Adopted Levels, Gammas

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh, Jun Chen and Ameenah R. Farhan	NDS 194,3 (2024)	8-Jan-2024

Q(β^-)=−4963 *9*; S(n)=11153.79 *7*; S(p)=9506.7 *9*; Q(α)=−5090.96 *8* 2021Wa16
S(2n)=19181.38 *2*, S(2p)=16407.45 *2* (2021Wa16).
Other reactions:
^{72}Ge(^{6}Li,d),E=34 MeV: 1984Co08, analyzed spectroscopic factors.
^{76}Se(e,e),E=225 MeV: 1988Kh02 (also 1987Ku21,1987Kh07). Measured σ and comparison with theory.
^{76}Se(d,^{3}He),E=25 MeV: 1983Ro08, deduced g.s. proton occupation numbers.
Giant dipole resonances studied by 1976Ca06 using (γ,xn) reactions.
(^{12}C,X),(^{16}O,X),(^{18}O,X),E=40-52 MeV: 1985GuZZ, GDR decay characteristics.
(γ,xn): GDR study: 1975Go16.
GDR experimental study in (^{12}C,X) reaction.
Additional information 1.
For neutron resonances see 1971Fe01, 1969Ma15, 1964Co31.
^{76}Ge(π^+,π^-): 1991Ka20, 1991Ci10.
Mass measurements: 2010Mo03, 2008Ra09, 2006Sc38, 2002Bf02, 2001Fr25, 2001Do08, 1993Hy02, 1991Hy01, 1985El01 (also 1984El01).

^{76}Se Levels

In ^{74}Ge(^{3}He,n), a level is seen at 4.1 MeV *1* which may correspond to any of the 12 or so levels between 4.0 and 4.2 MeV.

Cross Reference (XREF) Flags

A	^{76}As β^- decay (26.254 h)	I	^{75}As(^{3}He,d)	Q	^{76}Se(p,p′γ),(α,α′γ)
B	^{76}Br ε+β^+ decay (16.14 h)	J	^{75}Se(n,γ) E=thermal	R	^{76}Se(d,d′),(pol d,d′)
C	^{76}Br ε decay (1.31 s):?	K	^{75}As(p,n) IAR	S	^{76}Se(α,α′)
D	^{76}Ge 2β^- decay (1.926×10^{21} y)	L	^{76}Se(γ,γ′)	T	Coulomb excitation
E	^{70}Zn(^{12}C,α2nγ)	M	^{76}Se(pol γ,γ′)	U	^{76}Br(n,p) E=thermal
F	^{74}Ge(^{3}He,n)	N	^{76}Se(n,n′)	V	^{77}Se(d,t)
G	^{74}Ge(α,2nγ)	O	^{76}Se(n,n′γ)	W	^{78}Se(p,t)
H	^{74}Ge(^{16}O,^{14}C)	P	^{76}Se(p,p′),(pol p,p′)		

E(level)†	J$^\pi$#	T$_{1/2}$‡	XREF	Comments
0.0[b]	0$^+$	stable	ABCDEfGHIJ LMNOPQRSTUVW	RMS charge radius (<r^2>)$^{1/2}$=4.1395 fm *16* (2013An02 evaluation). J$^\pi$: microwave absorption method (1950Ge05,1949St07,1933Ra02) consistent with J=0. Valence protons in g.s. from transfer reaction measurements (2009Ka06). From (p,t) reactions, 2007Fr10 deduce very similar neutron pair correlations for ^{76}Se and ^{76}Ge. From (^{3}He,n) reaction, 2013Ro10 deduce no evidence of pairing vibrations for ^{76}Se and ^{76}Ge, and conclude a simple BCS structure for the ground states of both nuclei.
559.103[b] *5*	2$^+$	11.98 ps +*16*−*40*	ABC EfGHIJ LMNOPQRSTUVW	μ=+0.70 *11* (2019Mc05,2020StZV) Q=−0.35 *4* (2019He07,2021StZZ) β_2=0.28 *1* (1993Mo05) J$^\pi$: E2 γ to 0$^+$. T$_{1/2}$: from averaged B(E2)↑=0.432 +*15*−*6* (2016Pr01

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Adopted Levels, Gammas (continued)

^{76}Se Levels (continued)

E(level)[†]	Jπ[#]	$T_{1/2}$[‡]	XREF	Comments
				evaluation), based on the following measurements: mean lifetime τ=15.5 ps *+13−19* (1963Pr04 in (γ,γ′)), 13 ps *2* (1960De08 in (γ,γ′)), 33 ps *22* (1955Co55,γγ(t)). Coulomb excitation measurements: B(E2)↑=0.419 *43* (1995Ka29, incident energy above the Coulomb barrier), 0.425 *9* (1984Zo01, RDM and DSA), 0.423 *6* (1977Le11), 0.42 *2* (1974Ba80, superseded by 1977Le11), 0.390 *40* (1970AgZV), 0.45 *4* (1962Ga13), 0.480 *43* (1962St02), 0.42 *8* (1960An07), 0.43 *6* (1956Te26). μ: transient-field method in Coul. ex. (2019Mc05), with measured $g^{76}Se/g^{74}Se$=0.96 *7* for first 2^+ states. Others: +0.806 *46* (1998Sp03,transient-field method in Coul. ex.); +0.81 *22* (1967Mu10, γγ(θ,H) in ^{76}As β^-), +0.80 *22* (1969He11, IMPAC in Coul. Ex.). Q: reorientaton in Coul. ex. (2019He07). Others: −0.34 *7* (1977Le11, reorientation in Coul. ex.); −0.30 *5* (1976VoZY). β_2(p,p′): 0.28 *1* (1993Mo05); 0.310 *10*, 0.301 *15* (1984De01); 0.27 *4*, 0.28 *4* (1983Ma59); 0.278 *7*, 0.293 *7* (1979Ma28); 0.323 (1970He10). β_2(n,n′): 0.28 (1976La12). β_2R=1.52 *5* (1984Ku09), 1.72 *5* (1981Br23). β_2(α,α′): 0.265, 0.356 (1988Ba35). β_2(Coul. ex.): 0.268 (1977Le11), 0.309 (1974Ba80), 0.319 (1970AgZV). β_2(^{16}O,^{14}O): 0.326 (1976Co09).
1122.279 *8*	0^+	12.1 ps *+39−24*	AB IJ L OPQR T VW	$T_{1/2}$: from B(E2) in Coul. ex. Otehr: 11 ps *5* from B(E2) ratios of unresolved 563γ and 559γ (1964By02) in Coul. ex. Jπ: E0 transition to 0^+. Also γγ(θ) in ^{76}As β^- and ^{76}Br ε decay.
1216.154[c] *6*	2^+	3.3 ps *3*	AB E G IJ LM OPQRSTUVW	μ=0.61 *11* (1998Sp03,2020StZV) Q=+0.19 *4* (2019He07,2021StZZ) β_2=0.28 *1* (1993Mo05) μ: transient-field method in Coul. ex. (1998Sp03), measured value of 0.70 *12* in 1998Sp03 is re-evaluated to 0.61 *11* in 2020StZV. Q: reorientaton in Coul. ex. (2019He07). Jπ: E2 γ to 0^+. $T_{1/2}$: from B(E2) in Coul. ex. Other: 3.5 ps *14* (DSAM in (α,2nγ)). β_2(p,p′)=0.085 *2* (1993Mo05). β_2(α,α′)=0.1 (1988Ba35).
1330.872[b] *8*	4^+	1.52 ps *3*	ABC E G IJ OPQR T VW	μ=2.2 *4* (1998Sp03,2020StZV) Q=−0.29 *4* (2019He07,2021StZZ) μ: transient-field method in Coul. ex. (1998Sp03), measured value of 2.56 *36* in 1998Sp03 is re-evaluated to 2.2 *4* in 2020StZV. Q: reorientaton in Coul. ex. (2019He07). Jπ: ΔJ=2, E2 γ to 2^+. Observed anisotropy forbids J=0. $T_{1/2}$: from B(E2) in Coul. ex. Others: 0.7 ps *+5−4* (DSAM in (α,2nγ)), 1.3 ps *+5−1* (p,p′γ). β_4(p,p′)=0.049 *10* or 0.012 (1986MoZR), 0.040 (1984De01), 0.014 *5*, 0.012 *4* (1983Ma59); β_4(n,n′)=0 (1984Ku09).

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Adopted Levels, Gammas (continued)

^{76}Se Levels (continued)

E(level)[†]	Jπ[#]	$T_{1/2}$[‡]	XREF	Comments
1688.971[d] *7*	3^+	3.2 ps *+12−6*	AB E G J OPQ T V	Jπ: ΔJ=1 E2+M1 γ to 2^+; γ to 4^+.
1787.655 *7*	2^+	1.29 ps *+42−24*	AB IJ OPQRSTUV	Jπ: M1+E2 γ to 2^+; γ rays to 0^+ and 4^+ and L(p,p′)=2. $T_{1/2}$: weighted average of 1.18 ps *+42−24* from DSAM in (n,n′γ) (2019Mu04) and 1.5 ps *+5−4* from B(E2) for 1229γ in Coul. ex. $\beta_2(\alpha,\alpha')$=0.07 (1988Ba35).
1791.437 *21*	0^+		AB O Q	Jπ: from isotropic γ(θ) for 575.3γ and comparison of excitation function data with statistical model calculations using CINDY code in (n,n′γ); spin=0 also from γγ(θ) in ^{76}Br ε decay (2018MoZZ).
2026.020[c] *8*	4^+	1.6 ps *2*	AB E G IJ OPQR T VW	Jπ: ΔJ=2, E2 γ to 2^+ and M1+E2 γ to 4^+. $T_{1/2}$: weighted average of 1.8 ps *4* from DSAM in (α,2nγ) and 1.6 ps *2* from B(E2) in Coul. ex.
2127.224 *7*	$(2)^+$		AB IJ OPQR V	Jπ: L=1+3 in (^{3}He,d) from $3/2^-$ and γ rays to 0^+ and 4^+.
2170.572 *11*	(0^+)	1.5 ps *+10−5*	AB IJ OPQR W	XREF: P(2177)R(2210). Jπ: L(p,t)=(0). But L(^{3}He,d)=(1+3) from $3/2^-$ suggests $(1^+,2^+,3^+)$. E(level): there may be two separate levels near this energy as indicated by contradictory L(p,t) and L(^{3}He,d).
2262.42[b] *16*	6^+	0.58 ps *5*	E G OPQR T	XREF: R(2290). Jπ: ΔJ=2, E2 γ to 4^+; member of rotaional band. $T_{1/2}$: weighted average of 0.62 ps *7* from DSAM in (α,2nγ) and 0.56 ps *5* from B(E2) in Coul.ex.
2362.963 *13*			J W	XREF: W(2347). Jπ: γ to 2^+; possible γ to 4^+.
2429.131[e] *8*	3^-	8.9 ps *+15−12*	AB GHIJ NOPQRST W	β_3=0.17 *1* (1993Mo05) B(E3)=0.032 *7* (2002Ki06 evaluation, from Coulomb ex.). Jπ: L(d,^{3}He)=4 from $3/2^-$ and L(p,p′)=3. Also dipole γ rays to 2^+ and 3^+; 403γ to 4^+ can only be D,E2 from RUL. $T_{1/2}$: weighted average of 14 ps *7* from DSAM in (α,2nγ) and 8.7 ps *+15−12* from B(E3) in Coul. ex. and adopted γ branching ratios. β_3(p,p′)=0.17 *1* (1993Mo05), 0.15 (1984De01), 0.164 (1979Ma28, 1979Ma41); $\beta_3(\alpha,\alpha')$=0.183 (1988Ba35); β_3(Coul. ex.)=0.185 (1974Ba80); $\beta_3(^{16}O,^{14}O)$=0.185 (1976Co09); β_3R(n,n′)=0.77 *5* (1984Ku09).
2485.02 *5*	4^+	485 fs *+76−62*	OpQ	XREF: p(2487). Jπ: spin=4 from γ(θ) in (n,n′γ); γ M1+E2 to 3^+.
2489.35[d] *5*	5^+	0.9 ps *+3−2*	E G OpQ	XREF: p(2487). Jπ: ΔJ=2, E2 γ to 3^+; E2+M1 γ to 4^+.
2514.681 *11*	2^+	1.18 ps *+39−24*	AB IJ OPQR W	XREF: R(2540). Jπ: M1+E2 γ to 2^+; 825.8γ D+Q to 3^+; 723.2γ to 0^+. L(p,t)=(2) also supports (2^+).
2558.73 *8*			B V	XREF: V(2570).
2604.09 *4*	$1^+,2^+$	1.08 ps *+64−30*	B O	Jπ: M1+E2 γ to 2^+; γ to 0^+.
2617.89 *6*	$(4)^+$	402 fs *+76−55*	I OP VW	Jπ: L(p,p′)=4 and L(^{3}He,d)=3 from $3/2^-$; M1+E2 γ to 4^+ and 3^+.
2655.383 *13*	1	0.82 ps *+22−15*	AB J OPQ w	Jπ: dipole γ to 0^+.

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Adopted Levels, Gammas (continued)

^{76}Se Levels (continued)

E(level)[†]	Jπ[#]	$T_{1/2}$[‡]	XREF	Comments
2669.904 *14*	2^-	0.89 ps +*27*−*17*	AB IJ O QR w	Jπ: L(^{3}He,d)=2+4 from 3/2$^-$; dipole γ to 2$^+$; γ to 0$^+$.
2691 *2*	(3^-)		P	Jπ: L(p,p′)=(3).
2805.10 *15*	(4^+)	0.39 ps +*10*−*7*	OP	Jπ: L(p,p′)=4.
2812.130 *34*	(3^+)		B J O Q w	XREF: B(?)w(2820). Jπ: (M1+E2) γ rays to 2$^+$ and 3$^+$; (3^+) from (n,n′γ) based on γ decay pattern.
2817.24 *4*	(2^+)	98 fs *6*	B J O w	XREF: w(2820). Jπ: γs to 4$^+$ and 0$^+$.
2824.797[e] *10*	5^-	6.2 ps +*21*−*14*	G iJ O	XREF: i(2830). Jπ: ΔJ=2, E2 γ to 3$^-$ and E1 γ to 4$^+$. Also L(^{3}He,d)=4 from 3/2$^-$.
2829.61 *19*	(1,2)		B i	XREF: i(2830). Jπ: 2830γ to 0$^+$.
2853 *2*	(4^+)		P r v	XREF: r(2870). Jπ: L(p,p′)=4.
2859.781[f] *24*	4^-	1.2 ps *5*	B G IJ O v	Jπ: ΔJ=1, M1+E2 γ to 3$^-$ and ΔJ=0 or 2, D+Q γ to 4$^+$.
2869.34 *5*	(1^+,2^+)	82 ps *6*	B J O Qr v	XREF: r(2870). Jπ: (M1+E2) γ to 2$^+$; γ to 0$^+$.
2910.993 *18*	(1 to 4)[a]		J w	
2917.32 *8*	$(4)^+$		IJ OP w	XREF: P(2915). Jπ: L(p,p′)=4 and L(^{3}He,d)=3 from 3/2$^-$. But 5$^+$ from (n,n′γ).
2950.171 *32*	1^+	92 fs *14*	B J L O Q	Jπ: (M1) intense 2950γ to 0$^+$; M1+E2 γ to 2$^+$; dipole γ to 0$^+$ from γ(θ) in (γ,γ′). $T_{1/2}$: weighted average of 76 fs *13* from (γ,γ′) and 104 fs *11* from (n,n′γ).
2969.48 *6*	2^-,3^-,4^-		IJ OP r	XREF: I(2956). Jπ: L(^{3}He,d)=4+2 from 3/2$^-$.
2975.00 *5*	(2^+,3,4^+)		B O	Jπ: γs to 2$^+$ and 4$^+$.
2975.98[c] *29*	6^+	1.2 ps +*7*−*4*	E G r T	Jπ: ΔJ=2, E2 γ to 4$^+$; γ to 6$^+$. $T_{1/2}$: other: 1.1 ps *4* from B(E2) in Coul. ex.
3007.75 *8*	$(2)^+$	27.0 fs *21*	IJ OP VW	XREF: I(3022)P(3001). Jπ: L(p,p′)=2 and L(^{3}He,d)=1+3 from 3/2$^-$; M1+E2 γ to 2$^+$; γ to 0$^+$.
3031.57 *7*	0^+	98 fs *8*	O	Jπ: from isotropic γ(θ) for 1815 and 2472 γ rays and comparison of excitation function data with statistical model calculations using CINDY code in (n,n′γ).
3042 *4*	(6^+)		P	Jπ: L(p,p′)=6.
3045.79 *8*	(5^-)	0.39 ps +*28*−*12*	G O	Jπ: (M1), ΔJ=(0) γ to 5$^-$. $T_{1/2}$: from DSAM in (n,n′γ). Other: <0.28 ns from (α,2nγ). Note that the quoted $T_{1/2}$ results in a large reduduced transition strength for any of Mult=E1, M1, or E2.
3069.62 *4*	2^+	457 fs +*83*−*62*	B J O Q	Jπ: M1+E2 γ to 2$^+$; 1380.5γ dipole to 3$^+$; ε feeding (log *ft*=5.95) from 1$^-$.
3084.58 *6*	(1^+,2^+,3^+)[&]	32.6 fs *21*	I OP	
3105.48 *5*	(3^-)	202 fs *21*	B J OP W	Jπ: L(p,p′)=3.
3160.115 *32*	(2^+)	0.38 ps +*21*−*10*	B J O Qr	Jπ: γs to 4$^+$ and 1$^+$; ε feeding (log *ft*=6.4 from 1$^-$). But 0$^+$ proposed in (n,n′γ) from isotropic 2601γ(θ).
3161.80 *5*	(3^-)	272 fs +*63*−*43*	OP r	Jπ: (M1+E2) γ to (3$^-$); γ to 4$^+$ and 2$^+$.

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Adopted Levels, Gammas (continued)

^{76}Se Levels (continued)

E(level)†	Jπ#	$T_{1/2}$‡	XREF	Comments
3191.67 *8*	(3)+&	112 fs *8*	B IJ O	XREF: I(3198). Jπ: (M1+E2) γs to 2+ and 4+.
3212.98 *10*	1+,2+	11.1 fs *14*	i L O	XREF: i(3212). Jπ: γ to 0+ can only be D,E2 from RUL; M1+E2 γ to 2+. $T_{1/2}$: from DSAM in (n,n′γ). Other: 11 fs *4* from (γ,γ′).
3216 *4*	(3−&4+)		P W	XREF: W(3232). Jπ: L(p,p′)=3+4; also L(p,t)=(3,4) for a possible doublet.
3219.428 *33*	(2+,3+)	56.1 fs *42*	B iJ O	XREF: i(3212). Jπ: γs to 2+ and 4+; L(^{3}He,d)=1+3 for a group at 3212.
3225.7 *5*	(6,8+)		G	Jπ: ΔJ=0 or 2 γ to 6+. $T_{1/2}$: from DSAM in (α,2nγ) 1981KiZW give 1.1 ps *3* but this value is not reported in authors′ published work (1984Zo01).
3230.27 *8*	1,2+	0.7 ps *+21−3*	O	Jπ: γ to 0+ can only be D,E2 from RUL.
3238.78 *8*			G O	Jπ: γ to 5−.
3259.81 *8*			B p	XREF: p(3259).
3262.34[f] *25*	6−	12 ps *6*	G p	XREF: p(3259). Jπ: ΔJ=2, (E2) γ to 4−, M1+E2 γ to 5− and D+Q γ to 6+.
3262.96 *8*		201 fs *+97−55*	IJ Op	XREF: p(3259). Jπ: γ to 2+.
3267.57 *6*	(2+,3,4+)	395 fs *+97−69*	B ij O	XREF: i(3268). Jπ: γs to 2+ and 4+.
3268.70 *4*	(1−,2)		B ij	XREF: i(3268). Jπ: ε feeding (log *ft*=7.2) from 1−; γ to (3−).
3269.75[b] *33*	8+	0.35 ps *7*	E G T	Jπ: ΔJ=2, E2 γ to 6+; member of rotational band. $T_{1/2}$: other: 0.34 ps *8* from B(E2) in Coul. Ex.
3282.19 *11*	1,2+	101 fs *9*	O	Jπ: γ to 0+ can only be D,E2 from RUL.
3294.8 *4*	(4+)		J P r w	XREF: P(3289). Jπ: L(p,p′)=4.
3295.02 *12*	(1+,2+)		B i o r w	Jπ: γ to 0+; L(^{3}He,d)=1+3 for a group at 3295. E(level),$T_{1/2}$: 69 fs *5* for a 3295.28 level in (n,n′γ) could correspond to 3295.70+3297.05 levels in ^{76}Br ε decay based on matching of their decaying γ transitions.
3296.2 *6*	(1+,2+)		B i o r w	XREF: i(3295). E(level),$T_{1/2}$: see comment at 3295.7 level. Jπ: γ to 0+; L(^{3}He,d)=1+3 for a group at 3295.
3312.04 *30*	(6−)	0.14 ns *+14−7*	G w	Jπ: ΔJ=1, D+Q (δ=0.25) γ to 5−.
3331.51 *8*		229 fs *+42−35*	O	Jπ: γ to 2+.
3346.25 *11*			Op	XREF: p(3342). Jπ: γs to 4+.
3348.48 *11*	(1+,2+)	0.3 ps *+15−2*	i Op	XREF: i(3345)p(3342). Jπ: γ to 0+; L(^{3}He,d)=1+3 for a group at 3345.
3351.462 *30*	(2)+	90 fs *9*	B iJ O Q	XREF: i(3345). Jπ: M1+E2 γ to 2+; γ to 0+; γs to 0+ and 3−.
3376.37 *12*	1(+),2+	77 fs *+49−29*	i O	XREF: i(3378). Jπ: γ to 0+ can only be D,E2 from RUL; L(^{3}He,d)=1+3 from 3/2− for a group at 3378 could correspond to 3376.3+3377.2 levels.

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Adopted Levels, Gammas (continued)

^{76}Se Levels (continued)

E(level)†	Jπ#	$T_{1/2}$‡	XREF	Comments
3377.0 *4*	$(1^+,2^+,3^+)$		B i	XREF: i(3378). Jπ: γ to 2^+; L(^{3}He,d)=1+3 from $3/2^-$ for a group at 3378 could correspond to 3376.3+3377.2 levels.
3403.82 *9*	$(2^+,3^+,4^+)$	32.6 fs *35*	O	Jπ: 592γ to 3^+ can't be pure E1, E2 or M2 based on RUL; γ to 4^+. Note that (5^+) is proposed in (n,n′γ), but it would require a B(E2)(W.u.)=5.5×10^3 *+7−6* for 592γ, which greatly exceeds RUL=300.
3405.9 *7*	(1)	205 fs *33*	L	Jπ: (D) γ to 0^+.
3407.91 *4*	(4^+)	0.52 ps *+56−19*	OP	Jπ: L(p,p′)=4.
3417 *10*	$^-$		I	Jπ: L(^{3}He,d)=4 from $3/2^-$ suggests J=2 to 6.
3432.31[d] *33*	7^+	0.8 ps *+4−2*	E G	Jπ: ΔJ=2, E2 γ to 5^+ and ΔJ=1, M1 γ to 6^+.
3436.09 *16*	$1^{(+)},2^+$	63 fs *5*	I O	Jπ: γs to 0^+ can only be D,E2; (M1+E2) γ to 2^+.
3441.27 *22*	(3^-)		OP W	XREF: W(3458). Jπ: L(p,p′)=3. Also L(p,t)=(3,4).
3441.54[e] *26*	7^-	3.6 ps *7*	G	Jπ: ΔJ=2, E2 γ to 5^- and γ to 6^+.
3459.13 *5*	(2^+)		B I Q	XREF: I(3467). Jπ: ε feeding (log *ft*=6.6) from 1^-; γs to 3^+ and 3^-; L(^{3}He,d)=1+3 from $3/2^-$ for a group at 3467.
3466.39 *11*	(1,2,3)		B O	XREF: O(?). Jπ: γs to 2^+ and 2^-.
3475 *4*	(4^+)		P	Jπ: L(p,p′)=4.
3528.69 *30*	1^+	50 fs *5*	I L O r	XREF: O(?). Jπ: L(^{3}He,d)=1+3 from $3/2^-$; dipole γ to 0^+ from γ(θ). $T_{1/2}$: from (γ,γ′).
3552.89 *7*	(1,2)		B i r	XREF: i(3558)r(3540). Jπ: 2431γ to 0^+.
3556.210 *29*	(2^-)		B iJ Qr	XREF: i(3558). Jπ: γs to 1^+ and 4^-; ε feeding (log *ft*=6.4) from 1^-.
3566.6 *10*	$1^{(+)}$	157 fs *24*	i L P	XREF: i(3558). Jπ: dipole γ to 0^+ in (γ,γ′); L(^{3}He,d)=(1+3) for a group at 3558.
3604.192 *33*	1^+	55 fs *5*	B IJ L Q W	XREF: I(3598)W(3591). Jπ: ε feeding (log *ft*=6.4) from 1^-; γ to 0^+ can only be D,E2 from RUL; L(^{3}He,d)=1+3 from $3/2^-$ for a group at 3598; dipole γ to 0^+ in (γ,γ′).
3636.88 *6*	(2^+)		B I P	Jπ: γs to 0^+ and (3^-); L(^{3}He,d)=(1+3) for a group at 3634.
3651.88 *9*	$(1^+,2^+,3^+)$		B iJ p	XREF: i(3659)p(3655). Jπ: L(^{3}He,d)=1+3 from $3/2^-$ for a group at 3659 and γs to 1^+ and 3^+ suggests $(1^+,2^+,3^+)$. But L(p,p′)=(4) for a 3655 group suggests (4^+) and may indicate a different level.
3657.7? *4*	(1,2)		i Op	XREF: i(3659)O(?)p(3655). Jπ: 3657.8γ to 0^+.
3670.2 *4*	$1^{(+)}$	73 fs *8*	i L	XREF: i(3659). Jπ: dipole γ to 0^+; L(^{3}He,d)=1+3 from $3/2^-$ for a group at 3659.

