) γ(θ); L=3 in ^{31}P(^{3}He,d) from $1/2^+$.
7882.9 *8*	4^+		K	Jπ: from ^{31}P(p,γ) γ(θ).
7885 *4*	$0^-,1^-,2^-$		NO	Jπ: L(^{3}He,d)=L(d,n)=1 from $1/2^+$.
7921.0 *10*	1^+		K T X	E(level): from ^{31}P(p,γ).
				Jπ: from ^{31}P(p,p′),(pol p,p′) angular distribution.
7950.1 *4*	4^-	146 fs *35*	I K O	E(level),$T_{1/2}$: from ^{31}P(p,γ).
				Jπ: from ^{31}P(p,γ) from γ(θ) and RUL, and L=3 in ^{31}P(^{3}He,d).
7974.9 *7*	4^-	<21 fs	K NO VWX	E(level),$T_{1/2}$: from ^{31}P(p,γ).
				Jπ: from L=3 in ^{31}P(^{3}He,d) and ^{31}P(d,n) in disagreement with ^{31}P(p,γ) and parity in ^{34}S(p,t).
8125.40 *20*	1^+	0.144 fs *21*	K NOPQ T X	E(level): from ^{32}S(γ,γ′),^{32}S(pol γ,γ′).
				Jπ: from ^{32}S(γ,γ′),^{32}S(pol γ,γ′) angular distribution and L=0 in ^{31}P(^{3}He,d).
				$T_{1/2}$: weighted average of ^{32}S(γ,γ′),^{32}S(pol γ,γ′).
8191.1 *6*	4		K O	E(level): from ^{31}P(p,γ).
8270.3 *14*	$3^-,5^-$	<60 fs	I K o X	E(level),Jπ,$T_{1/2}$: from ^{29}Si(α,nγ) n-γ(θ) correlation.
8281	$(0 \text{ to } 4)^+$		o V	E(level),Jπ: from ^{33}S(p,d) with L=2 from $3/2^+$.
8296.1 *10*	3^-		K NO	E(level): from ^{31}P(p,γ).

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Adopted Levels, Gammas (continued)

^{32}S Levels (continued)

E(level)†	Jπ	$T_{1/2}$	XREF	Comments
				Jπ: from ^{31}P(p,γ) γ(θ) and L=3 in ^{31}P(d,n), ^{31}P(^{3}He,d).
8343 *3*	2+		X	Jπ: L(p,t)=2.
8346.4 *14*	4+	<28 fs	I K O V	E(level),Jπ: 4+, 6+ from ^{29}Si(α,nγ) n-γ(θ); L=2 in ^{33}S(p,d) from 3/2+. $T_{1/2}$: from ^{31}P(p,γ).
8380 *5*			O V	
8407.0 *14*	2		K O V	E(level),Jπ: from ^{31}P(p,γ) γ(θ).
8499.3 *5*	1−	1.30 fs *24*	BC Fg K NOP V X	XREF: Others: AF XREF: V(8489). E(level),$T_{1/2}$: from ^{31}P(p,γ). Jπ: from L=1 in ^{31}P(d,n) and ^{31}P(^{3}He,d).
8671.7			S	
8684.0			S	
8687.6			A C K NO S V	E(level): from ^{32}S(n,n′γ),(n,n′).
8729.3 *6*	3+		K O V X	E(level),Jπ: from ^{31}P(p,γ) γ(θ) and RUL.
8736.7			S	
8741.8			S	
8745.6 *8*	3		K	Jπ: from ^{31}P(p,γ) γ(θ).
8751.0			S	
8782.9			S	
8797.5			S	
8809.7			S	
8838.7			S	
8861 *2*	2+		A C K O V X	E(level): from ^{28}Si(α,γ). Jπ: from γ decay in ^{31}P(p,γ).
8895.3			S	
8906.0			S	
8921.8			S	
8941.9			S	
8945.1			S	
8953.6			S	
8977.5			S	
8984.7			S	
9007.3			S	
9009.2			S	
9012.7			S	
9023.8 *21*	4−	0.27 ps *6*	C I K NO X	E(level): from ^{29}Si(α,nγ). Jπ: 4−,6− from ^{29}Si(α,nγ); L=3 in ^{31}P(^{3}He,d) from 1/2+ target; L=1 in ^{31}P(d,n) is apparently in disagreement but in another (d,n) study L=1 or 3 is also indicated.
9031.1			S	
9042.0			S	
9055.1			S	
9059 *2*	1−		K NO v	E(level): from ^{31}P(p,γ). Jπ: from L=1 in ^{31}P(^{3}He,d).
9065 *2*		<14 fs	C K v	E(level),$T_{1/2}$: from ^{28}Si(α,γ).
9087.9			S	
9090.9			S	
9139.9			S V	
9159.0			S	
9170 *3*	3+		I K O V	E(level): from ^{31}P(p,γ). Jπ: from ^{31}P(^{3}He,d) γδ coincidence.
9196 *8*	2+		K X	E(level),Jπ: from ^{34}S(p,t).
9200.8			S	

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Adopted Levels, Gammas (continued)

^{32}S Levels (continued)

E(level)†	Jπ	$T_{1/2}$	XREF	Comments
9207.55 *71*	1+	4.2 fs *14*	K MNOP	E(level): from ^{31}P(p,γ) γγ(θ). Jπ,$T_{1/2}$: from ^{32}S(γ,γ′),^{32}S(pol γ,γ′).
9210.6			S	
9211.2			S	
9235.2 *24*	1−	<60 fs	A C I K MNO	E(level),$T_{1/2}$: from ^{29}Si(α,nγ). Jπ: from ^{31}P(^{3}He,d) L=1 and angular distribution. The γ-rays reported in ^{29}Si(α,nγ) do not match those from ^{28}Si(α,γ) we report here the older values but clearly more investigation is necessary.
9253 *1*	2+		K O	E(level): from ^{31}P(p,γ). Jπ: from ^{31}P(^{3}He,d) dγ coincidences.
9268.0			S	
9271.7			S	
9280	1		T	
9287.9			S	
9289.0 *1*	1+		K MNO	E(level),Jπ: from ^{31}P(p,γ) γ(θ) and γγ(θ).
9297.0			S	
9309.2			S	
9317.1			S	
9344.9			S	
9357.6			S	
9360.5			S	
9388 *1*	2+		K MNO	E(level): from ^{31}P(p,γ). Jπ: from ^{31}P(^{3}He,d) as well as L=1 in ^{31}P(d,n).
9395.0			S	
9397.2			S	
9402.1			S	
9436.0			S	
9450.6			S	
9463.4 *10*	5−,7−	<70 fs	I	
9466.0 *15*	2+	<49 fs	A C K M O X	E(level),Jπ: from ^{28}Si(α,γ) n-γ(θ) correlation. $T_{1/2}$: from ^{31}P(p,γ).
9481.5			S	
9485.7 *10*	1−	8.2 eV *25*	C K MNO S	E(level): from ^{31}P(p,γ). $T_{1/2}$: from ^{31}P(p,α) and ^{31}P(p,γ). Jπ: from ^{31}P(p,γ) γ(θ) and L=1 in ^{31}P(^{3}He,d), ^{31}P(d,n).
9500			F S	
9515.9			S	
9524.3			S	
9534.0			S	
9534.9			S	
9560.6			S	
9562 *10*	1−,2−		O	Jπ: from L=1 in ^{31}P(^{3}He,d).
9597.1			S	
9619.4			S	
9634.6 *18*	4−,6+	0.09 ps *6*	I	
9650 *30*	6−		R	
9650.2 *5*	2+		A K MNO v X	E(level),Jπ: from ^{31}P(p,γ) γ(θ), γγ(θ) and L=2 in ^{34}S(p,t).
9655.2			S v	
9656.7			S v	
9660.1 *11*	1+	2.4 eV *7*	K M PQ ST v	E(level),Jπ,$T_{1/2}$: from ^{32}S(γ,γ′),^{32}S(pol γ,γ′) γ(θ).
9665.4			S	

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Adopted Levels, Gammas (continued)

^{32}S Levels (continued)

E(level)[†]	Jπ	$T_{1/2}$	XREF	Comments
9671.7			S	
9674.6			S	
9693.4			S	
9704 *8*			S X	E(level): from ^{34}S(p,t).
9711.9 *14*	2$^+$	3.6 eV	A C K	E(level),$T_{1/2}$: from ^{31}P(p,γ). Jπ: from ^{28}Si(α,γ) γ(θ) and correlation.
9724 *1*	2,3,4		K O	Jπ: from ^{31}P(p,γ) γ(θ).
9727.9 *5*			K	
9731 *1*	1$^-$,2$^-$		K NO	E(level): from ^{31}P(p,γ). Jπ: from ^{31}P(d,n) L=1 and ^{31}P(^{3}He,d) L=3,1.
9783 *20*	6	0.14 fs *+13−11*	I V	Jπ: from ^{29}Si(α,nγ) γ(θ).
9810			R	
9816.8 *10*	3$^-$,4$^-$		K NO X	E(level): from ^{31}P(p,γ). Jπ: from L=3 in ^{31}P(^{3}He,d).
9827 *3*			K	
9848 *1*	1$^-$	0.100 keV *10*	C K MNO	E(level): from ^{31}P(p,γ). $T_{1/2}$: from ^{31}P(p,α). Jπ: from ^{31}P(p,α) angular distribution with L=1 in ^{31}P(^{3}He,d).
9883.3 *5*			K v	
9887.3 *6*	2$^+$,3$^+$	0.010 keV *5*	A K NO v	E(level),$T_{1/2}$: from ^{31}P(p,γ). Jπ: from L=2 in ^{31}P(^{3}He,d).
9919.3 *5*	2$^+$	0.010 keV *5*	K X	E(level),$T_{1/2}$: from ^{31}P(p,γ). Jπ: from ^{34}S(p,t) L=2 angular distribution and modeling.
9935 *6*	1		C T	E(level): from ^{28}Si(α,γ). Jπ: from ^{32}S(p,p′),^{32}S(pol p,p′) angular distributions.
9946.6 *5*	1$^-$	0.150 keV *15*	A K NO V	E(level),$T_{1/2}$: from ^{31}P(p,γ). Jπ: from ^{31}P(^{3}He,d) L=1 and RUL.
9977.9 *5*	4		K N v	E(level),Jπ: from ^{31}P(p,γ) γ(θ).
9978.3 *1*	3		K Q v	E(level): from ^{31}P(p,γ). Jπ: from ^{31}P(p,γ) γ(θ) disagrees with 1$^+$ from ^{31}P(e,e′).
9982.7 *6*	2,0$^+$	0.100 keV *10*	A K	E(level),$T_{1/2}$: from ^{31}P(p,γ). Jπ: this is a doublet with J=0$^+$ coming from ^{32}Cl decay.
9988 *10*	3$^-$,4$^-$	≈4 keV	M O	E(level),$T_{1/2}$: from ^{31}P(p,α). Jπ: from L=3 ^{31}P(^{3}He,d).
9997 *6*			C	E(level): from ^{28}Si(α,γ).
10021 *10*	3$^-$,4$^-$		O	E(level),Jπ: from L=3 ^{31}P(^{3}He,d).
10073.4 *6*	2$^-$	1.50 keV *15*	K MNO	E(level),Jπ,$T_{1/2}$: from ^{31}P(p,γ), very strong M2 γ to 0$^+$ forces this to be 2$^-$ despite L=1 from ^{31}P(^{3}He,d) and ^{31}P(d,n).
10079 *2*	(1)	1.7 keV *4*	L	E(level),Jπ,$T_{1/2}$: from ^{31}P(p,p′).
10090 *10*	2$^-$		Q	Jπ: M2 transition.
10102.3 *10*	4$^{(+)}$		K O	E(level),Jπ: from ^{31}P(p,γ) γ(θ).
10113 *6*			C	
10218.8 *6*	3$^+$	0.010 keV *5*	C K N	E(level),Jπ,$T_{1/2}$: from ^{31}P(p,γ) γ(θ) and E3+M2 decay to 4961.
10221.2 *6*	3$^-$	0.056 keV *10*	KLM O	E(level),Jπ,$T_{1/2}$: from ^{31}P(p,γ) with L=3 from

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Adopted Levels, Gammas (continued)

^{32}S Levels (continued)

E(level)†	Jπ	$T_{1/2}$	XREF	Comments
				^{31}P(^{3}He,d), note however that ^{31}P(p,α) found a very different lifetime and possibility of J=2.
10225.0 *16*		0.18 keV *2*	K	
10230.3 *6*	1+	0.025 keV *3*	A K	E(level),Jπ: from ^{31}P(p,γ) from γ(θ) and RUL.
10256.1 *7*	4−	0.035 keV *4*	KLMNO	E(level),$T_{1/2}$: from ^{31}P(p,γ). Jπ: from ^{31}P(p,γ) γ(θ) and L=3 in ^{31}P(^{3}He,d).
10276 *8*	4+		N X	E(level),Jπ: from ^{34}S(p,t) L=4 and microscopic model comparison.
10286.3 *7*	3−	0.16 keV *2*	C K MNO	E(level),$T_{1/2}$: from ^{31}P(p,γ). Jπ: from ^{31}P(p,α) angular distribution and L=3 in ^{31}P(^{3}He,d).
10290.2 *6*	2	0.125 keV *13*	A K	E(level),Jπ,$T_{1/2}$: from ^{31}P(p,γ) γ(θ).
10292.0 *15*	3	0.07 keV *1*	C K M	E(level),$T_{1/2}$: from ^{31}P(p,γ). Jπ: from ^{31}P(p,α) angular distribution. $T_{1/2}$: ^{31}P(p,α) found a much higher half life than ^{31}P(p,γ).
10310			R	
10331.1 *15*	1−	6.1 keV *7*	K MNO	E(level),Jπ,$T_{1/2}$: from L=1 from ^{31}P(^{3}He,d) and ^{31}P(d,n).
10337 *3*		9 keV *2*	C L	E(level),Jπ,$T_{1/2}$: from ^{31}P(p,p′) with L=(1).
10369	(0+)	5.8 keV	B D TU W	XREF: B(10250). Jπ: from ^{28}Si(α,α) R-matrix fits.
10370.6 *6*	2+	0.025 keV *3*	KLM O X	E(level),$T_{1/2}$: from ^{31}P(p,γ). Jπ: from ^{34}S(p,t) angular distribution and L=2 in ^{31}P(^{3}He,d).
10396.7 *6*	4−	0.012 keV *2*	K MNO	E(level),Jπ,$T_{1/2}$: from ^{31}P(p,γ) γ(θ) with L=3 in ^{31}P(^{3}He,d).
10405 *3*		11 keV *4*	F L	E(level),$T_{1/2}$: from ^{31}P(p,p′).
10428 *10*	2+,3+,3−,4−		O	Jπ: from ^{31}P(^{3}He,d) L=2,3.
10456 *6*	1+	2.9 keV	A C M Q	E(level),$T_{1/2}$: from ^{31}P(p,α). Jπ: from ^{31}P(e,e′) angular distribution. Additional information 4.
10500	(0+)	1.7 keV	B D T	XREF: Others: AE XREF: B(10380).
10507.9 *10*		0.010 keV *5*	K	
10534 *4*	3−,4−	1.8 keV	A C LM O X	E(level): from ^{31}P(p,p′). $T_{1/2}$: from ^{31}P(p,α). Jπ: from L=3 in ^{31}P(^{3}He,d) disagrees with J=2 from ^{31}P(p,α).
10556.1 *10*			KL	E(level): from ^{31}P(p,γ).
10570	(0+)	1.2 keV	B D T X	XREF: Others: AF XREF: B(10460).
10574.4 *10*	5+	0.015 keV *2*	K	
10603.8 *10*		0.15 keV *2*	K	
10624 *6*	3−,4−	3.1 keV	M O	E(level),$T_{1/2}$: from ^{31}P(p,α). Jπ: from L=3 in ^{31}P(^{3}He,d).
10636.4 *10*			C K	E(level): from ^{31}P(p,γ).
10658	(1−)	2.3 keV	B D T W	XREF: Others: AE XREF: B(10530).

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Adopted Levels, Gammas (continued)

^{32}S Levels (continued)

E(level)†	Jπ	$T_{1/2}$	XREF	Comments
10696.1 *10*		0.18 keV *2*	K	
10700.5 *10*	1^-	21 keV *4*	K M o	E(level),$T_{1/2}$: from ^{31}P(p,γ). Jπ: from ^{31}P(p,α) angular distribution and L=1 in ^{31}P(^{3}He,d).
10705.3 *10*	$1^-,2^-$	20 keV *3*	C KL No	E(level): from ^{31}P(p,γ). Jπ: from L=1 in ^{31}P(d,n).
10745	(0^+)	8.9 keV	B D R T WX	XREF: B(10650). E(level),$T_{1/2}$: from ^{28}Si(α,α) angular distribution.
10756.7 *10*	$3^{(+)}$	0.05 keV *1*	K N	E(level),Jπ,$T_{1/2}$: from ^{31}P(p,γ) γ(θ).
10778.8 *10*	2^+	0.62 keV *7*	A K M O X	E(level),$T_{1/2}$: from ^{31}P(p,γ) note however that in ^{31}P(p,α) a much higher half life was found, the spin discrepancy additionally indicates this level may be a doublet. Jπ: from L=2 in ^{34}S(p,t), parity disagrees with L=1 in ^{31}P(^{3}He,t).
10783.8 *10*		0.75 keV *8*	K	
10784.5 *10*		0.60 keV *6*	K	
10791.3 *10*	1	0.17 keV *2*	A C KLM	E(level),$T_{1/2}$: from ^{31}P(p,γ). Jπ: from ^{31}P(p,α) angular distribution and ^{28}Si(α,γ) γ(θ).
10806	2		C F	E(level),Jπ: from ^{28}Si(α,γ).
10816	$(3^-,5^-)$	4.7 keV	B D T	XREF: Others: AG XREF: B(10700).
10825.4 *10*	2^-	22 keV *4*	KLMNO Q X	E(level),$T_{1/2}$: from ^{31}P(p,γ) note that ^{31}P(p,α) gives a much lower approximate estimate. Jπ: from ^{32}S(e,e′) strength and L=1 in ^{31}P(^{3}He,d) and ^{31}P(d,n), parity disagrees with ^{34}S(p,t) and spin with ^{31}P(p,α).
10827.0 *10*		0.32 keV *3*	K m	E(level),$T_{1/2}$: from ^{31}P(p,γ).
10830 *3*		≈4 keV	M	
10832 *3*	2,(3)	≈2.5 keV	C M	E(level),$T_{1/2}$: from ^{31}P(p,α). Jπ: from ^{28}Si(α,γ) γ(θ) disagrees with J=2,(3) of ^{31}P(p,α).
10841 *10*	2	≈0.4 keV	C M	E(level),$T_{1/2}$: from ^{31}P(p,α). Jπ: from ^{28}Si(α,γ) γ(θ).
10851	1		C	
10868	(2^+)	7.7 keV	B D T	XREF: Others: AG XREF: B(10780).
10880 *40*	6^-		R	
10907 *10*	1^+	2.1 keV	M Q	E(level),$T_{1/2}$: from ^{31}P(p,α). Jπ: from ^{31}P(e,e′) strength and ^{31}P(p,α) angular distribution.
10915 *2*			K	
10933.7 *10*	3		K	
10941	1		C	E(level),Jπ: from ^{28}Si(α,γ) γγ(θ).
10956	(0^+)	2.9 keV	B D T	XREF: B(10880).
10977 *10*	$(1^-,2^-)$		LM O	Jπ: from L=(1) in ^{31}P(^{3}He,d).
10980 *40*	6^-		QR	E(level),Jπ: from ^{32}S(e,e′).
10998	(4)		C	
11009.9 *10*	4^+		K O	E(level),Jπ: from ^{31}P(p,γ) γ(θ).
11020	$(1^-,2^-)$		N	
11052	(4)		C	
11064	2^+		A	

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Adopted Levels, Gammas (continued)

^{32}S Levels (continued)

E(level)†	Jπ	$T_{1/2}$	XREF	Comments
11078	2		C	E(level),Jπ: from ^{28}Si(α,γ) $\gamma\gamma(\theta)$.
11092.3 *10*	3⁻		KLM O	E(level): from ^{31}P(p,γ). Jπ: from ^{31}P(p,γ) $\gamma(\theta)$ and L=3 in ^{31}P(^{3}He,d).
11107	(2⁺)	67.4 keV	BCD T W	XREF: B(10950). E(level): average of ^{28}Si(α,α) and ^{28}Si(α,γ). Jπ,$T_{1/2}$: from ^{28}Si(α,α), R-Matrix fits.
11114 *2*			K	
11123 *1*			K	
11130	(0⁺)	1.8 keV	B D T W	XREF: B(11050).
11131 *2*	1		K T	E(level): from ^{31}P(p,γ). Jπ: from ^{31}P(p,p′).
11139.8 *10*	1⁺		K Q	E(level): from ^{31}P(p,γ). Jπ: from ^{31}P(e,e′).
11170 *50*	6⁻		Q	
11198 *10*	3⁻,4⁻		NO	E(level),Jπ: from L=3 ^{31}P(^{3}He,d) and L=3 ^{31}P(d,n).
11235.5 *10*	3	9 keV	K M O	E(level),Jπ: from ^{31}P(p,γ) $\gamma(\theta)$ note that ^{31}P(p,α) finds J=1. $T_{1/2}$: from ^{31}P(p,α).
11253.9 *10*	(3⁻)	1.1 keV	B D K O T U W	XREF: B(11250). E(level): from ^{31}P(p,γ). Jπ: from ^{28}Si(α,α):res R-matrix fit.
11332.8 *10*			K	
11366 *10*			O	
11410	(3⁻)	1.9 keV	B D T	XREF: Others: AE XREF: B(11380).
11425 *10*	1	≈4 keV	M	
11438 *10*			O	
11474.6 *10*	3		K O	E(level),Jπ: from ^{31}P(p,γ) $\gamma(\theta)$.
11485.8 *10*	1⁺		K O Q	E(level): from ^{31}P(p,γ). Jπ: from ^{32}S(e,e′).
11554 *10*	(0,1)	6.1 keV	M O	E(level): average of ^{31}P(^{3}He,d) and ^{31}P(p,α). $T_{1/2}$,Jπ: from ^{31}P(p,α) angular distribution.
11589.7 *10*	1⁻	10.7 keV	K MNO	E(level): ^{31}P(p,γ). Jπ,$T_{1/2}$: from ^{31}P(p,α) angular distribution with L=1 in ^{31}P(d,n).
11602.4 *10*			K O	E(level): from ^{31}P(p,γ) $\gamma(\theta)$.
11620 *7*	1⁺		O Q	E(level),Jπ: from ^{32}S(e,e′).
11629	(1,2⁺,3⁻)	5.7 keV	B D T	XREF: Others: AF XREF: B(11410). E(level),$T_{1/2}$: from ^{28}Si(α,α):res. Jπ: ^{32}S(p,p′) J=1; 3⁻ from ^{28}Si(α,α'); 2⁺ from ^{4}He(^{28}Si,α). There may be two different levels near this energy.
11637.1 *10*			K	
11648 *10*	1	6.6 keV	K	
11660 *10*			O	
11669.6 *10*	5⁺		K	
11690 *10*	(3⁻)	1.2 keV	B D O T W	XREF: Others: AG XREF: B(11570). E(level): from ^{31}P(^{3}He,d). Jπ,$T_{1/2}$: from ^{28}Si(α,α):res R-matrix fit.
11696.7 *10*	5⁺		K m	XREF: Others: AB E(level),Jπ: from ^{31}P(p,γ).