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Adopted Levels, Gammas (continued)

^{76}Se Levels (continued)

E(level)[†]	Jπ[#]	$T_{1/2}$[‡]	XREF	Comments
3696.27 *28*	(7⁻)	28 ps *7*	G	Jπ: ΔJ=1, (M1+E2) γ to (6⁻);and DJ=(0) γ to 7⁻.
3697 *4*	1⁺,2⁺,3⁺[&]		I P W	
3716.52 *6*	(2)		B	Jπ: ε feednig (log *ft*=7.4 from 1⁻); ΔJ=0,2 γ to 2⁺.
3730.8 *10*	(3⁻)		J P	Jπ: L(p,p′)=3.
3752.1 *14*	1(+)	175 fs *50*	I L	XREF: I(3741). Jπ: L(^{3}He,d)=1+3 from 3/2⁻; dipole γ to 0⁺.
3758.79 *20*	1	6.0 fs *6*	L	Jπ: dipole γ to 0⁺.
3776 *4*	(4⁺)		P	Jπ: L(p,p′)=4.
3785.7 *4*	(8⁺)	0.9 ps *+5−3*	G	Jπ: ΔJ=0,2 γ to 6⁺; γ to 8⁺ is likely dipole from RUL.
3790	(≤3⁺)		I	Jπ: L(^{3}He,d)=1(+3) from 3/2⁻.
3806 *4*	(5⁻)		P	Jπ: L(p,p′)=5.
3808 *10*	1⁺,2⁺,3⁺[&]		I	
3853.75[c] *33*	(8)⁺	0.23 ps *+8−5*	E G	Jπ: DJ=(0), M1+E2 γ to 8⁺ and γ to 6⁺.
3857.8 *11*	1⁺	171 fs *35*	I L	Jπ: L(d,^{3}He)=1+3 from 3/2⁻; dipole γ to 0⁺.
3861.11 *32*	(4⁺)		J P W	XREF: P(3862)W(3843). Jπ: L(p,p′)=4. Level in (p,t) probably corresponds to this level rather than 3857, 1⁺.
3880.46 *18*			B	
3906.39 *30*	1⁺,2⁺,3⁺[&]		IJ	
3915.48 *5*	(2⁻)		B J	Jπ: γs to 1⁺ and 4⁻; possible ε feeding (log *ft*=7.0 from 1⁻).
3917 *4*	(4⁺)		P	Jπ: L(p,p′)=4.
3922.5 *4*	1	42 fs *4*	L	Jπ: dipole γ to 0⁺.
3930.02 *6*	(1,2⁺)		B J	XREF: J(3926.9). Jπ: ε feeding (log *ft*=7.0) from 1⁻; 1759γ to 0⁺.
3932.7 *4*			J	
3948 *4*	(4⁺)		P	Jπ: L(p,p′)=4.
3970.407 *32*	(2⁺)		B I	XREF: I(3955). Jπ: ε feeding (log *ft*=6.4) from 1⁻; γ to (30); L(^{3}He,d)=1+3 from 3/2⁻ for a group at 3955.
4001.81 *23*	(3⁻)		IJ P W	XREF: W(3980). Jπ: L(p,p′)=3. But L(^{3}He,d)=(1+3) from 3/2⁻ suggests (1⁺,2⁺,3⁺).
4005.1 *8*			G	Additional information 2. Jπ: γ to (7⁻) suggests (7,8,9).
4008.7[f] *6*	(8⁻)	2.2 ps *7*	G	Jπ: ΔJ=2, E2 γ to 6⁻.
4045.61 *10*	1⁺	31.1 fs *29*	B iJ L P	XREF: i(4054). Jπ: dipole γ to 0⁺; γ to 3⁺ can only be D,E2.
4055.22 *30*	1⁺	29.3 ps *26*	i LM	XREF: i(4054). Jπ: M1 γ to 0⁺.
4083.68 *6*	(1⁻,2)		B	Jπ: ε feeding (log *ft*=6.9) from 1⁻; γ to 3⁻.
4086.58 *19*	(1,2,3⁺)		B	Jπ: γs to 1⁺, 2⁺, 2⁻.
4119 *4*	2⁻,3⁻,4⁻		I P	XREF: I(4103). Jπ: L(^{3}He,d)=2+4 from 3/2⁻.
4125.5 *10*	1⁺	123 fs *25*	I LM	XREF: I(4137). Jπ: M1 γ to 0⁺. $T_{1/2}$: weighted average of 134 fs *25* from (γ,γ′) and 98 fs *38* from (pol γ,γ′).
4151.36 *6*	(2)		B	Jπ: ε feeding (log *ft*=7.2 from 1⁻); γs to 3⁺ and 3⁻.
4170 *4*	(4⁺)		i P w	Jπ: L(p,p′)=4.
4174.33 *6*	(1,2)		B i w	Jπ: ε feeding (log *ft*=6.7) from 1⁻; 2383γ to 0⁺.

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Adopted Levels, Gammas (continued)

^{76}Se Levels (continued)

E(level)[†]	Jπ[#]	$T_{1/2}$[‡]	XREF	Comments
4199.19 *5*	(1⁻,2)		B w	Jπ: ε feeding (log *ft*=6.8) from 1⁻; γ to 3⁻.
4205.44 *5*	(1⁻,2)		B J w	Jπ: ε feeding (log *ft*=6.9) from 1⁻; γ to 3⁻.
4214.0 *4*	(8⁻)	1.7 ps *+15−8*	G	Jπ: ΔJ=2, E2 γ to (6⁻).
4218 *4*	(3⁻)		P	Jπ: L(p,p′)=3.
4218.81 *10*	1⁺	2.98 fs *35*	I LM	XREF: I(4218). Jπ: M1 γ to 0⁺.
4240.54 *21*	(1 to 4)[a]		iJ P	XREF: i(4250).
4249.20 *28*	(1,2)		B i	XREF: i(4250). Jπ: 4249γ to 0⁺.
4257.59 *13*	(1,2)		B iJ	XREF: i(4250). Jπ: 2087γ to 0⁺.
4282.8 *4*	(2⁻,3⁻,4⁻)		iJ	XREF: i(4301). Jπ: L(^{3}He,d)=2+4 from 3/2⁻.
4298.87 *9*	(1,2,3⁺)		B i	XREF: i(4301). Jπ: γs to 1⁺, 2⁻, 2⁺.
4299.5[b] *5*	10⁺	0.49 ps *+10−7*	E G	Jπ: ΔJ=2, E2 γ to 8⁺; member of rotational band.
4324.6[e] *6*	(9)⁻	1.4 ps *4*	G	Jπ: ΔJ=2, E2 γ to 7⁻; band assignmetn.
4328.36 *7*	(1,2)		B	Jπ: 4328γ to 0⁺.
4329.2 *4*	1	6.1 fs *15*	L	Jπ: γ(θ) in (γ,γ′); dipole γ to 0⁺ and 2⁺.
4340 *4*	(3⁻)		i P	Jπ: L(p,p′)=3.
4347.53 *33*	(1,2)		B i	XREF: i(4343). Jπ: 4347γ to 0⁺.
4351.3 *7*	(1 to 4)[a]		iJ	XREF: i(4343).
4366.55 *11*			B	Jπ: γs to 2⁺ and 3⁺.
4369.43 *22*	(4⁺)		IJ	XREF: I(4375). Jπ: L(p,p′)=4.
4383.97 *15*	1⁺,2⁺,3⁺[&]		IJ	XREF: I(4400).
4399 *4*	(4⁺)		P	Jπ: L(p,p′)=4.
4405.9[d] *4*	(9⁺)	0.9 ps *2*	E G	Jπ: ΔJ=2, (E2) γ to 7⁺; band assignment.
4411.65 *4*	(2)		B	Jπ: ε feeding (log *ft*=6.3) from 1⁻; γs to 3⁺ and 3⁻.
4425 *10*	(3⁻,4⁺)		W	Jπ: L(p,t)=(3,4) frm 0⁺.
4437.72 *5*	(1⁺,2⁺)		B I p	XREF: I(4425)p(4447). Jπ: ε feeding (log *ft*=6.6) from 1⁻; 2267γ to 0⁺; L(^{3}He,d)=1+3 for a group at 4425.
4451.92 *11*	(1⁺,2⁺)		B I	XREF: I(4459). Jπ: 4451.8γ to 0⁺; L(^{3}He,d)=1+3 from 3/2⁻ for a group at 4459.
4473.46 *8*	(2⁺)		B iJ P	XREF: i(4475). Jπ: L(p,p′)=(2).
4489.23 *6*	(1,2)		B iJ	XREF: i(4475). Jπ: 2698γ to 0⁺.
4523.47 *10*	(3⁻)		B IJ P	Jπ: L(p,p′)=3.
4532.91 *12*	(1⁻,2,3)		B	Jπ: γs to 2⁺, 2⁻, 3⁻.
4534.93 *8*	(0,1,2)		B	Jπ: ε feeding (log *ft*=6.7 from 1⁻).
4535.7 *5*	1⁺	10.1 fs *17*	LM	Jπ: M1 γ to 0⁺. $T_{1/2}$: from (γ,γ′). Other: 10.1 fs *24* from (pol γ,γ′).
4576.11 *19*	(1,2)		B I	XREF: I(4567). Jπ: 3453.8γ to 0⁺.
4581.05 *10*	(1,2)		B	Jπ: ε feeding (log *ft*=6.6) from 1⁻; 2152γ to 3⁻.
4603.26 *28*	(1,2)⁺		B I	XREF: I(4603). Jπ: 4603γ to 0⁺; L(^{3}He,d)=1+3 from 3/2⁻.
4603.3 *6*	1⁻	8.0 fs *24*	M	Jπ: E1 γ to 0⁺.
4611 *4*	(3⁻)		P	Jπ: L(p,p′)=3.
4647 *10*	1⁺,2⁺,3⁺[&]		I	

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Adopted Levels, Gammas (continued)

^{76}Se Levels (continued)

E(level)[†]	Jπ[#]	$T_{1/2}$[‡]	XREF	Comments
4658 *4*	(3⁻)		I P	XREF: I(4677). Jπ: L(p,p′)=3 and L(^{3}He,d)=2+4 from 3/2⁻.
4663.08 *31*	1⁻	5.4 fs *9*	LM	Jπ: E1 γ to 0⁺.
4673.7 *14*	1⁺	54 fs *18*	M	Jπ: M1 γ to 0⁺.
4687.21 *11*	(1,2,3⁺)		B	Jπ: γs to 1⁺, (3).
4687.3[c] *4*	(10)⁺	0.49 ps *7*	E G	Jπ: ΔJ=2, E2 γ to 8⁺ and γ to (10)⁺.
4720.6 *5*	1⁻	6.4 fs *9*	B LM	Jπ: E1 γ to 0⁺ and 2⁺. $T_{1/2}$: from (γ,γ′). Other: 6.4 fs *10* from (pol γ,γ′).
4723.2 *4*	(3⁺)		B i P	XREF: i(4729). Jπ: L(^{3}He,d)=1+3 from 3/2⁻ for a 4729 group gives 1⁺,2⁺,3⁺ and L(p,p′)=4 gives 4⁺. However, J^π=3⁺ would agree with both if unnatural parity state is populated in (p,p′).
4728.6 *6*			G	Jπ: γ to 7⁻ suggests (7,8,9). $T_{1/2}$: for a 1287γ, from DSAM 1981KiZW report $T_{1/2}$=0.6 ps *1*, but this value is not reported in authors′ published work (1984Zo01).
4731.6 *4*	(⁺)		B i	XREF: i(4729). Jπ: L(^{3}He,d)=1+3 from 3/2⁻ for a 4729 group gives 1⁺,2⁺,3⁺.
4751.6 *5*	1⁺,2⁺,3⁺[&]		I J	
4766.96 *30*	1	17.4 fs *15*	L	Jπ: dipole γ to 0⁺.
4771 *4*	(3⁻)		P	Jπ: L(p,p′)=(3).
4794.97 *13*	(1,2)		B	Jπ: 3672.5γ to 0⁺.
4811 *4*	1⁺,2⁺,3⁺[&]		I P	
4836 *10*	1⁺,2⁺,3⁺[&]		I	
4859 *4*	(⁺)		I P	Jπ: L(^{3}He,d)=1+3 from 3/2⁻ allows (1⁺,2⁺,3⁺) but L(p,p′)=4 suggests 4⁺. However, J^π=3⁺ agrees with both if an unnatural parity state is populated in (p,p′).
4880.0 *4*	1⁻	19.7 fs *19*	LM	Jπ: E1 γ to 0⁺. $T_{1/2}$: weighted average of 19.9 fs *19* from (γ,γ′) and 19 fs *4* from (pol γ,γ′).
4887.07 *30*	1⁻	27.0 fs *33*	LM	Jπ: E1 γ to 0⁺. $T_{1/2}$: from (γ,γ′). Other: 27 fs *9* from (pol γ,γ′).
4911 *10*	1⁺,2⁺,3⁺[&]		I	
4931.6 *17*	1⁻	79 fs *21*	LM	Jπ: E1 γ to 0⁺.
4935 *4*	(3⁻)		I P	Jπ: L(p,p′)=3.
4938.6 *15*	1	43 fs *8*	L	Jπ: dipole γ to 0⁺.
4971.5 *17*	1⁺	38 fs *7*	I L	Jπ: L(^{3}He,d)=1+3 FROM 3/2⁻; dipole γ to 0⁺.
4984.81 *31*	1⁻	6.0 fs *8*	LM	Jπ: E1 γ to 0⁺. $T_{1/2}$: from (γ,γ′). Other: 6.0 fs *11* from (pol γ,γ′).
4998 *4*	1⁺,2⁺,3⁺[&]		I P	XREF: I(5013).
5001.48 *20*	1⁻	8.4 fs *6*	M	Jπ: E1 γ to 0⁺.
5010.76 *21*	1⁻	3.65 fs *35*	LM	Jπ: E1 γ to 0⁺. $T_{1/2}$: from (γ,γ′). Other: 3.7 fs *7* from (pol γ,γ′).
5032.11 *19*	(2⁻,3⁻,4⁻)		I J	XREF: I(5043). Jπ: L(^{3}He,d)=2+4 from 3/2⁻.
5068.1[f] *8*	(10)⁻	1.0 ps *+4−2*	G	Jπ: ΔJ=2, E2 γ to (8)⁻; band assignment.
5074.00 *10*	1⁻	2.44 fs *15*	LM	Jπ: E1 γ to 0⁺. $T_{1/2}$: from (γ,γ′). Other: 2.43 fs *28* from (pol γ,γ′).
5081 *4*	(3)⁻		I P	Jπ: L(^{3}He,d)=2+4 from 3/2⁻ and L(p,p′)=3.
5122.19 *20*	1	35 fs *8*	L	Jπ: dipole γ to 0⁺.
5128.59 *10*	1	25 fs *4*	L	Jπ: dipole γ to 0⁺.

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Adopted Levels, Gammas (continued)

^{76}Se Levels (continued)

E(level)[†]	Jπ[#]	$T_{1/2}$[‡]	XREF	Comments
5139.9 *5*	(1 to 4)[a]		J	
5142.3 *7*	1	26.1 fs *32*	L	Jπ: dipole γ to 0+.
5174 *4*	(3−)		P	Jπ: L(p,p′)=3.
5195.00 *15*	1−	2.27 fs *17*	J LM	Jπ: E1 γ to 0+. $T_{1/2}$: from (γ,γ′). Other: 2.29 fs *28* from (pol γ,γ′).
5217.8 *11*	1−	12.1 fs *26*	M	Jπ: E1 γ to 0+.
5239.6 *8*	1	9.6 fs *15*	L	Jπ: dipole γ to 0+.
5261 *4*	(4+)		P	Jπ: L(p,p′)=4.
5284.40 *30*	1	8.4 fs *6*	L	Jπ: dipole γ to 0+.
5297.90 *30*	(1+)	13.7 fs *8*	M	Jπ: (M1) γ to 0+.
5298.60 *10*	1−	1.98 fs *11*	LM	Jπ: E1 γ to 0+. $T_{1/2}$: 3.56 fs *23* in (pol γ,γ′), where only the 5298γ from this level was listed.
5303 *4*	(3−)		P	Jπ: L(p,p′)=3.
5324.18 *29*	1−	3.12 fs *35*	LM	Jπ: E1 γ to 0+. $T_{1/2}$: other: 8.8 fs *7* in (γ,γ′), where only the 5324γ from this level was listed.
5346.94 *23*	1−	3.4 fs *4*	LM	Jπ: E1 γ to 0+. $T_{1/2}$: from (γ,γ′). Other: 3.5 fs *8* from (pol γ,γ′).
5367.5 *13*	1	44 fs *10*	L	Jπ: dipole γ to 0+.
5368.3[d] *5*	(11+)		E	Jπ: γ to (10)+; band assignment.
5375.45 *18*	1−	1.43 fs *13*	LM	Jπ: E1 γ to 0+. $T_{1/2}$: from (γ,γ′). Other: 1.46 fs *14* from (pol γ,γ′).
5405.2 *18*	1−	26 fs *8*	M P	Jπ: E1 γ to 0+.
5411.33 *29*	1−	1.53 fs *33*	LM	Jπ: E1 γ to 0+. $T_{1/2}$: from (γ,γ′). Other: 1.5 fs *4* from (pol γ,γ′).
5425.21 *26*	1−	3.6 fs *4*	LM	Jπ: E1 γ to 0+.
5431.8[b] *6*	12+	0.2 ps *1*	E G	Jπ: ΔJ=2, (E2) γ to 10+; member of rotaional band.
5510 *10*			I	
5551.8 *15*	1−	9.4 fs *24*	M	Jπ: E1 γ to 0+.
5629.8 *15*	1−	24 fs *8*	M	Jπ: E1 γ to 0+.
5637.7 *15*	1−	24 fs *8*	M	Jπ: E1 γ to 0+.
5669.2 *15*	1−	22 fs *8*	M	Jπ: E1 γ to 0+.
5685.5 *4*	1−	8.0 fs *7*	LM	Jπ: E1 γ to 0+.
5709.8 *4*	1−	7.4 fs *7*	LM	Jπ: E1 γ to 0+.
5740.73 *30*	1−	5.6 fs *5*	LM	Jπ: E1 γ to 0+.
5762.0 *10*	1−	15.7 fs *34*	M	Jπ: E1 γ to 0+.
5773.3 *10*	1−	17.9 fs *26*	LM	Jπ: E1 γ to 0+. $T_{1/2}$: weighted average of 19.2 fs *32* from (γ,γ′) and 17.1 fs *26* from (pol γ,γ′).
5781.24 *20*	1−	3.94 fs *29*	LM	Jπ: E1 γ to 0+. $T_{1/2}$: weighted average of 3.90 fs *29* from (γ,γ′) and 4.4 fs *10* from (pol γ,γ′).
5796.7[c] *5*	(12+)		E	Jπ: γ to 10+; band assignment.
5804.0 *6*	1−	2.8 fs *6*	LM	Jπ: E1 γ to 0+. $T_{1/2}$: weighted average of 3.1 fs *8* from (γ,γ′) and 2.6 fs *6* from (pol γ,γ′).
5813.9 *5*	1−	8.0 fs *8*	LM	Jπ: E1 γ to 0+.
5842.31 *29*	1−	3.1 fs *4*	LM	Jπ: E1 γ to 0+. $T_{1/2}$: weighted average of 3.28 fs *24* from (γ,γ′) and 2.1 fs *6* from (pol γ,γ′).
5865.3 *7*	1−	7.6 fs *11*	M	Jπ: E1 γ to 0+.
5879.6 *6*	1−	14.8 fs *19*	LM	Jπ: E1 γ to 0+.
5892.30 *31*	1−	3.4 fs *5*	LM	Jπ: E1 γ to 0+.
5939.0 *5*	(1 to 4)[a]		J	

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Adopted Levels, Gammas (continued)

^{76}Se Levels (continued)

E(level)[†]	Jπ[#]	$T_{1/2}$[‡]	XREF	Comments
5996.1 *9*	1^-	5.3 fs *12*	LM	Jπ: E1 γ to 0^+. $T_{1/2}$: other: 0.94 fs *21* in (γ,γ′).
6005 *10*			I	
6035.4 *5*	1^-	2.6 fs *4*	LM	Jπ: E1 γ to 0^+. $T_{1/2}$: other: 6.1 fs *6* in (γ,γ′) for only the 6035γ.
6099.3 *4*	1^-	2.8 fs *5*	LM	Jπ: E1 γ to 0^+.
6131.5 *6*	1^-	11.5 fs *18*	LM	Jπ: E1 γ to 0^+.
6156.6 *14*	1^-	55 fs *10*	M	Jπ: E1 γ to 0^+.
6165.1 *11*	1^-	21 fs *6*	M	Jπ: E1 γ to 0^+.
6196.2 *11*	1^-	10.0 fs *13*	M	Jπ: E1 γ to 0^+.
6208.7 *15*	1^-	5.0 fs *10*	M	Jπ: E1 γ to 0^+.
6242.7 *6*	1^-	2.6 fs *11*	LM	XREF: L(6247.4). E(level): evaluators assume that 6242.7 in (pol γ,γ′) and 6247.4 in (γ,γ′) correspond to the same level. Jπ: E1 γ to 0^+. $T_{1/2}$: other: 4.6 fs *6* in (γ,γ′).
6250.7 *5*	1^-	5.6 fs *8*	LM	XREF: L(6254.0). E(level): evaluators assume that 6250.7 in (pol γ,γ′) and 6254.0 in (γ,γ′) correspond to the same level. Jπ: E1 γ to 0^+. $T_{1/2}$: weighted average of 5.5 fs *8* from (γ,γ′) and 5.8 fs *15* from (pol γ,γ′).
6297.9 *14*	1^-	10.0 fs *15*	LM	Jπ: E1 γ to 0^+.
6315.9 *4*	1^-	3.1 fs *4*	LM	Jπ: E1 γ to 0^+. $T_{1/2}$: weighted average of 2.97 fs *25* from (γ,γ′) and 5.1 fs *12* from (pol γ,γ′).
6336.8 *20*	1^-	4.4 fs *23*	LM	Jπ: E1 γ to 0^+. $T_{1/2}$: unweighted average of 6.6 fs *13* from (γ,γ′) and 2.1 fs *10* from (pol γ,γ′).
6342.64 *29*	1^-	0.28 fs *7*	LM	Jπ: E1 γ to 0^+. $T_{1/2}$: other: 5.1 fs *8* in (γ,γ′) from only the 6342γ.
6387.5 *14*	1^-	6.7 fs *10*	LM	Jπ: E1 γ to 0^+.
6438.1 *19*	1	8.4 fs *19*	L	
6449.0 *20*	1^-	6.1 fs *10*	LM	Jπ: E1 γ to 0^+.
6497.7 *6*	1^-	3.6 fs *14*	LM	Jπ: E1 γ to 0^+. $T_{1/2}$: unweighted average of 5.0 fs *6* from (γ,γ′) and 2.2 fs *7* from (pol γ,γ′).
6500.8[d] *6*	(13^+)		E	
6532.7 *4*	1^-	3.05 fs *28*	LM	Jπ: E1 γ to 0^+.
6551.00 *30*	1^+	11.0 fs *19*	LM	Jπ: M1 γ to 0^+.
6562.9 *9*	1^-	7.69 fs *28*	LM	Jπ: E1 γ to 0^+. $T_{1/2}$: from (pol γ,γ′). Other: 8.1 fs *15* from (γ,γ′).
6570.4 *9*	1^-	4.9 fs *6*	LM	Jπ: E1 γ to 0^+.
6596.2 *7*	1^-	5.5 fs *7*	LM	Jπ: E1 γ to 0^+.
6608.5 *9*	1^-	6.0 fs *8*	LM	Jπ: E1 γ to 0^+.
6631.8 *7*	1^-	1.39 fs *28*	LM	Jπ: E1 γ to 0^+.
6641.3 *17*	1^-	5.5 fs *12*	M	Jπ: E1 γ to 0^+.
6653.7 *14*	1^-	3.3 fs *7*	M	Jπ: E1 γ to 0^+.
6680.0 *18*	1^-	6.1 fs *7*	M	Jπ: E1 γ to 0^+.
6691.5 *8*	1^-	9.9 fs *16*	LM	Jπ: E1 γ to 0^+. $T_{1/2}$: weighted average of 9.6 fs *16* from (γ,γ′) and 10.2 fs *17* from (pol γ,γ′).
6700.3 *20*	1^-	8.2 fs *21*	M	Jπ: E1 γ to 0^+.
6709.0 *21*	1^-	9.1 fs *25*	M	Jπ: E1 γ to 0^+.
6736.2 *15*	1^-	9.1 fs *25*	M	Jπ: E1 γ to 0^+.

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Adopted Levels, Gammas (continued)

^{76}Se Levels (continued)

E(level)[†]	J$^{\pi}$[#]	T$_{1/2}$[‡]	XREF	Comments
6743.31 *28*	1$^-$	1.11 fs *14*	LM	J$^{\pi}$: E1 γ to 0$^+$.
6749.2 *4*	1$^-$	1.32 fs *21*	LM	J$^{\pi}$: E1 γ to 0$^+$.
6751.5[b] *7*	(14$^+$)		E	
6813.9 *20*	1$^-$	16 fs *6*	M	J$^{\pi}$: E1 γ to 0$^+$.
6830.2 *15*	1$^-$	8.3 fs *18*	M	J$^{\pi}$: E1 γ to 0$^+$.
6882.7 *6*	1$^-$	1.52 fs *28*	LM	J$^{\pi}$: E1 γ to 0$^+$.
6908.3 *20*	1$^-$	15 fs *4*	M	J$^{\pi}$: E1 γ to 0$^+$.
6913.3 *17*	1$^+$	14 fs *4*	M	J$^{\pi}$: M1 γ to 0$^+$.
6922.2 *18*	1$^-$	12.6 fs *33*	M	J$^{\pi}$: E1 γ to 0$^+$.
6970.3 *5*	1$^-$	4.0 fs *9*	LM	XREF: L(6973.0). E(level): evaluators assume that 6970.3 in (pol γ,γ') and 6973.0 in (γ,γ') correspond to the same level. J$^{\pi}$: E1 γ to 0$^+$.
6992.9 *5*	1$^-$	3.3 fs *5*	LM	J$^{\pi}$: E1 γ to 0$^+$.
7018.1 *18*	1$^-$	11 fs *5*	M	J$^{\pi}$: E1 γ to 0$^+$.
7025.1 *20*	1$^+$	12 fs *4*	M	J$^{\pi}$: E1 γ to 0$^+$.
7047.4 *15*	1$^+$	14 fs *5*	M	J$^{\pi}$: E1 γ to 0$^+$.
7053.1 *19*	1$^-$	12.5 fs *37*	M	J$^{\pi}$: E1 γ to 0$^+$.
7084.5[c] *6*	(14$^+$)		E	
7093.1 *20*	1$^-$	11.2 fs *30*	M	J$^{\pi}$: E1 γ to 0$^+$.
7101.1 *19*	1$^-$	11.4 fs *35*	M	J$^{\pi}$: E1 γ to 0$^+$.
7110.1 *19*	1$^+$	10.0 fs *29*	M	J$^{\pi}$: M1 γ to 0$^+$.
7115.5 *12*	1$^-$	2.9 fs *10*	M	J$^{\pi}$: E1 γ to 0$^+$.
7128.4 *11*	1$^-$	0.80 fs *21*	M	J$^{\pi}$: E1 γ to 0$^+$.
7156.0 *17*	1$^-$	7.6 fs *21*	M	J$^{\pi}$: E1 γ to 0$^+$.
7168.1 *18*	1$^-$	11.8 fs *35*	M	J$^{\pi}$: E1 γ to 0$^+$.
7195.6 *14*	1$^-$	6.3 fs *18*	M	J$^{\pi}$: E1 γ to 0$^+$.
7225.6 *20*	1$^-$	6.0 fs *15*	M	J$^{\pi}$: E1 γ to 0$^+$.
7241.6 *7*	1$^-$	4.5 fs *8*	LM	J$^{\pi}$: E1 γ to 0$^+$. T$_{1/2}$: weighted average of 4.3 fs *8* from (γ,γ') and 4.9 fs *10* from (pol γ,γ').
7292.8 *15*	1$^-$	4.0 fs *10*	M	J$^{\pi}$: E1 γ to 0$^+$.
7324.6 *18*	1$^-$	8.3 fs *24*	M	J$^{\pi}$: E1 γ to 0$^+$.
7335.0 *20*	1$^-$	10.3 fs *33*	M	J$^{\pi}$: E1 γ to 0$^+$.
7342.2 *14*	1$^-$	4.6 fs *12*	M	J$^{\pi}$: E1 γ to 0$^+$.
7362.2 *21*	1$^-$	12 fs *4*	M	J$^{\pi}$: E1 γ to 0$^+$.
7392.6 *8*	1$^-$	13 fs *4*	M	J$^{\pi}$: E1 γ to 0$^+$.
7406.0 *11*	1$^-$	2.4 fs *12*	M	J$^{\pi}$: E1 γ to 0$^+$.
7427.1 *14*	1$^-$	4.2 fs *11*	M	J$^{\pi}$: E1 γ to 0$^+$.
7455.5 *13*	1$^-$	3.9 fs *13*	LM	XREF: L(7457.6). E(level): evaluators assume that 7455.5 in (pol γ,γ') and 7457.6 in (γ,γ') correspond to the same level. J$^{\pi}$: E1 γ to 0$^+$. T$_{1/2}$: unweighted average of 5.1 fs *10* from (γ,γ') and 2.6 fs *6* from (pol γ,γ').
7464.9 *14*	1$^-$	1.8 fs *6*	M	J$^{\pi}$: E1 γ to 0$^+$.
7508.4 *8*	1$^-$	4.0 fs *5*	LM	J$^{\pi}$: E1 γ to 0$^+$.
7522.7 *5*	1$^-$	1.18 fs *21*	LM	J$^{\pi}$: E1 γ to 0$^+$.
7546.9 *6*	1$^-$	1.63 fs *14*	LM	J$^{\pi}$: E1 γ to 0$^+$. T$_{1/2}$: weighted average of 1.59 fs *14* from (γ,γ') and 1.66 fs *14* from (pol γ,γ').
7580.5 *16*	1$^-$	8.3 fs *23*	M	J$^{\pi}$: E1 γ to 0$^+$.
7617.2 *17*	1$^-$	5.5 fs *11*	M	J$^{\pi}$: E1 γ to 0$^+$.
7627.8 *15*	1$^-$	4.1 fs *8*	M	J$^{\pi}$: E1 γ to 0$^+$.
7643.3 *17*	1$^-$	7.5 fs *19*	M	J$^{\pi}$: E1 γ to 0$^+$.