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Adopted Levels, Gammas (continued)

^{32}S Levels (continued)

E(level)†	Jπ	$T_{1/2}$	XREF	Comments
				$T_{1/2}$: 8.0 keV from ^{31}P(p,α) and 55 keV *24* from ^{16}O(^{20}Ne,α) may belong to this level but many levels overlap within uncertainties.
11720 *10*			O	
11750 *10*	1		C O	E(level): from ^{31}P(^{3}He,d). Jπ: from ^{28}Si(α,γ) γ(θ).
11758.8 *10*			K	
11783 *10*	1	30 keV	C M O	E(level): from ^{31}P(^{3}He,d). Jπ: from ^{28}Si(α,γ) γ(θ) note that ^{31}P(p,α) favors J=2. $T_{1/2}$: from ^{31}P(p,α).
11806 *10*	1,2		C F O	E(level): from ^{31}P(^{3}He,d). Jπ: from ^{28}Si(α,γ) γ(θ).
11823 *10*	1⁻,2⁻		NO	E(level): from ^{31}P(^{3}He,d). Jπ: from ^{31}P(d,n) L=1.
11848	(3⁻)	10.4 keV	B D T WX	XREF: B(11650).
11861 *10*			O	
11876 *10*			O	
11883 *10*	1	7.6 keV	M Q T	E(level): average of ^{32}S(e,e′) and ^{31}P(p,α). Jπ: from ^{31}P(p,α) angular distribution and ^{32}S(p,p′), J=2⁻ ^{32}S(e,e′) disagrees.
11900 *10*			O	
11936 *10*	3⁻	7.3 keV	M O	E(level): from ^{31}P(^{3}He,d). Jπ,$T_{1/2}$: from ^{31}P(p,α) angular distribution and L=3 from ^{31}P(^{3}He,d).
11940 *20*	6⁻	86 keV *24*	QR	E(level): from ^{16}O(^{20}Ne,α). Jπ: from ^{32}S(e,e′) and ^{32}S(π^+,π^+), disagrees with 5⁻ assignment of ^{16}O(^{20}Ne,α) however large uncertainties mean there may be several levels here.
11940.1 *10*	3		K	
11955 *10*	(2⁺,3⁻)	3.2 keV	B D O T	XREF: B(11800). E(level): from ^{31}P(^{3}He,d). Jπ,$T_{1/2}$: from ^{28}Si(α,α):res R-matrix fit.
12002 *10*	2	11.8 keV	M O	E(level): from ^{31}P(^{3}He,t). Jπ,$T_{1/2}$: from ^{31}P(p,α) angular distribution.
12030 *10*			C q TU x	XREF: Others: AE, AG XREF: C(12037). E(level),Jπ: from ^{32}S(e,e′) likely a doublet or triplet of levels since the spins reported are all in disagreement, uncertainties are also large or absent making it impossible to make clear assignments.
12043.9 *10*			K no q x	E(level),Jπ: from ^{31}P(p,γ) which resolved the triplet.
12044.19 *28*	2,3,4		K no q x	E(level),Jπ: from ^{31}P(p,γ) which resolved the triplet.
12047.96 *28*	0⁺		C K no	E(level),Jπ: from ^{31}P(p,γ) which resolved the triplet.
12050	(2⁺,3⁻)		B D T	XREF: Others: AF XREF: B(11940).
12124	2	6.9 keV	M	
12160 *10*	(3⁺,2⁺)	22 keV	B M O TU	XREF: Others: AG

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Adopted Levels, Gammas (continued)

^{32}S Levels (continued)

E(level)†	Jπ	$T_{1/2}$	XREF	Comments
				XREF: B(12170). E(level): from ^{31}P(^{3}He,t). Jπ,$T_{1/2}$: from ^{31}P(p,α) angular distribution with L=(2) from ^{31}P(^{3}He,t).
12196 *10*	1^-		NO QR	E(level): from ^{32}S(e,e′). Jπ: From ^{32}S(e,e′) but with parity from L=1 in ^{31}P(d,n).
12198	(3^-)	6.4 keV	B D TU	XREF: B(12000).
12235 *10*	$(2^+,3^+)$		O	
12260	$[3^-]$		B	
12270	0	21 keV	M	
12308 *10*			O	
12340 *10*			O	
12362 *10*	3,(2)	4.8 keV	M O	E(level),Jπ,$T_{1/2}$: from ^{31}P(p,α) angular distribution.
12393 *10*	3	7.7 keV	MNO	E(level): from ^{31}P(^{3}He,d). $T_{1/2}$,Jπ: from ^{31}P(p,α) angular distribution.
12426 *10*	3,2	13.9 keV	B M O TU	XREF: Others: AF XREF: B(12440). E(level),Jπ: from ^{31}P(^{3}He,d). $T_{1/2}$: from ^{31}P(p,α) angular distribution.
12465 *10*	2	7.8 keV	M O	E(level): from ^{31}P(^{3}He,d). Jπ,$T_{1/2}$: from ^{31}P(p,α) angular distribution.
12491 *10*	(2,1)	18.6 keV	M O	E(level): from ^{31}P(^{3}He,d). Jπ,$T_{1/2}$: from ^{31}P(p,α) angular distribution.
12510	$[3^-]$		B	
12553	2	8.4 keV	M	
12560	1		T	
12568	2	3.0 keV	M	
12600	3,2	7.9 keV	M	
12630 *30*	6^-		N R	E(level),Jπ: from ^{32}S(π^+,π^+) note that L=1 in ^{31}P(d,n) probably means there are several levels in this vicinity.
12650 *10*	1^+	<0.10 MeV	B Q TU WX	XREF: B(12650).
12710	$(5^-,3^-)$‡	5 keV	B D TU	XREF: Others: AE, AG XREF: B(12730).
12740 *40*	6^-		QR	
12760 *20*	6^+	84 keV *24*		XREF: Others: AB
12770	(2^+)‡	10 keV	D	
12830	(3^-)‡	1 keV	D	
12860	(3^-)‡	38 keV	D	
12910	(3^-)‡	8 keV	B D TU	XREF: B(12880).
12930	(3^-)‡	29 keV *5*	B D TU	XREF: Others: AE XREF: B(12930).
12980 *10*	1^+		QR	E(level),Jπ: from ^{32}S(e,e′).
13040 *20*	(4^+)	<47 keV	B T W	XREF: Others: AB, AE XREF: B(13050).
13086	(3^-)‡	26 keV *7*	B D T	XREF: Others: AE XREF: B(13110).
13220	$[3^-]$	<0.06 MeV	B	
13230	1		T	
13260 *50*	6^-		QR	E(level),Jπ: from ^{32}S(e,e′).
13268	(3^-)‡	49 keV *3*	B D TU	XREF: Others: AE, AG

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Adopted Levels, Gammas (continued)

^{32}S Levels (continued)

E(level)[†]	Jπ	$T_{1/2}$	XREF	Comments
				XREF: B(13270).
13339	(3⁻)	28.8 keV *13*	B D M T X	XREF: Others: AE, AG XREF: B(13360)D(13370). E(level): average of ^{31}P(p,α) and ^{28}Si(α,α). Jπ: from ^{31}P(p,α) angular distribution and L=(3) in ^{28}Si(α,α):res. $T_{1/2}$: from ^{28}Si(α,α):res.
13410 *10*	1⁺,(2⁻)		Q	
13430	3⁻,4⁻		N	
13490	(3⁻)[‡]	54 keV *5*	B D T W	XREF: Others: AE XREF: B(13500).
13540 *50*	5⁻		QR	
13588	(3⁻)[‡]	18 keV *4*	B D T WX	XREF: Others: AE XREF: B(13560).
13655	(3⁻)[‡]	74 keV *2*	D	
13696	(4⁺,3⁻)[‡]	23.6 keV *9*	B D TU X	XREF: Others: AE XREF: B(13620).
13760 *20*	6⁺	50 keV *24*		XREF: Others: AB
13780 *10*	1⁺		Q T	E(level),Jπ: from ^{32}S(e,e′).
13807	(3⁻)[‡]	47.4 keV *8*	B D T X	XREF: Others: AE, AG XREF: B(13670).
13870	(5⁻,3⁻)[‡]	22.0 keV *11*	B D T	XREF: Others: AE, AG XREF: B(13790).
13896	(4⁺)[‡]	22.4 keV *1*	B D T	XREF: Others: AE XREF: B(13830).
13900	1		T	
13970 *10*	1⁺,(2⁻)		Q	
14000 *20*	(7⁻)	50 keV *24*		XREF: Others: AB
14070	(3⁻)[‡]	29.6 keV *7*	B D T	XREF: Others: AE, AF XREF: B(14030).
14131	(5⁻)[‡]	15.2 keV *6*	B D T	XREF: Others: AF XREF: B(14110).
14177	(4⁺)[‡]	42.0 keV *11*	B D T X	XREF: Others: AF XREF: B(14160).
14234	(3⁻)[‡]	89 keV *2*	B D TU	XREF: Others: AF XREF: B(14220).
14290 *50*	6⁻		QR	
14429	(3⁻)[‡]	40 keV *2*	B D T	XREF: Others: AE, AF, AG XREF: B(14370).
14450 *10*	1⁺		Q	
14542	(4⁺,5⁻)[‡]	84.5 keV *11*	B D T W	XREF: Others: AF XREF: B(14550).
14633	(5⁻)[‡]	7.0 keV *9*	D	
14730	[4⁺]		B	
14770 *10*	2⁻	<0.08 MeV	Q	
14810 *20*	(8⁺)	91 keV *24*		XREF: Others: AB
14832	(4⁺)[‡]	37.5 keV *5*	B D T	XREF: Others: AF XREF: B(14810).
14878	(4⁺)[‡]	25.5 keV *7*	D	
14880	1		T	
15025	(4⁺)[‡]	30.5 keV *11*	B D T	XREF: Others: AF

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Adopted Levels, Gammas (continued)

^{32}S Levels (continued)

E(level)†	Jπ	$T_{1/2}$	XREF	Comments
				XREF: B(14980).
15040	1		T	
15116	(5⁻)‡	36 keV *2*	B D T W	XREF: Others: AF XREF: B(15140).
15.2×10³ *1*	6⁺	119 keV *24*		XREF: Others: AB
15230	(4⁺,5⁻)‡	18 keV *2*	B D TU W	XREF: Others: AE XREF: B(15230).
15344	(5⁻)‡	45.9 keV *1*	B D T W	XREF: Others: AE XREF: B(15330).
15385	(5⁻)‡	24.5 keV *6*	B D T W	XREF: Others: AE XREF: B(15380).
15441	(5⁻)‡	34.3 keV *3*	B D T W	XREF: Others: AF XREF: B(15440).
15527	(5⁻)‡	46.8 keV *3*	B D T W	XREF: Others: AE XREF: B(15530).
15580	1		T	
15600			F	
15631	(5⁻)‡	29.9 keV *3*	B D T WX	XREF: B(15610).
15686	(5⁻,6⁺)‡	35.9 keV *1*	B D TU W	XREF: Others: AG XREF: B(15720).
15700	1		T	
15758	(6⁺,5⁻)‡	41.0 keV *9*	B D T WX	XREF: Others: AG XREF: B(15760).
15840	1		T	
15847	(4⁺,5⁻)‡	47 keV *2*	B D TU W	XREF: B(15820).
15894	(5⁻,4⁺)‡	28.0 keV *8*	B D T W	XREF: B(15890).
15955	(6⁺)‡	21.6 keV *5*	B D T WX	XREF: B(15960).
16052	(5⁻)‡	54 keV *2*	B D T X	XREF: B(16060).
16243	(6⁺)‡	41.3 keV *8*	B D T X	XREF: B(16160).
16250	[5⁻]		B	
16310 *70*	6⁻		R	
16341	(5⁻)‡	86 keV *2*	B D T X	XREF: Others: AE XREF: B(16330).
16370	[5⁻]		B	
16430 *70*	6⁻		Q	
16495	(5⁻)‡	64 keV *3*	B D T X	XREF: Others: AF XREF: B(16480).
16615	(6⁺)‡	60 keV *2*	B D T WX	XREF: B(16650).
16650 *70*	6⁻		R	
16691	(5⁻,6⁺)‡	23 keV *2*	B D T X	XREF: B(16690).
16747	(6⁺)‡	45 keV *2*	B D T X	XREF: Others: AG XREF: B(16780).
16795	(6⁺)‡	76 keV *6*	D	
16866	(6⁺)‡	38.1 keV *6*	B D T X	XREF: Others: AG XREF: B(16870).
16920	(6⁺)‡	35.0 keV *8*	D	
16978	(6⁺)‡	47 keV *3*	B D T X	XREF: Others: AG XREF: B(16970).
17080	(6⁺)‡	58.0 keV *14*	B D T X	XREF: Others: AG XREF: B(17060).

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Adopted Levels, Gammas (continued)

^{32}S Levels (continued)

E(level)†	Jπ	$T_{1/2}$	XREF	Comments
17120 *70*	6^-		R	
17180 *80*	6^-		Q	
17250	(5^-)‡	92 keV *14*	B D TU X	XREF: Others: AG XREF: B(17260).
17393	(7^-)‡	35 keV *6*	B D T W	XREF: Others: AE, AG XREF: B(17350).
17420	$[7^-]$		B	
17570	$[7^-]$		B	
17656	(7^-)‡	36 keV *2*	B D T X	XREF: Others: AG XREF: B(17690).
17688	(7^-)‡	26 keV *2*	D	
17868	$(6^+,7^-)$‡	82 keV *7*	B D T	XREF: Others: AG XREF: B(17800).
17880	$[7^-]$		B	
17934	(7^-)‡	48 keV *4*	B D T	XREF: Others: AF, AG XREF: B(17940).
18042	(7^-)‡	44 keV *2*	B D T X	XREF: B(18060).
18213	(7^-)‡	76 keV *7*	B D TU	XREF: B(18220).
18400	$[9^-]$		B	
18458	(7^-)‡	66 keV *5*	B D T	XREF: Others: AF, AG XREF: B(18470).
18554	(7^-)‡	73.6 keV *14*	B D T WX	XREF: B(18560).
18660	(7^-)‡	74 keV *5*	B D T X	XREF: B(18660).
18736	(7^-)‡	75 keV *6*	B D T W	XREF: Others: AG XREF: B(18750).
18803	$(8^+,7^-)$‡	46 keV *3*	B D T	XREF: B(18890).
18810	$[7^-]$		B	
18986	$(8^+,7^-)$‡	34 keV *2*	B D T	XREF: B(18980).
19119	$(8^+,7^-)$‡	84 keV *7*	B D TU	XREF: B(19120).
19190	$[7^-]$		B	
19248	(8^+)‡	54 keV *10*	B D TU	XREF: Others: AE XREF: B(19320).
19250	$[7^-]$		B	
19442	$(7^-,8^+)$‡	72 keV *2*	B D T W	XREF: B(19500).
19450	$[7^-]$		B	
19551	(8^+)‡	75 keV *18*	B D T X	XREF: B(19610).
19653	(8^+)‡	54 keV *2*	B D T X	XREF: B(19690).
19747	$(8^+,7^-)$‡	79 keV *9*	B D T	XREF: B(19800).
20200	$[8^+]$		B	
20270	$[8^+]$		B	
20275	$(7^-,8^+)$‡	44 keV *4*	B D U	XREF: Others: AE XREF: B(20320).
20381	(8^+)‡	72 keV *17*	B D TU	XREF: Others: AF XREF: B(20410).
20485	(8^+)‡	84 keV *4*	B D U W	XREF: Others: AE XREF: B(20530).
20610	$[8^+]$		B	
20680	$[8^+]$		B	
20703	(8^+)‡	37 keV *4*	B D U W	XREF: Others: AG XREF: B(20750).

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Adopted Levels, Gammas (continued)

^{32}S Levels (continued)

E(level)†	Jπ	$T_{1/2}$	XREF	Comments
20800	[8+]		B	
20835	(8+)‡	59 keV *2*	B D U X	XREF: B(20860).
20950	[8+]		B	
21050	[9−]		B	
21212	(9−)‡	69 keV *3*	B D TU	XREF: B(21280).
21395	(9−)‡	70 keV *5*	B D TU	XREF: Others: AE, AF XREF: B(21430).
21457	(9−)‡	45 keV *4*	B D TU	XREF: Others: AF XREF: B(21490).
21532	(9−)‡	39 keV *10*	B D TU W	XREF: B(21590).
21720	[9−]		B	
21783	(8+,9−)‡	53 keV *2*	B D TU	XREF: B(21810).
22000	[9−]		B	
22135	(9−)‡	74 keV *4*	B D TU	XREF: Others: AG XREF: B(22170).
22205	(9−)‡	54 keV *9*	B D U	XREF: Others: AF XREF: B(22240).
22308	(9−)‡	47 keV *14*	B D TU	XREF: Others: AE XREF: B(22310).
22355	(8+)‡	24 keV *5*	B D U	XREF: Others: AE XREF: B(22390).
22590	[9−]		B	
22710	[9−]		B	
22846	(9−)‡	51 keV *5*	B D TU	XREF: B(22810).
22964	(10+,9−)‡	58 keV *3*	B D U	XREF: Others: AE XREF: B(23030).
23226	(9−)‡	74 keV *16*	B D TU X	XREF: Others: AE XREF: B(23160).
23296	(9−)‡	52 keV *7*	B D U X	XREF: Others: AE XREF: B(23260).
23430	[9−]		B	
23493	(10+)‡	93 keV *12*	B D U W	XREF: Others: AE, AG XREF: B(23750?).
23.86×10^3	7−‡	≈0.1 MeV	D	
24.93×10^3	8+‡	≈0.1 MeV	D	
26.90×10^3	11−‡	≈0.2 MeV	D	
27.25×10^3	9−‡	0.08 MeV	D	
27.44×10^3	8+‡	0.04 MeV	D	
27.69×10^3	9−‡	0.15 MeV	D	
27.82×10^3	9−‡	0.11 MeV	D	
28.04×10^3	10+‡	0.04 MeV	D	
28.17×10^3	10+‡	0.07 MeV	D	
28.30×10^3	8+‡	0.08 MeV	D	
28.48×10^3	10+‡	0.17 MeV	D	
28.67×10^3	10+‡	0.22 MeV	D	
28.97×10^3	10+‡	0.19 MeV	D	
29.25×10^3	9−‡	0.13 MeV	D	
29.66×10^3	10+‡	0.16 MeV	D	

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Adopted Levels, Gammas (continued)

^{32}S Levels (continued)

E(level)[†]	J^{π}	$T_{1/2}$	XREF
29.88×10^3	10^+[‡]	0.20 MeV	D
29.91×10^3	10^+[‡]	0.16 MeV	D
30.26×10^3	9^-[‡]	0.17 MeV	D
30.37×10^3	10^+[‡]	0.13 MeV	D
30.61×10^3	11^-[‡]	0.25 MeV	D
30.89×10^3	12^+[‡]	0.14 MeV	D
31.19×10^3	12^+[‡]	0.20 MeV	D
31.71×10^3	9^-[‡]	0.22 MeV	D
31.98×10^3	12^+[‡]	0.22 MeV	D
32.7×10^3		≈0.3 MeV	D
33.5×10^3		≈0.2 MeV	D

[†] From least-squares fit to Eγ data for levels populated in γ-ray studies. For others, weighted averages are taken when possible.
[‡] From L(α,α) for resonances (2003Ka07,2010Lo12); R-matrix analysis in 2010Lo12.

Adopted Levels, Gammas (continued)

$\gamma(^{32}S)$

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[†]	δ[†]	$I_{(\gamma+ce)}$	Comments
2230.57	2^+	2230.49 *15*	100	0	0^+	E2			E_γ: from $^{32}S(\gamma,\gamma')$.
3778.4	0^+	1548.8 *15*	100	2230.57	2^+	[E2]			B(E2)(W.u.)=11.8 *12*
		3778		0	0^+	[E0]		0.035 *6*	q_K^2(E0/E2)=0.044 *8*, X(E0/E2)=0.047 *9*, ρ^2=0.019 *5* (2005Ki02 evaluation).
									$I_{(\gamma+ce)}$: from $^{31}P(^3He,d)$ (1975Ad02). γ intensity <10.
4281.8	2^+	503.7	<0.4	3778.4	0^+				
		2052.6 *15*	14.9 *6*	2230.57	2^+	E2+M1	−26 *16*		B(M1)(W.u.)=1.2×10^{-5} *+15−12*; B(E2)(W.u.)=7.9 *9*
									Mult.,δ: from $^{31}P(p,p'\gamma)$.
		4281.5 *3*	100.0 *6*	0	0^+				E_γ: from $^{32}S(\gamma,\gamma')$.
4459.1	4^+	681.4	<0.3	3778.4	0^+				
		2229.4 *12*	100.0	2230.57	2^+	E2			B(E2)(W.u.)=14 *3*
		4458.4	<1.0	0	0^+				
4695.3	1^+	414.1	<0.98	4281.8	2^+				
		917.8	<0.65	3778.4	0^+				
		2466.0 *15*	100.0 *17*	2230.57	2^+	M1(+E2)	−0.08 *10*		B(M1)(W.u.)=(0.0031 *8*); B(E2)(W.u.)=(0.014 *+35−14*)
									Mult.,δ: note $^{31}P(p,p'\gamma)$ makes a case for a stronger E2 component.
		4694.0 *25*	63.9 *17*	0	0^+	[M1]			B(M1)(W.u.)=0.00029 *8*
5006.2	3^-	724.8	<0.1	4281.8	2^+				
		1228.4	<0.4	3778.4	0^+				
		2776.2 *12*	100.0 *5*	2230.57	2^+	E1(+M2)	0.00 *5*		B(E1)(W.u.)=$(5.8\times10^{-5}$ *4*)
		5005.4	3.5 *5*	0	0^+	E3			B(E3)(W.u.)=16 *3*
5412.6	3^+	406.2	<2	5006.2	3^-				
		716.9	<1	4695.3	1^+				
		953.3	<1	4459.1	4^+				
		1131.0	<6	4281.8	2^+				
		1634.6	<20	3778.4	0^+				
		3181.8	100	2230.57	2^+	E2+M1	+7.6 *19*		B(M1)(W.u.)=7.E−5 *4*; B(E2)(W.u.)=1.6 *3*
		5411.4	<5	0	0^+				
5548.5	2^+	541.2	<0.7	5006.2	3^-				
		851.9	<1.6	4695.3	1^+				
		1088.3	<3.3	4459.1	4^+				
		1265.9	<1.6	4281.8	2^+				
		1769.6	<1.6	3778.4	0^+				
		3318.5	100.0 *25*	2230.57	2^+	E2+M1	−5.2 *21*		B(M1)(W.u.)=0.00022 *18*; B(E2)(W.u.)=2.3 *3*
		5546.4	66.7 *25*	0	0^+				
5796.8	1^-	791.3	<1	5006.2	3^-				
		1102.0	<1	4695.3	1^+				
		1338.3	<1.5	4459.1	4^+				
		1516.0	<1	4281.8	2^+				
		2019.7	<1.5	3778.4	0^+				
		3566.8	<5	2230.57	2^+				

$^{32}_{16}S_{16}$-18

Adopted Levels, Gammas (continued)

$\gamma(^{32}S)$ (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[†]	δ[†]	Comments
5796.8	1^-	5796.3 *3*	100.0	0	0^+			E_γ: from $^{32}S(\gamma,\gamma')$.
6222.9	2^-	811.3	<0.2	5412.6	3^+			
		1217.5	3 *2*	5006.2	3^-			
		1528.1	<0.5	4695.3	1^+			
		1764.5	<0.6	4459.1	4^+			
		1942.2	<1.5	4281.8	2^+			
		2445.8	<0.8	3778.4	0^+			
		3993.0 *20*	100.0 *21*	2230.57	2^+	E1+M2	−0.07 *3*	B(E1)(W.u.)=0.00015 *3*; B(M2)(W.u.)=0.21 *19*
		6222.4	<1.5	0	0^+			
6411	4^+	4179	100.0	2230.57	2^+			
6621.7	4^-	1209.1	<1.2	5412.6	3^+	E1		B(E1)(W.u.)=5.E−6 *5*
		1615.2	100.0 *14*	5006.2	3^-	E2+M1	2.9 *8*	B(M1)(W.u.)=0.0011 *6*; B(E2)(W.u.)=15 *3*
		1925.9	<0.4	4695.3	1^+			
		2162.2	32.9 *10*	4459.1	4^+	E1(+M2)	−0.06 *2*	B(E1)(W.u.)=(4.4×10^{-5} *8*); B(M2)(W.u.)=(0.15 *11*)
		2339.9	<0.27	4281.8	2^+			
		2843.5	<0.82	3778.4	0^+			
		4390.6	4.1 *5*	2230.57	2^+	M2+E3	−0.41 *8*	B(M2)(W.u.)=0.13 *3*; B(E3)(W.u.)=8 *3*
		6620.0	<0.41	0	0^+			
6666.1	2^+	1253.3	<2	5412.6	3^+			
		1659.5	<8	5006.2	3^-			
		1970.2	29 *4*	4695.3	1^+			
		2206.5	<6	4459.1	4^+			
		2384.2	<14	4281.8	2^+			
		2887.9 *20*	100 *11*	3778.4	0^+			
		4434.8	76 *9*	2230.57	2^+			
		6664.3	<6	0	0^+			
6761.6	5^-	1349.1	<4	5412.6	3^+			
		1755.3	100 *4*	5006.2	3^-	[E2]		B(E2)(W.u.)=14 *3* Additional information 5.
		2066.0	<11	4695.3	1^+			
		2302.3	32 *14*	4459.1	4^+	E1+M2	−0.6	B(E1)(W.u.)=3.3×10^{-5} *16*; B(M2)(W.u.)=10 *5* Additional information 6.
		2480.0	<4	4281.8	2^+			
		2983.6	<5	3778.4	0^+			
		4530.6	<9	2230.57	2^+			
		6760.1	2.7 *14*	0	0^+			
6851.5	4^+	1439.9	13 *7*	5412.6	3^+			
		1846.1	<16.2	5006.2	3^-			
		2156.7	<6	4695.3	1^+			
		2393.1	13 *7*	4459.1	4^+	E2		Additional information 7. Mult.: from $^{29}Si(\alpha,n\gamma)$.
		2570.8	100 *13*	4281.8	2^+	E2		B(E2)(W.u.)=8 *3*

$^{32}_{16}S_{16}$-19

Adopted Levels, Gammas (continued)

$\gamma(^{32}S)$ (continued)

E_i(level)	J_i^π	E_γ †	I_γ †	E_f	J_f^π	Mult.†	δ†	Comments
								Additional information 8.
								δ: 0.93 *5*.
6851.5	4^+	3074.4	<10	3778.4	0^+			
		4621.4	<8.7	2230.57	2^+			
		6850.8	<10	0	0^+			
7001.4	1^+	1589.0	<1	5412.6	3^+			
		1995.1	<2	5006.2	3^-			
		2305.8	<1	4695.3	1^+			
		2542.1	<2	4459.1	4^+			
		2719.8	<2	4281.8	2^+			
		3223.4	10 *5*	3778.4	0^+			
		4770.5 *3*	100.0	2230.57	2^+			
		6999.8	<2	0	0^+			
7115.3	2^+	1702.8	<0.6	5412.6	3^+			
		2109.0	<1	5006.2	3^-			
		2419.6	10.5 *12*	4695.3	1^+			
		2656.0	<1	4459.1	4^+			
		2833.6	3.5 *12*	4281.8	2^+			
		3337.2	3.5 *24*	3778.4	0^+			
		4884.2	100.0 *24*	2230.57	2^+	M1+E2	−0.38 *3*	B(M1)(W.u.)=0.079 *17*; B(E2)(W.u.)=2.0 *5*
		7113.6	2.3 *6*	0	0^+			
7190.1	1^+	2183.7	<47	5006.2	3^-			
		2494.4	<42	4695.3	1^+			
		2730.7	<92	4459.1	4^+			
		2908.4	<59	4281.8	2^+			
		3412.0	<93	3778.4	0^+			
		4959.0	100 *21*	2230.57	2^+			
		7188.4	69 *21*	0	0^+			
7350.0	$3^{(+)}$	2654.2	100.0	4695.3	1^+			
7434	1^-	3150	33 *17*	4281.8	2^+			
		5203	33 *17*	2230.57	2^+			
		7432	100 *25*	0	0^+			
7484.0	2^+	2071.4	<10	5412.6	3^+			
		2477.5	<9	5006.2	3^-			
		2788.1	<6	4695.3	1^+			
		3024.5	<14	4459.1	4^+			
		3202.2	<13	4281.8	2^+			
		3705.7	<15	3778.4	0^+			
		5252.8 *6*	<7	2230.57	2^+			E_γ: from $^{32}S(\gamma,\gamma')$.
		7483.2 *5*	100.0	0	0^+	E2		B(E2)(W.u.)=0.49 *11* E_γ: from $^{32}S(\gamma,\gamma')$.