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Adopted Levels, Gammas (continued)

^{76}Se Levels (continued)

E(level)[†]	J$^{\pi}$[#]	T$_{1/2}$[‡]	XREF	Comments
7652.9 *17*	1$^-$	4.1 fs *8*	M	J$^{\pi}$: E1 γ to 0$^+$.
7658.71 *20*	1$^-$	6.4 fs *10*	LM	J$^{\pi}$: E1 γ to 0$^+$.
7698.3 *8*	1$^-$	0.97 fs *28*	LM	J$^{\pi}$: E1 γ to 0$^+$. T$_{1/2}$: other: 2.22 fs *28* in (γ,γ') from only the 7698γ.
7729.7 *16*	1$^-$	3.7 fs *8*	M	J$^{\pi}$: E1 γ to 0$^+$.
7781.6 *18*	1$^-$	6.9 fs *22*	M	J$^{\pi}$: E1 γ to 0$^+$.
7817.5 *10*	1$^-$	9.7 fs *35*	M	J$^{\pi}$: E1 γ to 0$^+$.
7830.0 *9*	1$^-$	9.0 fs *35*	M	J$^{\pi}$: E1 γ to 0$^+$.
7846.9[d] *7*	(15$^+$)		E	
7866.1 *17*	1$^-$	8.3 fs *27*	M	J$^{\pi}$: E1 γ to 0$^+$.
7890.9 *18*	1$^-$	7.8 fs *25*	M	J$^{\pi}$: E1 γ to 0$^+$.
7920.1 *17*	1$^-$	5.1 fs *16*	M	J$^{\pi}$: E1 γ to 0$^+$.
7927.6 *17*	1$^-$	5.3 fs *17*	M	J$^{\pi}$: E1 γ to 0$^+$.
7952.1 *21*	1$^-$	7.1 fs *24*	M	J$^{\pi}$: E1 γ to 0$^+$.
7960.4 *18*	1$^-$	5.9 fs *19*	M	J$^{\pi}$: E1 γ to 0$^+$.
7979.0 *8*	1$^-$	3.0 fs *6*	LM	J$^{\pi}$: E1 γ to 0$^+$. T$_{1/2}$: weighted average of 2.8 fs *6* from (γ,γ') and 3.3 fs *8* from (pol γ,γ').
8017.9 *23*	1$^-$	6.6 fs *21*	M	J$^{\pi}$: E1 γ to 0$^+$.
8062.5 *22*	1$^-$	5.4 fs *17*	M	J$^{\pi}$: E1 γ to 0$^+$.
8082.7 *18*	1$^-$	2.3 fs *8*	M	J$^{\pi}$: E1 γ to 0$^+$.
8107.3 *22*	1$^-$	5.7 fs *17*	M	J$^{\pi}$: E1 γ to 0$^+$.
8132.1 *22*	1$^-$	5.7 fs *17*	M	J$^{\pi}$: E1 γ to 0$^+$.
8154.9 *21*	1$^-$	6.5 fs *19*	M	J$^{\pi}$: E1 γ to 0$^+$.
8170.1 *22*	1$^-$	6.0 fs *17*	M	J$^{\pi}$: E1 γ to 0$^+$.
8198.0 *10*	1$^-$	0.76 fs *14*	LM	J$^{\pi}$: E1 γ to 0$^+$.
8210.5 *20*	1$^-$	4.0 fs *10*	M	J$^{\pi}$: E1 γ to 0$^+$.
8222.5 *20*	1$^-$	2.5 fs *6*	M	J$^{\pi}$: E1 γ to 0$^+$.
8251.9 *23*	1$^-$	12 fs *5*	M	J$^{\pi}$: E1 γ to 0$^+$.
8268.5[b] *8*	(16$^+$)		E	
8288.5 *23*	1$^-$	3.6 fs *9*	M	J$^{\pi}$: E1 γ to 0$^+$.
8316.7 *22*	1$^-$	6.1 fs *21*	M	J$^{\pi}$: E1 γ to 0$^+$.
8340.7 *10*	1$^-$	4.4 fs *13*	M	J$^{\pi}$: E1 γ to 0$^+$.
8394.9 *19*	1$^-$	2.50 fs *35*	LM	J$^{\pi}$: E1 γ to 0$^+$.
8453.5 *21*	1$^-$	2.8 fs *7*	M	J$^{\pi}$: E1 γ to 0$^+$.
8486.5 *18*	1$^-$	0.91 fs *23*	M	J$^{\pi}$: E1 γ to 0$^+$.
8528.1 *4*	1$^-$	0.48 fs *10*	LM	J$^{\pi}$: E1 γ to 0$^+$.
8539.8 *11*	1$^-$	0.94 fs *17*	M	J$^{\pi}$: E1 γ to 0$^+$.
8571.7 *19*	1$^-$	1.7 fs *5*	M	J$^{\pi}$: E1 γ to 0$^+$.
8573.8[c] *8*	(16$^+$)		E	
8590.1 *20*	1$^-$	2.3 fs *8*	M	J$^{\pi}$: E1 γ to 0$^+$.
8654.9 *19*	1$^-$	2.0 fs *6*	M	J$^{\pi}$: E1 γ to 0$^+$.
8709.9 *13*	1$^-$	1.66 fs *28*	LM	J$^{\pi}$: E1 γ to 0$^+$.
8719.5 *21*	1$^-$	3.0 fs *10*	M	J$^{\pi}$: E1 γ to 0$^+$.
8770.9 *23*	1$^-$	1.9 fs *6*	M	J$^{\pi}$: E1 γ to 0$^+$.
8843.4 *14*	1$^-$	0.83 fs *42*	M	J$^{\pi}$: E1 γ to 0$^+$.
8864.8 *20*	1$^-$	2.9 fs *9*	M	J$^{\pi}$: E1 γ to 0$^+$.
8890.8 *19*	1$^-$	2.1 fs *6*	M	J$^{\pi}$: E1 γ to 0$^+$.
8918.8 *19*	1$^-$	2.1 fs *6*	M	J$^{\pi}$: E1 γ to 0$^+$.
8935.6 *20*	1$^-$	2.6 fs *8*	M	J$^{\pi}$: E1 γ to 0$^+$.
9394.7[d] *8*	(17$^+$)		E	
9963.8[b] *10*	(18$^+$)		E	
11147.1[d] *10*	(19$^+$)		E	
(11154.19 *7*)	2$^+$,3$^+$		J	J$^{\pi}$: s-wave capture in ^{75}Se (g.g. J^{π}=5/2$^+$).

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Adopted Levels, Gammas (continued)

^{76}Se Levels (continued)

E(level)[†]	Jπ[#]	XREF	Comments
			E(level): S(n)=11153.79 *7* (2021Wa16).
11774.8[b] *11*	(20$^+$)	E	
12528[@]		K	
12578[@]		K	
12678[@]		K	
12718[@]		K	
12788[@]		K	
12888[@]		K	
12938[@]		K	
13138[@]		K	
13278[@]		K	
13418[@]		K	
13478[@]		K	
13528[@]		K	
13598[@]		K	
13681.3[b] *12*	(22$^+$)	E	
13728[@]		K	
13928[@]		K	
14038[@]		K	
14118[@]		K	
14198[@]		K	

[†] From a least squares fit to Eγ data for levels populated in γ-ray studies. In other cases, values are mainly from (^{3}He,d), (p,p′) and/or from primary transitions in (n,γ).

[‡] Unless otherwise indictated, values for high-spin states are from recoil-distance Doppler-shift (RDDS) or DSA methods in (α,2nγ) (1984Zo01), DSAM in (n,n′γ), (pol γ,γ′), and from cross section data in (γ,γ′) for J=1 levels above 2900 keV.

[#] When deduced from γ(θ) in (α,2nγ), it is assumed that a γ-transition with large quadrupole component is E2 rather than M2, unless a long lifetime is indicated. Above /2800, values are given in parentheses when available only from L(p,p′) due to following reasons: 1. The agreement of σ(θ) fits to DWBA is not good over the whole angular range. 2. The correspondence between levels in different reactions is not unique due to large level density and large uncertainties in E(level) from particle reactions. Above 2900 keV, levels populated in (γ,γ′) and (pol γ,γ′) are primarily J=1 states, determined from γ(θ) and γ(pol) data.

[@] Isobaric analog resonances from ^{75}As(p,n). Uncertainty ≈25 keV. See ^{75}As(p,n) IAR for assignment to analog states in ^{76}As.

[&] L(^{3}He,d)=1+3 from 3/2$^-$.

[a] Primary γ from 2$^+$,3$^+$ in (n,γ).

[b] Band(A): Yrast band based on ground state. First band crossing at ħω≈0.55 MeV due to pair of $g_{9/2}$ neutrons, second crossing at ħω≈0.80 MeV, due to pair of $g_{9/2}$ protons, and interpreted as shape transition from prolate to oblate (2015Xu09). Band parameters are: E_0=196.0, A=51.8, B=−0.12.

[c] Band(B): γ band, even spin.

[d] Band(b): γ band, odd spin.

[e] Band(C): K^π=3$^-$ band. Band parameters are: E_0=2178.1, A=20.4, B=0.038.

[f] Band(D): ΔJ=2 band. Band parameters are: E_0=2514.8, A=15.3, B=0.072.

Adopted Levels, Gammas (continued)

γ(^{76}Se)

Additional information 3.

E_i(level)	J_i^π	E_γ[‡]	I_γ[‡]	E_f	J_f^π	Mult.[#]	δ[#]	α[†]	$I_{(\gamma+ce)}$	Comments
559.103	2^+	559.099 *5*	100	0.0	0^+	E2		1.97×10^{-3} *3*		B(E2)(W.u.)=45.1 *+12−6* α(K)=0.001747 *24*; α(L)=0.0001872 *26*; α(M)=2.91×10^{-5} *4* α(N)=2.452×10^{-6} *34*
1122.279	0^+	563.171 *7*	100	559.103	2^+	E2		1.92×10^{-3} *3*		B(E2)(W.u.)=47 *11* α(K)=0.001710 *24*; α(L)=0.0001832 *26*; α(M)=2.85×10^{-5} *4* α(N)=2.400×10^{-6} *34*
		1122.3 *3*		0.0	0^+	E0			0.023 *5*	q^2_K(E0/E2)=0.133 *15*, X(E0/E2)=0.0246 *31*, ρ^2(E0)=0.035 *+14−13* (2022Ki03 evaluation). X(E0/E2)=0.023 *4* (1986Gi12); ρ(E0)=0.17 *4* (1986Gi12), 0.19 *4* (1983Pa10) from ce data in ^{76}Br ε decay.
1216.154	2^+	657.041 *5*	100.0 *22*	559.103	2^+	E2+M1(+E0)	+5.2 *2*	1.23×10^{-3} *2*		B(M1)(W.u.)=5.31×10^{-4} *+71−59*; B(E2)(W.u.)=44.7 *+45−38* α(K)=0.001090 *15*; α(L)=0.0001159 *16*; α(M)=1.802×10^{-5} *25* α(N)=1.524×10^{-6} *21* Mult.,δ: from γ(θ) in ^{76}As β^-. Others: +6 *1* (γγ(θ) in ^{76}Br ε); +4.7 *+11−20* (α,2nγ). E0 from α(K)exp=0.00167 *15* (1970Dz09) in ^{76}Br ε decay. X(E0/E2)≤0.14; ρ(E0)≤0.41 (1986Gi12). q^2_K(E0/E2)=0.25 *14*, X(E0/E2)=0.11 *6*, ρ^2(E0)=0.140 *80*, %E0=19 (2022Ki03 evaluation).
		1216.149 *25*	58.0 *22*	0.0	0^+	E2		0.000281 *4*		B(E2)(W.u.)=1.24 *+13−11* α(K)=0.0002408 *34*; α(L)=2.508×10^{-5} *35*; α(M)=3.90×10^{-6} *5* α(N)=3.33×10^{-7} *5*; α(IPF)=1.090×10^{-5} *15* I_γ: NRM weighted average; low value of 37.7 *26* in (α,2nγ) is not used in averaging.
1330.872	4^+	771.757 *9*	100	559.103	2^+	E2		0.000800 *11*		B(E2)(W.u.)=71.1 *14* α(K)=0.000712 *10*; α(L)=7.52×10^{-5} *11*;

$^{76}_{34}Se_{42}$-15

Adopted Levels, Gammas (continued)

γ(^{76}Se) (continued)

E_i(level)	J_i^π	E_γ[‡]	I_γ[‡]	E_f	J_f^π	Mult.[#]	δ[#]	α[†]	Comments
									α(M)=1.170×10^{-5} *16* α(N)=9.93×10^{-7} *14*
1688.971	3$^+$	358.099 *7*	4.1 *17*	1330.872	4$^+$	(M1+E2)		0.0059 *21*	α(K)=0.0053 *19*; α(L)=5.7×10^{-4} *22*; α(M)=8.9×10^{-5} *33* α(N)=7.5×10^{-6} *27* B(M1)(W.u.)=0.0044 *21* if M1, B(E2)(W.u.)=46 *22* if E2. δ: +1.8 *+10−12* or +0.8 *+20−3* from (n,n′γ).
		472.813 *7*	36 *4*	1216.154	2$^+$	M1+E2	+3.20 *+27−24*	0.00316 *5*	B(M1)(W.u.)=0.00148 *44*; B(E2)(W.u.)=92 *+23−25* α(K)=0.00281 *4*; α(L)=0.000303 *5*; α(M)=4.71×10^{-5} *7* α(N)=3.95×10^{-6} *6* I_γ: unweighted average of available values. δ: from ^{76}Br ε decay. Others: +2.1 *9*, +0.75 *44* from γ(θ) in (α,2nγ); +0.01 to +0.73, >+2.5 or <−6.7 from γ(θ) in ^{76}As β$^-$.
		1129.873 *16*	100 *5*	559.103	2$^+$	E2+M1	+1.08 *10*	0.000309 *4*	B(M1)(W.u.)=0.00157 *+40−42*; B(E2)(W.u.)=1.93 *+47−53* α(K)=0.000275 *4*; α(L)=2.86×10^{-5} *4*; α(M)=4.44×10^{-6} *6* α(N)=3.80×10^{-7} *5*; α(IPF)=1.573×10^{-6} *33* δ: from γγ(θ) in ^{76}As β$^-$ decay. Others: +1.8 12 from γ(θ) in (α,2nγ), +0.57 to +3.55 from γ(θ) in ^{76}As β$^-$, +1.9 *2* from γγ(θ) in ^{76}Br ε decay.
1787.655	2$^+$	456.77 *5*	3.06 *8*	1330.872	4$^+$	[E2]		0.00365 *5*	B(E2)(W.u.)=21.0 *+48−51* α(K)=0.00324 *5*; α(L)=0.000351 *5*; α(M)=5.46×10^{-5} *8* α(N)=4.58×10^{-6} *6*
		571.495 *9*	8.7 *10*	1216.154	2$^+$	(M1(+E2))	+0.13 *12*	1.29×10^{-3} *3*	B(M1)(W.u.)=0.0046 *+11−13*; B(E2)(W.u.)=0.32 *+80−29* α(K)=0.001148 *26*; α(L)=0.0001203 *29*; α(M)=1.87×10^{-5} *5* α(N)=1.60×10^{-6} *4* I_γ: NRM weighted average. High value of 31 from (n,n′γ) is not used. δ: from γγ(θ) in ^{76}As β$^-$ decay. Other: −0.13 *34* or >+1.37 from γ(θ) in ^{76}As β$^-$. Parity is from the Adopted Levels.
		665.361 *9*	32.3 *16*	1122.279	0$^+$	[E2]		1.19×10^{-3} *2*	B(E2)(W.u.)=33.7 *+77−82* α(K)=0.001062 *15*; α(L)=0.0001128 *16*;

$^{76}_{34}Se_{42}$-16

Adopted Levels, Gammas (continued)

γ(^{76}Se) (continued)

E_i(level)	J_i^π	E_γ[‡]	I_γ[‡]	E_f	J_f^π	Mult.[#]	δ[#]	α[†]	Comments
									α(M)=1.755×10^{-5} *25* α(N)=1.484×10^{-6} *21*
1787.655	2$^+$	1228.600 *20*	100.0 *19*	559.103	2$^+$	M1+E2	−0.51 *5*	0.000264 *4*	B(M1)(W.u.)=0.0043 *+10−11*; B(E2)(W.u.)=1.00 *28* α(K)=0.0002259 *32*; α(L)=2.340×10^{-5} *33*; α(M)=3.64×10^{-6} *5* α(N)=3.12×10^{-7} *4*; α(IPF)=1.042×10^{-5} *18* Mult.,δ: weighted average from γ(θ) and γγ(θ) in ^{76}As β$^-$. Others: −0.19 *5* from γγ(θ) in ^{76}Br ε, −0.52 *+9−7* from (n,n′γ).
		1787.62 *2*	24.3 *7*	0.0	0$^+$	[E2]		0.000333 *5*	B(E2)(W.u.)=0.181 *+42−44* α(K)=0.0001103 *15*; α(L)=1.139×10^{-5} *16*; α(M)=1.772×10^{-6} *25* α(N)=1.517×10^{-7} *21*; α(IPF)=0.0002089 *29*
1791.437	0$^+$	575.28 *3*	100.0 *20*	1216.154	2$^+$	(E2)		1.81×10^{-3} *3*	α(K)=0.001607 *22*; α(L)=0.0001719 *24*; α(M)=2.67×10^{-5} *4* α(N)=2.253×10^{-6} *32*
		1232.40 *5*	13.6 *4*	559.103	2$^+$	(E2)		0.000276 *4*	α(K)=0.0002340 *33*; α(L)=2.436×10^{-5} *34*; α(M)=3.79×10^{-6} *5* α(N)=3.24×10^{-7} *5*; α(IPF)=1.373×10^{-5} *19*
2026.020	4$^+$	239.11 *10*		1787.655	2$^+$	[E2]		0.0333 *5*	α(K)=0.0293 *4*; α(L)=0.00335 *5*; α(M)=0.000520 *7* α(N)=4.25×10^{-5} *6*
		695.137 *9*	46.5 *20*	1330.872	4$^+$	E2+M1	+1.7 *+6−1*	0.000999 *27*	B(M1)(W.u.)=0.00327 *+57−73*; B(E2)(W.u.)=26.3 *+46−31* α(K)=0.000889 *24*; α(L)=9.40×10^{-5} *26*; α(M)=1.46×10^{-5} *4* α(N)=1.240×10^{-6} *33* I_γ: high value of 79 *5* in (α,2nγ) is not used in averaging.
		809.828 *11*	100.0 *22*	1216.154	2$^+$	E2		0.000706 *10*	B(E2)(W.u.)=35.5 *+51−40* α(K)=0.000629 *9*; α(L)=6.63×10^{-5} *9*; α(M)=1.031×10^{-5} *14* α(N)=8.76×10^{-7} *12*
		1466.8 *3*	3.1 *7*	559.103	2$^+$	[E2]		0.000256 *4*	B(E2)(W.u.)=0.056 *+15−14* α(K)=0.0001626 *23*; α(L)=1.685×10^{-5} *24*; α(M)=2.62×10^{-6} *4* α(N)=2.241×10^{-7} *31*; α(IPF)=7.36×10^{-5} *10*
2127.224	(2)$^+$	335.87 *10*	6.7 *7*	1791.437	0$^+$				
		339.569 *5*	19.8 *19*	1787.655	2$^+$				E_γ: from (n,γ) E=thermal. Others: 339.62 *10* from ^{76}Br ε+β$^+$ decay (16.14 h), 339.60 *10* from (n,n′γ),

$^{76}_{34}Se_{42}$-17

Adopted Levels, Gammas (continued)

γ(^{76}Se) (continued)

E_i(level)	J_i^π	E_γ[‡]	I_γ[‡]	E_f	J_f^π	Mult.[#]	α[†]	Comments
								and 338.0 *15* from (p,p′γ).
								I_γ: unweighted average of 21 *5* from ^{76}Br ε+β$^+$ decay (16.14 h), 16.1 *16* from (n,γ) E=thermal, and 22.4 *4* from (n,n′γ).
2127.224	(2)$^+$	438.253 *5*	44 *6*	1688.971	3$^+$			I_γ: unweighted average of 54.0 *20* from ^{76}As β$^-$ decay, 45 *4* from ^{76}Br ε+β$^+$ decay (16.14 h), 26.8 *29* from (n,γ) E=thermal, and 51.3 *9* from (n,n′γ).
		796.10 *6*	1.49 *33*	1330.872	4$^+$			E_γ: weighted average of 796.44 *26* from ^{76}Br ε+β$^+$ decay (16.14 h), 796.08 *6* from (n,γ) E=thermal, and 796.2 *3* from (p,p′γ).
								I_γ: from ^{76}Br ε+β$^+$ decay (16.14h). Other: 18.7 *32* from (n,γ) E=thermal questionable.
		910.06 *10*	4.79 *18*	1216.154	2$^+$			E_γ: weighted average of 911.11 *13* from ^{76}Br ε+β$^+$ decay (16.14 h) and 911.03 *10* from (n,n′γ). Other: 910.7 *8* from (p,p′γ).
								I_γ: weighted average of 4.73 *14* from ^{76}Br ε+β$^+$ decay (16.14 h) and 5.3 *4* from (n,n′γ).
		1005.01 *16*	4.8 *14*	1122.279	0$^+$			E_γ: weighted average of 1005.06 *22* from ^{76}Br ε+β$^+$ decay (16.14 h) and 1004.98 *16* from (n,n′γ).
								I_γ: unweighted average of 3.4 *4* from ^{76}Br ε+β$^+$ decay (16.14 h) and 6.1 *4* from (n,n′γ).
		1568.14 *7*	100.0 *9*	559.103	2$^+$			E_γ: weighted average of 1568.22 *7* from ^{76}As β$^-$ decay, 1568.25 *10* from ^{76}Br ε+β$^+$ decay (16.14 h), 1568.02 *7* from (n,γ) E=thermal, and 1568.07 *12* from (n,n′γ). Other: 1568.1 *5* from (p,p′γ).
								I_γ: from (n,n′γ). Others: 100.0 *13* from ^{76}As β$^-$ decay, 100 *6* from ^{76}Br ε+β$^+$ decay (16.14 h), and 100 *13* from (n,γ) E=thermal.
		2127.30 *21*	18.3 *4*	0.0	0$^+$			E_γ: unweighted average of 2127.0 *1* from ^{76}As β$^-$ decay, 2127.69 *20* from ^{76}Br ε+β$^+$ decay (16.14 h), and 2127.21 *8* from (n,n′γ).
								I_γ: weighted average of 18.0 *13* from ^{76}As β$^-$ decay, 16.7 *14* from ^{76}Br ε+β$^+$ decay (16.14 h), and 18.4 *4* from (n,n′γ).
2170.572	(0$^+$)	382.904 *9*	3.5 *9*	1787.655	2$^+$	[E2]	0.00647 *9*	α(K)=0.00574 *8*; α(L)=0.000629 *9*; α(M)=9.77×10^{-5} *14*
								α(N)=8.14×10^{-6} *11*
								B(E2)(W.u.)=70 *+41−32*
								E_γ: from (n,γ) E=thermal. Other: 382.92 *44* from ^{76}Br ε+β$^+$ decay (16.14 h).
								I_γ: from ^{76}Br ε+β$^+$ decay (16.14 h).
		954.49 *9*	15.7 *7*	1216.154	2$^+$	[E2]	0.000470 *7*	α(K)=0.000418 *6*; α(L)=4.39×10^{-5} *6*; α(M)=6.83×10^{-6} *10*
								α(N)=5.81×10^{-7} *8*
								B(E2)(W.u.)=3.3 *+17−13*
								E_γ: weighted average of 954.7 *2* from ^{76}As β$^-$ decay, 954.35 *28* from ^{76}Br ε+β$^+$ decay (16.14 h), 954.47 *9* from (n,n′γ), and 953.9 *10* from (p,p′γ).
								I_γ: weighted average of 13.3 *19* from ^{76}As β$^-$ decay, 16.3 *8* from ^{76}Br

$^{76}_{34}Se_{42}$-18

Adopted Levels, Gammas (continued)

γ(^{76}Se) (continued)

E_i(level)	J_i^π	E_γ[‡]	I_γ[‡]	E_f	J_f^π	Mult.[#]	δ[#]	α[†]	Comments
									ε+β$^+$ decay (16.14 h), and 15.6 *7* from (n,n′γ). Other: 330 *120* in (n,γ) E=thermal indicates contamination.
2170.572	(0$^+$)	1611.65 *8*	100.0 *7*	559.103	2$^+$	[E2]		0.000282 *4*	α(K)=0.0001347 *19*; α(L)=1.394×10^{-5} *20*; α(M)=2.168×10^{-6} *30* α(N)=1.855×10^{-7} *26*; α(IPF)=0.0001310 *18* B(E2)(W.u.)=1.5 *+8−6* E_γ: weighted average of 1611.5 *3* from ^{76}As β$^-$ decay, 1611.71 *12* from ^{76}Br ε+β$^+$ decay (16.14 h), and 1611.63 *8* from (n,n′γ). Other: 1611.7 *5* from (p,p′γ). I_γ: (n,n′γ). Others: 100 *4* from ^{76}As β$^-$ decay, ^{76}Br ε+β$^+$ decay (16.14 h).
2262.42	6$^+$	931.50 *20*	100	1330.872	4$^+$	E2		0.000498 *7*	B(E2)(W.u.)=72.7 *+68−58* α(K)=0.000444 *6*; α(L)=4.66×10^{-5} *7*; α(M)=7.24×10^{-6} *10* α(N)=6.16×10^{-7} *9*
2362.963		575.305 *11*	100 *10*	1787.655	2$^+$				
		1032[b] *1*	<20	1330.872	4$^+$				
2429.131	3$^-$	301.96 *5*	0.67 *3*	2127.224	(2)$^+$	[E1]		0.00313 *4*	B(E1)(W.u.)=8.8×10^{-6} *14* α(K)=0.00279 *4*; α(L)=0.000292 *4*; α(M)=4.52×10^{-5} *6* α(N)=3.83×10^{-6} *5*
		403.094 *7*	1.83 *7*	2026.020	4$^+$	[E1]		1.44×10^{-3} *2*	B(E1)(W.u.)=1.01×10^{-5} *+16−15* α(K)=0.001280 *18*; α(L)=0.0001334 *19*; α(M)=2.072×10^{-5} *29* α(N)=1.759×10^{-6} *25*
		740.147 *20*	8.49 *18*	1688.971	3$^+$	(E1+M2)	−0.21 *12*	0.00040 *9*	B(E1)(W.u.)=7.2×10^{-6} *+11−12* α(K)=0.00036 *8*; α(L)=3.7×10^{-5} *8*; α(M)=5.8×10^{-6} *13* α(N)=5.0×10^{-7} *11* δ: from γγ(θ) in ^{76}As β$^-$. Other: +0.08 *16* from γ(θ) in ^{76}As β$^-$. Parity is from the Adopted Levels. B(M2)(W.u.)=2.7 *+47−23* exceeds RUL=1.
		1098.33 *5*	0.28 *5*	1330.872	4$^+$	[E1]		0.0001521 *21*	B(E1)(W.u.)=7.6×10^{-8} *18* α(K)=0.0001358 *19*; α(L)=1.400×10^{-5} *20*; α(M)=2.176×10^{-6} *30* α(N)=1.861×10^{-7} *26*

$^{76}_{34}Se_{42}$-19

Adopted Levels, Gammas (continued)

γ(^{76}Se) (continued)

E_i(level)	J_i^π	E_γ[‡]	I_γ[‡]	E_f	J_f^π	Mult.[#]	δ[#]	α[†]	Comments
2429.131	3⁻	1212.980 *10*	100.0 *5*	1216.154	2⁺	(E1+M2)	+0.025 *20*	0.0001820 *26*	B(E1)(W.u.)=2.02×10^{-5} *+32−29*; B(M2)(W.u.)=0.039 *+89−35* α(K)=0.0001136 *17*; α(L)=1.170×10^{-5} *17*; α(M)=1.818×10^{-6} *27* α(N)=1.556×10^{-7} *23*; α(IPF)=5.48×10^{-5} *8* δ: from γγ(θ) in ^{76}As β$^-$. Others: −0.27 *13* from γ(θ) in (α,2nγ), +0.11 *10* from γ(θ) in ^{76}As β$^-$. Parity is the Adopted Levels.
		1870.02 *2*	3.87 *13*	559.103	2⁺	(E1+M2)	+0.17 *3*	0.000589 *9*	B(E1)(W.u.)=2.07×10^{-7} *+33−31*; B(M2)(W.u.)=0.0079 *+32−28* α(K)=5.91×10^{-5} *16*; α(L)=6.06×10^{-6} *16*; α(M)=9.42×10^{-7} *25* α(N)=8.08×10^{-8} *22*; α(IPF)=0.000523 *9* δ: from γγ(θ) in ^{76}As β$^-$. Other: +0.00 *8* from γ(θ) in ^{76}As β$^-$. Parity is from the Adopted Levels.
		2429.49 *22*	2.41 *4*	0.0	0⁺	[E3]		0.000437 *6*	B(E3)(W.u.)=16.3 *+26−24* α(K)=9.90×10^{-5} *14*; α(L)=1.025×10^{-5} *14*; α(M)=1.596×10^{-6} *22* α(N)=1.367×10^{-7} *19*; α(IPF)=0.000326 *5*
2485.02	4⁺	796.08 *6*	29.5 *7*	1688.971	3⁺	M1+E2	+0.20 *+19−13*	0.000621 *14*	α(K)=0.000553 *13*; α(L)=5.76×10^{-5} *14*; α(M)=8.98×10^{-6} *22* α(N)=7.68×10^{-7} *18* B(M1)(W.u.)=0.0153 *+21−28*; B(E2)(W.u.)=1.3 *+32−11* E_γ,I_γ: from (n,n′γ) only. Mult.,δ: D+Q from γ(θ) in (n,n′γ); E1+M2 ruled out by RUL.
		1154.09 *9*	100 *1*	1330.872	4⁺	M1+E2	−0.35 *5*	0.000289 *4*	α(K)=0.000255 *4*; α(L)=2.64×10^{-5} *4*; α(M)=4.11×10^{-6} *6* α(N)=3.52×10^{-7} *5*; α(IPF)=2.53×10^{-6} *4* B(M1)(W.u.)=0.0159 *23*; B(E2)(W.u.)=2.0 *6* E_γ,I_γ: from (n,n′γ) only. Mult.,δ: D+Q from γ(θ) in (n,n′γ); E1+M2 ruled out by RUL.
		1268.81 *9*	37.2 *8*	1216.154	2⁺	[E2]		0.000268 *4*	α(K)=0.0002198 *31*; α(L)=2.286×10^{-5} *32*; α(M)=3.56×10^{-6} *5* α(N)=3.04×10^{-7} *4*; α(IPF)=2.098×10^{-5} *29* B(E2)(W.u.)=4.1 *6* E_γ,I_γ: from (n,n′γ) only.
2489.35	5⁺	800.41 *9*	100.0 *6*	1688.971	3⁺	E2		0.000728 *10*	B(E2)(W.u.)=67 *+19−17*

$^{76}_{34}Se_{42}$-20

Adopted Levels, Gammas (continued)

γ(^{76}Se) (continued)

E_i(level)	J_i^π	E_γ[‡]	I_γ[‡]	E_f	J_f^π	Mult.[#]	δ[#]	α[†]	Comments
									α(K)=0.000648 *9*; α(L)=6.84×10^{-5} *10*; α(M)=1.063×10^{-5} *15* α(N)=9.03×10^{-7} *13* E_γ: weighted average of 800.6 *5* from (α,2nγ) and 800.40 *9* from (n,n′γ). I_γ: from (n,n′γ). Other: 100 *7* from (α,2nγ).
2489.35	5$^+$	1158.45 *5*	49.9 *6*	1330.872	4$^+$	E2+M1	+2.9 *8*	0.000302 *5*	B(M1)(W.u.)=5.6×10^{-4} *+46−23*; B(E2)(W.u.)=4.7 *13* α(K)=0.000266 *4*; α(L)=2.77×10^{-5} *4*; α(M)=4.31×10^{-6} *6* α(N)=3.68×10^{-7} *5*; α(IPF)=3.57×10^{-6} *9* E_γ: from (n,n′γ). Other: 1158.4 *5* from (α,2nγ). I_γ: from (n,n′γ). Other: 50.0 *33* from (α,2nγ).
2514.681	2$^+$	387.66 *49*	0.61 *12*	2127.224	(2)$^+$	[M1,E2]		0.0047 *15*	α(K)=0.0042 *14*; α(L)=4.5×10^{-4} *15*; α(M)=7.0×10^{-5} *24* α(N)=5.9×10^{-6} *19* B(M1)(W.u.)=0.00117 *+39−37* if M1, B(E2)(W.u.)=10.5 *+35−33* if E2.
		723.24 *11*	6.5 *12*	1791.437	0$^+$				
		727.014 *10*	100.0 *15*	1787.655	2$^+$	M1+E2	+0.22 *5*	0.000759 *11*	α(K)=0.000676 *10*; α(L)=7.06×10^{-5} *11*; α(M)=1.098×10^{-5} *17* α(N)=9.39×10^{-7} *14* B(M1)(W.u.)=0.028 *7*; B(E2)(W.u.)=3.4 *+18−16* δ: weighted average of +0.188 *52* from ^{76}Br ε decay and +0.24 *5* from (n,n′γ). Others: >+3.0 or <−0.10 from γ(θ) in ^{76}As β$^-$ decay.
		825.78 *8*	3.0 *4*	1688.971	3$^+$	(M1+E2)		0.00062 *5*	α(K)=0.00055 *5*; α(L)=5.8×10^{-5} *5*; α(M)=9.0×10^{-6} *8* α(N)=7.7×10^{-7} *7* δ: −3 *+18−3* or −1 *+15−1* from (n,n′γ). B(M1)(W.u.)=6.0×10^{-4} *17* if M1, B(E2)(W.u.)=1.18 *33* if E2.
		1298.60 *12*	0.98 *5*	1216.154	2$^+$	[M1,E2]		0.000254 *9*	α(K)=0.000205 *5*; α(L)=2.12×10^{-5} *6*; α(M)=3.30×10^{-6} *9* α(N)=2.83×10^{-7} *8*; α(IPF)=2.43×10^{-5} *33* B(M1)(W.u.)=5.0×10^{-5} *13* if M1, B(E2)(W.u.)=0.040 *10* if E2.
		1392.36 *12*	2.1 *4*	1122.279	0$^+$	[E2]		0.0002534 *35*	α(K)=0.0001808 *25*; α(L)=1.877×10^{-5} *26*; α(M)=2.92×10^{-6} *4* α(N)=2.495×10^{-7} *35*; α(IPF)=5.07×10^{-5} *7* B(E2)(W.u.)=0.060 *19*
		1955.53 *4*	53.4 *12*	559.103	2$^+$	(M1+E2)	−0.21 *+5−6*	0.000348 *5*	α(K)=9.19×10^{-5} *13*; α(L)=9.45×10^{-6} *13*; α(M)=1.471×10^{-6} *21*

$^{76}_{34}Se_{42}$-21

Adopted Levels, Gammas (continued)

γ(^{76}Se) (continued)

E_i(level)	J_i^π	E_γ[‡]	I_γ[‡]	E_f	J_f^π	Mult.[#]	δ[#]	α[†]	Comments
									α(N)=1.262×10^{-7} *18*; α(IPF)=0.000245 *4* B(M1)(W.u.)=7.6×10^{-4} *19*; B(E2)(W.u.)=0.012 *+8−6* δ: from γγ(θ) in ^{76}Br ε decay.
2558.73		1342.30 *14*	100.0 *25*	1216.154	2$^+$				
		1999.74 *10*	31.3 *14*	559.103	2$^+$				
2604.09	1$^+$,2$^+$	816.47 *17*	6.2 *10*	1787.655	2$^+$	[M1,E2]		0.00064 *5*	α(K)=0.00057 *5*; α(L)=6.0×10^{-5} *5*; α(M)=9.3×10^{-6} *8* α(N)=7.9×10^{-7} *7* B(M1)(W.u.)=0.0017 *+7−6* if M1, B(E2)(W.u.)=3.4 *+15−13* if E2.
		1387.87 *6*	30.1 *10*	1216.154	2$^+$	[M1,E2]		0.000244 *10*	α(K)=0.000179 *4*; α(L)=1.85×10^{-5} *5*; α(M)=2.88×10^{-6} *7* α(N)=2.47×10^{-7} *6*; α(IPF)=4.4×10^{-5} *6* E_γ: weighted average of 1388.13 *27* from ^{76}Br ε+β$^+$ decay (16.14 h) and 1387.86 *6* from (n,n′γ). I_γ: weighted average of 28.6 *14* from ^{76}Br ε+β$^+$ decay (16.14 h) and 30.7 *9* from (n,n′γ). B(M1)(W.u.)=0.0017 *+7−6* if M1, B(E2)(W.u.)=1.17 *+46−40* if E2.
		2044.93 *6*	100.0 *9*	559.103	2$^+$	M1+E2	−3.0 *+14−60*	0.000423 *11*	α(K)=8.58×10^{-5} *12*; α(L)=8.84×10^{-6} *13*; α(M)=1.375×10^{-6} *20* α(N)=1.178×10^{-7} *17*; α(IPF)=0.000327 *10* B(M1)(W.u.)=1.7×10^{-4} *+35−14*; B(E2)(W.u.)=0.50 *+18−21* E_γ: from (n,n′γ). Other: 2045.49 *70* from ^{76}Br ε+β$^+$ decay (16.14 h). I_γ: from (n,n′γ). Other: 100 *4* from ^{76}Br ε+β$^+$ decay (16.14 h). Mult.,δ: D+Q from γγ(θ) in ^{76}Br ε+β$^+$ decay (16.14 h); E1+M2 ruled out by RUL.
		2604.10 *41*	0.91 *4*	0.0	0$^+$	[M1,E2]		0.00063 *4*	α(K)=5.57×10^{-5} *9*; α(L)=5.72×10^{-6} *9*; α(M)=8.90×10^{-7} *15* α(N)=7.64×10^{-8} *12*; α(IPF)=0.000567 *35* B(M1)(W.u.)=7.7×10^{-6} *+31−26* if M1, B(E2)(W.u.)=0.0015 *+6−5* if E2.
2617.89	(4)$^+$	830.41 *11*	26.8 *7*	1787.655	2$^+$	[E2]		0.000662 *9*	α(K)=0.000590 *8*; α(L)=6.21×10^{-5} *9*; α(M)=9.67×10^{-6} *14* α(N)=8.21×10^{-7} *11* B(E2)(W.u.)=31.1 *50*
		928.82 *14*	15.5 *5*	1688.971	3$^+$	M1+E2		0.000473 *30*	α(K)=0.000421 *26*; α(L)=4.40×10^{-5} *30*; α(M)=6.8×10^{-6} *5* α(N)=5.8×10^{-7} *4* δ: +8 *+21−5* or +0.15 *11* from (n,n′γ). B(M1)(W.u.)=0.0066 *11* if M1, B(E2)(W.u.)=10.3 *17* if E2.
		1286.91 *10*	100 *1*	1330.872	4$^+$	M1+E2	−0.22 *4*	0.0002480 *35*	α(K)=0.0002041 *29*; α(L)=2.111×10^{-5} *30*;

$^{76}_{34}Se_{42}$-22

Adopted Levels, Gammas (continued)

γ(^{76}Se) (continued)

E_i(level)	J_i^π	E_γ[‡]	I_γ[‡]	E_f	J_f^π	Mult.[#]	δ[#]	α[†]	Comments
									α(M)=3.29×10^{-6} *5* α(N)=2.82×10^{-7} *4*; α(IPF)=1.918×10^{-5} *29* B(M1)(W.u.)=0.0152 *25*; B(E2)(W.u.)=0.60 *+24−21*
2617.89	(4)$^+$	1401.70 *11*	18.0 *7*	1216.154	2$^+$	[E2]		0.0002532 *35*	α(K)=0.0001784 *25*; α(L)=1.851×10^{-5} *26*; α(M)=2.88×10^{-6} *4* α(N)=2.461×10^{-7} *34*; α(IPF)=5.32×10^{-5} *7* B(E2)(W.u.)=1.53 *+24−26*
2655.383	1	484.69 *5*	1.33 *15*	2170.572	(0$^+$)				
		528.15 *6*	0.62 *3*	2127.224	(2)$^+$				
		863.90 *5*	1.79 *7*	1791.437	0$^+$				
		867.723 *26*	25 *3*	1787.655	2$^+$	D(+Q)	+0.013 *20*		δ: from γγ(θ) in ^{76}Br ε decay. Others: +0.08 *7* from γγ(θ) in ^{76}As β$^-$, +0.4 *+6−3* from γ(θ) in ^{76}As β$^-$.
		1439.211 *21*	48.3 *8*	1216.154	2$^+$	D+Q	−0.043 *19*		δ: from γγ(θ) in ^{76}Br ε decay. Others: +0.01 *3*, +0.13 *9* from γγ(θ) in ^{76}As β$^-$, −0.02 *10* from γ(θ) in ^{76}As β$^-$.
		1533.11 *5*	4.11 *8*	1122.279	0$^+$	D			δ: 0.0 from γ(θ) in ^{76}As β$^-$.
		2096.17 *3*	100.0 *8*	559.103	2$^+$	D(+Q)	−0.043 *+43−42*		δ: from γγ(θ) in ^{76}Br ε decay. Others: +0.02 *6* from γγ(θ) in ^{76}As β$^-$, 0.00 *8* from γ(θ) in ^{76}As β$^-$.
		2655.47 *8*	7.3 *5*	0.0	0$^+$				
2669.904	2$^-$	882.213 *20*	18.2 *6*	1787.655	2$^+$	(E1)		0.0002325 *33*	α(K)=0.0002074 *29*; α(L)=2.144×10^{-5} *30*; α(M)=3.33×10^{-6} *5* α(N)=2.85×10^{-7} *4* B(E1)(W.u.)=6.7×10^{-5} *16* δ: +0.26 *15* from γγ(θ) in ^{76}As β$^-$ but it would give a large B(M2)(W.u.) exceeding RUL.
		980.80 *8*	13.0 *5*	1688.971	3$^+$	(E1)		0.0001885 *26*	B(E1)(W.u.)=3.5×10^{-5} *8* α(K)=0.0001683 *24*; α(L)=1.737×10^{-5} *24*; α(M)=2.70×10^{-6} *4* α(N)=2.307×10^{-7} *32* δ: <+0.24 or >+16.4 from γ(θ) in ^{76}As β$^-$.
		1453.717 *20*	35.4 *16*	1216.154	2$^+$	(E1+M2)	+0.045 *19*	0.000308 *4*	α(K)=8.34×10^{-5} *13*; α(L)=8.57×10^{-6} *13*; α(M)=1.333×10^{-6} *20* α(N)=1.141×10^{-7} *17*; α(IPF)=0.0002150 *30* B(E1)(W.u.)=2.9×10^{-5} *7*; B(M2)(W.u.)=0.13 *+13−9* δ: from γγ(θ) in ^{76}Br ε decay. Others: +0.05 *2* from γγ(θ), −0.11 *12* from γ(θ) in ^{76}As β$^-$.

$^{76}_{34}Se_{42}$-23

Adopted Levels, Gammas (continued)

$\gamma(^{76}Se)$ (continued)

E_i(level)	J_i^π	E_γ[‡]	I_γ[‡]	E_f	J_f^π	Mult.[#]	δ[#]	α[†]	Comments
2669.904	2^-	2110.75 *5*	100.0 *7*	559.103	2^+	(E1+M2)	+0.047 *12*	0.000758 *11*	α(K)=4.64×10^{-5} *7*; α(L)=4.75×10^{-6} *7*; α(M)=7.39×10^{-7} *11* α(N)=6.34×10^{-8} *9*; α(IPF)=0.000706 *10* B(E1)(W.u.)=2.7×10^{-5} *6*; B(M2)(W.u.)=0.061 *+39−30* E_γ: from ^{76}As decay. Value of 2111.27 *8* from ^{76}Br decay fits poorly. Weighted average (NRM) of all available values is 2111.23 *12*. δ: from $\gamma\gamma(\theta)$ in ^{76}Br ε decay. Others: −0.09 *2* from $\gamma\gamma(\theta)$, −0.02 *16* from $\gamma(\theta)$ in ^{76}As β^-.
		2670.1 *5*	0.16 *7*	0.0	0^+	[M2]		0.000460 *6*	α(K)=8.79×10^{-5} *12*; α(L)=9.08×10^{-6} *13*; α(M)=1.413×10^{-6} *20* α(N)=1.213×10^{-7} *17*; α(IPF)=0.000362 *5* B(M2)(W.u.)=0.014 *+7−6*
2805.10	(4^+)	1474.21 *15*	100	1330.872	4^+				
2812.130	(3^+)	382.92 *17*	22.4 *9*	2429.131	3^-				
		1123.07 *10*	27.1 *11*	1688.971	3^+	(M1+E2)		0.000312 *12*	α(K)=0.000277 *11*; α(L)=2.88×10^{-5} *12*; α(M)=4.49×10^{-6} *18* α(N)=3.84×10^{-7} *15*; α(IPF)=1.29×10^{-6} *21* Mult.,δ: D+Q with δ=−1.61 *+30−21* or −0.045 *12* from (n,n′γ) are likely M1+E2.
		1481.48 *16*	9.6 *11*	1330.872	4^+				
		1595.93 *13*	100.0 *11*	1216.154	2^+	(M1(+E2))	+0.03 *3*	0.0002500 *35*	α(K)=0.0001341 *19*; α(L)=1.383×10^{-5} *19*; α(M)=2.152×10^{-6} *30* α(N)=1.847×10^{-7} *26*; α(IPF)=9.97×10^{-5} *14*
		2253.00 *18*	27.0 *12*	559.103	2^+	(M1+E2)		0.000485 *30*	α(K)=7.17×10^{-5} *11*; α(L)=7.37×10^{-6} *12*; α(M)=1.147×10^{-6} *18* α(N)=9.84×10^{-8} *16*; α(IPF)=0.000404 *30* δ: −1.0 *+14−2* or −4.8 *+10−3* from (n,n′γ).
2817.24	(2^+)	1486.67 *13*	1.3 *4*	1330.872	4^+	[E2]		0.000258 *4*	α(K)=0.0001582 *22*; α(L)=1.639×10^{-5} *23*; α(M)=2.55×10^{-6} *4* α(N)=2.181×10^{-7} *31*; α(IPF)=8.06×10^{-5} *11* B(E2)(W.u.)=0.33 *10*
		1600.92 *7*	100.0 *10*	1216.154	2^+	[M1,E2]		0.000265 *15*	α(K)=0.0001349 *25*; α(L)=1.394×10^{-5} *27*; α(M)=2.17×10^{-6} *4* α(N)=1.858×10^{-7} *34*; α(IPF)=0.000114 *13* B(M1)(W.u.)=0.0331 *21* if M1, B(E2)(W.u.)=17.4 *11* if E2.
		2258.04 *8*	63.9 *10*	559.103	2^+	[M1,E2]		0.000487 *30*	α(K)=7.14×10^{-5} *11*; α(L)=7.34×10^{-6} *12*; α(M)=1.142×10^{-6} *18*

$^{76}_{34}Se_{42}$-24

Adopted Levels, Gammas (continued)

γ(^{76}Se) (continued)

E_i(level)	J_i^π	E_γ[‡]	I_γ[‡]	E_f	J_f^π	Mult.[#]	δ[#]	α[†]	Comments
									α(N)=9.80×10^{-8} *15*; α(IPF)=0.000407 *30* B(M1)(W.u.)=0.00752 *+50−45* if M1, B(E2)(W.u.)=1.99 *13* if E2.
2817.24	(2$^+$)	2817.20 *28*	0.61 *9*	0.0	0$^+$	[E2]		0.000753 *11*	α(K)=4.92×10^{-5} *7*; α(L)=5.05×10^{-6} *7*; α(M)=7.86×10^{-7} *11* α(N)=6.74×10^{-8} *9*; α(IPF)=0.000698 *10* B(E2)(W.u.)=0.0063 *10*
2824.797	5$^-$	335.5 *5*	5.8	2489.35	5$^+$	(E1)		2.34×10^{-3} *3*	B(E1)(W.u.)=4.2×10^{-5} *+15−14* α(K)=0.002089 *30*; α(L)=0.0002181 *32*; α(M)=3.39×10^{-5} *5* α(N)=2.87×10^{-6} *4* γ from (α,2nγ) only. δ(M2/E1)=+0.35 *15* gives B(M2)(W.u.)=210 *180*. RUL≤1 for M2 gives δ<0.01. Parity from the Adopted Levels.
		395.665 *5*	39 *3*	2429.131	3$^-$	E2		0.00581 *8*	B(E2)(W.u.)=87 *+27−23* α(K)=0.00515 *7*; α(L)=0.000563 *8*; α(M)=8.75×10^{-5} *12* α(N)=7.30×10^{-6} *10*
		562.3 *5*	<20	2262.42	6$^+$	[E1]		0.000625 *9*	B(E1)(W.u.)<4.2×10^{-5} α(K)=0.000557 *8*; α(L)=5.79×10^{-5} *8*; α(M)=9.00×10^{-6} *13* α(N)=7.67×10^{-7} *11*
		798.83 *6*	100 *8*	2026.020	4$^+$	(E1)		0.000285 *4*	B(E1)(W.u.)=5.4×10^{-5} *+16−14* α(K)=0.000254 *4*; α(L)=2.63×10^{-5} *4*; α(M)=4.09×10^{-6} *6* α(N)=3.49×10^{-7} *5* δ(Q/D)=+0.04 *4* from γ(θ) in (α,2nγ). Parities from the Adopted Levels give mult=E1.
		1493.88 *6*	65 *7*	1330.872	4$^+$	E1		0.000335 *5*	B(E1)(W.u.)=5.4×10^{-6} *+16−15* α(K)=7.93×10^{-5} *11*; α(L)=8.14×10^{-6} *11*; α(M)=1.266×10^{-6} *18* α(N)=1.084×10^{-7} *15*; α(IPF)=0.0002457 *34*
2829.61	(1,2)	1041.18 *32* 2829.99 *24*	100 *6* 0.54 *18*	1787.655 0.0	2$^+$ 0$^+$				δ: +0.03 *5* from γ(θ,pol) in (α,2nγ).
2859.781	4$^-$	430.649 *27*	71 *9*	2429.131	3$^-$	M1+E2	−0.7 *+4−12*	0.0031 *9*	B(M1)(W.u.)=0.053 *+41−32*; B(E2)(W.u.)=1.9×10^2 *+27−15* α(K)=0.0028 *8*; α(L)=2.9×10^{-4} *9*; α(M)=4.6×10^{-5} *14*

$^{76}_{34}Se_{42}$-25

Adopted Levels, Gammas (continued)

γ(^{76}Se) (continued)

E_i(level)	J_i^π	E_γ[‡]	I_γ[‡]	E_f	J_f^π	Mult.[#]	δ[#]	α[†]	Comments
									α(N)=3.9×10^{-6} *11* B(E2)(W.u.)=1.9×10^{2} *+27−15* upper bound exceeds RUL=300.
2859.781	4$^-$	1170.85 *8*	35 *7*	1688.971	3$^+$	[E1]		0.0001659 *23*	α(K)=0.0001208 *17*; α(L)=1.244×10^{-5} *17*; α(M)=1.934×10^{-6} *27* α(N)=1.655×10^{-7} *23*; α(IPF)=3.06×10^{-5} *4* B(E1)(W.u.)=3.3×10^{-5} *+23−11*
		1528.87 *8*	100.0 *13*	1330.872	4$^+$	(E1(+M2))	<0.1	0.000359 *5*	B(E1)(W.u.)=4.3×10^{-5} *+37−15* α(K)=7.74×10^{-5} *15*; α(L)=7.95×10^{-6} *16*; α(M)=1.235×10^{-6} *24* α(N)=1.058×10^{-7} *21*; α(IPF)=0.000272 *4* δ: ≈0.4 for ΔJ=0 from γ(θ) in (α,2nγ) is too high. From RUL(M2)=1, δ<0.1. B(M2)(W.u.)<1.6 upper limit exceeds RUL=1.
2869.34	(1$^+$,2$^+$)	1653.06 *10*	51.7 *18*	1216.154	2$^+$	(M1+E2)		0.000277 *16*	α(K)=0.0001268 *22*; α(L)=1.310×10^{-5} *24*; α(M)=2.04×10^{-6} *4* α(N)=1.746×10^{-7} *31*; α(IPF)=0.000135 *14* δ: +0.38 *+14−12* or +1.1 *+3−8* from (n,n′γ). B(M1)(W.u.)=1.76×10^{-5} *+15−13* if M1, B(E2)(W.u.)=0.0086 *7* if E2.
		2310.09 *16*	100.0 *11*	559.103	2$^+$	(M1+E2)		0.000508 *31*	α(K)=6.86×10^{-5} *11*; α(L)=7.05×10^{-6} *11*; α(M)=1.097×10^{-6} *18* α(N)=9.41×10^{-8} *15*; α(IPF)=0.000431 *31* δ: −0.52 *9* or −12 *+52−6* from (n,n′γ). B(M1)(W.u.)=1.25×10^{-5} *10* if M1, B(E2)(W.u.)=0.00314 *+25−22* if E2.
		2869.40 *31*	23.1 *15*	0.0	0$^+$				
2910.993	(1 to 4)	548.028[b] *12*	100	2362.963					
2917.32	(4)$^+$	1586.41 *8*	100	1330.872	4$^+$	(M1+E2)	+0.34 *4*	0.000251 *4*	α(K)=0.0001360 *19*; α(L)=1.403×10^{-5} *20*; α(M)=2.183×10^{-6} *31* α(N)=1.873×10^{-7} *26*; α(IPF)=9.87×10^{-5} *15*
2950.171	1$^+$	294.60 *17*	0.108 *24*	2655.383	1				
		779.48 *10*	0.287 *28*	2170.572	(0$^+$)	[M1]		0.000645 *9*	α(K)=0.000575 *8*; α(L)=5.99×10^{-5} *8*; α(M)=9.32×10^{-6} *13* α(N)=7.98×10^{-7} *11* B(M1)(W.u.)=9.0×10^{-4} *+19−15*
		822.92 *31*	0.26 *5*	2127.224	(2)$^+$	[M1,E2]		0.00063 *5*	α(K)=0.00056 *5*; α(L)=5.8×10^{-5} *5*; α(M)=9.1×10^{-6} *8* α(N)=7.7×10^{-7} *7*