$^{32}_{16}S_{16}$-20

Adopted Levels, Gammas (continued)

γ(^{32}S) (continued)

E_i(level)	J_i^π	E_γ †	I_γ †	E_f	J_f^π	Mult.†	δ†	Comments
7535.7	0^+	2123.1	<10	5412.6	3^+			
		2529.3	<5	5006.2	3^-			
		2839.9	100.0	4695.3	1^+			
		3076.3	<6	4459.1	4^+			
		3253.9	<8	4281.8	2^+			
		3757.5	<11	3778.4	0^+			
		5304.5	<14	2230.57	2^+			
		7533.8	<7	0	0^+			
7566.8	5^+	2154	43 *14*	5412.6	3^+			E_γ,I_γ: from ^{29}Si(α,nγ).
		3108.4 *12*	100 *14*	4459.1	4^+	E2+M1	−9.7 *15*	E_γ,I_γ: from ^{29}Si(α,nγ). Additional information 9. Mult.,δ: from ^{29}Si(α,nγ).
7637.0	1	3355.2	100	4281.8	2^+			
7701.44	3^-	2288.9	<50	5412.6	3^+			
		2695.0	<50	5006.2	3^-			
		3005.6	<50	4695.3	1^+			
		3242.0	<50	4459.1	4^+			
		3419.6	<70	4281.8	2^+			
		3923.2	<45	3778.4	0^+			
		5470.1	100.0	2230.57	2^+			
		7699.5	<60	0	0^+			
7882.9	4^+	2335.3	15 *7*	5548.5	2^+			
		2876.4	19 *7*	5006.2	3^-			
		5651.5	100 *7*	2230.57	2^+			
7921.0	1^+	x	11 *11*					Additional information 10.
		5689.6	100 *11*	2230.57	2^+			
7950.1	4^-	2537.5	67 *17*	5412.6	3^+			
		2943.6	100 *12*	5006.2	3^-			
		3254.2	<5	4695.3	1^+			
		3490.6	<13	4459.1	4^+			
		3668.2	<16	4281.8	2^+			
		4171.8	<3	3778.4	0^+			
		5718.7	<7	2230.57	2^+			
		7948.0	<0.8	0	0^+			
7974.9	4^-	x	62					Additional information 11.
		2968.4	38 *10*	5006.2	3^-			
		5743.4	100 *10*	2230.57	2^+			
8125.40	1^+	2712.7	<5	5412.6	3^+			
		3118.8	<2	5006.2	3^-			
		3429.4	<5	4695.3	1^+			
		3665.8	<5	4459.1	4^+			

$^{32}_{16}S_{16}$-21

Adopted Levels, Gammas (continued)

$\gamma(^{32}S)$ (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[†]	δ[†]	Comments
8125.40	1^+	3843.4	<4	4281.8	2^+			
		4347.0	<12	3778.4	0^+			
		5894.32 *28*	18 *6*	2230.57	2^+			E_γ: from $^{32}S(\gamma,\gamma')$.
		8124.12 *24*	100 *6*	0	0^+			E_γ: from $^{32}S(\gamma,\gamma')$.
8191.1	4	2643.4	100 *20*	5548.5	2^+			
		2778.4	80 *17*	5412.6	3^+			
		3731.5	93 *20*	4459.1	4^+			
		3909.1	60 *10*	4281.8	2^+			
8270.3	$3^-,5^-$	3264	100	5006.2	3^-	M1+E2	−1.5 *14*	E_γ,I_γ: from $^{29}Si(\alpha,n\gamma)$. Additional information 12. Mult.,δ: from $^{29}Si(\alpha,n\gamma)$.
8296.1	3^-	x	35					Additional information 13.
		4014.1	50 *17*	4281.8	2^+			
		6064.5	100 *17*	2230.57	2^+			
8346.4	4^+	3886.1 *15*	100	4459.1	4^+	M1+E2	−1.3 *4*	E_γ,I_γ: from $^{29}Si(\alpha,n\gamma)$. Additional information 14. Mult.,δ: from $^{29}Si(\alpha,n\gamma)$ for J=4.
8407.0	2	x	59					Additional information 15.
		3711.0	20 *4*	4695.3	1^+			
		4125.0	18 *4*	4281.8	2^+			
		4628.1	100 *10*	3778.4	0^+			
8499.3	1^-	4212[‡]	<13	4281.8	2^+			
		4716[‡]	<5	3778.4	0^+			
		6267.9[‡] *5*	66 *6*	2230.57	2^+			E_γ: from $^{32}S(\gamma,\gamma')$.
		8494.4[‡] *8*	100 *6*	0	0^+			E_γ: from $^{32}S(\gamma,\gamma')$.
8687.6		4909[‡]	21 *7*	3778.4	0^+			
		6459[‡]	100 *9*	2230.57	2^+			
		8687[‡]	57 *7*	0	0^+			
8729.3	3^+	x	311					Additional information 16.
		1876.7	56 *12*	6851.5	4^+			
		2107.6	89 *17*	6621.7	4^-			
		3316.5	100 *17*	5412.6	3^+			
8745.6	3	1893.0	30 *13*	6851.5	4^+			
		2123.9	85 *13*	6621.7	4^-			
		2335.4	100 *13*	6411	4^+			
		3197.8	20 *10*	5548.5	2^+			
		3332.8	18 *8*	5412.6	3^+			
8861	2^+	5080[‡]	27 *8*	3778.4	0^+			
		6630[‡]	65 *8*	2230.57	2^+			

$^{32}_{16}S_{16}$-22

Adopted Levels, Gammas (continued)

γ(^{32}S) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[†]	δ[†]	Comments
8861	2^+	8858[‡]	100 *10*	0	0^+			
9023.8	4^-	2262	100 *9*	6761.6	5^-	M1+E2	−1.5 *10*	E_γ,I_γ: from ^{29}Si(α,nγ). Additional information 17. Mult.,δ: from ^{29}Si(α,nγ).
		2402	43 *9*	6621.7	4^-	M1+E2	+4.3 *10*	E_γ,I_γ: from ^{29}Si(α,nγ). Additional information 18. Mult.,δ: from ^{29}Si(α,nγ).
		4008[‡]	31 *3*	5006.2	3^-			
		4742[‡]	33 *3*	4281.8	2^+			
		6791[‡]	100 *3*	2230.57	2^+			
9065		3654[‡]	100 *5*	5412.6	3^+			
		4604[‡]	95 *5*	4459.1	4^+			
		4784[‡]	40 *7*	4281.8	2^+			
9170	3^+	4711	100	4459.1	4^+			E_γ,I_γ: from ^{29}Si(α,nγ).
9207.55	1^+	911.4	<3	8296.1	3^-			
		1324.6	<3	7882.9	4^+			
		2017.31	8.1 *21*	7190.1	1^+			
		2983.6	26.4 *24*	6222.9	2^-			
		3409.7	18 *4*	5796.8	1^-			
		3659.7	21 *4*	5548.5	2^+			
		4747.6	8.7 *18*	4459.1	4^+			
		4925.5	6.1 *18*	4281.8	2^+			
		5428.9	11.9 *18*	3778.4	0^+			
		6975.0 *5*	99 *6*	2230.57	2^+			E_γ: from ^{32}S(γ,γ′).
		9206.1 *7*	100 *6*	0	0^+	M1		B(M1)(W.u.)=0.0022 *8* δ(E2/M1)=−0.14 *4*.
9235.2	1^-	4538.8	36 *17*	4695.3	1^+			
		5456.3	100 *3*	3778.4	0^+			
		7003.1	77 *20*	2230.57	2^+			
		9234[‡]	2.2 *15*	0	0^+			
9253	2^+	2587.0	28 *5*	6666.1	2^+			
		3029.0	19 *4*	6222.9	2^-			
		3705.1	13 *4*	5548.5	2^+			
		3840.1	16 *5*	5412.6	3^+			
		4246.3	44 *7*	5006.2	3^-			
		4556.8	77 *8*	4695.3	1^+			
		4971.0	18 *4*	4281.8	2^+			
		7021.0	100 *10*	2230.57	2^+			
9289.0	1^+	789	10 *3*	8499.3	1^-			

$^{32}_{16}S_{16}$-23

Adopted Levels, Gammas (continued)

γ(^{32}S) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[†]	δ[†]	Comments
9289.0	1+	1163.6	<2	8125.40	1+			
		1753.2	14.0 *13*	7535.7	0+			
		2173.5	39.1 *23*	7115.3	2+			
		2287.4	2.5 *5*	7001.4	1+			
		2623.0	<1	6666.1	2+			
		2667.3	<1	6621.7	4−			
		3065.0	6.3 *8*	6222.9	2−			
		3491.1	2.8 *5*	5796.8	1−			
		3741.1	<4	5548.5	2+			
		3876.1	<2	5412.6	3+			
		4282.2	<3	5006.2	3−			
		4592.8	39.1 *23*	4695.3	1+			
		4829.1	<2	4459.1	4+			Additional information 19.
		5006.8	<3	4281.8	2+			
		5510.3	<2	3778.4	0+			
		7057.0	46.9 *23*	2230.57	2+	M1(+E2)	0.01 *1*	
		9286.1	100 *5*	0	0+			
9388	2+	1262.6	2.08 *16*	8125.40	1+			
		2626.2	<0.6	6761.6	5−			
		2722.0	<0.6	6666.1	2+			
		2766.2	2.1 *5*	6621.7	4−			
		3164.0	25.4 *12*	6222.9	2−			
		3590.1	3.0 *5*	5796.8	1−			
		3840.1	2.7 *5*	5548.5	2+			
		3975.1	1.44 *16*	5412.6	3+			
		4381.2	12.5 *7*	5006.2	3−			
		4691.8	3.2 *4*	4695.3	1+			
		4928.1	<0.9	4459.1	4+			
		5105.7	3.0 *4*	4281.8	2+			
		5609.2	<0.8	3778.4	0+			
		7156.0	100 *4*	2230.57	2+			
		9385.0	4.0 *16*	0	0+			
9463.4	5−,7−	2701	100	6761.6	5−	M1+E2	−0.82 *25*	E_γ,I_γ: from ^{29}Si(α,nγ). Additional information 20. Mult.,δ: from ^{29}Si(α,nγ).
9466.0	2+	2347.8	13 *4*	7115.3	2+			
		3675[‡]	12 *4*	5796.8	1−			
		4455[‡]	12 *4*	5006.2	3−			
		4767.0	50 *8*	4695.3	1+			
		5005[‡]	12 *4*	4459.1	4+			
		5684.5	11 *3*	3778.4	0+			

$^{32}_{16}S_{16}$-24

Adopted Levels, Gammas (continued)

γ(^{32}S) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[†]	δ[†]	Comments
9466.0	2^+	7233.7	62 *8*	2230.57	2^+			
		9462.3	100 *8*	0	0^+			
9485.7	1^-	1360	3.5	8125.40	1^+			
		2370.2	<9.7	7115.3	2^+			
		2860	8.2	6621.7	4^-			
		3261.6	<2.8	6222.9	2^-			
		3687.7	4.2 *10*	5796.8	1^-			
		3937.8	<2.3	5548.5	2^+			
		4072.7	<1.6	5412.6	3^+			
		4478.8	3.6 *9*	5006.2	3^-			
		4789.4	<3.5	4695.3	1^+			
		5025.8	<0.9	4459.1	4^+			
		5203.4	9.4 *12*	4281.8	2^+			
		5706.9	<2.1	3778.4	0^+			
		7253.6	<2.7	2230.57	2^+			
		9482.7	100 *9*	0	0^+			
9634.6	4^-,6^+	3015.3	100	6621.7	4^-	M1+E2	−1.1 *3*	E_γ,I_γ: from ^{29}Si(α,nγ). Additional information 21. Mult.,δ: from ^{29}Si(α,nγ).
9650.2	2^+	2220	1.7	7434	1^-			
		3426.1	<1	6222.9	2^-			
		3852.2	<1.4	5796.8	1^-			
		4102.2	<0.9	5548.5	2^+			
		4237.2	2.9 *7*	5412.6	3^+			
		4643.3	<1	5006.2	3^-			
		4953.9	69 *6*	4695.3	1^+			
		5190.2	<2	4459.1	4^+			
		5367.8	<0.7	4281.8	2^+			
		5871.3	<0.7	3778.4	0^+			
		7418.1	100 *9*	2230.57	2^+			
9660.1	1^+	2174.9	0.37 *13*	7484.0	2^+			
		2468.7	2.6 *12*	7190.1	1^+			
		3434.9	<0.4	6222.9	2^-			
		3861.0	<0.9	5796.8	1^-			
		4111.0	2.7 *4*	5548.5	2^+			
		4246.0	<0.2	5412.6	3^+			
		4652.1	<0.4	5006.2	3^-			
		4962.7	2.8 *13*	4695.3	1^+			
		5199.0	<0.5	4459.1	4^+			
		5376.6	<0.2	4281.8	2^+			
		5880.1	2.2 *4*	3778.4	0^+			

$^{32}_{16}S_{16}$-25

Adopted Levels, Gammas (continued)

$\gamma(^{32}S)$ (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π
9660.1	1^+	7426.8	12.3 *13*	2230.57	2^+
		9655.9	100 *10*	0	0^+
9711.9	2^+	1586.5	6.7 *17*	8125.40	1^+
		2596.4	7.2 *12*	7115.3	2^+
		2710.2	7.2 *12*	7001.4	1^+
		3487.8	<4	6222.9	2^-
		3913.9	8.4 *21*	5796.8	1^-
		4163.9	<4	5548.5	2^+
		4298.9	<3	5412.6	3^+
		4705.0	4.88 *24*	5006.2	3^-
		5015.6	60 *5*	4695.3	1^+
		5251.9	2.8 *12*	4459.1	4^+
		5429.5	6.5 *19*	4281.8	2^+
		5933.0	14.9 *5*	3778.4	0^+
		7479.7	100 *17*	2230.57	2^+
		9708.7	15.3 *17*	0	0^+
9724	2,3,4	1773.8	<2	7950.1	4^-
		2022.9	2.4 *13*	7701.44	3^-
		2188.1	<1	7535.7	0^+
		2608.5	<1	7115.3	2^+
		2962.1	12.4 *5*	6761.6	5^-
		3102.2	100 *8*	6621.7	4^-
		3499.9	32 *4*	6222.9	2^-
		3926.0	<1	5796.8	1^-
		4176.0	<2	5548.5	2^+
		4311.0	<2	5412.6	3^+
		4717.1	95 *8*	5006.2	3^-
		5027.7	<2	4695.3	1^+
		5264.0	<2	4459.1	4^+
		5441.6	<2	4281.8	2^+
		5945.1	<3	3778.4	0^+
		7491.8	2.0 *5*	2230.57	2^+
		9720.8	<1	0	0^+
9731	1^-,2^-	1605.6	19 *3*	8125.40	1^+
		1780.8	5.5 *14*	7950.1	4^-
		2029.9	<3	7701.44	3^-
		2615.5	9	7115.3	2^+
		3109.2	<1	6621.7	4^-
		3506.9	91 *9*	6222.9	2^-
		3933.0	91 *9*	5796.8	1^-
		4183.0	4.5 *23*	5548.5	2^+
		4318.0	<6	5412.6	3^+

$^{32}_{16}S_{16}$-26

Adopted Levels, Gammas (continued)

γ(^{32}S) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Comments
9731	1⁻,2⁻	4724.1	14 *7*	5006.2	3⁻	
		5034.6	24 *4*	4695.3	1⁺	
		5271.0	<2	4459.1	4⁺	
		5448.6	100 *9*	4281.8	2⁺	
		5952.1	<4	3778.4	0⁺	
		7498.8	86 *9*	2230.57	2⁺	
		9727.8	18.2 *23*	0	0⁺	
9783	6	5324	100	4459.1	4⁺	E_γ,I_γ: from ^{29}Si(α,nγ). Additional information 22. Mult.,δ: from ^{29}Si(α,nγ).
9816.8	3⁻,4⁻	2701.3	17.2 *12*	7115.3	2⁺	
		3195.0	<1.2	6621.7	4⁻	
		3592.7	11.2 *14*	6222.9	2⁻	
		4018.8	5.4 *6*	5796.8	1⁻	
		4268.8	<1.4	5548.5	2⁺	
		4403.7	<3	5412.6	3⁺	
		4809.8	100 *6*	5006.2	3⁻	
		5120.4	<1.8	4695.3	1⁺	
		5356.7	3.4 *8*	4459.1	4⁺	
		5534.4	20 *4*	4281.8	2⁺	
		6037.9	<1.6	3778.4	0⁺	
		7584.6	40 *4*	2230.57	2⁺	
		9813.6	1.4 *4*	0	0⁺	
9848	1⁻	2732.4	53 *4*	7115.3	2⁺	
		3181.9	<2.7	6666.1	2⁺	
		3226.2	<1	6621.7	4⁻	
		3623.9	<4.3	6222.9	2⁻	
		4049.9	11.18 *20*	5796.8	1⁻	
		4300.0	<1.8	5548.5	2⁺	
		4434.9	<3.3	5412.6	3⁺	
		4841.0	<2	5006.2	3⁻	
		5151.6	4.7 *10*	4695.3	1⁺	
		5387.9	<2.5	4459.1	4⁺	
		5565.6	3.5 *12*	4281.8	2⁺	
		6069.1	<1	3778.4	0⁺	
		7615.8	100 *8*	2230.57	2⁺	
		9844.7	19.6 *20*	0	0⁺	
9887.3	2⁺,3⁺	2771.7	100 *14*	7115.3	2⁺	
		2885.6	53 *7*	7001.4	1⁺	
		3221.2	8.0 *9*	6666.1	2⁺	
		3663.1	<1.1	6222.9	2⁻	

$^{32}_{16}S_{16}$-27

Adopted Levels, Gammas (continued)

γ(^{32}S) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π
9887.3	$2^+,3^+$	4089.2	<0.7	5796.8	1^-
		4339.3	24.4 *23*	5548.5	2^+
		4474.2	<2.6	5412.6	3^+
		4880.3	<15.5	5006.2	3^-
		5190.9	11.11 *23*	4695.3	1^+
		5427.2	0.44 *23*	4459.1	4^+
		5604.8	8.4 *12*	4281.8	2^+
		6108.3	<1.3	3778.4	0^+
		7655.0	22.2 *23*	2230.57	2^+
		9884.0	3.8 *5*	0	0^+
9919.3	2^+	2383.4	2.0 *10*	7535.7	0^+
		2435.2	7.1 *8*	7484.0	2^+
		2803.7	22.0 *25*	7115.3	2^+
		3066.6	18.05 *25*	6851.5	4^+
		3253.1	<12.2	6666.1	2^+
		3297.4	<2.7	6621.7	4^-
		3695.1	<5.6	6222.9	2^-
		4121.2	<3.2	5796.8	1^-
		4371.3	85 *8*	5548.5	2^+
		4506.2	6.59 *25*	5412.6	3^+
		4912.3	<2.7	5006.2	3^-
		5222.9	<26.8	4695.3	1^+
		5459.2	<3.4	4459.1	4^+
		5636.8	2.9 *17*	4281.8	2^+
		6140.3	<3.2	3778.4	0^+
		7687.0	100 *10*	2230.57	2^+
		9916.0	<2.7	0	0^+
9946.6	1^-	1821.2	10.3 *8*	8125.40	1^+
		2831.0	2.0 *3*	7115.3	2^+
		2944.9	0.53 *14*	7001.4	1^+
		3324.7	<0.7	6621.7	4^-
		3722.4	<0.5	6222.9	2^-
		4148.5	<0.4	5796.8	1^-
		4398.6	<1	5548.5	2^+
		4533.5	<0.4	5412.6	3^+
		4939.6	<0.4	5006.2	3^-
		5250.2	2.0 *4*	4695.3	1^+
		5486.5	<1.3	4459.1	4^+
		5664.1	2.9 *4*	4281.8	2^+
		6167.6	3.7 *8*	3778.4	0^+
		7714.3	10.7 *12*	2230.57	2^+
		9943.3	100 *10*	0	0^+
9977.9	4	3356.4	51 *7*	6621.7	4^-
		3754.1	53 *7*	6222.9	2^-
		4971.3	100 *9*	5006.2	3^-
9978.3	3	1634.2	2.2 *6*	8346.4	4^+
		2276.9[#]		7701.44	3^-
		2494.2	10.8 *11*	7484.0	2^+
		2628.3	8.1	7350.0	$3^{(+)}$
		2862.7	13.2 *14*	7115.3	2^+
		2976.2	3.5 *6*	7001.4	1^+
		3125.6	19.5 *19*	6851.5	4^+
		3312.1	<1.6	6666.1	2^+
		3356.4	9.5 *9*	6621.7	4^-
		4180.2	3.0 *9*	5796.8	1^-
		4430.2	84 *9*	5548.5	2^+
		4565.2	17.8 *17*	5412.6	3^+
		5281.9	<1.1	4695.3	1^+
		5518.2	20.8 *22*	4459.1	4^+
		5695.8	<2.7	4281.8	2^+
		6199.3	<2.4	3778.4	0^+
		7746.0	100 *9*	2230.57	2^+
		9975.0	0.8	0	0^+
9982.7	$2,0^+$	2867.1	1.3 *5*	7115.3	2^+
		2981.0	2.9 *8*	7001.4	1^+
		3130.0	1.3 *4*	6851.5	4^+
		3360.8	1.9 *7*	6621.7	4^-
		3758.5	<1.8	6222.9	2^-
		4184.6	<1.4	5796.8	1^-
		4434.6	15.2 *15*	5548.5	2^+
		4569.6	<1.6	5412.6	3^+
		4975.7	<1.6	5006.2	3^-
		5286.3	34 *4*	4695.3	1^+
		5522.6	<1.4	4459.1	4^+
		5700.2	2.6 *8*	4281.8	2^+
		6203.7	<0.9	3778.4	0^+
		7750.4	100 *10*	2230.57	2^+
		9979.4	1.13 *17*	0	0^+
10073.4	2^-	1574.0	0.41 *21*	8499.3	1^-
		1777.2	0.8 *4*	8296.1	3^-
		1948.0	0.61 *21*	8125.40	1^+
		2372.2	0.61 *21*	7701.44	3^-
		2957.8	1.4 *7*	7115.3	2^+
		3407.2	<1.4	6666.1	2^+

$^{32}_{16}S_{16}$-28

Adopted Levels, Gammas (continued)

γ(^{32}S) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[†]	δ[†]
10073.4	2⁻	3451.5	<1.4	6621.7	4⁻		
		3849.2	100 *4*	6222.9	2⁻		
		4275.3	<3.0	5796.8	1⁻		
		4525.3	<1.4	5548.5	2⁺		
		4660.3	8.8 *7*	5412.6	3⁺		
		5066.3	28.2 *15*	5006.2	3⁻		
		5376.9	1.43 *21*	4695.3	1⁺		
		5613.2	<1	4459.1	4⁺		
		5790.9	3.06 *21*	4281.8	2⁺		
		6294.4	<0.8	3778.4	0⁺		
		7841.0	60 *3*	2230.57	2⁺		
		10070.0	3.47 *21*	0	0⁺	M2	
10102.3	4(+)	4689.3	16.5 *15*	5412.6	3⁺		
		5095.4	49.8 *15*	5006.2	3⁻		
		5642.2	46.7 *15*	4459.1	4⁺		
		5820.1	22.9 *12*	4281.8	2⁺		
		7870.0	100.0 *22*	2230.57	2⁺		
10218.8	3⁺	2734.6	2.7 *5*	7484.0	2⁺		
		3028.4	1.22 *25*	7190.1	1⁺		
		3103.2	100 *8*	7115.3	2⁺		
		3552.6	1.7 *5*	6666.1	2⁺		
		3596.9	<1.5	6621.7	4⁻		
		3994.6	<1.7	6222.9	2⁻		
		4420.6	<1.5	5796.8	1⁻		
		4670.7	16.6 *17*	5548.5	2⁺		
		4805.6	7.1 *8*	5412.6	3⁺		
		5211.7	12.0 *17*	5006.2	3⁻		
		5522.3	46 *5*	4695.3	1⁺		
		5758.6	12.9 *13*	4459.1	4⁺		
		5936.2	16.6 *15*	4281.8	2⁺		
		6439.7	<1.7	3778.4	0⁺		
		7986.4	29.3 *25*	2230.57	2⁺		
		10215.3	3.9 *5*	0	0⁺		
10221.2	3⁻	2737.0	<0.65	7484.0	2⁺		
		3105.6	3.2 *25*	7115.3	2⁺	E1+M2	+0.233 *17*
		3555.0	1.1 *4*	6666.1	2⁺		
		3599.3	<0.96	6621.7	4⁻		
		3997.0	<0.96	6222.9	2⁻		
		4423.0	<1.3	5796.8	1⁻		
		4673.1	<1.6	5548.5	2⁺		
		4808.0	0.6 *4*	5412.6	3⁺		

$^{32}_{16}S_{16}$-29

Adopted Levels, Gammas (continued)

γ(^{32}S) (continued)

E_i(level)	J_i^π	E_γ †	I_γ †	E_f	J_f^π	Mult.†	δ†	Comments
10221.2	3⁻	5214.1	100 *8*	5006.2	3⁻	D(+Q)	−0.06 *6*	δ: from ^{28}Si(α,γ).
		5524.7	<1.6	4695.3	1⁺	M2+E3	−0.22 *7*	
		5761.0	34 *4*	4459.1	4⁺	D+Q	−0.09 *2*	δ: from ^{28}Si(α,γ).
		5938.6	<1.6	4281.8	2⁺			
		6442.1	<0.32	3778.4	0⁺			
		7988.8	22.6 *17*	2230.57	2⁺	E1+M2	−0.70 *5*	δ: other: +0.11 *5* from ^{28}Si(α,γ).
		10217.7	0.5 *4*	0	0⁺			
10230.3	1⁺	2694.4	11.5 *15*	7535.7	0⁺			
		3039.9	1.9 *5*	7190.1	1⁺			
		3114.7	6.8 *22*	7115.3	2⁺			
		3228.5	100 *7*	7001.4	1⁺			
		3377.5	<2	6851.5	4⁺			
		3468.3	<2.3	6761.6	5⁻			
		3564.1	<2	6666.1	2⁺			
		3608.4	<1.9	6621.7	4⁻			
		4006.1	8.9 *20*	6222.9	2⁻			
		4432.1	<2	5796.8	1⁻			
		4682.2	5.3 *11*	5548.5	2⁺			
		4817.1	6.8 *7*	5412.6	3⁺			
		5223.2	<3	5006.2	3⁻			
		5533.8	9.1 *13*	4695.3	1⁺			
		5770.1	<2.1	4459.1	4⁺			
		5947.7	23.4 *22*	4281.8	2⁺			
		6451.2	6.0 *13*	3778.4	0⁺			
		7997.9	19.1 *20*	2230.57	2⁺			
		10226.8	16.2 *17*	0	0⁺			
10256.1	4⁻	2305.8	7.4 *8*	7950.1	4⁻			
		2554.9	<0.4	7701.44	3⁻			
		2906.1		7350.0	3⁽⁺⁾			
		3406.1		6851.5	4⁺			
		3494.1	3.4 *8*	6761.6	5⁻			
		3634.2	100 *7*	6621.7	4⁻	M1+E2	−0.9 *3*	
		3845.6	0.7 *3*	6411	4⁺			
		4708.0	<0.4	5548.5	2⁺			
		4842.9	<0.3	5412.6	3⁺			
		5249.0	6.2 *7*	5006.2	3⁻	M1+E2	+0.2 *1*	
		5559.6	<0.13	4695.3	1⁺			
		5795.9	12.8 *10*	4459.1	4⁺	E1+M2	−0.9 *3*	
		5973.5	<0.3	4281.8	2⁺			
		6477.0	<0.1	3778.4	0⁺			
		8023.6	1.18 *14*	2230.57	2⁺			

$^{32}_{16}S_{16}$-30

Adopted Levels, Gammas (continued)

γ(^{32}S) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[†]	δ[†]
10256.1	4⁻	10252.6	<0.4	0	0⁺	10370.6	2⁺	3517.8	<1.5	6851.5	4⁺		
10286.3	3⁻	5279.2	100.0	5006.2	3⁻			3704.3	35.0 *25*	6666.1	2⁺		
		5826.1	20.2	4459.1	4⁺			3748.6	<1.5	6621.7	4⁻		
		8053.8	14.8	2230.57	2⁺			4146.3	5.0 *8*	6222.9	2⁻		
		10282.8	9.6	0	0⁺			4572.4	<1.5	5796.8	1⁻		
10290.2	2	2164.7	10 *3*	8125.40	1⁺			4822.4	6.8 *8*	5548.5	2⁺		
		2806.0	<6.6	7484.0	2⁺			4957.4	30.0 *25*	5412.6	3⁺		
		3288.4	4.3	7001.4	1⁺			5363.4	5.8 *5*	5006.2	3⁻		
		3624.0	5 *3*	6666.1	2⁺			5674.0	23.0 *18*	4695.3	1⁺		
		3668.2	<4	6621.7	4⁻			5910.3	<0.75	4459.1	4⁺		
		4065.9	83 *6*	6222.9	2⁻			6088.0	100 *8*	4281.8	2⁺		
		4492.0	6.9 *23*	5796.8	1⁻			6591.4	1.5 *5*	3778.4	0⁺		
		4742.0	<4.9	5548.5	2⁺			8138.1	30.0 *25*	2230.57	2⁺		
		4877.0	6.3 *23*	5412.6	3⁺			10367.0	2.5 *5*	0	0⁺		
		5283.1	69 *3*	5006.2	3⁻	10396.7	4⁻	2271.2	1.0 *6*	8125.40	1⁺		
		5593.7	<2.9	4695.3	1⁺			2421.6	<0.5	7974.9	4⁻		
		5830.0	<8.6	4459.1	4⁺			2446.4	4.8 *5*	7950.1	4⁻		
		6007.6	8.0 *12*	4281.8	2⁺			2695.5	<0.3	7701.44	3⁻		
		6511.1	<4.3	3778.4	0⁺			2829.4	0.4 *8*	7566.8	5⁺		
		8057.7	100 *12*	2230.57	2⁺			3029.3	0.85 *14*	7367			
		10286.6	11.4 *12*	0	0⁺			3394.9	0.37 *9*	7001.4	1⁺		
10331.1	1⁻	2205.6	7.4 *15*	8125.40	1⁺			3543.9	1.6 *6*	6851.5	4⁺		
		3329.3	<3	7001.4	1⁺			3634.7	2.7 *21*	6761.6	5⁻		
		3569.1	<4.2	6761.6	5⁻			3774.7	100 *6*	6621.7	4⁻	M1+E2	+0.9 *3*
		3664.8	<3.2	6666.1	2⁺			3986.2	0.61 *25*	6411	4⁺		
		3709.1	<3.8	6621.7	4⁻			4172.4	<2.4	6222.9	2⁻		
		4106.8	<3.7	6222.9	2⁻			4598.5	0.37 *8*	5796.8	1⁻		
		4532.9	<5	5796.8	1⁻			4848.5	<0.6	5548.5	2⁺		
		4782.9	<16.2	5548.5	2⁺			4983.5	0.12 *4*	5412.6	3⁺		
		4917.9	<3.8	5412.6	3⁺			5389.5	7.8 *6*	5006.2	3⁻	M1+E2	+0.2 *1*
		5323.9	<1.9	5006.2	3⁻			5700.1	<0.4	4695.3	1⁺		
		5634.5	17.6 *15*	4695.3	1⁺			5936.4	1.7 *5*	4459.1	4⁺		
		5870.8	<1.9	4459.1	4⁺			6114.0	2.2 *6*	4281.8	2⁺		
		6048.5	<1.2	4281.8	2⁺			6617.5	0.37 *24*	3778.4	0⁺		
		6552.0	<3.4	3778.4	0⁺			8164.2	1.0 *4*	2230.57	2⁺		
		8098.6	100 *9*	2230.57	2⁺			10393.1	<1.1	0	0⁺		
		10327.5	22 *3*	0	0⁺	10507.9		3317.4	7.7 *8*	7190.1	1⁺		
10370.6	2⁺	2886.4	6.5 *23*	7484.0	2⁺			3392.2	100.0 *19*	7115.3	2⁺		
		3020.3[#]	0.75	7350.0	3⁽⁺⁾			3506.0	<8	7001.4	1⁺		
		3180.2	3.0 *23*	7190.1	1⁺			3655.1	<3	6851.5	4⁺		
		3368.8	0.50 *18*	7001.4	1⁺			3745.8	<3	6761.6	5⁻		

$^{32}_{16}S_{16}$-31

Adopted Levels, Gammas (continued)

γ(^{32}S) (continued)

E_i(level)	J_i^π	E_γ †	I_γ †	E_f	J_f^π
10507.9		3841.6	3.0 *6*	6666.1	2^+
		3885.9	<3	6621.7	4^-
		4283.6	<14.8	6222.9	2^-
		4709.7	4.0 *4*	5796.8	1^-
		4959.7	5.5 *11*	5548.5	2^+
		5094.6	14.0 *6*	5412.6	3^+
		5500.8	2.2 *4*	5006.2	3^-
		5811.3	1.6 *4*	4695.3	1^+
		6047.6	<2.8	4459.1	4^+
		6225.2	13.6 *8*	4281.8	2^+
		6728.7	<5	3778.4	0^+
		8275.3	41.7 *11*	2230.57	2^+
		10504.2	10.7 *17*	0	0^+
10556.1		8323.5	100	2230.57	2^+
		10552.4	67	0	0^+
10574.4	5^+	2304.2	3.8 *4*	8270.3	3^-,5^-
		3224.1	6.8 *6*	7350.0	$3^{(+)}$
		3812.3	6.0 *6*	6761.6	5^-
		3952.4	4.4 *6*	6621.7	4^-
		4163.8	2.7 *8*	6411	4^+
		5161.1	52.5 *10*	5412.6	3^+
		6114.0	100.0 *17*	4459.1	4^+
		8341.8	80	2230.57	2^+
		10570.7	12.8	0	0^+
10603.8		2478.3	7.7	8125.40	1^+
		3488.1	25.6	7115.3	2^+
		4805.5	12.8	5796.8	1^-
		5055.5	100	5548.5	2^+
		5190.5	25.6	5412.6	3^+
		5596.6	20.5	5006.2	3^-
		8371.1	15.4	2230.57	2^+
		10600.0	48.7	0	0^+
10636.4		2686.1	22.7 *12*	7950.1	4^-
		2934.7	5.5 *9*	7701.44	3^-
		3874.3	13.3 *13*	6761.6	5^-
		4014.4	100.0 *22*	6621.7	4^-
10696.1		2994.4	0.7	7701.44	3^-
		3160.1	0.7	7535.7	0^+
		4897.8	4.3	5796.8	1^-
		5147.8	2.9	5548.5	2^+
		5688.9	4.3	5006.2	3^-
		5999.4	2.9	4695.3	1^+
10696.1		6235.7	1.4	4459.1	4^+
		6413.5	14.3	4281.8	2^+
		6916.8	4.3	3778.4	0^+
		8463.4	7.1	2230.57	2^+
		10692.3	100.0	0	0^+
10700.5	1^-	4902.2	4.8	5796.8	1^-
		6003.8	3.6	4695.3	1^+
		6921.2	4.8	3778.4	0^+
		8467.8	6.0	2230.57	2^+
		10696.7	100	0	0^+
10705.3	1^-,2^-	3003.6	16.7 *18*	7701.44	3^-
		3943.2	60 *3*	6761.6	5^-
		4083.2	100 *4*	6621.7	4^-
		6244.9	16 *4*	4459.1	4^+
10756.7	$3^{(+)}$	1691.6	1.2 *4*	9065	
		2027.3	1.8 *6*	8729.3	3^+
		3054.9	3.5 *4*	7701.44	3^-
		3406.3	6.2 *4*	7350.0	$3^{(+)}$
		3641.0	2.6 *4*	7115.3	2^+
		3903.8	5.5 *4*	6851.5	4^+
		4092.4	3.5	6666.1	2^+
		4134.6	2.3 *6*	6621.7	4^-
		5208.4	31.7 *11*	5548.5	2^+
		5343.3	13.4 *7*	5412.6	3^+
		6296.3	100.0 *16*	4459.1	4^+
		6474.1	6.2 *4*	4281.8	2^+
		8524.0	1.9 *4*	2230.57	2^+
10778.8	2^+	1755.7	2.80 *24*	9023.8	4^-
		2803.6	4.9 *5*	7974.9	4^-
		3294.5	1.86 *24*	7484.0	2^+
		3428.4	0.70 *24*	7350.0	$3^{(+)}$
		3776.9	30.1 *7*	7001.4	1^+
		4112.4	3.7 *5*	6666.1	2^+
		4980.5	1.40 *24*	5796.8	1^-
		5230.5	1.40 *24*	5548.5	2^+
		5365.4	16.6 *5*	5412.6	3^+
		6082.1	10.5 *5*	4695.3	1^+
		6496.2	38.9 *7*	4281.8	2^+
		8546.0	100.0 *21*	2230.57	2^+
		10774.9	19.3 *5*	0	0^+
10783.8		2862.5	2.51 *20*	7921.0	1^+
		3146.5	1.35 *20*	7637.0	1

$^{32}_{16}S_{16}$-32

Adopted Levels, Gammas (continued)

γ(^{32}S) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[†]	δ[†]	Comments
10783.8		3781.9	3.09 *20*	7001.4	1^+			
		4117.4	3.68 *20*	6666.1	2^+			
		4373.2	2.901	6411	4^+			
		5235.5	23.0 *6*	5548.5	2^+			
		5777.8	1	5006.2	3^-			
		6087.1	20.1 *8*	4695.3	1^+			
		6323.4	1.934	4459.1	4^+			
		6501.2	7.2 *4*	4281.8	2^+			
		7004.5	3.3 *4*	3778.4	0^+			
		8551.0	28.4 *8*	2230.57	2^+			
		10779.9	100.0 *12*	0	0^+			
10784.5		6087.8	100	4695.3	1^+			
10791.3	1	3260[‡]	<30	7535.7	0^+			
		3600.8	4.12 *22*	7190.1	1^+			
		3675.5	8.68 *22*	7115.3	2^+			
		3789.4	9.98 *22*	7001.4	1^+			
		4993.0	1.30 *22*	5796.8	1^-			
		5243.0	3.9 *5*	5548.5	2^+			
		5377.9	9.1 *5*	5412.6	3^+			
		5784.1	20.0 *7*	5006.2	3^-			
		6094.6	7.2 *7*	4695.3	1^+			
		6508.7	15.4 *9*	4281.8	2^+			
		8558.5	100.0 *11*	2230.57	2^+			Additional information 23. Mult.,δ: −0.3 *2* or 1.4 *12* ^{28}Si(α,γ).
		10787.4	37.3 *9*	0	0^+			Additional information 24.
10806	2	5395[‡]	9	5412.6	3^+			
		5795[‡]	22	5006.2	3^-			
		6105[‡]	4	4695.3	1^+			
		6525[‡]	20	4281.8	2^+			
		8574[‡]	100	2230.57	2^+	D+Q	−0.19 *6*	Additional information 25. Mult.,δ: from ^{28}Si(α,γ).
		10802[‡]	63	0	0^+			Additional information 26. Mult.,δ: from ^{28}Si(α,γ).
10825.4	2^-	3823.5	13.4 *10*	7001.4	1^+			
		5027.1[#]	18.7	5796.8	1^-			
		5277.1	17 *4*	5548.5	2^+			
		5412.0	15 *4*	5412.6	3^+			
		5818.2	29 *6*	5006.2	3^-			
		6542.8	79 *7*	4281.8	2^+			

$^{32}_{16}S_{16}$-33

Adopted Levels, Gammas (continued)

γ(^{32}S) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[†]	δ[†]	Comments
10825.4	2$^-$	8592.6	100 *9*	2230.57	2$^+$			
		10821.5	58 *9*	0	0$^+$			
10827.0		3711.2	2.7	7115.3	2$^+$			
		4161	5.4	6666.1	2$^+$			
		4202	4.0	6621.7	4$^-$			
		5028.7	8.1	5796.8	1$^-$			
		5281	5.4	5548.5	2$^+$			
		5413.6	8.1	5412.6	3$^+$			
		5819.8	16.2	5006.2	3$^-$			
		6130.2	5.4	4695.3	1$^+$			
		6544.4	59.5	4281.8	2$^+$			
		7047.6	5.4	3778.4	0$^+$			
		8594.2	100	2230.57	2$^+$			
		10823.1	64.9	0	0$^+$			
10832	2,(3)	5421[‡]	<12	5412.6	3$^+$			
		5821[‡]	18	5006.2	3$^-$			
		8600[‡]	<12	2230.57	2$^+$			
		10828[‡]	100	0	0$^+$			Additional information 27.
10841	2	5430[‡]	25	5412.6	3$^+$			
		5830[‡]	25	5006.2	3$^-$			
		6560[‡]	75	4281.8	2$^+$	D+Q	+0.54 *15*	Additional information 28. Mult.,δ: from ^{28}Si(α,γ).
		8609	100	2230.57	2$^+$	D+Q	+0.60 *12*	Additional information 29. Mult.,δ: from ^{28}Si(α,γ).
		10837	25	0	0$^+$			Additional information 30. Mult.,δ: from ^{28}Si(α,γ).
10851	1	6570[‡]	<27	4281.8	2$^+$			
		8618[‡]	<55	2230.57	2$^+$			
		10847[‡]	>100	0	0$^+$			Additional information 31.
10915		8685	45	2230.57	2$^+$			
		10911	100	0	0$^+$			
10933.7	3	1221.7	7.4 *4*	9711.9	2$^+$			
		3449.4	7.7 *7*	7484.0	2$^+$			
		3583.3	30.4 *7*	7350.0	3$^{(+)}$			
		3817.9	6.1 *7*	7115.3	2$^+$			
		4080.7	67.0 *10*	6851.5	4$^+$			
		4523.0	22.8 *7*	6411	4$^+$			
		5385.3	15.1 *7*	5548.5	2$^+$			
		5520.3	13.5 *7*	5412.6	3$^+$			

$^{32}_{16}S_{16}$-34

Adopted Levels, Gammas (continued)

$\gamma(^{32}S)$ (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Comments
10933.7	3	6473.2	23.4 *10*	4459.1	4^+	
		6651.0	100.0 *10*	4281.8	2^+	
		8700.9	7.7 *13*	2230.57	2^+	
		10929.7	<3	0	0^+	
10941	1	8708[‡]	39	2230.57	2^+	Additional information 32. δ: 0.00 *18* or 3.0 *15* ^{28}Si(α,γ).
		10937[‡]	100	0	0^+	Additional information 33.
10998	(4)	4577[‡]	9	6411	4^+	
		5987[‡]	5	5006.2	3^-	
		6537[‡]	100	4459.1	4^+	Additional information 34.
11009.9	4^+	2739.6	1.46 *21*	8270.3	3^-,5^-	
		3059.5	0.63 *21*	7950.1	4^-	
		3126.7	4.38 *21*	7882.9	4^+	
		3308.1	2.29 *21*	7701.44	3^-	
		3525.6	0.83 *21*	7484.0	2^+	
		3575.3[#]	25	7434	1^-	
		3659.5	2.50 *21*	7350.0	$3^{(+)}$	
		3894.1	1.04 *21*	7115.3	2^+	
		4247.7	1.04 *21*	6761.6	5^-	
		4343.5	2.92 *21*	6666.1	2^+	
		4387.8	0.63 *21*	6621.7	4^-	
		4599.2	16.46 *21*	6411	4^+	
		5596.4	3.13 *21*	5412.6	3^+	
		6002.6	37.9 *7*	5006.2	3^-	
		6549.4	100.0 *11*	4459.1	4^+	
		6727.2	23.5 *5*	4281.8	2^+	
		8777.0	8.96 *21*	2230.57	2^+	
11052	(4)	4611[‡]	<5	6411	4^+	
		6041[‡]	<5	5006.2	3^-	
		6590[‡]	100	4459.1	4^+	A_2=+0.14 *7*, A_4=+0.15 *8* ^{28}Si(α,γ).
11078	2	11074[‡]	100	0	0^+	Additional information 35.
11092.3	3^-	2795.9	23.1 *9*	8296.1	3^-	
		2900.9	3.0 *9*	8191.1	4	
		3117.1	13.2 *5*	7974.9	4^-	
		3141.9	18.4 *9*	7950.1	4^-	
		3390.5	51.7 *13*	7701.44	3^-	
		4330.1	3.0 *17*	6761.6	5^-	
		4470.1	100.0 *17*	6621.7	4^-	
		4867.8	55.1 *17*	6222.9	2^-	

$^{32}_{16}S_{16}$-35

Adopted Levels, Gammas (continued)