$^{76}_{34}Se_{42}$-26

Adopted Levels, Gammas (continued)

γ(^{76}Se) (continued)

E_i(level)	J_i^π	E_γ[‡]	I_γ[‡]	E_f	J_f^π	Mult.[#]	δ[#]	α[†]	Comments
									B(M1)(W.u.)=7.0×10^{-4} *+20−16* if M1, B(E2)(W.u.)=1.38 *+39−31* if E2.
2950.171	1$^+$	1158.68 *13*	1.64 *20*	1791.437	0$^+$	[M1]		0.000284 *4*	α(K)=0.0002512 *35*; α(L)=2.60×10^{-5} *4*; α(M)=4.05×10^{-6} *6* α(N)=3.47×10^{-7} *5*; α(IPF)=2.70×10^{-6} *4*
									B(M1)(W.u.)=0.00157 *+35−28*
		1733.96 *19*	0.34 *5*	1216.154	2$^+$	[M1,E2]		0.000298 *18*	α(K)=0.0001158 *20*; α(L)=1.195×10^{-5} *21*; α(M)=1.859×10^{-6} *33* α(N)=1.593×10^{-7} *27*; α(IPF)=0.000168 *17*
									B(M1)(W.u.)=9.7×10^{-5} *+24−19* if M1, B(E2)(W.u.)=0.044 *+11−8* if E2.
		1828.22 *39*	0.59 *18*	1122.279	0$^+$	[M1]		0.000305 *4*	α(K)=0.0001039 *15*; α(L)=1.070×10^{-5} *15*; α(M)=1.665×10^{-6} *23* α(N)=1.429×10^{-7} *20*; α(IPF)=0.0001888 *26*
									B(M1)(W.u.)=1.4×10^{-4} *5*
		2391.14 *30*	57.2 *14*	559.103	2$^+$	M1+E2	−0.058 *+4−5*	0.000509 *7*	B(M1)(W.u.)=0.0062 *+12−9*; B(E2)(W.u.)=0.0049 *+14−9* α(K)=6.41×10^{-5} *9*; α(L)=6.58×10^{-6} *9*; α(M)=1.024×10^{-6} *14* α(N)=8.79×10^{-8} *12*; α(IPF)=0.000437 *6* Mult.: M1,E2 from α(K)exp and D+Q from γγ(θ) in ^{76}Br ε decay.
		2950.49 *9*	100.0 *13*	0.0	0$^+$	(M1)		0.000731 *10*	B(M1)(W.u.)=0.0058 *+11−8* α(K)=4.47×10^{-5} *6*; α(L)=4.58×10^{-6} *6*; α(M)=7.13×10^{-7} *10* α(N)=6.12×10^{-8} *9*; α(IPF)=0.000681 *10* Mult.: from α(K)exp in ^{76}Br ε; γ(θ) in (γ,γ′).
2969.48	2$^-$,3$^-$,4$^-$	540.40 *8*	48.2 *13*	2429.131	3$^-$	(M1+E2)		0.0018 *4*	α(K)=0.00161 *32*; α(L)=0.00017 *4*; α(M)=2.7×10^{-5} *6* α(N)=2.3×10^{-6} *5* δ: −0.44 *12* or −1.7 *4* from (n,n′γ).
		1280.44 *10*	100.0 *13*	1688.971	3$^+$				
2975.00	(2$^+$,3,4$^+$)	847.51 *11*	16.6 *16*	2127.224	(2)$^+$				
		1286.04 *11*	100 *10*	1688.971	3$^+$				
		1644.28 *12*	9.1 *10*	1330.872	4$^+$				
		1758.90 *12*	6.8 *7*	1216.154	2$^+$				
		2415.96 *34*	9.9 *10*	559.103	2$^+$				
2975.98	6$^+$	713.8 *5*	9.5	2262.42	6$^+$	[M1+E2]		0.00088 *10*	α(K)=0.00079 *9*; α(L)=8.3×10^{-5} *10*; α(M)=1.29×10^{-5} *16*

$^{76}_{34}Se_{42}$-27

Adopted Levels, Gammas (continued)

γ(^{76}Se) (continued)

E_i(level)	J_i^π	E_γ[‡]	I_γ[‡]	E_f	J_f^π	Mult.[#]	δ[#]	α[†]	Comments
									α(N)=1.09×10^{-6} *13* B(M1)(W.u.)=0.0044 *+24−18* if M1, B(E2)(W.u.)=12 *+7−5* if E2.
2975.98	6$^+$	950.0 *5*	100 *7*	2026.020	4$^+$	E2		0.000475 *7*	B(E2)(W.u.)=29 *+15−11* α(K)=0.000423 *6*; α(L)=4.44×10^{-5} *6*; α(M)=6.91×10^{-6} *10* α(N)=5.88×10^{-7} *8*
3007.75	(2)$^+$	1791.52 *12*	10.3 *6*	1216.154	2$^+$	(M1+E2)		0.000314 *20*	α(K)=0.0001089 *18*; α(L)=1.123×10^{-5} *19*; α(M)=1.747×10^{-6} *30* α(N)=1.497×10^{-7} *25*; α(IPF)=0.000192 *19* δ: *+5 +58−2* or −0.21 *19* from (n,n′γ). B(M1)(W.u.)=0.0127 *12* if M1, B(E2)(W.u.)=5.3 *5* if E2.
		2448.74 *12*	100.0 *8*	559.103	2$^+$	M1+E2	−0.16 *5*	0.000533 *8*	α(K)=6.15×10^{-5} *9*; α(L)=6.31×10^{-6} *9*; α(M)=9.82×10^{-7} *14* α(N)=8.43×10^{-8} *12*; α(IPF)=0.000464 *7* B(M1)(W.u.)=0.0470 *+38−36*; B(E2)(W.u.)=0.27 *+19−14*
		3007.40 *20*	5.0 *8*	0.0	0$^+$	[E2]		0.000832 *12*	α(K)=4.42×10^{-5} *6*; α(L)=4.53×10^{-6} *6*; α(M)=7.05×10^{-7} *10* α(N)=6.05×10^{-8} *8*; α(IPF)=0.000782 *11* B(E2)(W.u.)=0.194 *33*
3031.57	0$^+$	1815.40 *8*	60.5 *19*	1216.154	2$^+$	[E2]		0.000342 *5*	α(K)=0.0001072 *15*; α(L)=1.106×10^{-5} *15*; α(M)=1.721×10^{-6} *24* α(N)=1.473×10^{-7} *21*; α(IPF)=0.0002217 *31* B(E2)(W.u.)=5.8 *+6−5*
		2472.39 *12*	100.0 *19*	559.103	2$^+$	[E2]		0.000608 *9*	α(K)=6.14×10^{-5} *9*; α(L)=6.31×10^{-6} *9*; α(M)=9.82×10^{-7} *14* α(N)=8.42×10^{-8} *12*; α(IPF)=0.000539 *8* B(E2)(W.u.)=2.04 *+19−16*
3045.79	(5$^-$)	221.21 *11*	100 *6*	2824.797	5$^-$	(M1)		0.0125 *2*	B(M1)(W.u.)=2.8 *+13−11* α(K)=0.01111 *16*; α(L)=0.001191 *17*; α(M)=0.0001856 *26* α(N)=1.578×10^{-5} *22* Mult.,δ: γ(θ) in (α,2nγ) consistent with ΔJ=0 or 2; δ(Q/D)=+0.6 *3* from γ(θ) in (α,2nγ) (1984Zo01) would require a B(E2)(W.u.)=2.0×10^4 *+17−15* exceeding RUL=300; POL from (α,2nγ) seems consistent with E1 but it would require a B(E1)(W.u.)=0.048 *15-34* exceeding RUL=0.01. B(M1)(W.u.)=2.0 *+10−9* upper bound exceeds RUL=3.
		1714.73 *10*	87 *6*	1330.872	4$^+$	[E1]		0.000491 *7*	B(E1)(W.u.)=8.8×10^{-5} *+40−33* α(K)=6.35×10^{-5} *9*; α(L)=6.51×10^{-6} *9*; α(M)=1.012×10^{-6} *14* α(N)=8.67×10^{-8} *12*; α(IPF)=0.000420 *6*
3069.62	2$^+$	257.63 *12*	0.056 *9*	2812.130	(3$^+$)				

$^{76}_{34}Se_{42}$-28

Adopted Levels, Gammas (continued)

γ(^{76}Se) (continued)

E_i(level)	J_i^π	E_γ[‡]	I_γ[‡]	E_f	J_f^π	Mult.[#]	δ[#]	α[†]	Comments
3069.62	2^+	399.59 *52*	1.77 *11*	2669.904	2^-	[E1]		1.47×10^{-3} *2*	α(K)=0.001310 *19*; α(L)=0.0001365 *20*; α(M)=2.120×10^{-5} *31* α(N)=1.800×10^{-6} *26* B(E1)(W.u.)=1.64×10^{-4} *28*
		414.14 *10*	0.093 *7*	2655.383	1				
		640.46 *31*	0.151 *27*	2429.131	3^-	[M2]		0.00281 *4*	α(K)=0.002498 *35*; α(L)=0.000269 *4*; α(M)=4.20×10^{-5} *6* α(N)=3.58×10^{-6} *5* B(M2)(W.u.)=38 *+10−9* exceeds RUL=1.
		942.21 *12*	4.1 *26*	2127.224	$(2)^+$	(M1(+E2))	+0.04 *5*	0.000431 *6*	α(K)=0.000384 *5*; α(L)=3.99×10^{-5} *6*; α(M)=6.21×10^{-6} *9* α(N)=5.32×10^{-7} *7* B(M1)(W.u.)=0.0017 *+16−12*; B(E2)(W.u.)<0.04
		1380.52 *9*	20.6 *28*	1688.971	3^+	(M1+E2)		0.000245 *10*	α(K)=0.000181 *4*; α(L)=1.87×10^{-5} *5*; α(M)=2.91×10^{-6} *7* α(N)=2.49×10^{-7} *6*; α(IPF)=4.2×10^{-5} *5* δ: +0.04 *9* or −7 *+14−3* from (n,n′γ). B(M1)(W.u.)=0.0027 *5* if M1, B(E2)(W.u.)=1.91 *37* if E2.
		1853.24 *20*	100.0 *9*	1216.154	2^+	M1+E2	+0.035 *4*	0.000313 *4*	α(K)=0.0001013 *14*; α(L)=1.043×10^{-5} *15*; α(M)=1.624×10^{-6} *23* α(N)=1.393×10^{-7} *20*; α(IPF)=0.0001993 *28* B(M1)(W.u.)=0.0054 *9*; B(E2)(W.u.)=0.0026 *+8−7*
		2510.68 *19*	12.7 *16*	559.103	2^+	(M1+E2)	+0.069 *6*	0.000557 *8*	α(K)=5.88×10^{-5} *8*; α(L)=6.04×10^{-6} *8*; α(M)=9.40×10^{-7} *13* α(N)=8.07×10^{-8} *11*; α(IPF)=0.000491 *7* B(M1)(W.u.)=2.8×10^{-4} *5*; B(E2)(W.u.)=2.8×10^{-4} *+8−7*
		3070.08 *20*	0.065 *4*	0.0	0^+	[E2]		0.000857 *12*	α(K)=4.27×10^{-5} *6*; α(L)=4.38×10^{-6} *6*; α(M)=6.81×10^{-7} *10* α(N)=5.85×10^{-8} *8*; α(IPF)=0.000809 *11* B(E2)(W.u.)=1.10×10^{-4} *19*
3084.58	$(1^+,2^+,3^+)$	2525.43 *6*	100	559.103	2^+				
3105.48	(3^-)	1774.58 *23*	33.8 *23*	1330.872	4^+	[E1]		0.000532 *7*	α(K)=6.01×10^{-5} *8*; α(L)=6.17×10^{-6} *9*; α(M)=9.59×10^{-7} *13* α(N)=8.21×10^{-8} *12*; α(IPF)=0.000465 *7* B(E1)(W.u.)=6.8×10^{-5} *+10−8*

$^{76}_{34}Se_{42}$-29

Adopted Levels, Gammas (continued)

γ(^{76}Se) (continued)

E_i(level)	J_i^π	E_γ[‡]	I_γ[‡]	E_f	J_f^π	Mult.[#]	δ[#]	α[†]	Comments
3105.48	(3$^-$)	1889.2 *6*	31 *9*	1216.154	2$^+$	[E1]		0.000610 *9*	α(K)=5.46×10^{-5} *8*; α(L)=5.59×10^{-6} *8*; α(M)=8.70×10^{-7} *12* α(N)=7.46×10^{-8} *10*; α(IPF)=0.000549 *8* B(E1)(W.u.)=5.2×10^{-5} *14*
		2546.6 *4*	100.0 *12*	559.103	2$^+$	[E1]		1.03×10^{-3} *1*	α(K)=3.53×10^{-5} *5*; α(L)=3.61×10^{-6} *5*; α(M)=5.61×10^{-7} *8* α(N)=4.81×10^{-8} *7*; α(IPF)=0.000986 *14* B(E1)(W.u.)=6.9×10^{-5} *+9−7*
3160.115	(2$^+$)	209.92 *10*	1.86 *9*	2950.171	1$^+$	[M1,E2]		0.034 *20*	α(K)=0.030 *17*; α(L)=0.0034 *20*; α(M)=5.3×10^{-4} *32* α(N)=4.3×10^{-5} *25* B(M1)(W.u.)=0.048 *+18−16* if M1. B(E2)(W.u.)=1.5×10^{3} *+6−5* exceeds RUL=300 if E2.
		290.79 *35*	0.171 *18*	2869.34	(1$^+$,2$^+$)				
		347.88 *10*	1.32 *18*	2812.130	(3$^+$)				
		489.98 *13*	12.9 *8*	2669.904	2$^-$	[E1]		0.000873 *12*	α(K)=0.000779 *11*; α(L)=8.10×10^{-5} *11*; α(M)=1.259×10^{-5} *18* α(N)=1.071×10^{-6} *15* B(E1)(W.u.)=4.5×10^{-4} *+17−15*
		504.54 *10*	10.7 *25*	2655.383	1	[E1]		0.000812 *11*	α(K)=0.000724 *10*; α(L)=7.53×10^{-5} *11*; α(M)=1.171×10^{-5} *16* α(N)=9.96×10^{-7} *14* B(E1)(W.u.)=3.4×10^{-4} *+15−14*
		730.71 *11*	20.8 *17*	2429.131	3$^-$	[E1]		0.000345 *5*	α(K)=0.000307 *4*; α(L)=3.19×10^{-5} *4*; α(M)=4.95×10^{-6} *7* α(N)=4.23×10^{-7} *6* B(E1)(W.u.)=2.2×10^{-4} *+8−7*
		1032.58 *10*	25 *5*	2127.224	(2)$^+$	[M1,E2]		0.000373 *18*	α(K)=0.000333 *16*; α(L)=3.47×10^{-5} *18*; α(M)=5.39×10^{-6} *28* α(N)=4.61×10^{-7} *22* B(M1)(W.u.)=0.0055 *+22−20* if M1, B(E2)(W.u.)=6.9 *+27−25* if E2.
		1372.29 *13*	24.2 *22*	1787.655	2$^+$	[M1,E2]		0.000245 *10*	α(K)=0.000183 *4*; α(L)=1.89×10^{-5} *5*; α(M)=2.95×10^{-6} *7* α(N)=2.52×10^{-7} *6*; α(IPF)=4.0×10^{-5} *5* B(M1)(W.u.)=0.0023 *+9−8* if M1, B(E2)(W.u.)=1.6 *+6−5* if E2.
		1471.08 *7*	100.0 *18*	1688.971	3$^+$	[M1,E2]		0.000245 *11*	α(K)=0.0001592 *33*; α(L)=1.65×10^{-5} *4*; α(M)=2.56×10^{-6} *6* α(N)=2.19×10^{-7} *5*; α(IPF)=6.7×10^{-5} *8*

$^{76}_{34}Se_{42}$-30

Adopted Levels, Gammas (continued)

γ(^{76}Se) (continued)

E_i(level)	J_i^π	E_γ[‡]	I_γ[‡]	E_f	J_f^π	Mult.[#]	δ[#]	α[†]	Comments
									B(M1)(W.u.)=0.0075 *+27−24* if M1, B(E2)(W.u.)=4.7 *+17−15* if E2.
3160.115	(2$^+$)	1830.80 *15*	0.72 *6*	1330.872	4$^+$	[E2]		0.000347 *5*	α(K)=0.0001055 *15*; α(L)=1.088×10^{-5} *15*; α(M)=1.693×10^{-6} *24* α(N)=1.450×10^{-7} *20*; α(IPF)=0.0002289 *32*
		1944.18 *10*	17.0 *7*	1216.154	2$^+$	(M1(+E2))	+0.05 *6*	0.000342 *5*	B(E2)(W.u.)=0.0113 *+42−37* α(K)=9.28×10^{-5} *13*; α(L)=9.55×10^{-6} *13*; α(M)=1.486×10^{-6} *21* α(N)=1.275×10^{-7} *18*; α(IPF)=0.0002384 *34*
		2601.36 *20*	26.8 *11*	559.103	2$^+$	(M1+E2)	+0.149 *22*	0.000595 *8*	B(M1)(W.u.)=5.5×10^{-4} *+28−24*; B(E2)(W.u.)<0.0036 α(K)=5.54×10^{-5} *8*; α(L)=5.68×10^{-6} *8*; α(M)=8.84×10^{-7} *12* α(N)=7.59×10^{-8} *11*; α(IPF)=0.000533 *7*
									B(M1)(W.u.)=3.6×10^{-4} *+13−12*; B(E2)(W.u.)=0.0016 *+8−7* This γ is placed in (n,n′γ) from a different level with J^π=0$^+$.
3161.80	(3$^-$)	732.77 *6*	47.3 *31*	2429.131	3$^-$	(M1+E2)	+0.2 *+14−1*	0.00074 *12*	α(K)=0.00066 *11*; α(L)=6.9×10^{-5} *12*; α(M)=1.08×10^{-5} *19* α(N)=9.2×10^{-7} *15*
		1830.79 *8*	60.2 *21*	1330.872	4$^+$	[E1]		0.000570 *8*	B(M1)(W.u.)=0.045 *+8−13*; B(E2)(W.u.)=5 *+14−4* α(K)=5.73×10^{-5} *8*; α(L)=5.87×10^{-6} *8*; α(M)=9.13×10^{-7} *13* α(N)=7.83×10^{-8} *11*; α(IPF)=0.000506 *7*
		1945.48 *10*	100.0 *29*	1216.154	2$^+$	[E1]		0.000649 *9*	B(E1)(W.u.)=6.5×10^{-5} *13* α(K)=5.22×10^{-5} *7*; α(L)=5.35×10^{-6} *7*; α(M)=8.32×10^{-7} *12* α(N)=7.13×10^{-8} *10*; α(IPF)=0.000590 *8*
									B(E1)(W.u.)=9.1×10^{-5} *17*
3191.67	(3)$^+$	1502.74 *20*	100.0 *32*	1688.971	3$^+$	(M1+E2)		0.000249 *12*	α(K)=0.0001526 *30*; α(L)=1.578×10^{-5} *34*; α(M)=2.46×10^{-6} *5* α(N)=2.10×10^{-7} *4*; α(IPF)=7.7×10^{-5} *9* δ: +1.93 *+28−34* or −0.14 *5* from (n,n′γ).
									B(M1)(W.u.)=0.0392 *+36−32* if M1, B(E2)(W.u.)=23.3 *+22−19* if E2.
		1860.91 *26*	17 *6*	1330.872	4$^+$	(M1+E2)	−0.2 *+88−1*	0.00032 *4*	α(K)=0.0001006 *22*; α(L)=1.036×10^{-5} *24*; α(M)=1.61×10^{-6} *4* α(N)=1.383×10^{-7} *29*; α(IPF)=0.00020 *4*
									B(M1)(W.u.)<0.0052; B(E2)(W.u.)<2.0
		1975.6 *6*	17.5 *10*	1216.154	2$^+$	(M1+E2)		0.000377 *24*	α(K)=9.08×10^{-5} *15*; α(L)=9.35×10^{-6} *15*;

$^{76}_{34}Se_{42}$-31

Adopted Levels, Gammas (continued)

γ(^{76}Se) (continued)

E_i(level)	J_i^π	E_γ[‡]	I_γ[‡]	E_f	J_f^π	Mult.[#]	δ[#]	α[†]	Comments
									α(M)=1.455×10^{-6} *24* α(N)=1.248×10^{-7} *20*; α(IPF)=0.000275 *23* δ: −0.02 *9* or −4.6 *+33−14* from (n,n′γ). B(M1)(W.u.)=0.00302 *+33−29* if M1, B(E2)(W.u.)=1.04 *+11−10* if E2.
3191.67	(3)$^+$	2632.9 *5*	13.4 *34*	559.103	2$^+$	(M1+E2)		0.00064 *4*	α(K)=5.47×10^{-5} *9*; α(L)=5.61×10^{-6} *9*; α(M)=8.73×10^{-7} *14* α(N)=7.49×10^{-8} *12*; α(IPF)=0.00058 *4* δ: +0.26 *10* or +14 *+50−8* from (n,n′γ). B(M1)(W.u.)=9.8×10^{-4} *24* if M1, B(E2)(W.u.)=0.189 *+48−46* if E2.
3212.98	1$^+$,2$^+$	2653.82 *10*	100.0 *4*	559.103	2$^+$	M1+E2		0.00065 *4*	α(K)=5.39×10^{-5} *9*; α(L)=5.54×10^{-6} *9*; α(M)=8.61×10^{-7} *14* α(N)=7.39×10^{-8} *12*; α(IPF)=0.00059 *4* δ: +3.2 *+7−4* or −0.10 *5* from (n,n′γ). B(M1)(W.u.)=0.098 *+15−11* if M1, B(E2)(W.u.)=18.6 *+28−21* if E2.
		3214.7 *20*	8.6 *4*	0.0	0$^+$	[M1,E2]		0.00087 *4*	α(K)=3.92×10^{-5} *7*; α(L)=4.02×10^{-6} *7*; α(M)=6.25×10^{-7} *11* α(N)=5.37×10^{-8} *10*; α(IPF)=0.00083 *4* B(M1)(W.u.)=0.0047 *+7−6* if M1, B(E2)(W.u.)=0.62 *+9−7* if E2.
3219.428	(2$^+$,3$^+$)	790.12 *4*	38 *12*	2429.131	3$^-$	[E1]		0.000292 *4*	α(K)=0.000260 *4*; α(L)=2.69×10^{-5} *4*; α(M)=4.19×10^{-6} *6* α(N)=3.57×10^{-7} *5* B(E1)(W.u.)=0.0033 *+8−9*
		1530.32 *43*	1.57 *27*	1688.971	3$^+$	[M1,E2]		0.000252 *13*	α(K)=0.0001473 *29*; α(L)=1.523×10^{-5} *32*; α(M)=2.37×10^{-6} *5* α(N)=2.03×10^{-7} *4*; α(IPF)=8.7×10^{-5} *10* B(M1)(W.u.)=0.00110 *+23−21* if M1, B(E2)(W.u.)=0.63 *+13−12* if E2.
		1888.95 *36*	17.4 *10*	1330.872	4$^+$	[M1,E2]		0.000346 *22*	α(K)=9.86×10^{-5} *16*; α(L)=1.017×10^{-5} *17*; α(M)=1.581×10^{-6} *26* α(N)=1.356×10^{-7} *22*; α(IPF)=0.000235 *21* B(M1)(W.u.)=0.0065 *+8−7* if M1, B(E2)(W.u.)=2.43 *+31−27* if E2.
		2660.38 *11*	100.0 *12*	559.103	2$^+$	[M1,E2]		0.00065 *4*	α(K)=5.37×10^{-5} *9*; α(L)=5.51×10^{-6} *9*; α(M)=8.58×10^{-7} *14* α(N)=7.36×10^{-8} *12*; α(IPF)=0.00059 *4* B(M1)(W.u.)=0.0133 *+16−13* if M1, B(E2)(W.u.)=2.52 *+29−25* if E2.
3225.7	(6,8$^+$)	963.3 *5*	100	2262.42	6$^+$				Mult.: γ(θ) in (α,2nγ) consistent with ΔJ=0 or 2.
3230.27	1,2$^+$	1059.69 *8*	100	2170.572	(0$^+$)	[D,E2]			B(E2)(W.u.)=32 *+25−16* if E2.
3238.78		413.98 *8*	100	2824.797	5$^-$				
3259.81		309.77 *12*	46.2 *21*	2950.171	1$^+$				
		604.33 *10*	100 *5*	2655.383	1				
3262.34	6$^-$	402.7 *5*	27.3 *23*	2859.781	4$^-$	(E2)		0.00548 *8*	B(E2)(W.u.)=38 *+32−13*

$^{76}_{34}Se_{42}$-32

Adopted Levels, Gammas (continued)

γ(^{76}Se) (continued)

E_i(level)	J_i^π	E_γ[‡]	I_γ[‡]	E_f	J_f^π	Mult.[#]	δ[#]	α[†]	Comments
									α(K)=0.00486 *7*; α(L)=0.000531 *8*; α(M)=8.25×10^{-5} *12* α(N)=6.88×10^{-6} *10*
3262.34	6$^-$	437.6 *5*	100 *7*	2824.797	5$^-$	M1+E2	−0.25 *5*	0.00247 *6*	B(M1)(W.u.)=0.012 *+11−4*; B(E2)(W.u.)=5 *+5−3* α(K)=0.00220 *5*; α(L)=0.000232 *5*; α(M)=3.62×10^{-5} *8* α(N)=3.08×10^{-6} *7* δ=−0.25 *5* from (α,2nγ). RUL (for E2 and M2) favors M1+E2.
		999.9 *5*	40.9 *23*	2262.42	6$^+$	(E1+M2)	−0.23 *17*	2.2×10^{-4} *6*	B(E1)(W.u.)=7×10^{-6} *+6−3* α(K)=1.9×10^{-4} *5*; α(L)=2.0×10^{-5} *6*; α(M)=3.1×10^{-6} *9* α(N)=2.7×10^{-7} *8* B(M2)(W.u.)=1.8 *+42−15* exceeds RUL=1.
3262.96		1135.73 *8*	100	2127.224	(2)$^+$				
3267.57	(2$^+$,3,4$^+$)	1578.45 *16*	15 *8*	1688.971	3$^+$				
		1936.54 *24*	100.0 *22*	1330.872	4$^+$				
		2051.3 *5*	42 *6*	1216.154	2$^+$				
		2708.8 *5*	84.2 *22*	559.103	2$^+$				
3268.70	(1$^-$,2)	163.35 *11*	2.81 *21*	3105.48	(3$^-$)				
		318.74 *10*	15.0 *7*	2950.171	1$^+$				
		456.75 *16*	2.8 *4*	2812.130	(3$^+$)				
		598.78 *10*	100 *7*	2669.904	2$^-$				
		613.35 *10*	11.9 *6*	2655.383	1				
		1141.62 *14*	3.15 *27*	2127.224	(2)$^+$				
3269.75	8$^+$	1007.2 *5*	100	2262.42	6$^+$	E2		0.000414 *6*	B(E2)(W.u.)=82 *+21−14* α(K)=0.000368 *5*; α(L)=3.86×10^{-5} *5*; α(M)=6.00×10^{-6} *8* α(N)=5.11×10^{-7} *7*
3282.19	1,2$^+$	464.67 *20*	50.6 *14*	2817.24	(2$^+$)				
		2160.00 *13*	100.0 *14*	1122.279	0$^+$	[D,E2]			B(E2)(W.u.)=4.14 *+40−36* if E2.
3295.02	(1$^+$,2$^+$)	1124.33 *13*	11.2 *8*	2170.572	(0$^+$)				
		2736.6 *4*	100.0 *19*	559.103	2$^+$				E_γ: unweighted average of 2737.07 *24* from ^{76}Br ε+β$^+$ decay (16.14 h) and 2736.21 *10* from (n,n′γ). I_γ: from (n,n′γ). Other: 100 *6* from ^{76}Br ε+β$^+$ decay (16.14 h).
		3295.6 *6*	42.6 *34*	0.0	0$^+$	[M1,E2]		0.00090 *4*	α(K)=3.77×10^{-5} *7*; α(L)=3.86×10^{-6} *7*; α(M)=6.00×10^{-7} *11* α(N)=5.15×10^{-8} *9*; α(IPF)=0.00086 *4*