γ(^{32}S) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π
11092.3	3⁻	6085.0	85 *3*	5006.2	3⁻
		6631.7	63 *3*	4459.1	4⁺
		6809.5	10.3 *17*	4281.8	2⁺
		8859.4[#]		2230.57	2⁺
		11088.2[#]		0	0⁺
11107	(2⁺)	6099[‡]	<67	5006.2	3⁻
		8877[‡]	>100	2230.57	2⁺
11114		4490 *1*		6621.7	4⁻
		6109 *3*		5006.2	3⁻
		8881 *10*		2230.57	2⁺
		11113 *86*		0	0⁺
11123		2432.8[#]	11.4	8687.6	
		4121.0	9.1 *3*	7001.4	1⁺
		6426.1	6.7 *3*	4695.3	1⁺
		7343.5	9.6 *3*	3778.4	0⁺
		8890.0	14.4 *5*	2230.57	2⁺
		11118.9	100.0 *8*	0	0⁺
11139.8	1⁺	3603.7	0.47 *12*	7535.7	0⁺
		3946.4	1.2	7190.1	1⁺
		4137.8	0.71 *12*	7001.4	1⁺
		4915.3	0.47 *12*	6222.9	2⁻
		5589.9	<0.6	5548.5	2⁺
		6442.9	2.71 *24*	4695.3	1⁺
		7360.3	2.12 *24*	3778.4	0⁺
		8906.8	10.8 *7*	2230.57	2⁺
		11135.6	100.0 *9*	0	0⁺
11235.5	3	2545.3	2.95 *21*	8687.6	
		3044.1	6.53 *21*	8191.1	4
		3533.6	3.16 *21*	7701.44	3⁻
		4824.7	4.2 *5*	6411	4⁺
		5687.0	2.7 *5*	5548.5	2⁺
		5822.0	7.2 *5*	5412.6	3⁺
		6774.9	6.5 *5*	4459.1	4⁺
		6952.7	77.5 *13*	4281.8	2⁺
		9002.5	100.0 *13*	2230.57	2⁺
11253.9	(3⁻)	2392.7	1.37 *16*	8861	2⁺
		2524.4	1.22 *16*	8729.3	3⁺
		2563.7	3.65 *16*	8687.6	
		2846.6	4.11 *16*	8407.0	2
		2957.5	0.61 *16*	8296.1	3⁻
11253.9	(3⁻)	3062.5	7.31 *16*	8191.1	4
		3303.4	2.74 *16*	7950.1	4⁻
		3552.0	1.22 *16*	7701.44	3⁻
		4400.9	1.83 *16*	6851.5	4⁺
		4587.4	2.89 *16*	6666.1	2⁺
		4843.1	2.44 *16*	6411	4⁺
		5705.4	1.67 *16*	5548.5	2⁺
		5840.4	1.83 *16*	5412.6	3⁺
		6246.5	7.2 *3*	5006.2	3⁻
		6557.0	1.67 *16*	4695.3	1⁺
		6971.1	8.5 *3*	4281.8	2⁺
		9020.9	100.0 *8*	2230.57	2⁺
11332.8		1673.7	30 *3*	9660.1	1⁺
		3207.1	46.9 *23*	8125.40	1⁺
		4216.9	21 *3*	7115.3	2⁺
		4330.7	6 *3*	7001.4	1⁺
		4922.0	26 *3*	6411	4⁺
		6325.4	19 *3*	5006.2	3⁻
		6635.8	16 *3*	4695.3	1⁺
		7049.9	57 *4*	4281.8	2⁺
		11328.5	100.0 *7*	0	0⁺
11474.6	3	2728.8	4.99 *14*	8745.6	3
		2745.0	4.99 *14*	8729.3	3⁺
		4621.5	1.62 *14*	6851.5	4⁺
		4808.0	2.56 *14*	6666.1	2⁺
		4852.3	2.29 *14*	6621.7	4⁻
		5063.7	0.54 *14*	6411	4⁺
		5250.0	0.94 *14*	6222.9	2⁻
		5926.0	1.35 *14*	5548.5	2⁺
		6061.0	9.03 *14*	5412.6	3⁺
		7013.8	6.33 *14*	4459.1	4⁺
		7191.7	100.0 *6*	4281.8	2⁺
11485.8	1⁺	3360.1	55 *10*	8125.40	1⁺
		6478.3	81 *15*	5006.2	3⁻
		7706.1	100 *12*	3778.4	0⁺
11589.7	1⁻	3182.4	4.5 *3*	8407.0	2
		4473.7	25.8 *8*	7115.3	2⁺
		4923.1	1.1 *6*	6666.1	2⁺
		5178.8	0.8 *6*	6411	4⁺
		6582.1	7.6 *8*	5006.2	3⁻

$^{32}_{16}S_{16}$-36

Adopted Levels, Gammas (continued)

γ(^{32}S) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Comments
11589.7	1⁻	6892.6	1.8 *6*	4695.3	1⁺	
		7128.9	18.2 *11*	4459.1	4⁺	
		7306.7	56.6 *11*	4281.8	2⁺	
		7810.0	8.4 *8*	3778.4	0⁺	
		9356.5	38.2 *14*	2230.57	2⁺	
		11585.2	100.0 *19*	0	0⁺	
11602.4		4066.1	12.0 *16*	7535.7	0⁺	
		4411.6	31.8 *16*	7190.1	1⁺	
		6053.8	37.8 *20*	5548.5	2⁺	
		6594.8	45.1 *23*	5006.2	3⁻	
		6905.3	100 *4*	4695.3	1⁺	
11637.1		3290.4	0.80 *12*			
		3715.6	0.57 *12*	7921.0	1⁺	
		4152.6	0.46 *12*	7484.0	2⁺	
		4202.5	0.23 *12*	7434	1⁻	
		4446.3	0.46 *12*	7190.1	1⁺	
		4634.9	0.80 *12*	7001.4	1⁺	
		4970.5	0.69 *12*	6666.1	2⁺	
		5412.4	0.57 *12*	6222.9	2⁻	
		5838.5	0.69 *12*	5796.8	1⁻	
		6088.5	3.55 *12*	5548.5	2⁺	
		6940.0	2.17 *12*	4695.3	1⁺	
		7857.3	1.26 *12*	3778.4	0⁺	
		9403.8	2.75 *23*	2230.57	2⁺	
		11632.6	100.0 *6*	0	0⁺	
11669.6	5⁺	2940.0	0.63 *16*	8729.3	3⁺	
		3322.9	6.2 *4*			
		3478.1	15.2 *4*	8191.1	4	
		4102.0	21.4 *4*	7566.8	5⁺	
		4907.2	0.63 *16*	6761.6	5⁻	
		5258.7	100.0 *7*	6411	4⁺	
		7208.8	14.4 *4*	4459.1	4⁺	
11696.7	5⁺	3350.0	6.66 *17*			
		3505.2	10.15 *17*	8191.1	4	
		4129.1	14.6 *4*	7566.8	5⁺	
		4346.1	1.66 *17*	7350.0	3⁽⁺⁾	
		5074.3	1.5 *4*	6621.7	4⁻	
		5285.8	100.0 *7*	6411	4⁺	
		7235.8	31.9 *4*	4459.1	4⁺	
11750	1	7464[‡]	100	4281.8	2⁺	Additional information 36. δ: −0.21 *2* or 1.8 *1* ^{28}Si(α,γ).

$^{32}_{16}S_{16}$-37

Adopted Levels, Gammas (continued)

$\gamma(^{32}S)$ (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Comments
11750	1	11741[‡]	2	0	0^+	Additional information 37.
11758.8		3462.3	14.0 *4*	8296.1	3^-	
		3808.2	14.2 *11*	7950.1	4^-	
		4996.4	100.0 *11*	6761.6	5^-	
		5136.4	49.5 *9*	6621.7	4^-	
		6751.2	4.4 *8*	5006.2	3^-	
11783	1	11780[‡]	100	0	0^+	Additional information 38.
11806	1,2	4682[‡]	<5	7115.3	2^+	I_γ: intensity seen in only one part of the doublet.
		11798[‡]	100	0	0^+	Additional information 39.
11940.1	3	3532.7	1.4 *3*	8407.0	2	
		3989.5	6.5 *3*	7950.1	4^-	
		5086.8	2.2 *3*	6851.5	4^+	
		5317.7	15.7 *6*	6621.7	4^-	
		5715.3	6.2 *3*	6222.9	2^-	
		6391.3	21.6 *9*	5548.5	2^+	
		6526.3	27.8 *6*	5412.6	3^+	
		7479.1	100.0 *12*	4459.1	4^+	
		7656.9	50.0 *6*	4281.8	2^+	
		9706.6	49.4 *9*	2230.57	2^+	
12030		4520[‡]	10	7535.7	0^+	
		4900[‡]	14	7115.3	2^+	
		9788[‡]	14	2230.57	2^+	
		12016[‡]	100	0	0^+	Additional information 40.
12043.9		4093.2	3.2 *5*	7950.1	4^-	
		5281.4	19.0 *11*	6761.6	5^-	
		5421.4	2.7 *5*	6621.7	4^-	
		7036.1	100.0 *13*	5006.2	3^-	
		7582.9	2.5 *4*	4459.1	4^+	
12044.19	2,3,4	7036.33	100	5006.2	3^-	
		9811.8	1	2230.57	2^+	
12047.96	0^+	2840.32 *14*	11.2 *8*	9207.55	1^+	
		3922.37 *15*	100.0 *11*	8125.40	1^+	
		5046.1 *4*	7.5 *8*	7001.4	1^+	
		9816[#]	≤0.30	2230.57	2^+	

[†] From $^{31}P(p,\gamma)$, unless otherwise noted.
[‡] From $^{28}Si(\alpha,\gamma)$.
[#] Placement of transition in the level scheme is uncertain.

$^{32}_{16}S_{16}$-38

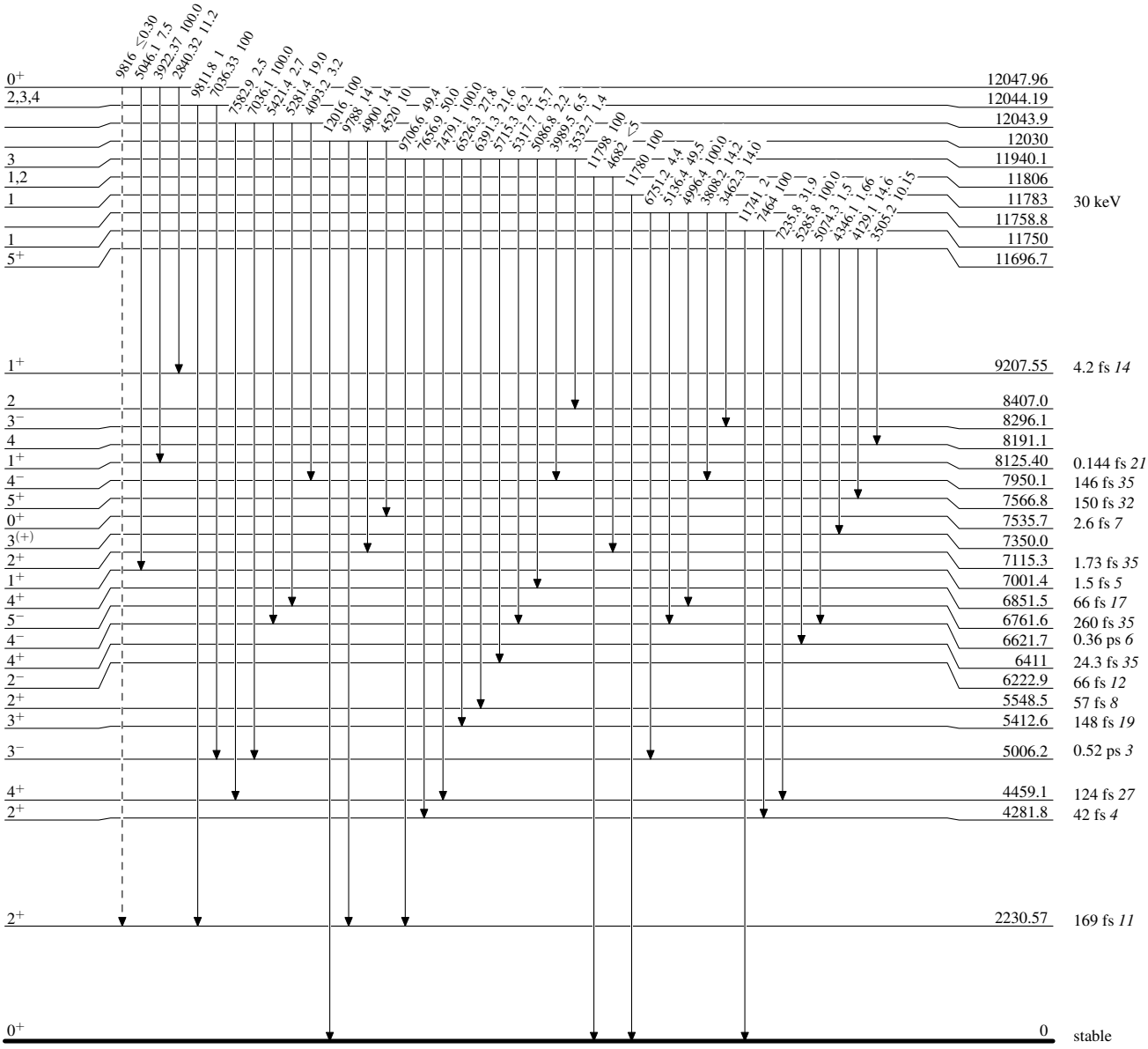
Adopted Levels, Gammas

Legend

Level Scheme

Intensities: Relative photon branching from each level

γ Decay (Uncertain)

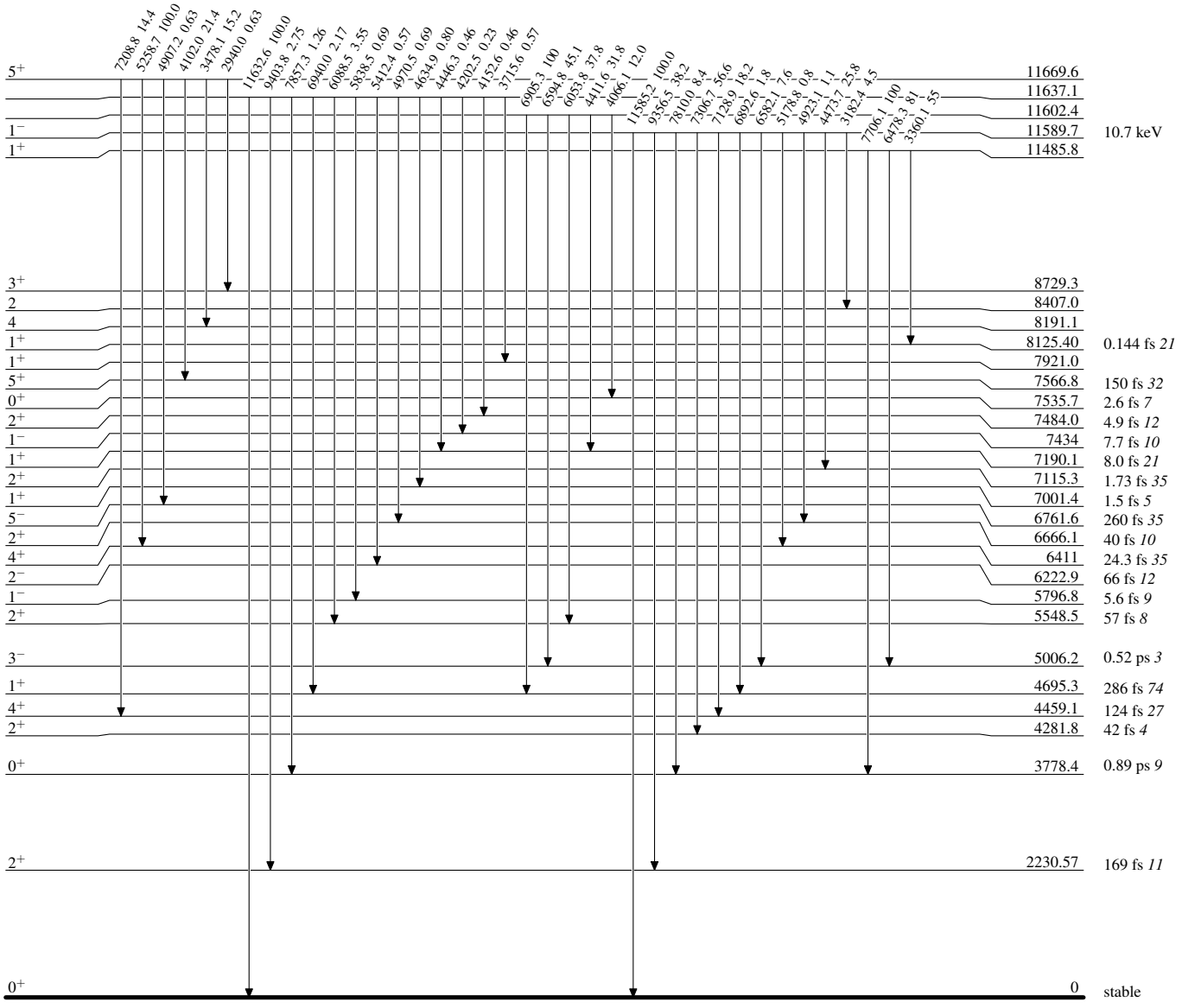


$^{32}_{16}S_{16}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

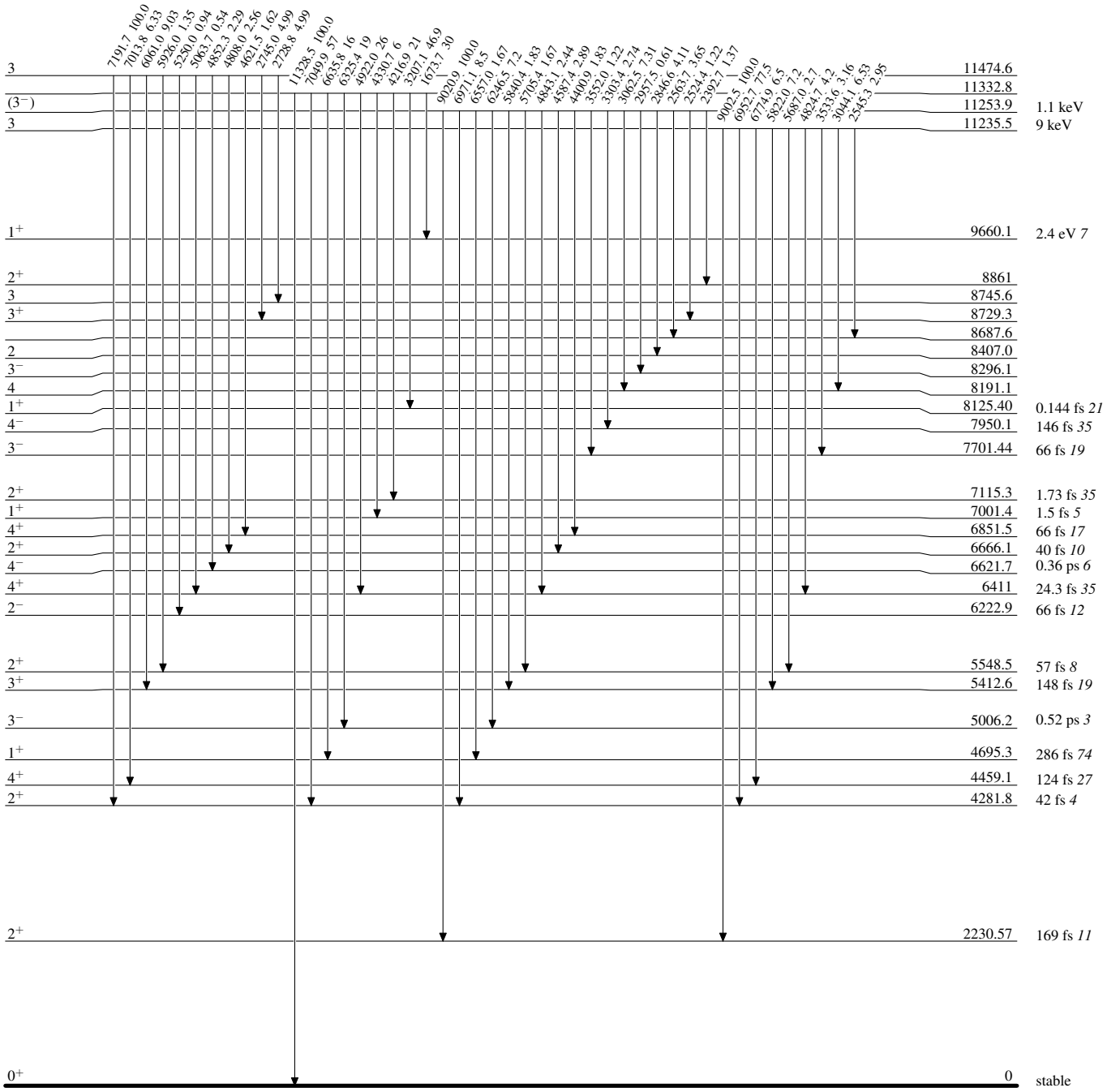


$^{32}_{16}S_{16}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level



$^{32}_{16}S_{16}$

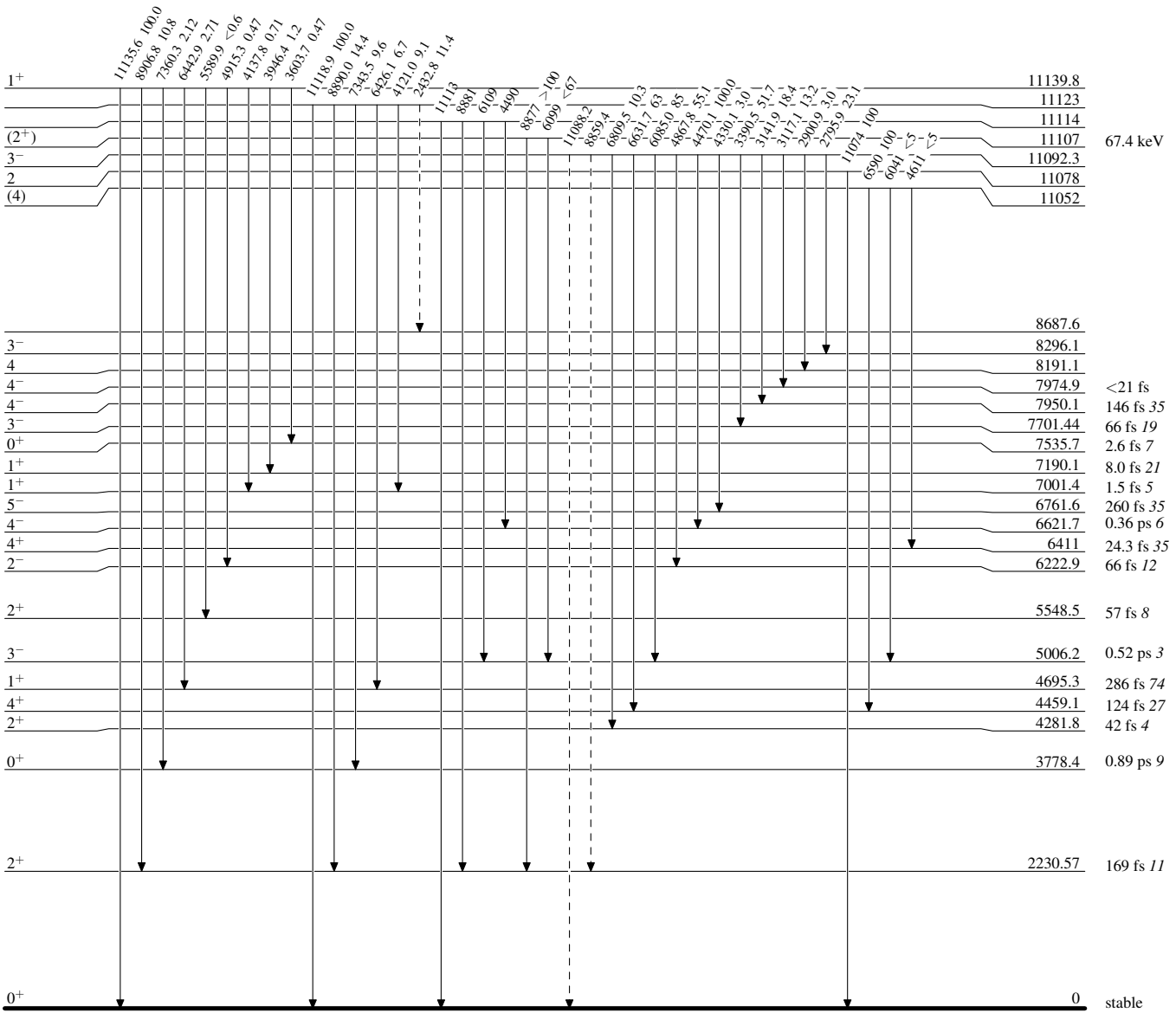
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

γ Decay (Uncertain)



$^{32}_{16}S_{16}$

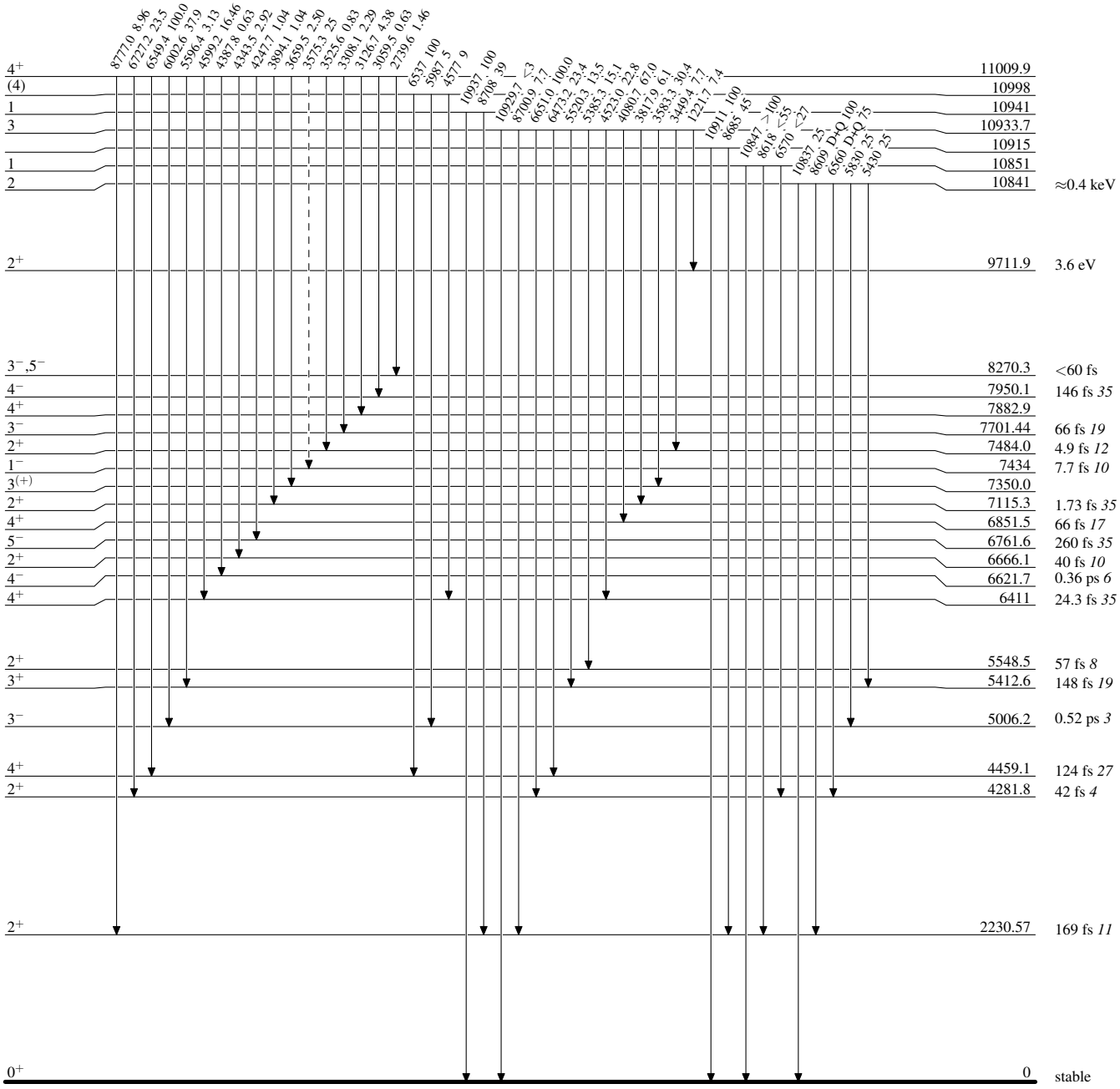
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

- - - - - - ► γ Decay (Uncertain)



$^{32}_{16}S_{16}$

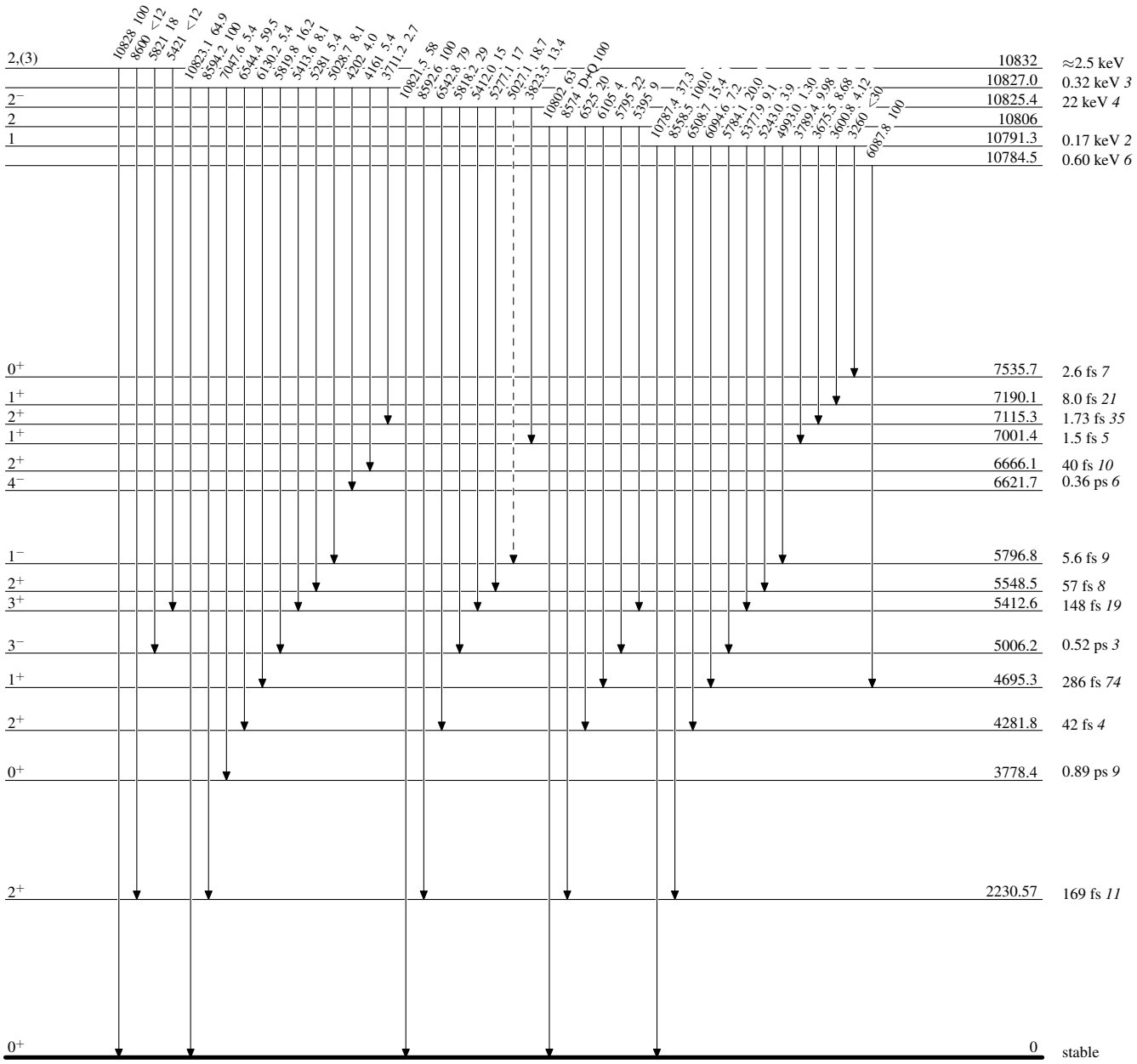
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

– – – – – – ► γ Decay (Uncertain)

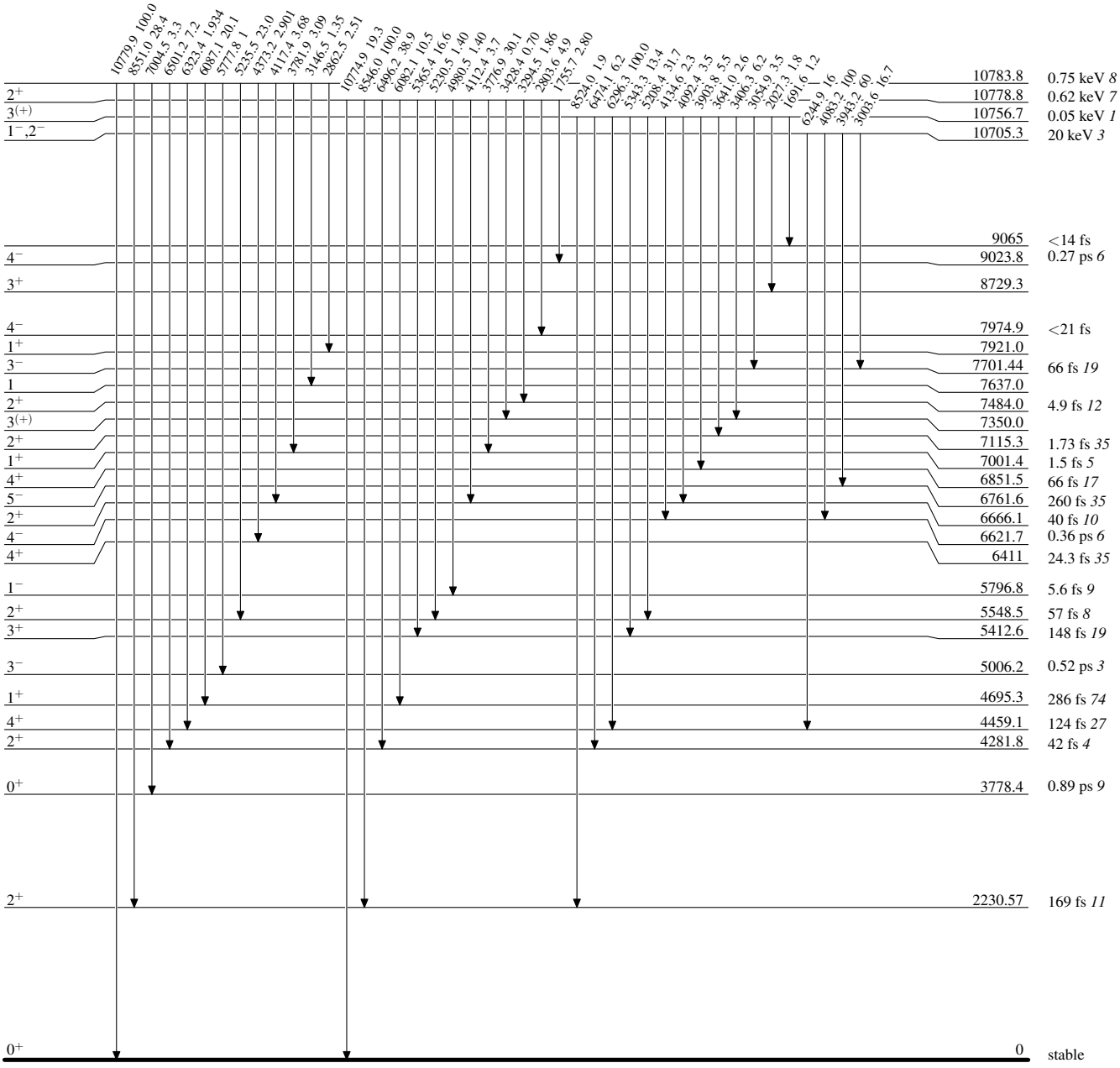


$^{32}_{16}S_{16}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

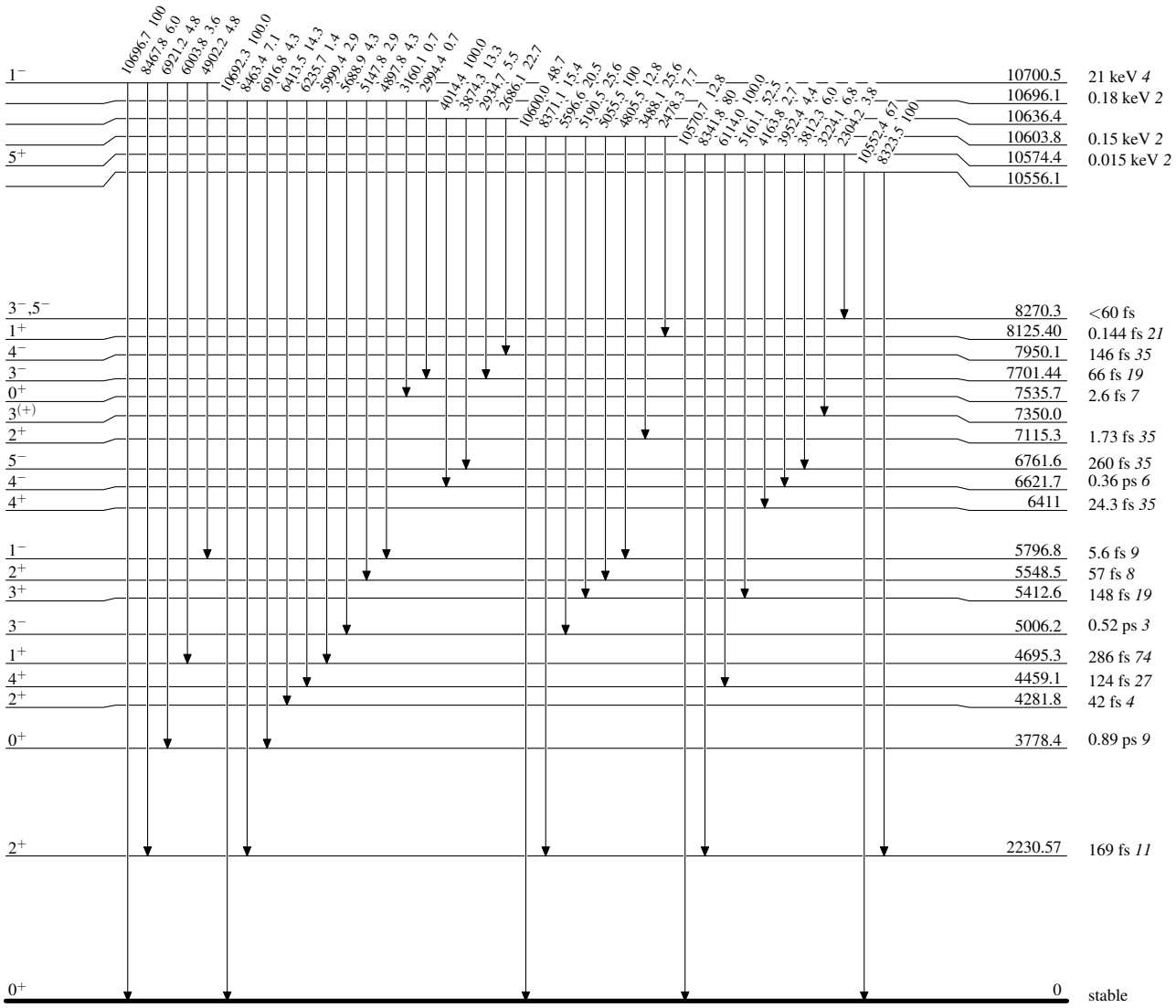


$^{32}_{16}S_{16}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

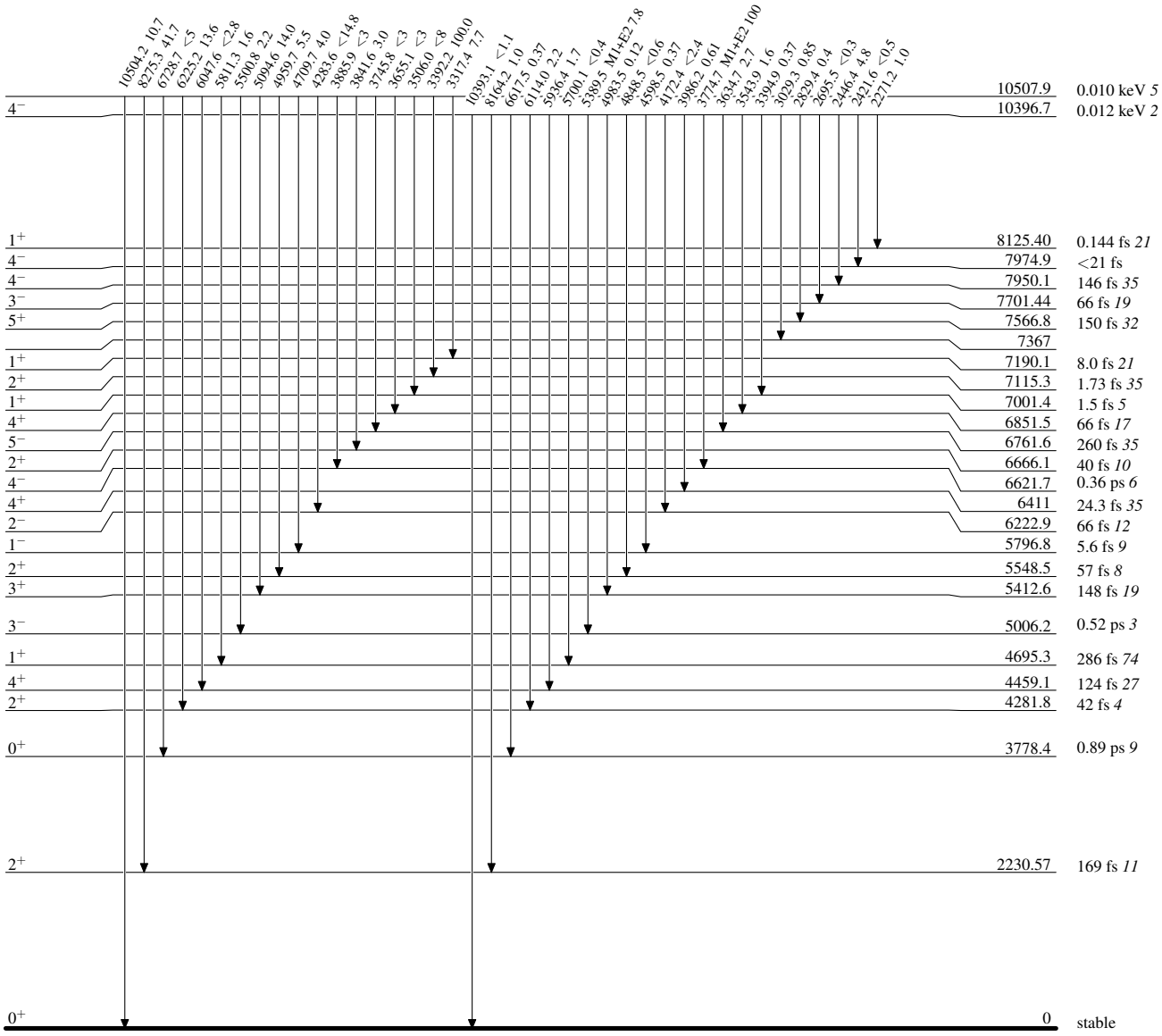


$^{32}_{16}S_{16}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level



$^{32}_{16}S_{16}$

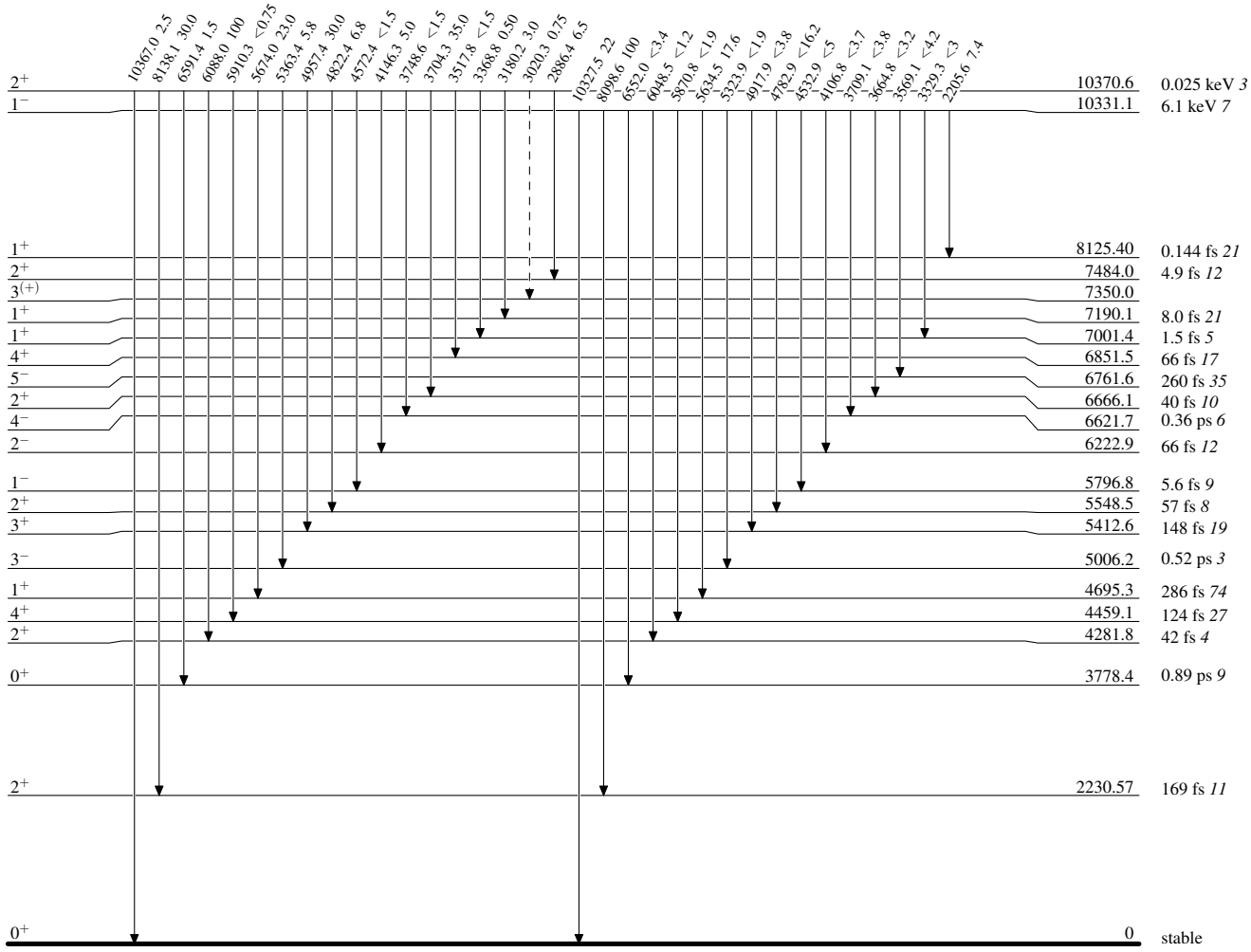
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

γ Decay (Uncertain)