$^{76}_{34}Se_{42}$-33

Adopted Levels, Gammas (continued)

γ(^{76}Se) (continued)

E_i(level)	J_i^π	E_γ[‡]	I_γ[‡]	E_f	J_f^π	Mult.[#]	δ[#]	α[†]	Comments
									E_γ: unweighted average of 3296.14 *20* from ^{76}Br $\varepsilon+\beta^+$ decay (16.14 h) and 3295.07 *14* from (n,n′γ). I_γ: unweighted average of 45.9 *17* from ^{76}Br $\varepsilon+\beta^+$ decay (16.14 h) and 39.2 *14* from (n,n′γ).
3296.2	(1$^+$,2$^+$)	1508.4 *9*	80 *41*	1787.655	2$^+$				E_γ: unweighted average of 1509.23 *16* from ^{76}Br $\varepsilon+\beta^+$ decay (16.14 h) and 1507.52 *14* from (n,n′γ). I_γ: from ^{76}Br $\varepsilon+\beta^+$ decay.
		2173.9 *8*	100 *7*	1122.279	0$^+$				E_γ: unweighted average of 2174.66 *30* from ^{76}Br $\varepsilon+\beta^+$ decay (16.14 h) and 2173.06 *18* from (n,n′γ). I_γ: from ^{76}Br $\varepsilon+\beta^+$ decay.
3312.04	(6$^-$)	266.1 *5*	100 *8*	3045.79	(5$^-$)	(M1+E2)		0.015 *7*	α(K)=0.014 *7*; α(L)=0.0015 *8*; α(M)=2.3×10^{-4} *12* α(N)=1.9×10^{-5} *9* B(M1)(W.u.)=0.0045 *+45−22* if M1, B(E2)(W.u.)=9×10^{1} *+9−4* if E2.
		487.1 *5*	85 *8*	2824.797	5$^-$	(M1+E2)	+0.25 *5*	0.00191 *4*	B(M1)(W.u.)=6×10^{-4} *+6−3*; B(E2)(W.u.)=0.21 *+23−11* α(K)=0.001700 *34*; α(L)=0.000179 *4*; α(M)=2.79×10^{-5} *6* α(N)=2.38×10^{-6} *5*
3331.51		2772.35 *8*	100	559.103	2$^+$				
3346.25		1320.57 *18*	100.0 *35*	2026.020	4$^+$				
		2015.13 *14*	73.3 *35*	1330.872	4$^+$				
3348.48	(1$^+$,2$^+$)	1177.90 *11*	100	2170.572	(0$^+$)	[M1,E2]		0.000286 *10*	α(K)=0.000251 *8*; α(L)=2.60×10^{-5} *10*; α(M)=4.05×10^{-6} *15* α(N)=3.47×10^{-7} *12*; α(IPF)=4.8×10^{-6} *7* B(M1)(W.u.)=0.05 *+10−3* if M1, B(E2)(W.u.)=4×10^{1} *+9−3* if E2.
3351.462	(2)$^+$	191.44 *30*	0.42 *33*	3160.115	(2$^+$)				
		401.30 *11*	0.58 *4*	2950.171	1$^+$	[M1,E2]		0.0042 *13*	α(K)=0.0037 *12*; α(L)=4.0×10^{-4} *13*; α(M)=6.3×10^{-5} *21* α(N)=5.3×10^{-6} *17* B(M1)(W.u.)=0.0134 *+18−15* if M1, B(E2)(W.u.)=112 *+15−13* if E2.
		539.25 *14*	0.148 *13*	2812.130	(3$^+$)				
		681.44 *10*	7.8 *4*	2669.904	2$^-$	[E1]		0.000402 *6*	α(K)=0.000358 *5*; α(L)=3.72×10^{-5} *5*; α(M)=5.78×10^{-6} *8* α(N)=4.93×10^{-7} *7* B(E1)(W.u.)=6.3×10^{-4} *+8−7*
		695.95 *10*	9.1 *5*	2655.383	1				
		747.28 *13*	1.48 *11*	2604.09	1$^+$,2$^+$				
		836.62 *10*	6.30 *31*	2514.681	2$^+$	[M1,E2]		0.00060 *5*	α(K)=0.00054 *4*; α(L)=5.6×10^{-5} *5*; α(M)=8.7×10^{-6} *8*

$^{76}_{34}Se_{42}$-34

Adopted Levels, Gammas (continued)

γ(^{76}Se) (continued)

E_i(level)	J_i^π	E_γ[‡]	I_γ[‡]	E_f	J_f^π	Mult.[#]	δ[#]	α[†]	Comments
									α(N)=7.5×10^{-7} *6* B(M1)(W.u.)=0.0161 *+20−17* if M1, B(E2)(W.u.)=30.9 *+38−32* if E2.
3351.462	(2)$^+$	922.21 *11*	0.51 *8*	2429.131	3$^-$	[E1]		0.0002127 *30*	α(K)=0.0001898 *27*; α(L)=1.961×10^{-5} *27*; α(M)=3.05×10^{-6} *4* α(N)=2.60×10^{-7} *4* B(E1)(W.u.)=1.67×10^{-5} *+33−30*
		1180.71 *10*	2.10 *15*	2170.572	(0$^+$)	[E2]		0.000294 *4*	α(K)=0.000257 *4*; α(L)=2.68×10^{-5} *4*; α(M)=4.17×10^{-6} *6* α(N)=3.55×10^{-7} *5*; α(IPF)=5.90×10^{-6} *8* B(E2)(W.u.)=1.84 *+25−21*
		1224.19 *12*	5.06 *33*	2127.224	(2)$^+$	[M1,E2]		0.000270 *9*	α(K)=0.000231 *7*; α(L)=2.40×10^{-5} *8*; α(M)=3.73×10^{-6} *12* α(N)=3.19×10^{-7} *10*; α(IPF)=1.07×10^{-5} *16* B(M1)(W.u.)=0.0041 *5* if M1, B(E2)(W.u.)=3.70 *+48−41* if E2.
		1559.98 *10*	8.9 *8*	1791.437	0$^+$	[E2]		0.000270 *4*	α(K)=0.0001437 *20*; α(L)=1.487×10^{-5} *21*; α(M)=2.314×10^{-6} *32* α(N)=1.979×10^{-7} *28*; α(IPF)=0.0001091 *15* B(E2)(W.u.)=1.94 *+28−24*
		1564.10 *57*	0.439 *21*	1787.655	2$^+$	[M1,E2]		0.000258 *14*	α(K)=0.0001411 *27*; α(L)=1.459×10^{-5} *29*; α(M)=2.27×10^{-6} *5* α(N)=1.94×10^{-7} *4*; α(IPF)=0.000100 *11* B(M1)(W.u.)=1.72×10^{-4} *+21−18* if M1, B(E2)(W.u.)=0.094 *+12−10* if E2.
		2135.60 *8*	17.06 *13*	1216.154	2$^+$	(M1+E2)	−0.042 *10*	0.000411 *6*	α(K)=7.83×10^{-5} *11*; α(L)=8.05×10^{-6} *11*; α(M)=1.252×10^{-6} *18* α(N)=1.075×10^{-7} *15*; α(IPF)=0.000323 *5* B(M1)(W.u.)=0.00262 *+30−24*; B(E2)(W.u.)=0.0014 *+8−6*
		2229.91 *22*	0.390 *29*	1122.279	0$^+$	[E2]		0.000504 *7*	α(K)=7.36×10^{-5} *10*; α(L)=7.57×10^{-6} *11*; α(M)=1.177×10^{-6} *16* α(N)=1.009×10^{-7} *14*; α(IPF)=0.000422 *6* B(E2)(W.u.)=0.0142 *+20−17*
		2792.61 *21*	100.0 *5*	559.103	2$^+$	M1+E2	−0.060 *19*	0.000670 *9*	α(K)=4.90×10^{-5} *7*; α(L)=5.03×10^{-6} *7*; α(M)=7.82×10^{-7} *11* α(N)=6.72×10^{-8} *9*; α(IPF)=0.000615 *9* B(M1)(W.u.)=0.0069 *+8−6*; B(E2)(W.u.)=0.0043 *+32−23* Mult.: from α(K)exp in ^{76}Br ε.
		3351.94 *22*	3.09 *12*	0.0	0$^+$	[E2]		0.000967 *14*	α(K)=3.71×10^{-5} *5*; α(L)=3.80×10^{-6} *5*; α(M)=5.91×10^{-7} *8*

$^{76}_{34}Se_{42}$-35

Adopted Levels, Gammas (continued)

γ(^{76}Se) (continued)

E_i(level)	J_i^π	E_γ[‡]	I_γ[‡]	E_f	J_f^π	Mult.[#]	δ[#]	α[†]	Comments
									α(N)=5.07×10^{-8} *7*; α(IPF)=0.000926 *13* B(E2)(W.u.)=0.0147 *+18−15*
3376.37	1$^{(+)}$,2$^+$	3376.29 *12*	100	0.0	0$^+$				
3377.0	(1$^+$,2$^+$,3$^+$)	2160.80 *41*	100	1216.154	2$^+$				
3403.82	(2$^+$,3$^+$,4$^+$)	592.02 *14*	79.9 *34*	2812.130	(3$^+$)	[M1]			B(M1)(W.u.)=1.45 *+18−15* If E2, B(E2)(W.u.)=5.5×10^3 *+7−6* exceeds RUL=300; if E1, B(E1)(W.u.)=0.0248 *28* exceeds RUL=0.01;
		2072.68 *12*	100.0 *34*	1330.872	4$^+$	[M1,E2]		0.000413 *26*	α(K)=8.32×10^{-5} *13*; α(L)=8.57×10^{-6} *14*; α(M)=1.333×10^{-6} *22* α(N)=1.143×10^{-7} *18*; α(IPF)=0.000320 *25* B(M1)(W.u.)=0.042 *+5−4* if M1, B(E2)(W.u.)=13.2 *+17−13* if E2.
3405.9	(1)	3405.8 *7*	100	0.0	0$^+$	(D)			If M1, B(M1)(W.u.)=0.0027 *5*. If E1, B(E1)(W.u.)=4.7E−5 *8*.
3407.91	(4$^+$)	548.12 *4*	100.0 *24*	2859.781	4$^-$	[E1]		0.000664 *9*	α(K)=0.000592 *8*; α(L)=6.16×10^{-5} *9*; α(M)=9.57×10^{-6} *13* α(N)=8.15×10^{-7} *11* B(E1)(W.u.)=0.0035 *+20−16*
		1718.93 *10*	25.9 *24*	1688.971	3$^+$	[M1,E2]		0.000294 *18*	α(K)=0.0001177 *20*; α(L)=1.215×10^{-5} *22*; α(M)=1.890×10^{-6} *34* α(N)=1.620×10^{-7} *28*; α(IPF)=0.000162 *16* B(M1)(W.u.)=0.0017 *+10−8* if M1, B(E2)(W.u.)=0.78 *+46−35* if E2.
3432.31	7$^+$	942.8 *5*	100 *8*	2489.35	5$^+$	E2		0.000484 *7*	B(E2)(W.u.)=40 *13* α(K)=0.000431 *6*; α(L)=4.52×10^{-5} *6*; α(M)=7.03×10^{-6} *10* α(N)=5.99×10^{-7} *8*
		1169.6 *5*	24 *2*	2262.42	6$^+$	M1(+E2)	+0.08 *15*	0.000280 *4*	B(M1)(W.u.)=0.0033 *+18−15*; B(E2)(W.u.)<0.25 α(K)=0.0002466 *35*; α(L)=2.55×10^{-5} *4*; α(M)=3.97×10^{-6} *6* α(N)=3.41×10^{-7} *5*; α(IPF)=3.46×10^{-6} *8*
3436.09	1$^{(+)}$,2$^+$	2876.40 *28*	100.0 *14*	559.103	2$^+$	(M1+E2)	+0.64 *+28−20*	0.000724 *16*	α(K)=4.69×10^{-5} *7*; α(L)=4.81×10^{-6} *7*; α(M)=7.48×10^{-7} *11* α(N)=6.42×10^{-8} *9*; α(IPF)=0.000672 *16* B(M1)(W.u.)=0.0081 *+16−20*; B(E2)(W.u.)=0.54 *+31−25*
		3436.28 *20*	28.0 *14*	0.0	0$^+$	[M1,E2]		0.00096 *4*	α(K)=3.52×10^{-5} *7*; α(L)=3.61×10^{-6} *7*; α(M)=5.61×10^{-7} *10*

$^{76}_{34}Se_{42}$-36

Adopted Levels, Gammas (continued)

γ(^{76}Se) (continued)

E_i(level)	J_i^π	E_γ[‡]	I_γ[‡]	E_f	J_f^π	Mult.[#]	α[†]	Comments
								α(N)=4.82×10^{-8} *9*; α(IPF)=0.00092 *4* B(M1)(W.u.)=0.00188 *+18−16* if M1, B(E2)(W.u.)=0.214 *+20−18* if E2.
3441.27	(3$^-$)	2882.11 *22*	100	559.103	2$^+$			
3441.54	7$^-$	179.2 *5*	8.1 *9*	3262.34	6$^-$	[M1]	0.02147 *34*	B(M1)(W.u.)=0.070 *+20−14* α(K)=0.01907 *30*; α(L)=0.002056 *33*; α(M)=0.000321 *5* α(N)=2.72×10^{-5} *4* δ(E2/M1)<0.7 for RUL<300 for E2.
		465.3 *5*	6.3	2975.98	6$^+$	[E1]	0.000994 *14*	B(E1)(W.u.)=5.3×10^{-5} *+18−13* α(K)=0.000886 *13*; α(L)=9.22×10^{-5} *13*; α(M)=1.433×10^{-5} *20* α(N)=1.218×10^{-6} *17*
		616.8 *5*	100 *7*	2824.797	5$^-$	E2	1.48×10^{-3} *2*	B(E2)(W.u.)=74 *+18−13* α(K)=0.001314 *19*; α(L)=0.0001401 *20*; α(M)=2.178×10^{-5} *31* α(N)=1.840×10^{-6} *26*
		1179.1 *5*	9.0	2262.42	6$^+$	[E1]	0.0001684 *24*	B(E1)(W.u.)=4.7×10^{-6} *+15−11* α(K)=0.0001193 *17*; α(L)=1.228×10^{-5} *17*; α(M)=1.909×10^{-6} *27* α(N)=1.634×10^{-7} *23*; α(IPF)=3.48×10^{-5} *6*
3459.13	(2$^+$)	191.68 *15*	0.88 *18*	3267.57	(2$^+$,3,4$^+$)			
		267.47 *36*	0.26 *5*	3191.67	(3)$^+$			
		353.68 *17*	1.17 *9*	3105.48	(3$^-$)			
		389.50 *18*	1.77 *23*	3069.62	2$^+$			
		647.05 *33*	0.63 *13*	2812.130	(3$^+$)			
		789.09 *10*	74 *5*	2669.904	2$^-$			
		803.59 *10*	87 *4*	2655.383	1			
		1029.89 *15*	100 *11*	2429.131	3$^-$			
		1671.78 *16*	14.2 *6*	1787.655	2$^+$			
		1769.93 *41*	6.3 *6*	1688.971	3$^+$			
		2900.53 *20*	63.4 *26*	559.103	2$^+$			
3466.39	(1,2,3)	796.15 *19*	7.8 *14*	2669.904	2$^-$			
		2250.64 *23*	2.8 *5*	1216.154	2$^+$			
		2907.28 *24*	100 *19*	559.103	2$^+$			
3528.69	1$^+$	3528.6 *3*	100	0.0	0$^+$	[M1]	0.000951 *13*	B(M1)(W.u.)=0.0100 *+11−9* α(K)=3.33×10^{-5} *5*; α(L)=3.41×10^{-6} *5*; α(M)=5.31×10^{-7} *7* α(N)=4.56×10^{-8} *6*; α(IPF)=0.000913 *13* E_γ: from (γ,γ′).
3552.89	(1,2)	897.57 *11*	31.5 *17*	2655.383	1			
		2337.37 *26*	35.0 *19*	1216.154	2$^+$			

$^{76}_{34}Se_{42}$-37

Adopted Levels, Gammas (continued)

γ(^{76}Se) (continued)

E_i(level)	J_i^π	E_γ[‡]	I_γ[‡]	E_f	J_f^π	Mult.[#]	α[†]	Comments
3552.89	(1,2)	2431.38 *24*	38.2 *20*	1122.279	0^+			
		2994.27 *20*	100 *6*	559.103	2^+			
		3553.53 *96*	7.1 *18*	0.0	0^+			
3556.210	(2^-)	287.32 *25*	1.32 *13*	3268.70	$(1^-,2)$			
		288.68 *20*	0.085 *26*	3267.57	$(2^+,3,4^+)$			
		336.61 *12*	2.1 *5*	3219.428	$(2^+,3^+)$			
		450.83 *13*	1.78 *14*	3105.48	(3^-)			
		486.44 *10*	10.5 *7*	3069.62	2^+			
		581.20 *11*	1.18 *16*	2975.00	$(2^+,3,4^+)$			
		605.97 *14*	2.3 *4*	2950.171	1^+			
		686.81 *12*	1.69 *12*	2869.34	$(1^+,2^+)$			
		696.39 *10*	5.4 *33*	2859.781	4^-			
		738.88 *13*	0.57 *5*	2817.24	(2^+)			
		744.40 *45*	0.44 *4*	2812.130	(3^+)			
		886.14 *12*	32.4 *21*	2669.904	2^-			
		900.71 *10*	10.9 *5*	2655.383	1			
		1127.15 *23*	15.4 *22*	2429.131	3^-			
		1428.91 *10*	27.5 *18*	2127.224	$(2)^+$			
		1768.52 *10*	24.5 *10*	1787.655	2^+			
		1867.35 *10*	13.8 *13*	1688.971	3^+			
		2339.53 *21*	6.54 *26*	1216.154	2^+			
		2997.40 *8*	100 *4*	559.103	2^+			
3566.6	$1^{(+)}$	3566.5 *10*	100	0.0	0^+	(M1)	0.000964 *14*	α(K)=3.28×10^{-5} *5*; α(L)=3.36×10^{-6} *5*; α(M)=5.22×10^{-7} *7* α(N)=4.48×10^{-8} *6*; α(IPF)=0.000928 *13* B(M1)(W.u.)=0.0031 *+6−4*
3604.192	1^+	734.78 *14*	0.238 *19*	2869.34	$(1^+,2^+)$			
		934.26 *12*	4.9 *4*	2669.904	2^-	[E1]	0.0002073 *29*	α(K)=0.0001850 *26*; α(L)=1.911×10^{-5} *27*; α(M)=2.97×10^{-6} *4* α(N)=2.54×10^{-7} *4* B(E1)(W.u.)=3.14×10^{-4} *+43−36*
		948.70 *13*	2.91 *14*	2655.383	1			
		999.96 *10*	2.46 *18*	2604.09	$1^+,2^+$			
		1089.42 *10*	5.17 *27*	2514.681	2^+	[M1,E2]	0.000332 *14*	α(K)=0.000296 *12*; α(L)=3.08×10^{-5} *14*; α(M)=4.79×10^{-6} *21* α(N)=4.10×10^{-7} *17* B(M1)(W.u.)=0.0122 *+14−12* if M1, B(E2)(W.u.)=13.8 *+16−14* if E2.
		1433.53 *10*	2.37 *16*	2170.572	(0^+)	[M1]	0.0002337 *33*	α(K)=0.0001648 *23*; α(L)=1.702×10^{-5} *24*; α(M)=2.65×10^{-6} *4* α(N)=2.272×10^{-7} *32*; α(IPF)=4.90×10^{-5} *7* B(M1)(W.u.)=0.00245 *+31−27*
		1476.91 *10*	0.70 *11*	2127.224	$(2)^+$	[M1,E2]	0.000246 *11*	α(K)=0.0001579 *32*; α(L)=1.63×10^{-5} *4*; α(M)=2.54×10^{-6} *6*

$^{76}_{34}Se_{42}$-38

Adopted Levels, Gammas (continued)

γ(^{76}Se) (continued)

E_i(level)	J_i^π	E_γ[‡]	I_γ[‡]	E_f	J_f^π	Mult.[#]	α[†]	Comments
								α(N)=2.18×10^{-7} *5*; α(IPF)=6.9×10^{-5} *8* B(M1)(W.u.)=6.6×10^{-4} *+13−12* if M1, B(E2)(W.u.)=0.41 *+8−7* if E2.
3604.192	1$^+$	1812.92 *12*	1.9 *5*	1791.437	0$^+$	[M1]	0.000301 *4*	B(M1)(W.u.)=9.7×10^{-4} *+28−26* α(K)=0.0001055 *15*; α(L)=1.087×10^{-5} *15*; α(M)=1.691×10^{-6} *24* α(N)=1.451×10^{-7} *20*; α(IPF)=0.0001825 *26*
		1816.71 *12*	2.06 *10*	1787.655	2$^+$	[M1,E2]	0.000322 *21*	α(K)=0.0001061 *18*; α(L)=1.094×10^{-5} *19*; α(M)=1.701×10^{-6} *29* α(N)=1.458×10^{-7} *24*; α(IPF)=0.000203 *19* B(M1)(W.u.)=0.00105 *+12−11* if M1, B(E2)(W.u.)=0.426 *+49−42* if E2.
		2482.60 *20*	6.42 *27*	1122.279	0$^+$	[M1]	0.000545 *8*	B(M1)(W.u.)=0.00128 *+15−12* α(K)=6.00×10^{-5} *8*; α(L)=6.16×10^{-6} *9*; α(M)=9.58×10^{-7} *13* α(N)=8.23×10^{-8} *12*; α(IPF)=0.000478 *7*
		3045.51 *20*	2.15 *24*	559.103	2$^+$	[M1,E2]	0.00081 *4*	α(K)=4.28×10^{-5} *7*; α(L)=4.39×10^{-6} *8*; α(M)=6.83×10^{-7} *12* α(N)=5.86×10^{-8} *10*; α(IPF)=0.00076 *4* B(M1)(W.u.)=2.32×10^{-4} *+37−32* if M1, B(E2)(W.u.)=0.034 *5* if E2.
		3604.01 *8*	100 *3*	0.0	0$^+$	(M1)	0.000978 *14*	B(M1)(W.u.)=0.0065 *+7−6* α(K)=3.22×10^{-5} *5*; α(L)=3.30×10^{-6} *5*; α(M)=5.13×10^{-7} *7* α(N)=4.41×10^{-8} *6*; α(IPF)=0.000941 *13* E_γ: weighted average of 3603.99 *8* from ^{76}Br ε+β$^+$ decay (16.14 h) and 3604.3 *3* from (γ,γ′). I_γ: from ^{76}Br ε+β$^+$ decay (16.14 h).
3636.88	(2$^+$)	531.36 *37*	1.64 *18*	3105.48	(3$^-$)			
		767.61 *14*	1.64 *18*	2869.34	(1$^+$,2$^+$)			
		966.78 *11*	9.7 *7*	2669.904	2$^-$			
		981.24 *20*	26.9 *28*	2655.383	1			
		1122.12 *43*	7.8 *26*	2514.681	2$^+$			
		1466.13 *35*	2.4 *5*	2170.572	(0$^+$)			
		1509.44 *11*	28.7 *21*	2127.224	(2)$^+$			
		1845.58 *16*	90 *8*	1791.437	0$^+$			
		1848.72 *72*	23.6 *13*	1787.655	2$^+$			
		2421.08 *20*	17.7 *9*	1216.154	2$^+$			
		2515.16 *59*	100 *4*	1122.279	0$^+$			
		3078.56 *21*	10.0 *5*	559.103	2$^+$			
3651.88	(1$^+$,2$^+$,3$^+$)	701.66 *12*	10.8 *19*	2950.171	1$^+$			
		1963.00 *34*	6.5 *7*	1688.971	3$^+$			
		2436.05 *27*	8.2 *7*	1216.154	2$^+$			

$^{76}_{34}Se_{42}$-39

Adopted Levels, Gammas (continued)

γ(^{76}Se) (continued)

E_i(level)	J_i^π	E_γ[‡]	I_γ[‡]	E_f	J_f^π	Mult.[#]	δ[#]	α[†]	Comments
3651.88	(1$^+$,2$^+$,3$^+$)	3092.95 *20*	100 *6*	559.103	2$^+$				
3657.7?	(1,2)	3098.3[b] *5*	100	559.103	2$^+$				
		3657.8 *5*		0.0	0$^+$				
3670.2	1$^{(+)}$	3670.1 *4*	100	0.0	0$^+$	(M1)		1.00×10^{-3} *1*	α(K)=3.13×10^{-5} *4*; α(L)=3.20×10^{-6} *4*; α(M)=4.98×10^{-7} *7* α(N)=4.28×10^{-8} *6*; α(IPF)=0.000965 *14* B(M1)(W.u.)=0.0061 *+8−6* E$_\gamma$: from (γ,γ′) only.
3696.27	(7$^-$)	254.5 *5*	100 *8*	3441.54	7$^-$	(M1+E2)	+0.045 *5*	0.00882 *13*	B(M1)(W.u.)=0.019 *+7−4*; B(E2)(W.u.)=0.79 *+36−23* α(K)=0.00784 *12*; α(L)=0.000838 *12*; α(M)=0.0001305 *19* α(N)=1.110×10^{-5} *17* Mult.: γ(θ) in (α,2nγ) consistent with ΔJ=0.
		384.2 *5*	42	3312.04	(6$^-$)	(M1+E2)	≈−0.9	≈0.00464	B(M1)(W.u.)=0.0013 *+8−5*; B(E2)(W.u.)=9 *6* α(K)≈0.00412; α(L)≈0.000445; α(M)≈6.92×10^{-5} α(N)≈5.82×10^{-6}
		434.1 *5*	28	3262.34	6$^-$	[M1+E2]		0.0034 *9*	α(K)=0.0030 *8*; α(L)=3.2×10^{-4} *9*; α(M)=5.0×10^{-5} *15* α(N)=4.2×10^{-6} *12* B(M1)(W.u.)=0.00106 *+43−28* if M1, B(E2)(W.u.)=7.6 *+31−20* if E2.
		650.8 *5*	83	3045.79	(5$^-$)	[E2]		1.27×10^{-3} *2*	B(E2)(W.u.)=3.0 *+11−7* α(K)=0.001129 *16*; α(L)=0.0001201 *17*; α(M)=1.868×10^{-5} *26* α(N)=1.579×10^{-6} *22*
3716.52	(2)	1060.87 *10*	24.2 *12*	2655.383	1				
		1929.05 *11*	14.9 *8*	1787.655	2$^+$				
		2028.04 *54*	7.6 *8*	1688.971	3$^+$				
		3157.64 *20*	100 *4*	559.103	2$^+$	D(+Q)	+0.004 *+34−35*		Mult.: γ(θ) in ^{76}Br ε decay consistent with ΔJ=0 or 2.
3752.1	1$^{(+)}$	3752.0 *14*	100	0.0	0$^+$	(M1)		1.03×10^{-3} *1*	B(M1)(W.u.)=0.0024 *+9−5* α(K)=3.02×10^{-5} *4*; α(L)=3.09×10^{-6} *4*; α(M)=4.81×10^{-7} *7* α(N)=4.13×10^{-8} *6*; α(IPF)=0.000995 *14*
3758.79	1	2542.6 *8*	19 *5*	1216.154	2$^+$				
		2636.1 *6*	42 *6*	1122.279	0$^+$	D			IF M1, B(M1)(W.u.)=0.040 *8*. IF E1, B(E1)(W.u.)=0.00069 *13*.