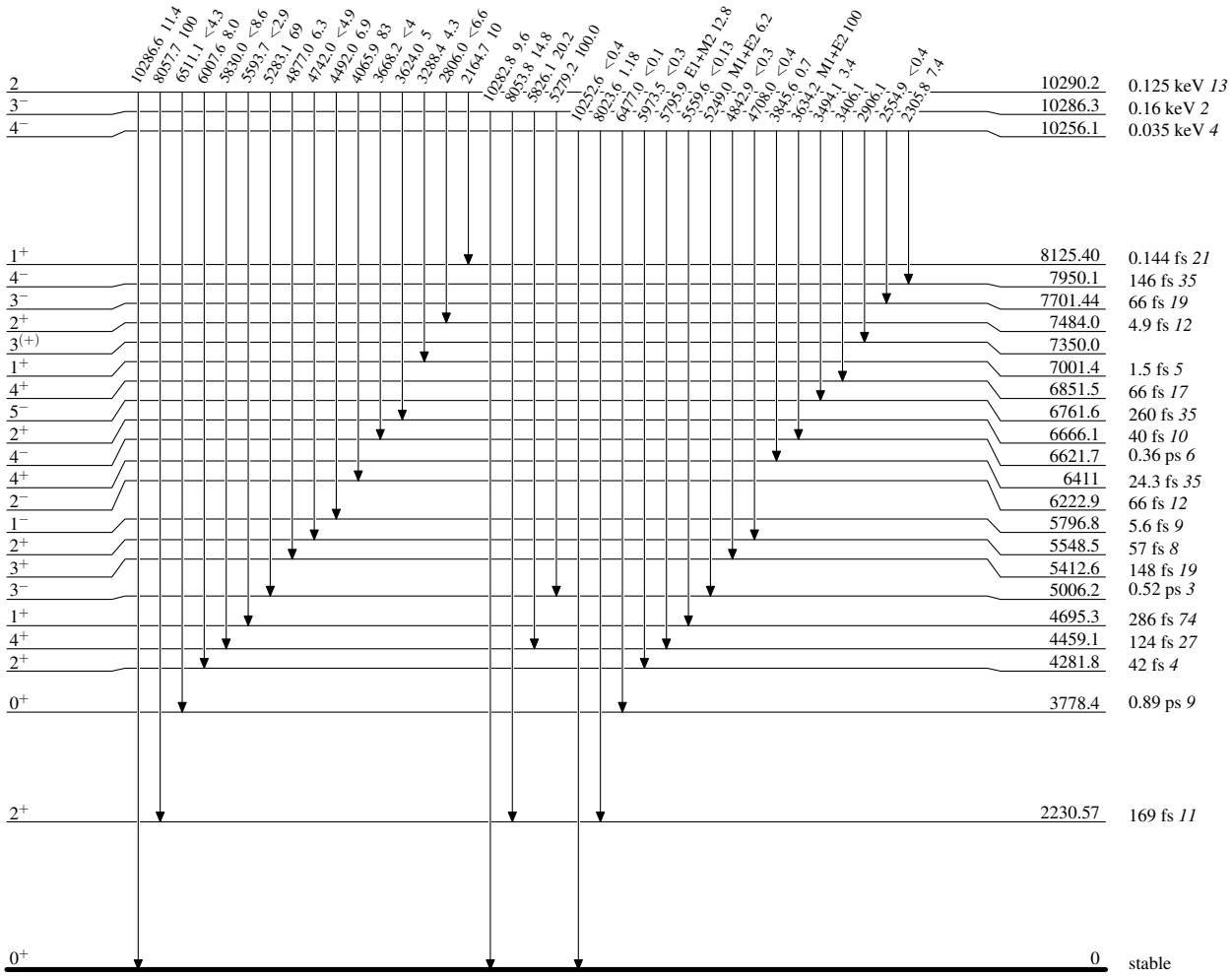


$^{32}_{16}S_{16}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

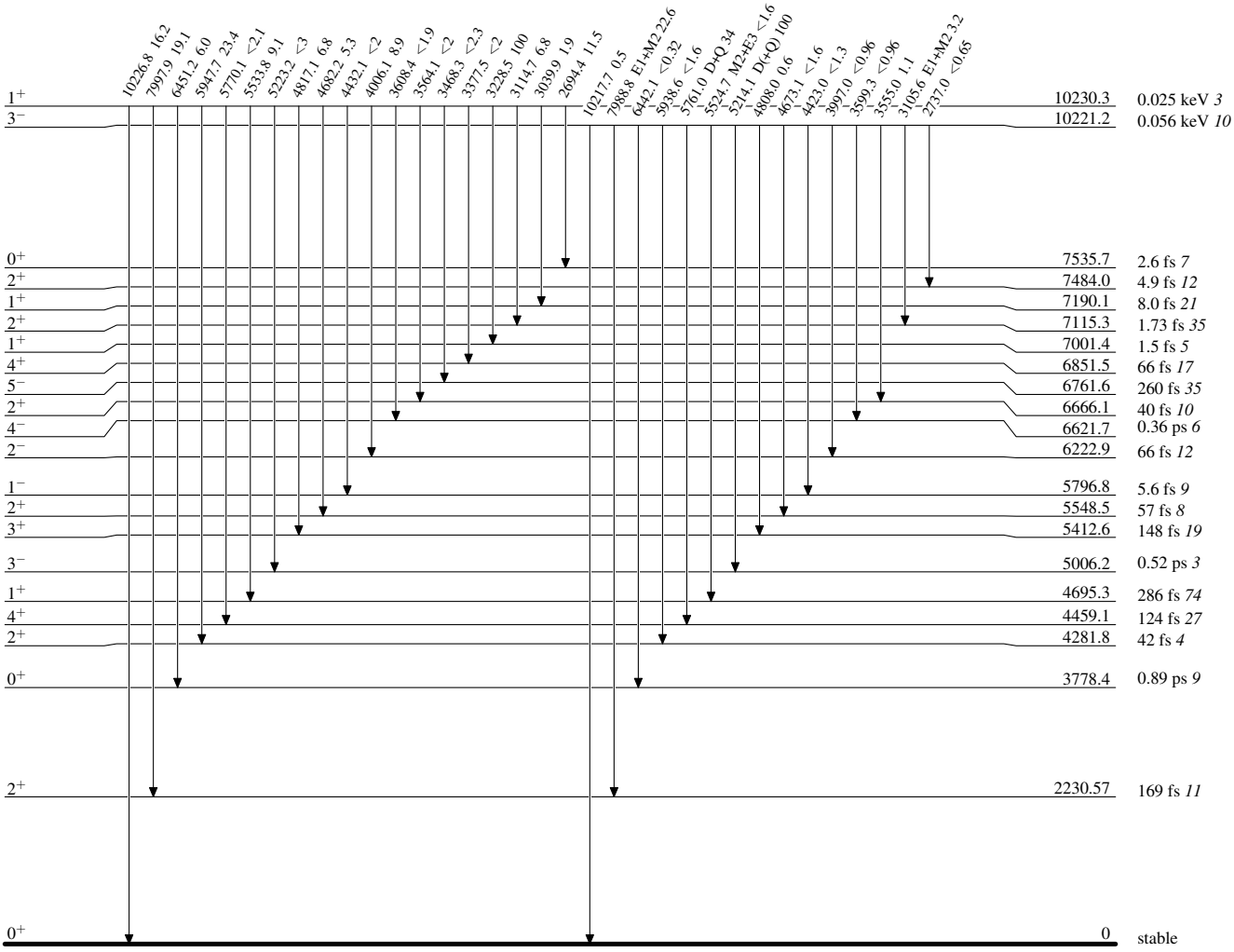


$^{32}_{16}S_{16}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

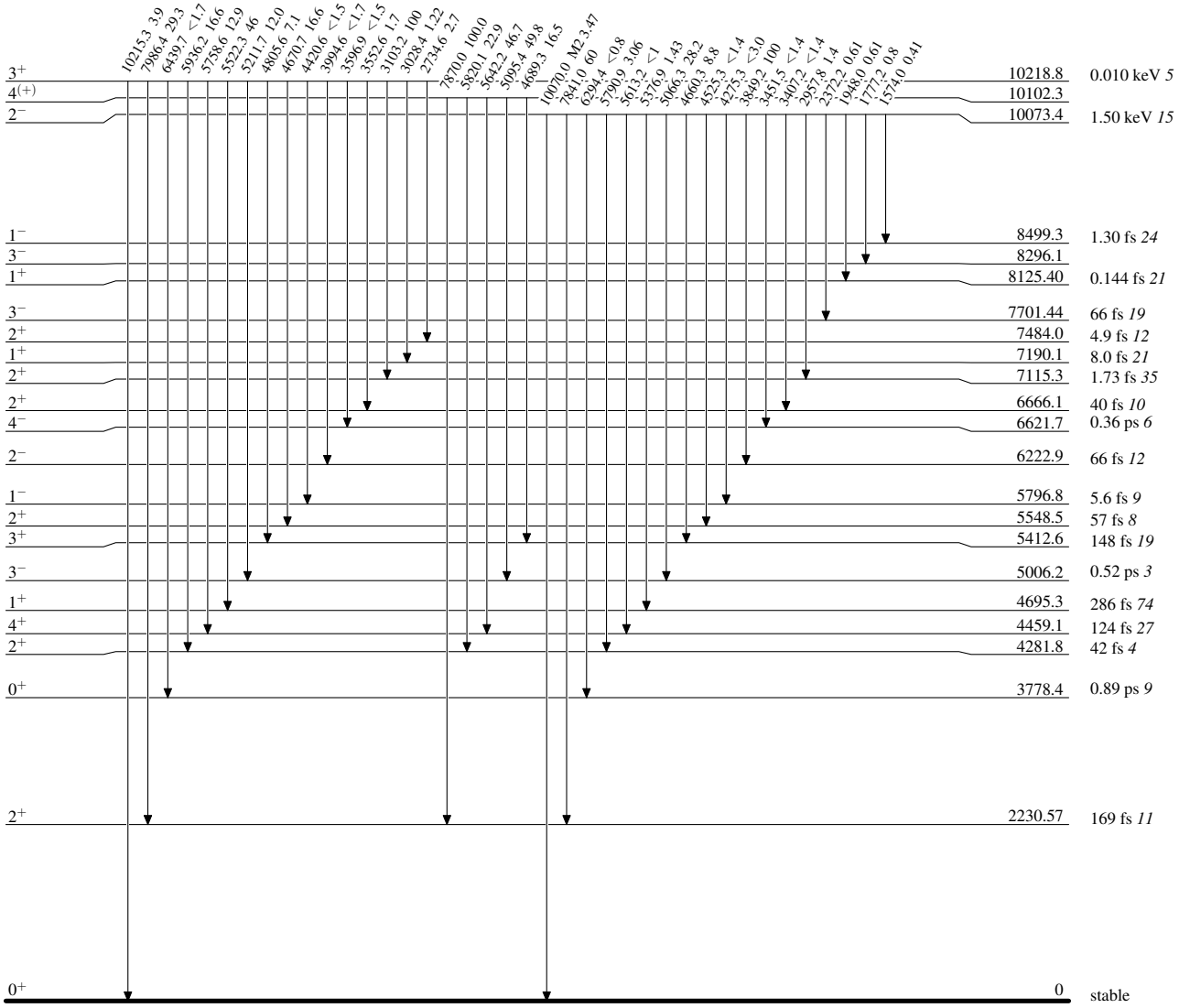


$^{32}_{16}S_{16}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level



$^{32}_{16}S_{16}$

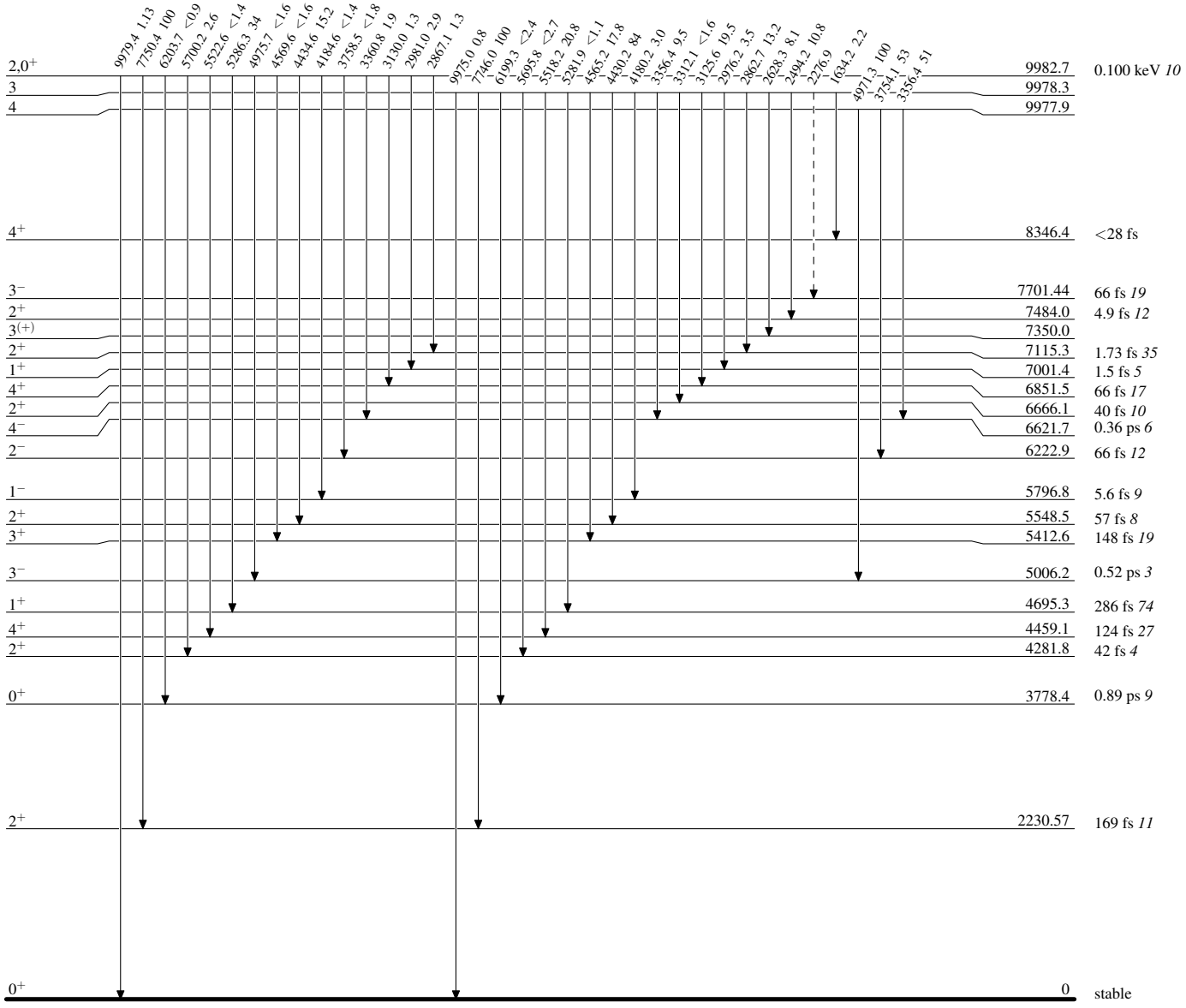
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

γ Decay (Uncertain)

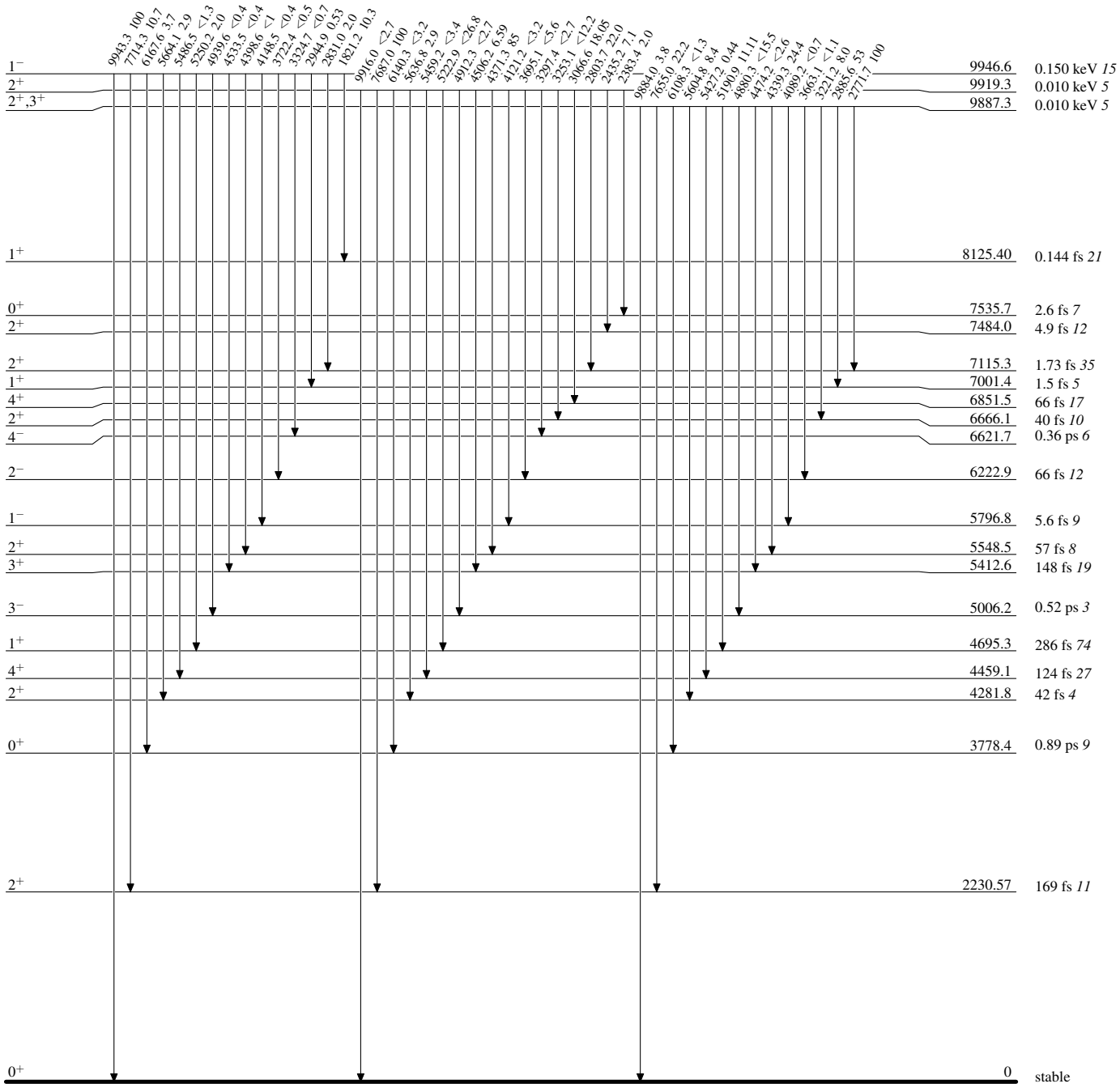


$^{32}_{16}S_{16}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

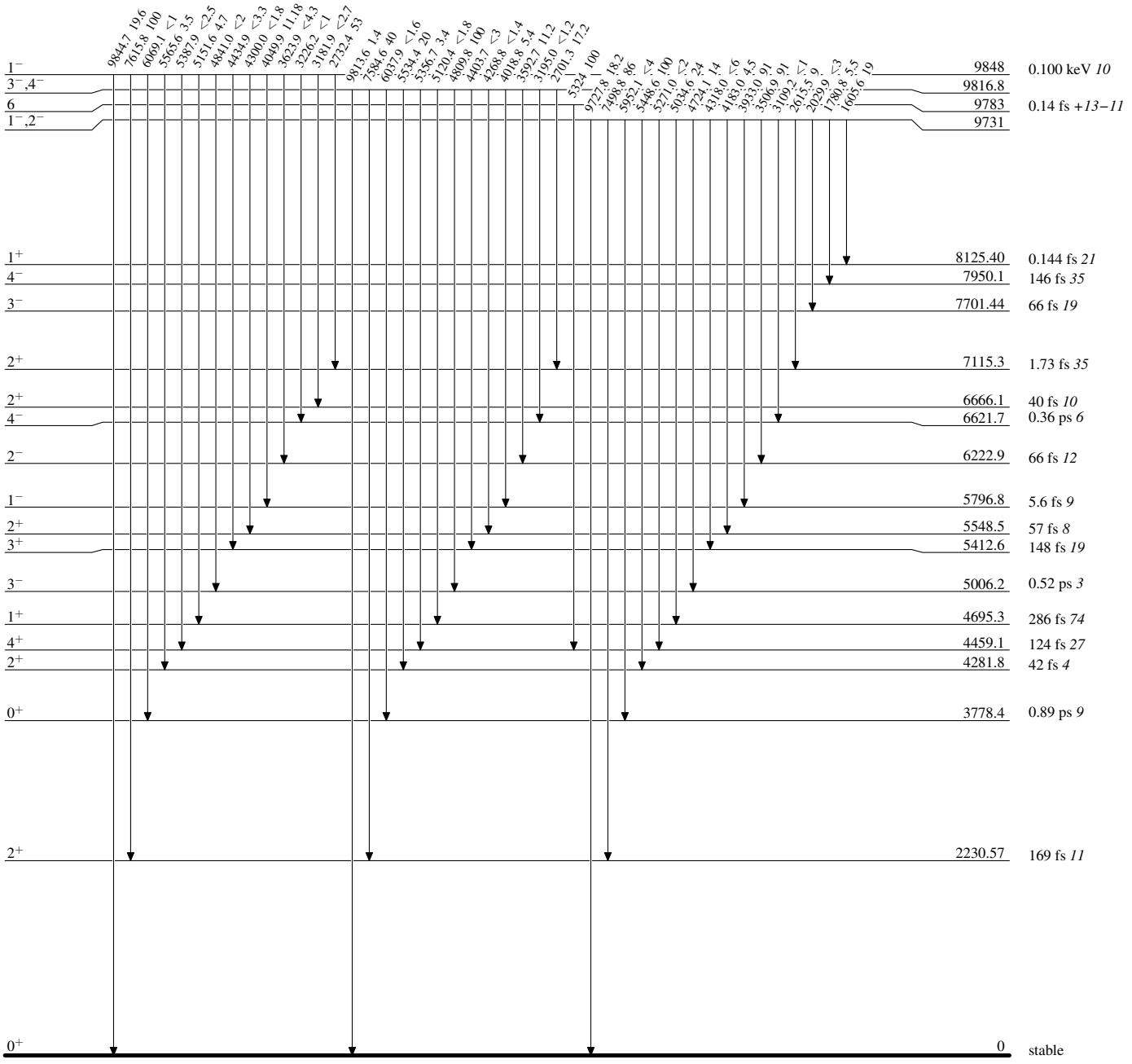


$^{32}_{16}S_{16}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

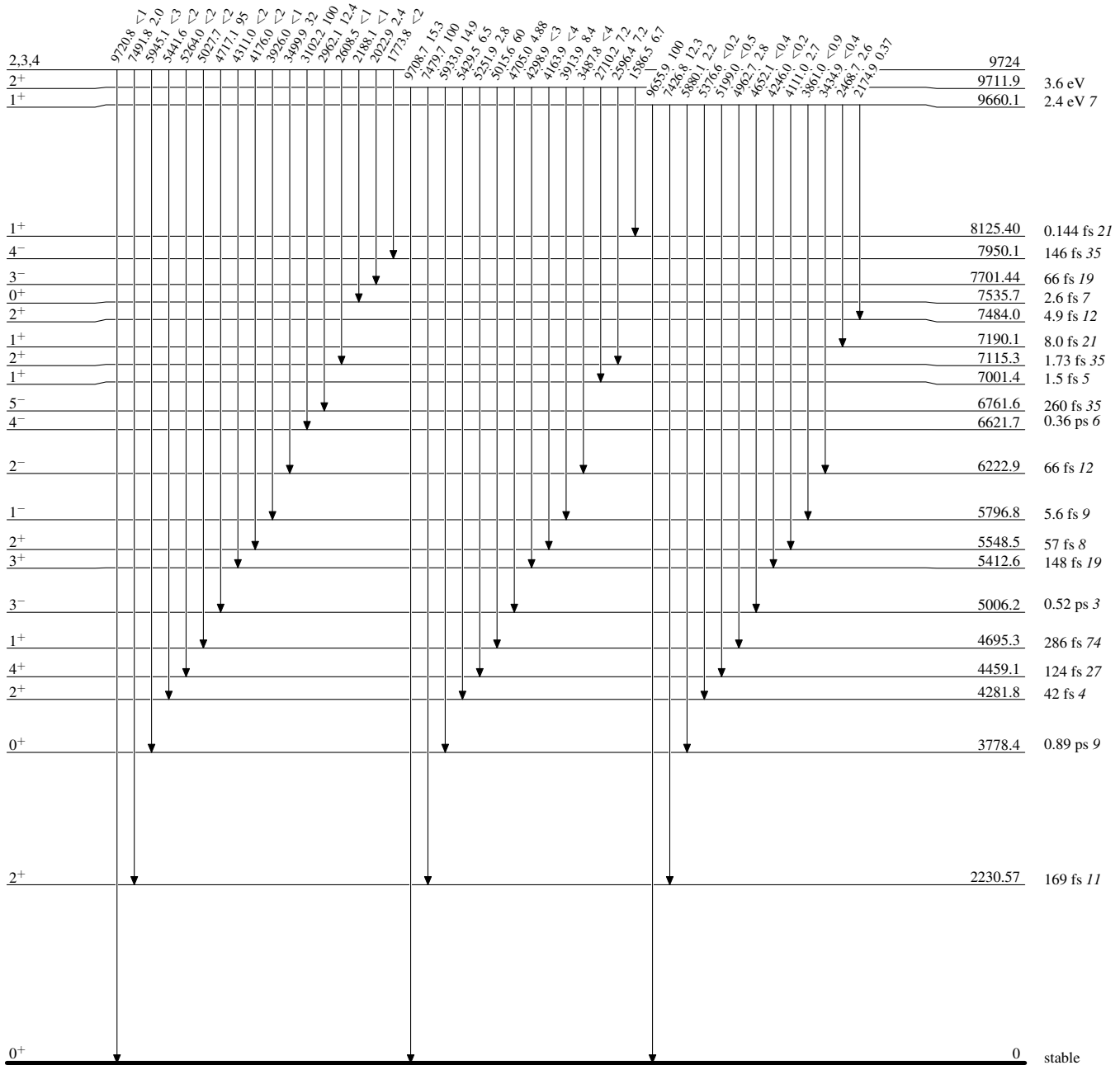


$^{32}_{16}S_{16}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

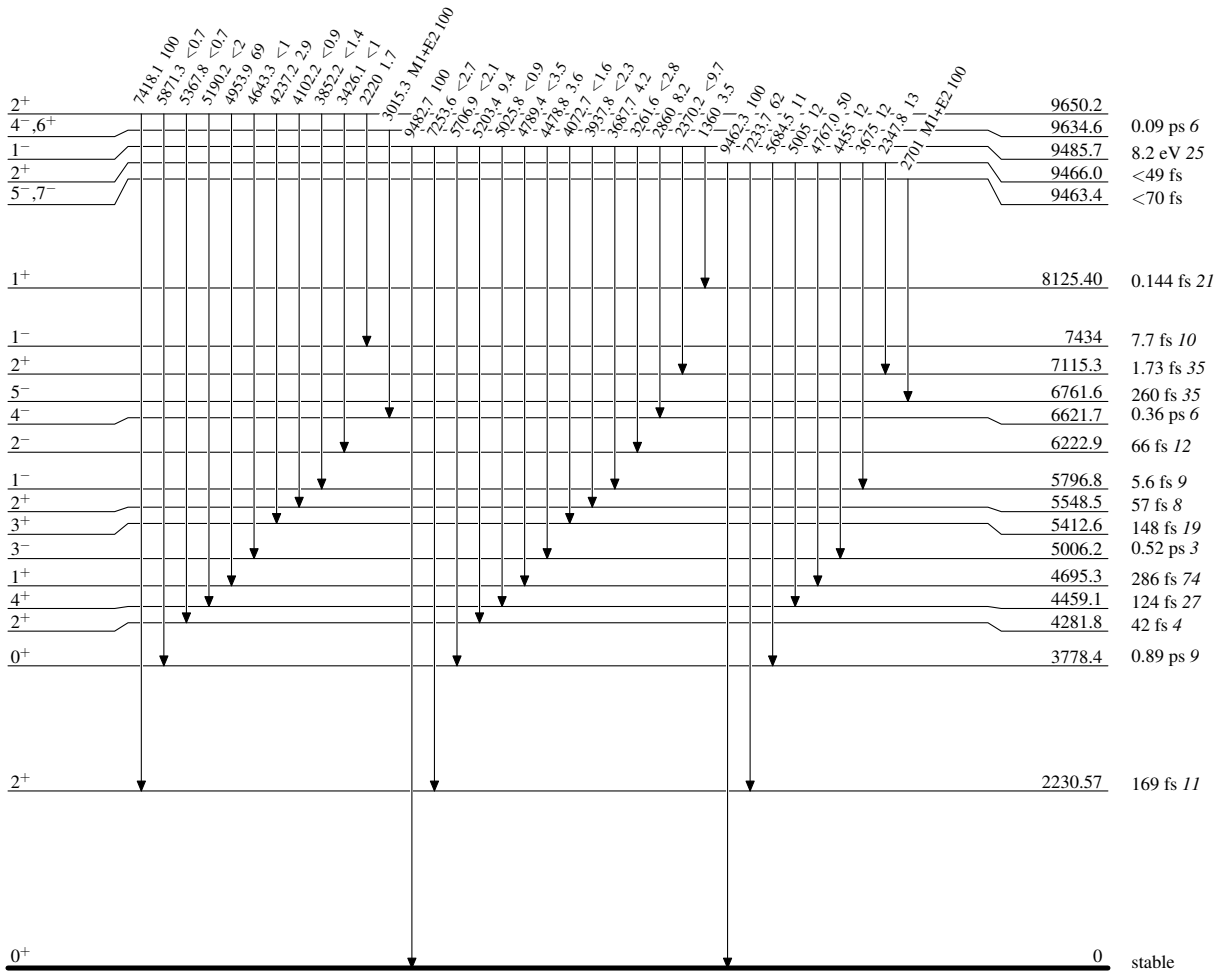


$^{32}_{16}S_{16}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

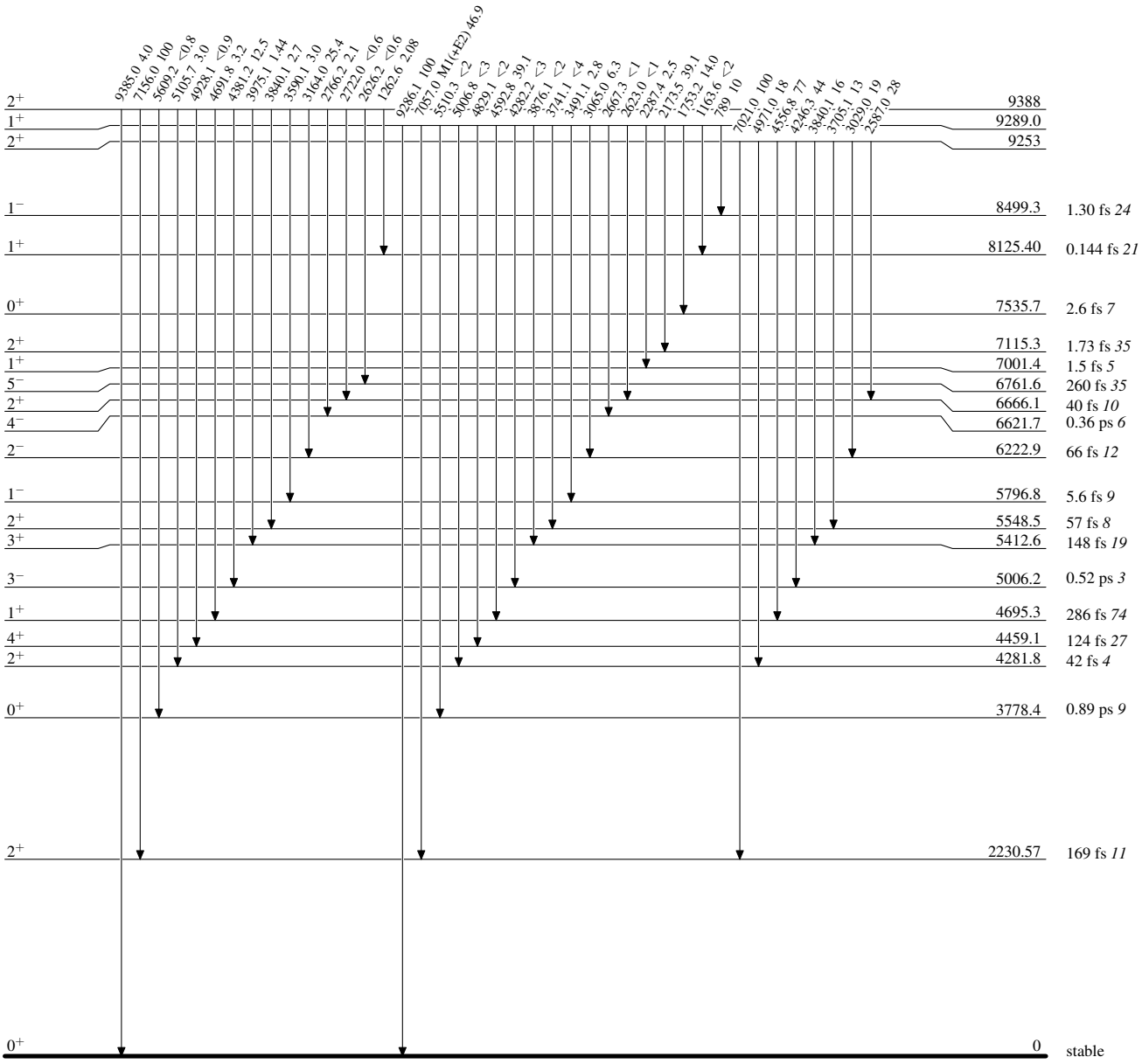


$^{32}_{16}S_{16}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

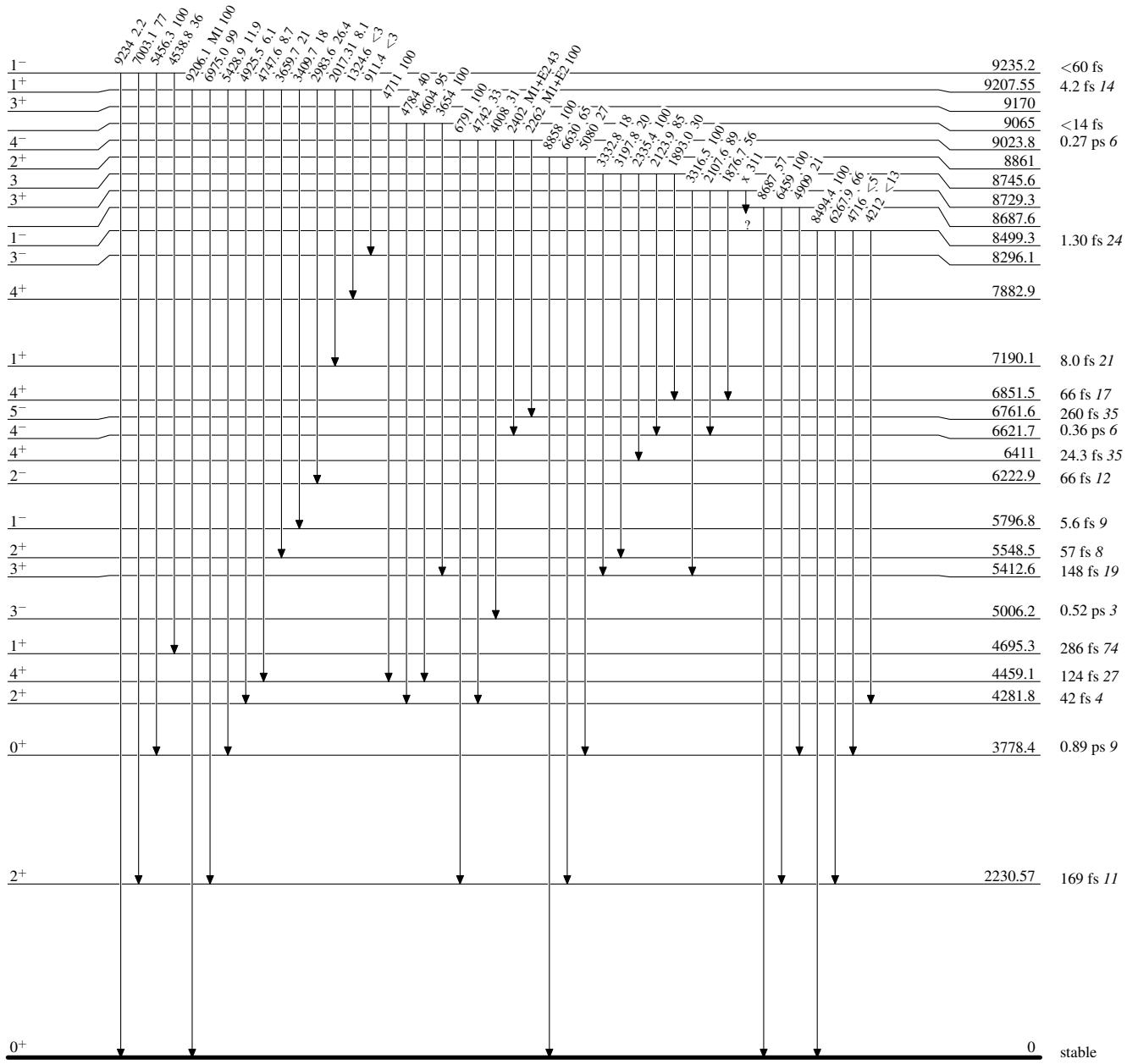


$^{32}_{16}S_{16}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

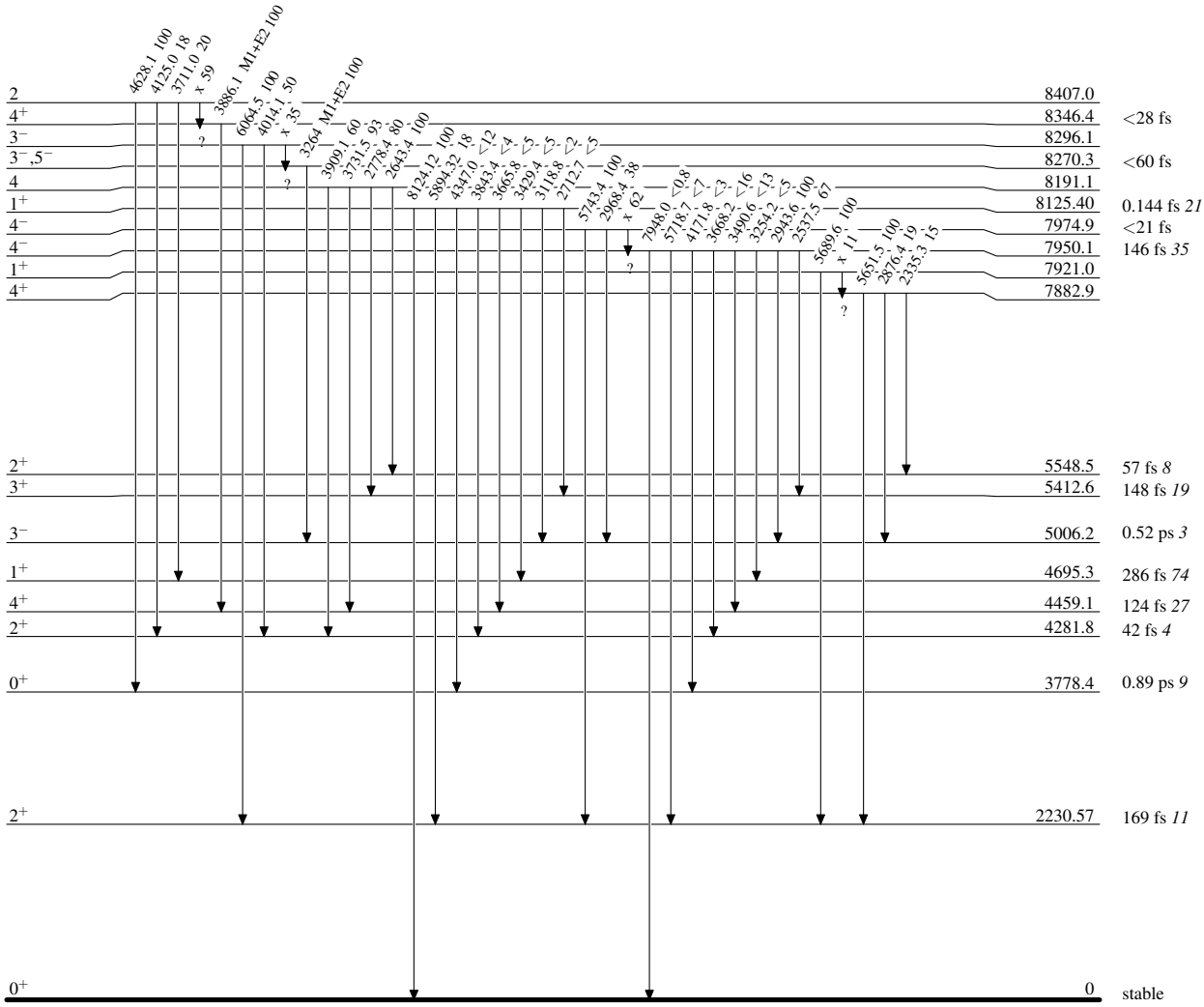


$^{32}_{16}S_{16}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

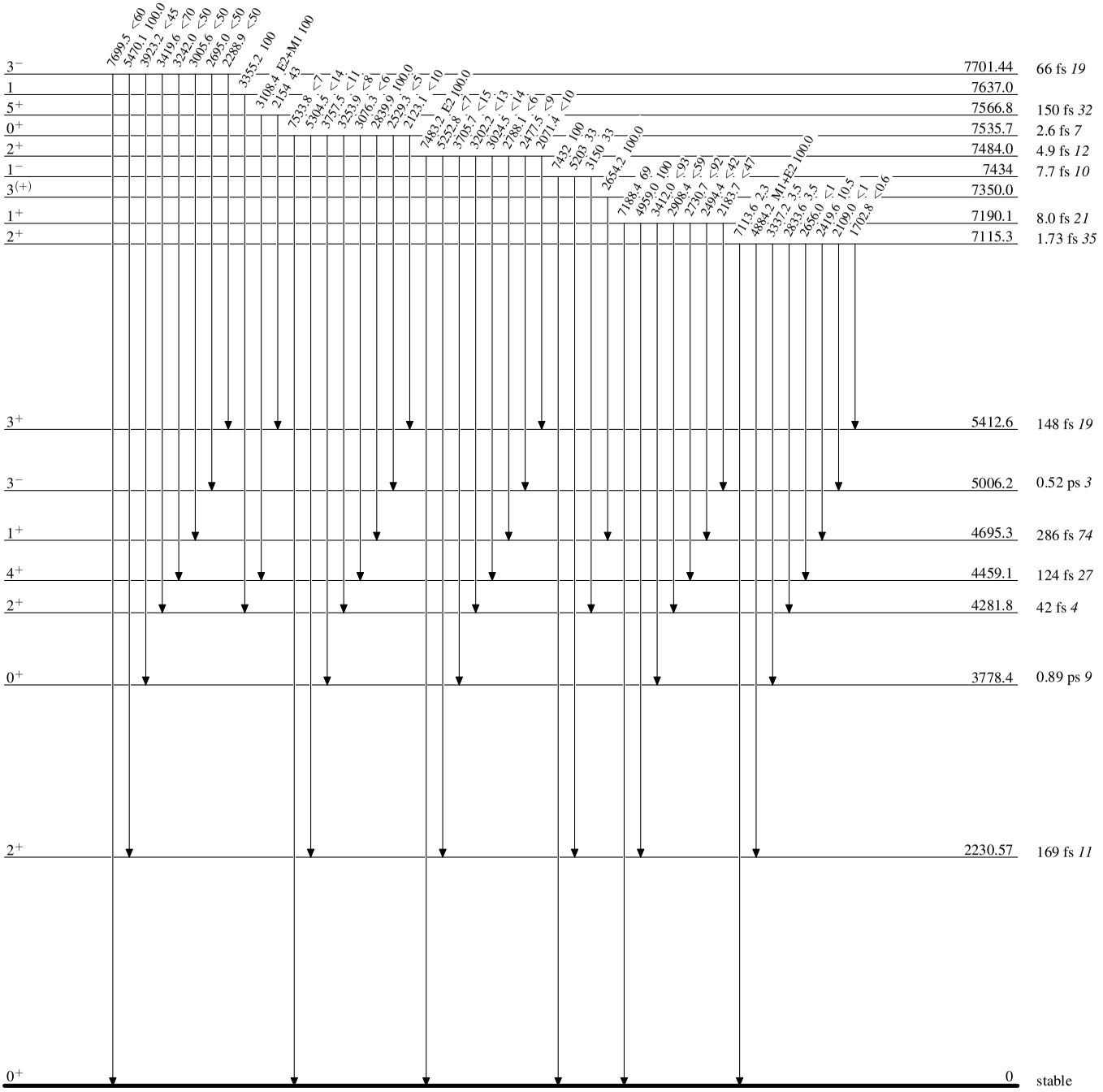


$^{32}_{16}S_{16}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

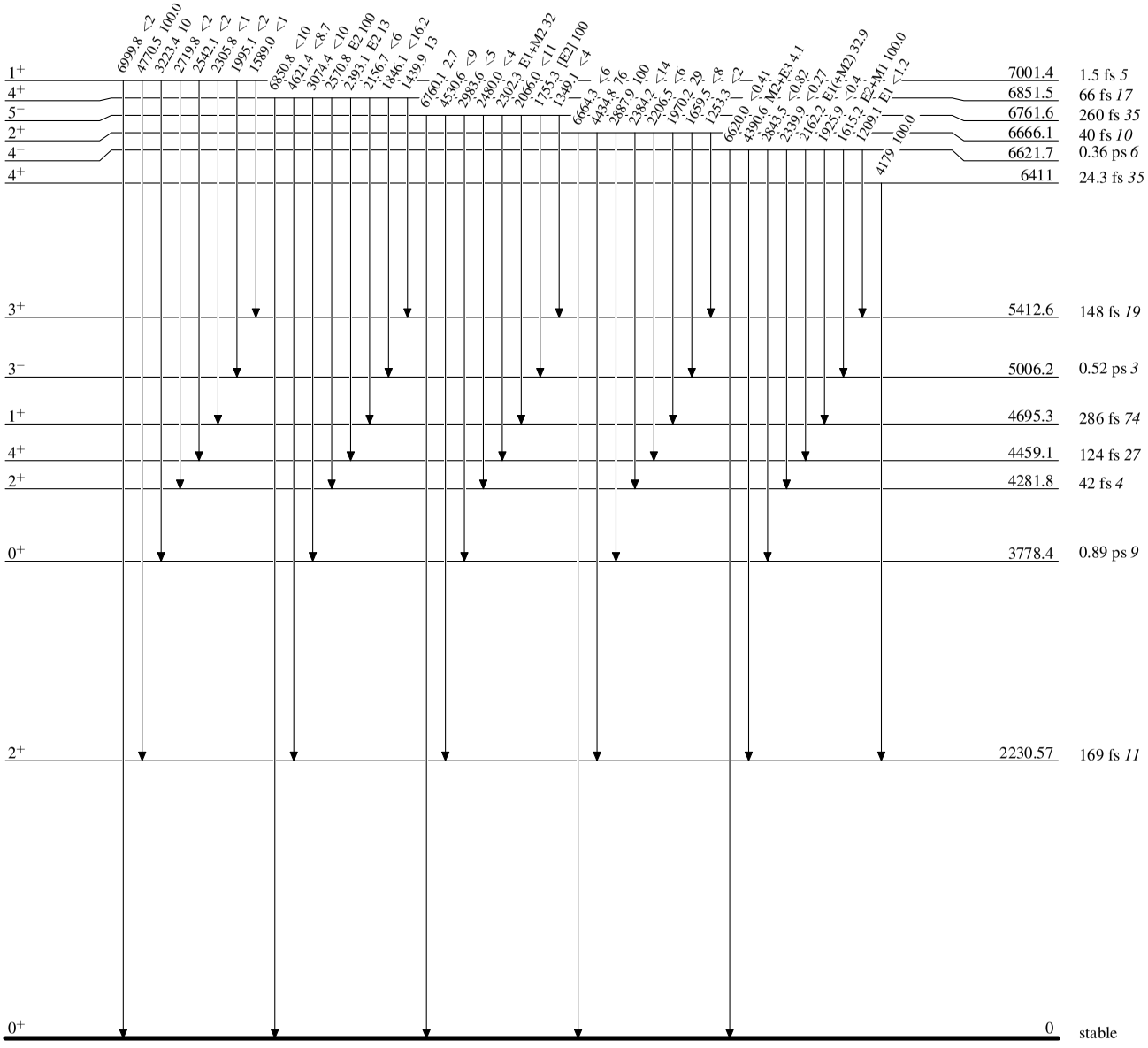


$^{32}_{16}S_{16}$

Adopted Levels, Gammas

Level Scheme (continued)

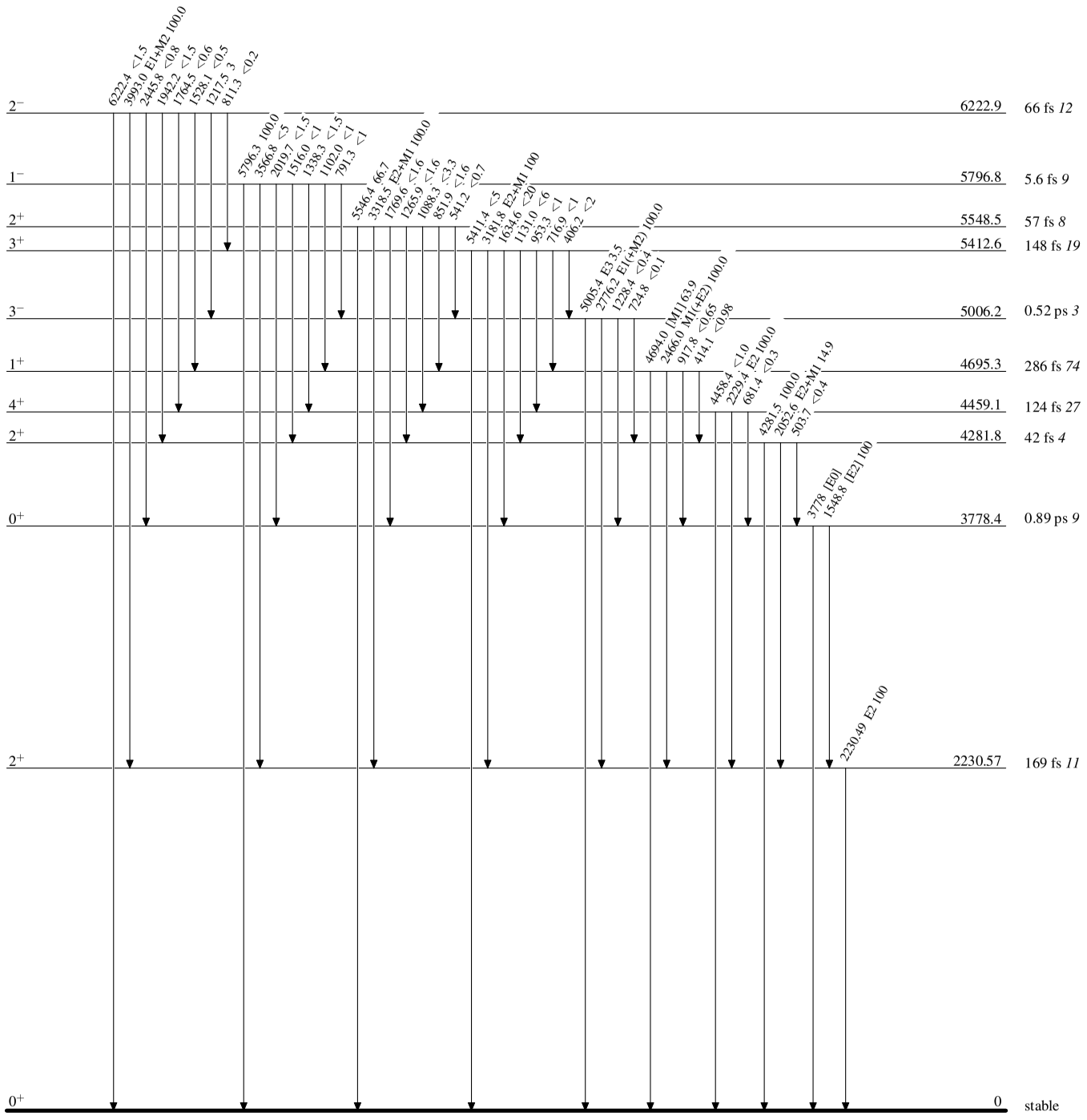
Intensities: Relative photon branching from each level



Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level



$^{32}_{16}S_{16}$