$^{76}_{34}Se_{42}$-40

Adopted Levels, Gammas (continued)

γ(^{76}Se) (continued)

E_i(level)	J_i^π	E_γ[‡]	I_γ[‡]	E_f	J_f^π	Mult.[#]	δ[#]	α[†]	Comments
3758.79	1	3199.8 *3*	47 *5*	559.103	2^+				
		3758.6 *3*	100 *9*	0.0	0^+	D			IF M1, B(M1)(W.u.)=0.033 *5*. IF E1, B(E1)(W.u.)=0.00057 *9*.
3785.7	(8^+)	515.7 *5*	89	3269.75	8^+	[M1+E2]		0.0021 *4*	α(K)=0.0018 *4*; α(L)=0.00020 *4*; α(M)=3.0×10^{-5} *7* α(N)=2.6×10^{-6} *6* B(M1)(W.u.)=0.084 *+46−31* if M1. B(E2)(W.u.)=4.2×10^2 *+23−16* exceeds RUL=300 if E2.
		1523.5 *5*	100	2262.42	6^+	[E2]		0.000263 *4*	B(E2)(W.u.)=2.1 *+11−8* α(K)=0.0001506 *21*; α(L)=1.560×10^{-5} *22*; α(M)=2.427×10^{-6} *34* α(N)=2.076×10^{-7} *29*; α(IPF)=9.44×10^{-5} *13* Mult.: γ(θ) in (α,2nγ) consistent with ΔJ=0,2.
3853.75	$(8)^+$	583.9 *5*	58 *4*	3269.75	8^+	M1+E2	−0.45 *25*	0.00131 *8*	B(M1)(W.u.)=0.147 *49*; B(E2)(W.u.)=1.2×10^2 *+12−9* α(K)=0.00116 *7*; α(L)=0.000122 *8*; α(M)=1.90×10^{-5} *13* α(N)=1.62×10^{-6} *11*
		878.3		2975.98	6^+				E_γ: γ from (^{12}C,α2nγ) only.
		1591.1 *5*	100	2262.42	6^+	[E2]		0.000277 *4*	B(E2)(W.u.)=8.0 *22* α(K)=0.0001382 *19*; α(L)=1.430×10^{-5} *20*; α(M)=2.224×10^{-6} *31* α(N)=1.903×10^{-7} *27*; α(IPF)=0.0001222 *17*
3857.8	1^+	3857.7 *11*	100	0.0	0^+	(M1)		1.07×10^{-3} *2*	B(M1)(W.u.)=0.0022 *+6−4* α(K)=2.89×10^{-5} *4*; α(L)=2.96×10^{-6} *4*; α(M)=4.60×10^{-7} *6* α(N)=3.95×10^{-8} *6*; α(IPF)=0.001034 *14*
3880.46		1225.07 *18*	100	2655.383	1				
3915.48	(2^-)	647.79 *20*	4.9 *18*	3267.57	$(2^+,3,4^+)$				
		695.70 *33*	36 *9*	3219.428	$(2^+,3^+)$				
		809.89 *12*	3.04 *29*	3105.48	(3^-)				
		845.76 *17*	27.5 *27*	3069.62	2^+				
		965.33 *15*	8.6 *11*	2950.171	1^+				
		1055.90 *13*	1.9 *13*	2859.781	4^-				
		1103.25 *10*	30 *6*	2812.130	(3^+)				
		1245.49 *32*	8.8 *8*	2669.904	2^-				
		1400.74 *18*	8.7 *8*	2514.681	2^+				
		1787.99 *32*	58 *5*	2127.224	$(2)^+$				
		2226.68 *20*	61 *6*	1688.971	3^+				

$^{76}_{34}Se_{42}$-41

Adopted Levels, Gammas (continued)

γ(^{76}Se) (continued)

E_i(level)	J_i^π	E_γ[‡]	I_γ[‡]	E_f	J_f^π	Mult.[#]	α[†]	Comments
3915.48	(2⁻)	2699.08 *20*	28.6 *26*	1216.154	2⁺			
		3356.87 *20*	100 *5*	559.103	2⁺			
3922.5	1	3922.4 *4*	100	0.0	0⁺	D		If M1, B(M1)(W.u.)=0.0087 *9*. If E1, B(E1)(W.u.)=0.000149 *15*.
3930.02	(1,2⁺)	1060.51 *25*	3.94 *32*	2869.34	(1⁺,2⁺)			
		1259.87 *19*	17.8 *13*	2669.904	2⁻			
		1759.34 *13*	1.23 *13*	2170.572	(0⁺)			
		1802.65 *11*	26.1 *18*	2127.224	(2)⁺			
		2142.50 *21*	10.5 *7*	1787.655	2⁺			
		2714.09 *20*	37.8 *25*	1216.154	2⁺			
		2808.17 *22*	46.2 *19*	1122.279	0⁺			
		3371.00 *20*	100 *7*	559.103	2⁺			
		3929.96 *40*	65 *4*	0.0	0⁺			
3970.407	(2⁺)	701.64 *10*	15.3 *14*	3268.70	(1⁻,2)			
		750.94 *20*	0.97 *24*	3219.428	(2⁺,3⁺)			
		778.84 *12*	7.0 *13*	3191.67	(3)⁺			
		810.32 *18*	6.4 *5*	3160.115	(2⁺)			
		864.93 *11*	2.92 *22*	3105.48	(3⁻)			
		900.82 *14*	27.7 *18*	3069.62	2⁺			
		995.41 *13*	11.9 *15*	2975.00	(2⁺,3,4⁺)			
		1020.32 *11*	7.1 *4*	2950.171	1⁺			
		1101.07 *11*	21.6 *15*	2869.34	(1⁺,2⁺)			
		1153.14 *10*	21.8 *18*	2817.24	(2⁺)			
		1158.27 *10*	9.4 *7*	2812.130	(3⁺)			
		1300.48 *12*	43.8 *29*	2669.904	2⁻			
		1314.70 *11*	22.4 *27*	2655.383	1			
		1455.63 *10*	30.5 *16*	2514.681	2⁺			
		1541.25 *11*	8.0 *13*	2429.131	3⁻			
		2183.01 *20*	55.8 *24*	1787.655	2⁺			
		2754.54 *20*	5.8 *6*	1216.154	2⁺			
		3411.55 *20*	100 *4*	559.103	2⁺			
4005.1		309.3 *5*	100	3696.27	(7⁻)			
4008.7	(8⁻)	746.3 *5*	100	3262.34	6⁻	E2	0.000874 *12*	B(E2)(W.u.)=58 *+27−14* α(K)=0.000778 *11*; α(L)=8.23×10^{-5} *12*; α(M)=1.280×10^{-5} *18* α(N)=1.085×10^{-6} *15*
4045.61	1⁺	1440.7 *12*	13.0 *19*	2604.09	1⁺,2⁺			
		1918.41 *45*	56 *5*	2127.224	(2)⁺	[M1,E2]	0.000356 *23*	α(K)=9.59×10^{-5} *16*; α(L)=9.88×10^{-6} *16*; α(M)=1.537×10^{-6} *26* α(N)=1.317×10^{-7} *21*; α(IPF)=0.000249 *22* B(M1)(W.u.)=0.0151 *+22−19* if M1, B(E2)(W.u.)=5.5 *+8−7* if E2.
		2258.06 *23*	100 *5*	1787.655	2⁺	[M1,E2]	0.000487 *30*	α(K)=7.14×10^{-5} *11*; α(L)=7.34×10^{-6} *12*; α(M)=1.142×10^{-6} *18* α(N)=9.80×10^{-8} *15*; α(IPF)=0.000407 *30*

$^{76}_{34}Se_{42}$-42

Adopted Levels, Gammas (continued)

γ(^{76}Se) (continued)

E_i(level)	J_i^π	E_γ‡	I_γ‡	E_f	J_f^π	Mult.#	α†	Comments
								E_γ,I_γ: from ^{76}Br ε+β$^+$ decay (16.14 h). B(M1)(W.u.)=0.0165 *+21−17* if M1, B(E2)(W.u.)=4.3 *+6−5* if E2.
4045.61	1$^+$	2356.89 *21*	38 *5*	1688.971	3$^+$	[E2]	0.000558 *8*	α(K)=6.67×10^{-5} *9*; α(L)=6.86×10^{-6} *10*; α(M)=1.067×10^{-6} *15* α(N)=9.15×10^{-8} *13*; α(IPF)=0.000484 *7* B(E2)(W.u.)=1.33 *+23−20*
		2830.11 *23*	66 *4*	1216.154	2$^+$	[M1,E2]	0.00072 *4*	α(K)=4.84×10^{-5} *8*; α(L)=4.96×10^{-6} *8*; α(M)=7.72×10^{-7} *13* α(N)=6.63×10^{-8} *11*; α(IPF)=0.00067 *4* B(M1)(W.u.)=0.0055 *+8−6* if M1, B(E2)(W.u.)=0.93 *+13−10* if E2.
		4046.2 *3*	100	0.0	0$^+$	(M1)	1.13×10^{-3} *2*	B(M1)(W.u.)=0.0029 *5* α(K)=2.69×10^{-5} *4*; α(L)=2.75×10^{-6} *4*; α(M)=4.27×10^{-7} *6* α(N)=3.67×10^{-8} *5*; α(IPF)=0.001100 *15*
4055.22	1$^+$	4055.1 *3*	100	0.0	0$^+$	M1	1.13×10^{-3} *2*	B(M1)(W.u.)=1.13×10^{-5} *+11−9* α(K)=2.68×10^{-5} *4*; α(L)=2.74×10^{-6} *4*; α(M)=4.26×10^{-7} *6* α(N)=3.66×10^{-8} *5*; α(IPF)=0.001102 *15*
4083.68	(1$^-$,2)	816.29 *13*	1.55 *24*	3267.57	(2$^+$,3,4$^+$)			
		864.16 *70*	3.5 *8*	3219.428	(2$^+$,3$^+$)			
		979.0 *17*	0.66 *10*	3105.48	(3$^-$)			
		1133.70 *61*	7.7 *4*	2950.171	1$^+$			
		1271.45 *12*	5.8 *5*	2812.130	(3$^+$)			
		1413.70 *14*	2.66 *24*	2669.904	2$^-$			
		1428.61 *57*	5.7 *34*	2655.383	1			
		1568.63 *14*	8.6 *12*	2514.681	2$^+$			
		1654.57 *21*	41 *5*	2429.131	3$^-$			
		2296.07 *26*	6.00 *17*	1787.655	2$^+$			
		3524.99 *20*	100 *4*	559.103	2$^+$			
4086.58	(1,2,3$^+$)	1136.10 *71*	14.7 *31*	2950.171	1$^+$			
		1416.48 *49*	12.5 *22*	2669.904	2$^-$			
		1431.9 *22*	17 *6*	2655.383	1			
		2298.95 *22*	100 *6*	1787.655	2$^+$			
4125.5	1$^+$	4125.4 *10*	100	0.0	0$^+$	M1	1.15×10^{-3} *2*	B(M1)(W.u.)=0.0026 *+7−4* α(K)=2.61×10^{-5} *4*; α(L)=2.66×10^{-6} *4*; α(M)=4.14×10^{-7} *6* α(N)=3.56×10^{-8} *5*; α(IPF)=0.001124 *16*
4151.36	(2)	1481.34 *11*	78 *7*	2669.904	2$^-$			
		1495.89 *13*	78 *4*	2655.383	1			
		1636.56 *10*	67.8 *35*	2514.681	2$^+$			
		1722.24 *12*	100 *15*	2429.131	3$^-$			

$^{76}_{34}Se_{42}$-43

Adopted Levels, Gammas (continued)

γ(^{76}Se) (continued)

E_i(level)	J_i^π	E_γ[‡]	I_γ[‡]	E_f	J_f^π	Mult.[#]	α[†]	Comments
4151.36	(2)	2364.10 *23*	46.9 *29*	1787.655	2^+			
		2462.82 *20*	90 *9*	1688.971	3^+			
4174.33	(1,2)	1504.32 *10*	63 *5*	2669.904	2^-			
		1518.79 *10*	55.8 *27*	2655.383	1			
		1659.66 *30*	13.2 *6*	2514.681	2^+			
		2003.79 *20*	6.9 *5*	2170.572	(0^+)			
		2047.10 *21*	62 *5*	2127.224	$(2)^+$			
		2383.45 *20*	53 *8*	1791.437	0^+			
		2386.77 *33*	100 *12*	1787.655	2^+			
		3052.38 *26*	18.1 *26*	1122.279	0^+			
		3615.08 *22*	6.0 *8*	559.103	2^+			
		4174.22 *40*	20.0 *16*	0.0	0^+			
4199.19	$(1^-,2)$	482.72 *29*	6.6 *5*	3716.52	(2)			
		980.1 *13*	10.7 *26*	3219.428	$(2^+,3^+)$			
		1093.62 *10*	21.3 *17*	3105.48	(3^-)			
		1249.15 *25*	12.6 *12*	2950.171	1^+			
		1329.77 *30*	5.0 *4*	2869.34	$(1^+,2^+)$			
		1543.69 *15*	12.9 *8*	2655.383	1			
		1684.40 *12*	10.1 *6*	2514.681	2^+			
		1770.02 *10*	56 *8*	2429.131	3^-			
		2072.05 *22*	71 *5*	2127.224	$(2)^+$			
		2411.79 *20*	47.0 *23*	1787.655	2^+			
		2983.39 *20*	38.5 *21*	1216.154	2^+			
		3639.99 *20*	100 *5*	559.103	2^+			
4205.44	$(1^-,2)$	937.73 *13*	8.6 *13*	3267.57	$(2^+,3,4^+)$			
		985.62 *10*	79 *19*	3219.428	$(2^+,3^+)$			
		1255.15 *44*	44 *6*	2950.171	1^+			
		1335.66 *34*	1.43 *22*	2869.34	$(1^+,2^+)$			
		1388.08 *11*	9.9 *11*	2817.24	(2^+)			
		1393.21 *10*	43 *4*	2812.130	(3^+)			
		1549.99 *14*	31.7 *18*	2655.383	1			
		1776.22 *11*	100 *13*	2429.131	3^-			
		2989.94 *69*	14.1 *22*	1216.154	2^+			
		3646.17 *21*	50.1 *24*	559.103	2^+			
4214.0	(8^-)	518.0 *5*	37	3696.27	(7^-)	[M1+E2]	0.0020 *4*	α(K)=0.0018 *4*; α(L)=0.00019 *4*; α(M)=3.0×10^{-5} *7* α(N)=2.5×10^{-6} *6* B(M1)(W.u.)=0.025 *+22−12* if M1, B(E2)(W.u.)=1.3×10^2 *+11−6* if E2.
		901.7 *5*	100 *5*	3312.04	(6^-)	E2	0.000539 *8*	B(E2)(W.u.)=21 *+19−10* α(K)=0.000480 *7*; α(L)=5.05×10^{-5} *7*; α(M)=7.85×10^{-6} *11* α(N)=6.68×10^{-7} *9*

$^{76}_{34}Se_{42}$-44

Adopted Levels, Gammas (continued)

γ(^{76}Se) (continued)

E_i(level)	J_i^π	E_γ[‡]	I_γ[‡]	E_f	J_f^π	Mult.[#]	α[†]	Comments
4218.81	1^+	3659.6 *1*	100 *8*	559.103	2^+	(M1)	0.000997 *14*	B(M1)(W.u.)=0.077 *+11−9* α(K)=3.15×10^{-5} *4*; α(L)=3.22×10^{-6} *5*; α(M)=5.01×10^{-7} *7* α(N)=4.30×10^{-8} *6*; α(IPF)=0.000962 *13*
		4218.8 *3*	95 *8*	0.0	0^+	M1	1.18×10^{-3} *2*	B(M1)(W.u.)=0.048 *+7−6* α(K)=2.517×10^{-5} *35*; α(L)=2.57×10^{-6} *4*; α(M)=4.00×10^{-7} *6* α(N)=3.44×10^{-8} *5*; α(IPF)=0.001153 *16*
4249.20	(1,2)	2121.95 *38*	100 *12*	2127.224	$(2)^+$			
		4249.06 *41*	7.1 *14*	0.0	0^+			
4257.59	(1,2)	2087.00 *28*	14.7 *13*	2170.572	(0^+)			
		2470.0 *11*	91 *7*	1787.655	2^+			
		3042.4 *15*	100 *9*	1216.154	2^+			
		3698.41 *26*	47 *5*	559.103	2^+			
		4257.79 *43*	14.7 *13*	0.0	0^+			
4298.87	$(1,2,3^+)$	1107.17 *11*	11.2 *17*	3191.67	$(3)^+$			
		1349.0 *13*	21.2 *17*	2950.171	1^+			
		1481.59 *20*	30.7 *29*	2817.24	(2^+)			
		1628.81 *28*	100 *7*	2669.904	2^-			
		1643.28 *28*	23 *4*	2655.383	1			
		3082.92 *21*	61 *8*	1216.154	2^+			
4299.5	10^+	1029.8 *5*	100	3269.75	8^+	E2	0.000393 *6*	B(E2)(W.u.)=52 *9* α(K)=0.000350 *5*; α(L)=3.66×10^{-5} *5*; α(M)=5.69×10^{-6} *8* α(N)=4.85×10^{-7} *7*
4324.6	$(9)^-$	883.0 *5*	100	3441.54	7^-	E2	0.000568 *8*	B(E2)(W.u.)=39 *+16−9* α(K)=0.000506 *7*; α(L)=5.32×10^{-5} *7*; α(M)=8.27×10^{-6} *12* α(N)=7.03×10^{-7} *10*
4328.36	(1,2)	724.15 *11*	13.3 *7*	3604.192	1^+			
		976.89 *16*	7.9 *8*	3351.462	$(2)^+$			
		1672.95 *10*	100 *5*	2655.383	1			
		4328.36 *42*	0.33 *6*	0.0	0^+			
4329.2	1	3112.4 *6*	100 *14*	1216.154	2^+			
		4329.7 *6*	30 *6*	0.0	0^+			
4347.53	(1,2)	3131.30 *56*	100 *5*	1216.154	2^+			
		4347.40 *41*	23.7 *13*	0.0	0^+			
4366.55		649.76 *40*	64 *5*	3716.52	(2)			
		1098.81 *15*	100 *11*	3267.57	$(2^+,3,4^+)$			
		1146.32 *64*	37 *9*	3219.428	$(2^+,3^+)$			
		2239.60 *24*	57 *7*	2127.224	$(2)^+$			
		2677.57 *28*	29.6 *35*	1688.971	3^+			
		3150.67 *26*	18.3 *35*	1216.154	2^+			
4383.97	$1^+,2^+,3^+$	2257[ab]		2127.224	$(2)^+$			

$^{76}_{34}Se_{42}$-45

Adopted Levels, Gammas (continued)

γ(^{76}Se) (continued)

E_i(level)	J_i^π	E_γ[‡]	I_γ[‡]	E_f	J_f^π	Mult.[#]	α[†]	Comments
4405.9	(9$^+$)	973.1 *5*	100	3432.31	7$^+$	(E2)	0.000449 *6*	B(E2)(W.u.)=38 *+11−7* α(K)=0.000400 *6*; α(L)=4.19×10^{-5} *6*; α(M)=6.52×10^{-6} *9* α(N)=5.55×10^{-7} *8*
		1136.1		3269.75	8$^+$			E_γ: from (^{12}C,α2nγ).
4411.65	(2)	859.45 *12*	7.1 *11*	3552.89	(1,2)			
		945.27 *18*	26 *7*	3466.39	(1,2,3)			
		1143.89 *12*	16.3 *12*	3267.57	(2$^+$,3,4$^+$)			
		1191.79 *10*	17 *4*	3219.428	(2$^+$,3$^+$)			
		1219.73 *59*	8.2 *11*	3191.67	(3)$^+$			
		1342.03 *12*	40.0 *27*	3069.62	2$^+$			
		1461.42 *12*	17.2 *8*	2950.171	1$^+$			
		1542.28 *38*	1.92 *16*	2869.34	(1$^+$,2$^+$)			
		1599.21 *25*	38.2 *29*	2812.130	(3$^+$)			
		1741.51[b] *10*	100 *7*	2669.904	2$^-$			
		1756.42 *11*	27.2 *14*	2655.383	1			
		1896.96 *34*	1.14 *26*	2514.681	2$^+$			
		1982.31 *46*	17.0 *29*	2429.131	3$^-$			
		2284.54 *24*	6.0 *5*	2127.224	(2)$^+$			
		2624.11 *20*	20.6 *12*	1787.655	2$^+$			
		2722.99 *21*	5.1 *5*	1688.971	3$^+$			
		3195.52 *20*	13.8 *9*	1216.154	2$^+$			
		3853.03 *45*	0.10 *5*	559.103	2$^+$			
4437.72	(1$^+$,2$^+$)	721.22 *11*	5.8 *5*	3716.52	(2)			
		1277.59 *15*	26 *4*	3160.115	(2$^+$)			
		1782.38 *11*	14.2 *6*	2655.383	1			
		1833.61 *25*	19.9 *15*	2604.09	1$^+$,2$^+$			
		1922.89 *10*	75 *4*	2514.681	2$^+$			
		2267.05 *20*	12.1 *10*	2170.572	(0$^+$)			
		2310.69 *27*	58 *8*	2127.224	(2)$^+$			
		2650.64 *44*	9.8 *15*	1787.655	2$^+$			
		3221.81 *20*	17.1 *10*	1216.154	2$^+$			
		3315.98 *52*	3.59 *33*	1122.279	0$^+$			
		3878.09 *23*	1.09 *22*	559.103	2$^+$			
		4437.33 *40*	100 *6*	0.0	0$^+$			
4451.92	(1$^+$,2$^+$)	1501.99 *24*	28.9 *22*	2950.171	1$^+$			
		1796.56 *21*	21.7 *17*	2655.383	1			
		3235.88 *22*	28.3 *17*	1216.154	2$^+$			
		3892.32 *20*	100 *6*	559.103	2$^+$			
		4451.81 *40*	59.4 *33*	0.0	0$^+$			
4473.46	(2$^+$)	1803.44 *13*	39 *4*	2669.904	2$^-$			
		1817.96 *19*	39 *5*	2655.383	1			

$^{76}_{34}Se_{42}$-46

Adopted Levels, Gammas (continued)

γ(^{76}Se) (continued)

E_i(level)	J_i^π	E_γ[‡]	I_γ[‡]	E_f	J_f^π	Mult.[#]	α[†]	Comments
4473.46	(2$^+$)	3257.58 *21*	37.0 *21*	1216.154	2$^+$			
		3913.93 *21*	100 *6*	559.103	2$^+$			
4489.23	(1,2)	936.04 *26*	24.6 *33*	3552.89	(1,2)			
		1137.74 *10*	44.3 *35*	3351.462	(2)$^+$			
		1539.05 *30*	9.7 *6*	2950.171	1$^+$			
		1819.27 *12*	9.0 *8*	2669.904	2$^-$			
		1833.87 *10*	100 *5*	2655.383	1			
		2698.18 *21*	10.3 *12*	1791.437	0$^+$			
		3366.2 *19*	9.9 *6*	1122.279	0$^+$			
		3930.06 *40*	32.4 *22*	559.103	2$^+$			
		4488.56 *40*	3.24 *34*	0.0	0$^+$			
4523.47	(3$^-$)	1255.89 *72*	43 *20*	3267.57	(2$^+$,3,4$^+$)			
		1304.1 *10*	30 *7*	3219.428	(2$^+$,3$^+$)			
		1653.91 *63*	29.3 *35*	2869.34	(1$^+$,2$^+$)			
		1711.26 *12*	80 *13*	2812.130	(3$^+$)			
		2008.33 *83*	19.0 *26*	2514.681	2$^+$			
		2835.30 *45*	25.9 *35*	1688.971	3$^+$			
		3307.29 *21*	100 *10*	1216.154	2$^+$			
4532.91	(1$^-$,2,3)	1265.30 *78*	30 *11*	3267.57	(2$^+$,3,4$^+$)			
		1862.81 *13*	100 *8*	2669.904	2$^-$			
		2103.93 *60*	50 *14*	2429.131	3$^-$			
		2746.09 *47*	41 *6*	1787.655	2$^+$			
		3974.67 *41*	55.4 *27*	559.103	2$^+$			
4534.93	(0,1,2)	1584.72 *10*	57.9 *28*	2950.171	1$^+$			
		1879.55 *12*	100 *5*	2655.383	1			
4535.7	1$^+$	3977.2 *11*	68 *13*	559.103	2$^+$	[M1]	1.11×10^{-3} *2*	B(M1)(W.u.)=0.0140 *+35−29* α(K)=2.76×10^{-5} *4*; α(L)=2.82×10^{-6} *4*; α(M)=4.39×10^{-7} *6* α(N)=3.77×10^{-8} *5*; α(IPF)=0.001077 *15*
		4535.4 *6*	100 *13*	0.0	0$^+$	M1	1.28×10^{-3} *2*	B(M1)(W.u.)=0.0139 *+32−24* α(K)=2.254×10^{-5} *32*; α(L)=2.304×10^{-6} *32*; α(M)=3.58×10^{-7} *5* α(N)=3.08×10^{-8} *4*; α(IPF)=0.001260 *18*
4576.11	(1,2)	1906.26 *35*	67 *11*	2669.904	2$^-$			
		1921.1 *12*	76 *31*	2655.383	1			
		3453.80 *27*	50 *5*	1122.279	0$^+$			
		4575.70 *40*	100 *11*	0.0	0$^+$			
4581.05	(1,2)	1313.70 *81*	4.0 *21*	3267.57	(2$^+$,3,4$^+$)			
		1420.92 *49*	20 *7*	3160.115	(2$^+$)			
		1605.80 *88*	4.1 *6*	2975.00	(2$^+$,3,4$^+$)			
		1911.10 *12*	9.2 *10*	2669.904	2$^-$			
		2152.17 *35*	6.1 *18*	2429.131	3$^-$			
		2454.00 *52*	20.2 *16*	2127.224	(2)$^+$			

$^{76}_{34}Se_{42}$-47

Adopted Levels, Gammas (continued)

γ(^{76}Se) (continued)

E_i(level)	J_i^π	E_γ[‡]	I_γ[‡]	E_f	J_f^π	Mult.[#]	α[†]	Comments
4581.05	(1,2)	3364.74 *32*	11.2 *9*	1216.154	2^+			
		4021.65 *40*	100 *9*	559.103	2^+			
4603.26	$(1,2)^+$	4043.89 *40*	61 *5*	559.103	2^+			
		4603.27 *40*	100 *5*	0.0	0^+			
4603.3	1^-	4603.1 *6*	100 *5*	0.0	0^+	E1	1.91×10^{-3} *3*	B(E1)(W.u.)=4.8×10^{-4} *+20−11* α(K)=1.624×10^{-5} *23*; α(L)=1.655×10^{-6} *23*; α(M)=2.57×10^{-7} *4* α(N)=2.209×10^{-8} *31*; α(IPF)=0.001887 *26*
4663.08	1^-	4104.2 *5*	32 *4*	559.103	2^+	(E1)	1.73×10^{-3} *2*	B(E1)(W.u.)=2.4×10^{-4} *+6−5* α(K)=1.873×10^{-5} *26*; α(L)=1.910×10^{-6} *27*; α(M)=2.97×10^{-7} *4* α(N)=2.55×10^{-8} *4*; α(IPF)=0.001713 *24*
		4662.7 *4*	100 *10*	0.0	0^+	E1	1.92×10^{-3} *3*	B(E1)(W.u.)=5.2×10^{-4} *+11−8* α(K)=1.598×10^{-5} *22*; α(L)=1.629×10^{-6} *23*; α(M)=2.532×10^{-7} *35* α(N)=2.174×10^{-8} *30*; α(IPF)=0.001905 *27*
4673.7	1^+	4673.5 *14*	100	0.0	0^+	M1	1.32×10^{-3} *2*	B(M1)(W.u.)=0.0040 *+19−10* α(K)=2.154×10^{-5} *30*; α(L)=2.201×10^{-6} *31*; α(M)=3.42×10^{-7} *5* α(N)=2.94×10^{-8} *4*; α(IPF)=0.001299 *18*
4687.21	$(1,2,3^+)$	1736.92 *17*	100 *11*	2950.171	1^+			
		1875.23 *16*	65 *25*	2812.130	(3^+)			
		2017.14 *46*	52 *6*	2669.904	2^-			
		3470.50 *50*	63 *4*	1216.154	2^+			
		4127.74 *50*	6.3 *21*	559.103	2^+			
4687.3	$(10)^+$	388.0 *5*	30	4299.5	10^+	[M1]	0.00314 *4*	B(M1)(W.u.)=0.108 *+29−25* α(K)=0.00279 *4*; α(L)=0.000295 *4*; α(M)=4.60×10^{-5} *7* α(N)=3.92×10^{-6} *6* δ: RUL=300 for E2 suggests δ(E2/M1)<0.7.
		833.8 *5*	100	3853.75	$(8)^+$	[E2]	0.000656 *9*	B(E2)(W.u.)=70 *+14−13* α(K)=0.000584 *8*; α(L)=6.15×10^{-5} *9*; α(M)=9.56×10^{-6} *13* α(N)=8.13×10^{-7} *11*
		1417.7 *5*	83 *4*	3269.75	8^+	E2	0.0002532 *35*	B(E2)(W.u.)=4.1 *+9−6* α(K)=0.0001742 *24*; α(L)=1.808×10^{-5} *25*; α(M)=2.81×10^{-6} *4* α(N)=2.404×10^{-7} *34*; α(IPF)=5.79×10^{-5} *8*
4720.6	1^-	4161.3 *6*	100 *10*	559.103	2^+	E1	1.75×10^{-3} *3*	B(E1)(W.u.)=4.9×10^{-4} *+9−7* α(K)=1.841×10^{-5} *26*; α(L)=1.877×10^{-6} *26*; α(M)=2.92×10^{-7} *4* α(N)=2.505×10^{-8} *35*; α(IPF)=0.001732 *24*
		4720.5 *7*	66 *8*	0.0	0^+	E1	1.94×10^{-3} *3*	B(E1)(W.u.)=2.22×10^{-4} *+43−34* α(K)=1.574×10^{-5} *22*; α(L)=1.605×10^{-6} *22*; α(M)=2.494×10^{-7} *35* α(N)=2.141×10^{-8} *30*; α(IPF)=0.001924 *27*

$^{76}_{34}Se_{42}$-48

Adopted Levels, Gammas (continued)

γ(^{76}Se) (continued)

E_i(level)	J_i^π	E_γ[‡]	I_γ[‡]	E_f	J_f^π	Mult.[#]	α[†]	Comments
4723.2	(3$^+$)	1772.95 *59*	100 *8*	2950.171	1$^+$			
		3507.05 *54*	86 *12*	1216.154	2$^+$			
		4163.45 *98*	80 *8*	559.103	2$^+$			
4728.6		1287.0 *5*	100	3441.54	7$^-$			
4731.6	(+)	1781.37 *40*	100 *6*	2950.171	1$^+$			
		3515.7 *11*	46 *6*	1216.154	2$^+$			
4766.96	1	4766.8 *3*	100	0.0	0$^+$	D		If M1, B(M1)(W.u.)=0.0117 *10*. If E1, B(E1)(W.u.)=0.000200 *18*.
4794.97	(1,2)	1982.95 *56*	36 *9*	2812.130	(3$^+$)			
		2139.93 *26*	60.4 *27*	2655.383	1			
		2365.29 *27*	100 *15*	2429.131	3$^-$			
		3672.54 *22*	19.5 *14*	1122.279	0$^+$			
		4235.89 *41*	53 *4*	559.103	2$^+$			
		4794.96 *40*	8.7 *7*	0.0	0$^+$			
4880.0	1$^-$	4879.8 *4*	100	0.0	0$^+$	E1	1.99×10^{-3} *3*	B(E1)(W.u.)=1.64×10^{-4} *+18−15* α(K)=1.512×10^{-5} *21*; α(L)=1.540×10^{-6} *22*; α(M)=2.394×10^{-7} *34* α(N)=2.056×10^{-8} *29*; α(IPF)=0.001976 *28*
4887.07	1$^-$	4886.9 *3*	100	0.0	0$^+$	E1	2.00×10^{-3} *3*	B(E1)(W.u.)=1.19×10^{-4} *+17−13* α(K)=1.509×10^{-5} *21*; α(L)=1.538×10^{-6} *22*; α(M)=2.390×10^{-7} *33* α(N)=2.052×10^{-8} *29*; α(IPF)=0.001978 *28*
4931.6	1$^-$	4931.4 *17*	100	0.0	0$^+$	E1	2.01×10^{-3} *3*	B(E1)(W.u.)=4.0×10^{-5} *+14−9* α(K)=1.492×10^{-5} *21*; α(L)=1.521×10^{-6} *21*; α(M)=2.364×10^{-7} *33* α(N)=2.029×10^{-8} *28*; α(IPF)=0.001993 *28*
4938.6	1	4938.4 *15*	100 *10*	0.0	0$^+$	D		If M1, B(M1)(W.u.)=0.0043 *8*. If E1, B(E1)(W.u.)=$7.3\times10_5$ *14*.
4971.5	1$^+$	4971.3 *17*	100	0.0	0$^+$	(M1)	1.41×10^{-3} *2*	B(M1)(W.u.)=0.0047 *+11−7* α(K)=1.964×10^{-5} *28*; α(L)=2.006×10^{-6} *28*; α(M)=3.12×10^{-7} *4* α(N)=2.68×10^{-8} *4*; α(IPF)=0.001390 *19*
4984.81	1$^-$	4426.1 *5*	73 *12*	559.103	2$^+$	(E1)	1.85×10^{-3} *3*	B(E1)(W.u.)=3.1×10^{-4} *+6−5* α(K)=1.705×10^{-5} *24*; α(L)=1.738×10^{-6} *24*; α(M)=2.70×10^{-7} *4* α(N)=2.319×10^{-8} *32*; α(IPF)=0.001829 *26*
		4984.3 *4*	100 *9*	0.0	0$^+$	E1	2.03×10^{-3} *3*	B(E1)(W.u.)=2.9×10^{-4} *+5−4* α(K)=1.473×10^{-5} *21*; α(L)=1.501×10^{-6} *21*; α(M)=2.333×10^{-7} *33* α(N)=2.003×10^{-8} *28*; α(IPF)=0.002011 *28*
5001.48	1$^-$	5001.3 *2*	100	0.0	0$^+$	E1	2.03×10^{-3} *3*	B(E1)(W.u.)=3.58×10^{-4} *+27−24* α(K)=1.467×10^{-5} *21*; α(L)=1.495×10^{-6} *21*; α(M)=2.323×10^{-7} *33* α(N)=1.995×10^{-8} *28*; α(IPF)=0.002016 *28*
5010.76	1$^-$	4451.8 *3*	36 *6*	559.103	2$^+$	(E1)	1.86×10^{-3} *3*	B(E1)(W.u.)=3.1×10^{-4} *5* α(K)=1.692×10^{-5} *24*; α(L)=1.725×10^{-6} *24*; α(M)=2.68×10^{-7} *4* α(N)=2.302×10^{-8} *32*; α(IPF)=0.001838 *26*
		5010.3 *3*	100 *7*	0.0	0$^+$	E1	2.04×10^{-3} *3*	B(E1)(W.u.)=6.0×10^{-4} *+7−6*

$^{76}_{34}Se_{42}$-49

Adopted Levels, Gammas (continued)

γ(^{76}Se) (continued)

E_i(level)	J_i^π	E_γ[‡]	I_γ[‡]	E_f	J_f^π	Mult.[#]	α[†]	Comments
								α(K)=1.464×10^{-5} *20*; α(L)=1.492×10^{-6} *21*; α(M)=2.318×10^{-7} *32* α(N)=1.990×10^{-8} *28*; α(IPF)=0.002019 *28*
5068.1	(10)$^-$	1059.4 *5*	100	4008.7	(8$^-$)	E2	0.000368 *5*	B(E2)(W.u.)=22 *6* α(K)=0.000328 *5*; α(L)=3.43×10^{-5} *5*; α(M)=5.33×10^{-6} *7* α(N)=4.54×10^{-7} *6*
5074.00	1$^-$	4515.8 *3*	35 *3*	559.103	2$^+$	(E1)	1.88×10^{-3} *3*	B(E1)(W.u.)=4.34×10^{-4} *+48−42* α(K)=1.663×10^{-5} *23*; α(L)=1.695×10^{-6} *24*; α(M)=2.63×10^{-7} *4* α(N)=2.262×10^{-8} *32*; α(IPF)=0.001859 *26*
		5073.7 *1*	100 *7*	0.0	0$^+$	E1	2.06×10^{-3} *3*	B(E1)(W.u.)=8.7×10^{-4} *6* α(K)=1.442×10^{-5} *20*; α(L)=1.469×10^{-6} *21*; α(M)=2.283×10^{-7} *32* α(N)=1.960×10^{-8} *27*; α(IPF)=0.002039 *29*
5122.19	1	5122.0 *2*	100	0.0	0$^+$	D		If M1, B(M1)(W.u.)=0.0047 *11*. If E1, B(E1)(W.u.)=8.0×10$_5$ *19*.
5128.59	1	5128.4 *1*	100	0.0	0$^+$	D		If M1, B(M1)(W.u.)=0.0065 *11*. IF E1, BE1W=0.000112 *18*.
5142.3	1	5142.1 *7*	100	0.0	0$^+$	D		If M1, B(M1)(W.u.)=0.0062 *8*. If E1, B(E1)(W.u.)=0.000106 *13*.
5195.00	1$^-$	4635.1 *3*	67 *6*	559.103	2$^+$	(E1)	1.91×10^{-3} *3*	B(E1)(W.u.)=6.7×10^{-4} *7* α(K)=1.610×10^{-5} *23*; α(L)=1.641×10^{-6} *23*; α(M)=2.55×10^{-7} *4* α(N)=2.190×10^{-8} *31*; α(IPF)=0.001897 *27*
		5194.5 *3*	100 *7*	0.0	0$^+$	E1	2.09×10^{-3} *3*	B(E1)(W.u.)=7.1×10^{-4} *+7−6* α(K)=1.401×10^{-5} *20*; α(L)=1.427×10^{-6} *20*; α(M)=2.219×10^{-7} *31* α(N)=1.905×10^{-8} *27*; α(IPF)=0.002074 *29*
5217.8	1$^-$	5217.6 *11*	100	0.0	0$^+$	E1	2.10×10^{-3} *3*	B(E1)(W.u.)=2.2×10^{-4} *+6−4* α(K)=1.394×10^{-5} *20*; α(L)=1.420×10^{-6} *20*; α(M)=2.207×10^{-7} *31* α(N)=1.895×10^{-8} *27*; α(IPF)=0.002081 *29*
5239.6	1	4023.1 *10*	28 *6*	1216.154	2$^+$			
		5239.7 *12*	100 *18*	0.0	0$^+$	D		If M1, B(M1)(W.u.)=0.012 *4*. If E1, B(E1)(W.u.)=0.00021 *6*.
5284.40	1	5284.2 *3*	100	0.0	0$^+$	D		If M1, B(M1)(W.u.)=0.0178 *13*. If E1, B(E1)(W.u.)=0.000304 *22*.
5297.90	(1$^+$)	5297.7 *3*	100	0.0	0$^+$	(M1)	1.50×10^{-3} *2*	B(M1)(W.u.)=0.0108 *6* α(K)=1.788×10^{-5} *25*; α(L)=1.826×10^{-6} *26*; α(M)=2.84×10^{-7} *4* α(N)=2.440×10^{-8} *34*; α(IPF)=0.001481 *21*
5298.60	1$^-$	4175.0[@] *12*	3.9 *9*	1122.279	0$^+$	(E1)	1.76×10^{-3} *3*	B(E1)(W.u.)=8.6×10^{-5} *20* α(K)=1.834×10^{-5} *26*; α(L)=1.870×10^{-6} *26*; α(M)=2.91×10^{-7} *4* α(N)=2.495×10^{-8} *35*; α(IPF)=0.001737 *24*
		4739.6[@] *5*	15.1 *16*	559.103	2$^+$	(E1)	1.95×10^{-3} *3*	B(E1)(W.u.)=2.26×10^{-4} *+28−26* α(K)=1.567×10^{-5} *22*; α(L)=1.597×10^{-6} *22*; α(M)=2.482×10^{-7} *35* α(N)=2.131×10^{-8} *30*; α(IPF)=0.001930 *27*
		5298.4 *1*	100 *6*	0.0	0$^+$	E1	2.12×10^{-3} *3*	B(E1)(W.u.)=0.00108 *7* α(K)=1.368×10^{-5} *19*; α(L)=1.394×10^{-6} *20*; α(M)=2.166×10^{-7} *30* α(N)=1.860×10^{-8} *26*; α(IPF)=0.002102 *29*

$^{76}_{34}Se_{42}$-50

Adopted Levels, Gammas (continued)

γ(^{76}Se) (continued)

E_i(level)	J_i^π	E_γ[‡]	I_γ[‡]	E_f	J_f^π	Mult.[#]	α[†]	Comments
5324.18	1⁻	4766.9 *10*	67 *10*	559.103	2⁺	[E1]	1.96×10^{-3} *3*	B(E1)(W.u.)=4.5×10^{-4} *7* α(K)=1.556×10^{-5} *22*; α(L)=1.585×10^{-6} *22*; α(M)=2.464×10^{-7} *35* α(N)=2.116×10^{-8} *30*; α(IPF)=0.001938 *27*
		5323.8 *3*	100 *10*	0.0	0⁺	E1	2.12×10^{-3} *3*	B(E1)(W.u.)=4.8×10^{-4} *+7−6* α(K)=1.360×10^{-5} *19*; α(L)=1.386×10^{-6} *19*; α(M)=2.154×10^{-7} *30* α(N)=1.849×10^{-8} *26*; α(IPF)=0.002109 *30*
5346.94	1⁻	4131.5 *9*	38 *6*	1216.154	2⁺	(E1)	1.74×10^{-3} *2*	B(E1)(W.u.)=3.3×10^{-4} *+7−6* α(K)=1.858×10^{-5} *26*; α(L)=1.895×10^{-6} *27*; α(M)=2.94×10^{-7} *4* α(N)=2.528×10^{-8} *35*; α(IPF)=0.001722 *24*
		4788.0 *3*	43 *6*	559.103	2⁺	(E1)	1.96×10^{-3} *3*	B(E1)(W.u.)=2.40×10^{-4} *+45−39* α(K)=1.547×10^{-5} *22*; α(L)=1.577×10^{-6} *22*; α(M)=2.451×10^{-7} *34* α(N)=2.104×10^{-8} *29*; α(IPF)=0.001945 *27*
		5346.0 *4*	100 *9*	0.0	0⁺	E1	2.13×10^{-3} *3*	B(E1)(W.u.)=4.0×10^{-4} *+6−5* α(K)=1.353×10^{-5} *19*; α(L)=1.379×10^{-6} *19*; α(M)=2.143×10^{-7} *30* α(N)=1.840×10^{-8} *26*; α(IPF)=0.002115 *30*
5367.5	1	5367.3 *13*	100	0.0	0⁺	D		If M1, B(M1)(W.u.)=0.0032 *8*. If E1, B(E1)(W.u.)=$5.5\times10_5$ *13*.
5368.3	(11⁺)	681.4		4687.3	(10)⁺			
		962.0		4405.9	(9⁺)			
		1068.5		4299.5	10⁺			
5375.45	1⁻	4816.1 *2*	100 *8*	559.103	2⁺	(E1)	1.97×10^{-3} *3*	B(E1)(W.u.)=0.00129 *+14−12* α(K)=1.536×10^{-5} *22*; α(L)=1.565×10^{-6} *22*; α(M)=2.433×10^{-7} *34* α(N)=2.089×10^{-8} *29*; α(IPF)=0.001954 *27*
		5375.6 *4*	83 *6*	0.0	0⁺	E1	2.14×10^{-3} *3*	B(E1)(W.u.)=7.7×10^{-4} *+9−8* α(K)=1.344×10^{-5} *19*; α(L)=1.369×10^{-6} *19*; α(M)=2.129×10^{-7} *30* α(N)=1.828×10^{-8} *26*; α(IPF)=0.002122 *30*
5405.2	1⁻	5405.0 *18*	100	0.0	0⁺	E1	2.15×10^{-3} *3*	B(E1)(W.u.)=9.2×10^{-5} *+40−22* α(K)=1.336×10^{-5} *19*; α(L)=1.361×10^{-6} *19*; α(M)=2.115×10^{-7} *30* α(N)=1.816×10^{-8} *25*; α(IPF)=0.002130 *30*
5411.33	1⁻	4852.0 *3*	100 *9*	559.103	2⁺	(E1)	1.98×10^{-3} *3*	B(E1)(W.u.)=0.00168 *+46−32* α(K)=1.522×10^{-5} *21*; α(L)=1.551×10^{-6} *22*; α(M)=2.411×10^{-7} *34* α(N)=2.070×10^{-8} *29*; α(IPF)=0.001966 *28*
		5412.4 *14*	28 *7*	0.0	0⁺	E1	2.15×10^{-3} *3*	B(E1)(W.u.)=3.4×10^{-4} *+12−9* α(K)=1.333×10^{-5} *19*; α(L)=1.358×10^{-6} *19*; α(M)=2.111×10^{-7} *30* α(N)=1.813×10^{-8} *25*; α(IPF)=0.002132 *30*
5425.21	1⁻	4865.9 *3*	100 *10*	559.103	2⁺	(E1)	1.99×10^{-3} *3*	B(E1)(W.u.)=4.5×10^{-4} *+7−6* α(K)=1.517×10^{-5} *21*; α(L)=1.546×10^{-6} *22*; α(M)=2.403×10^{-7} *34* α(N)=2.063×10^{-8} *29*; α(IPF)=0.001971 *28*
		5425.1 *5*	100 *10*	0.0	0⁺	E1	2.15×10^{-3} *3*	B(E1)(W.u.)=3.27×10^{-4} *+48−40*

$^{76}_{34}Se_{42}$-51

Adopted Levels, Gammas (continued)

γ(^{76}Se) (continued)

E_i(level)	J_i^π	E_γ[‡]	I_γ[‡]	E_f	J_f^π	Mult.[#]	α[†]	Comments
								α(K)=1.330×10^{-5} *19*; α(L)=1.354×10^{-6} *19*; α(M)=2.105×10^{-7} *29* α(N)=1.808×10^{-8} *25*; α(IPF)=0.002136 *30*
5431.8	12$^+$	1133.0 *5*	100	4299.5	10$^+$	(E2)	0.000318 *4*	B(E2)(W.u.)=8×10^{1} *+7−3* α(K)=0.000282 *4*; α(L)=2.94×10^{-5} *4*; α(M)=4.57×10^{-6} *6* α(N)=3.90×10^{-7} *5*; α(IPF)=1.96×10^{-6} *4*
5551.8	1$^-$	5551.6 *15*	100	0.0	0$^+$	E1	2.19×10^{-3} *3*	B(E1)(W.u.)=2.3×10^{-4} *+8−5* α(K)=1.294×10^{-5} *18*; α(L)=1.317×10^{-6} *18*; α(M)=2.048×10^{-7} *29* α(N)=1.758×10^{-8} *25*; α(IPF)=0.002171 *30*
5629.8	1$^-$	5629.6 *15*	100	0.0	0$^+$	E1	2.21×10^{-3} *3*	B(E1)(W.u.)=8.8×10^{-5} *+42−22* α(K)=1.272×10^{-5} *18*; α(L)=1.296×10^{-6} *18*; α(M)=2.014×10^{-7} *28* α(N)=1.729×10^{-8} *24*; α(IPF)=0.002193 *31*
5637.7	1$^-$	5637.5 *15*	100	0.0	0$^+$	E1	2.21×10^{-3} *3*	B(E1)(W.u.)=8.8×10^{-5} *+44−22* α(K)=1.270×10^{-5} *18*; α(L)=1.293×10^{-6} *18*; α(M)=2.010×10^{-7} *28* α(N)=1.726×10^{-8} *24*; α(IPF)=0.002196 *31*
5669.2	1$^-$	5669.0 *15*	100	0.0	0$^+$	E1	2.22×10^{-3} *3*	B(E1)(W.u.)=9×10^{-5} *+5−3* α(K)=1.262×10^{-5} *18*; α(L)=1.285×10^{-6} *18*; α(M)=1.997×10^{-7} *28* α(N)=1.715×10^{-8} *24*; α(IPF)=0.002205 *31*
5685.5	1$^-$	5685.3 *4*	100	0.0	0$^+$	E1	2.22×10^{-3} *3*	B(E1)(W.u.)=2.56×10^{-4} *+25−21* α(K)=1.257×10^{-5} *18*; α(L)=1.280×10^{-6} *18*; α(M)=1.990×10^{-7} *28* α(N)=1.709×10^{-8} *24*; α(IPF)=0.002209 *31*
5709.8	1$^-$	5709.6 *4*	100	0.0	0$^+$	E1	2.23×10^{-3} *3*	B(E1)(W.u.)=2.73×10^{-4} *+29−23* α(K)=1.251×10^{-5} *18*; α(L)=1.274×10^{-6} *18*; α(M)=1.980×10^{-7} *28* α(N)=1.700×10^{-8} *24*; α(IPF)=0.002216 *31*
5740.73	1$^-$	5740.5 *3*	100	0.0	0$^+$	E1	2.24×10^{-3} *3*	B(E1)(W.u.)=3.55×10^{-4} *+35−29* α(K)=1.243×10^{-5} *17*; α(L)=1.266×10^{-6} *18*; α(M)=1.967×10^{-7} *28* α(N)=1.689×10^{-8} *24*; α(IPF)=0.002224 *31*
5762.0	1$^-$	5761.8 *10*	100	0.0	0$^+$	E1	2.24×10^{-3} *3*	B(E1)(W.u.)=1.25×10^{-4} *+34−23* α(K)=1.237×10^{-5} *17*; α(L)=1.260×10^{-6} *18*; α(M)=1.959×10^{-7} *27* α(N)=1.682×10^{-8} *24*; α(IPF)=0.002230 *31*
5773.3	1$^-$	5773.1 *10*	100	0.0	0$^+$	E1	2.25×10^{-3} *3*	B(E1)(W.u.)=1.09×10^{-4} *+19−14* α(K)=1.235×10^{-5} *17*; α(L)=1.257×10^{-6} *18*; α(M)=1.954×10^{-7} *27* α(N)=1.678×10^{-8} *23*; α(IPF)=0.002233 *31*
5781.24	1$^-$	5781.0 *2*	100	0.0	0$^+$	E1	2.25×10^{-3} *3*	B(E1)(W.u.)=4.94×10^{-4} *+39−34* α(K)=1.233×10^{-5} *17*; α(L)=1.255×10^{-6} *18*; α(M)=1.951×10^{-7} *27* α(N)=1.675×10^{-8} *23*; α(IPF)=0.002235 *31* E_γ: 5783.3 *3* in (γ,γ′).
5796.7	(12$^+$)	1109.6 1496.7		4687.3 4299.5	(10)$^+$ 10$^+$			

$^{76}_{34}Se_{42}$-52

Adopted Levels, Gammas (continued)

γ(^{76}Se) (continued)

E_i(level)	J_i^π	E_γ[‡]	I_γ[‡]	E_f	J_f^π	Mult.[#]	α[†]	Comments
5804.0	1⁻	5246.1 *14*	100 *19*	559.103	2⁺	(E1)	2.10×10^{-3} *3*	B(E1)(W.u.)=5.7×10^{-4} *+16−12* α(K)=1.385×10^{-5} *19*; α(L)=1.410×10^{-6} *20*; α(M)=2.192×10^{-7} *31* α(N)=1.882×10^{-8} *26*; α(IPF)=0.002088 *29*
		5803.4 *7*	64 *11*	0.0	0⁺	E1	2.25×10^{-3} *3*	B(E1)(W.u.)=2.7×10^{-4} *+9−6* α(K)=1.227×10^{-5} *17*; α(L)=1.249×10^{-6} *17*; α(M)=1.942×10^{-7} *27* α(N)=1.668×10^{-8} *23*; α(IPF)=0.002241 *31*
5813.9	1⁻	5813.7 *5*	100	0.0	0⁺	E1	2.26×10^{-3} *3*	B(E1)(W.u.)=2.39×10^{-4} *+27−22* α(K)=1.224×10^{-5} *17*; α(L)=1.247×10^{-6} *17*; α(M)=1.938×10^{-7} *27* α(N)=1.664×10^{-8} *23*; α(IPF)=0.002243 *31*
5842.31	1⁻	5283.8[&] *10*	25 *8*	559.103	2⁺	[E1]	2.11×10^{-3} *3*	B(E1)(W.u.)=1.7×10^{-4} *5* α(K)=1.373×10^{-5} *19*; α(L)=1.398×10^{-6} *20*; α(M)=2.173×10^{-7} *30* α(N)=1.866×10^{-8} *26*; α(IPF)=0.002098 *29*
		5842.0 *3*	100 *11*	0.0	0⁺	E1	2.26×10^{-3} *3*	B(E1)(W.u.)=4.9×10^{-4} *+8−6* α(K)=1.217×10^{-5} *17*; α(L)=1.240×10^{-6} *17*; α(M)=1.927×10^{-7} *27* α(N)=1.654×10^{-8} *23*; α(IPF)=0.002251 *32*
5865.3	1⁻	5865.1 *7*	100	0.0	0⁺	E1	2.27×10^{-3} *3*	B(E1)(W.u.)=2.45×10^{-4} *+40−31* α(K)=1.212×10^{-5} *17*; α(L)=1.234×10^{-6} *17*; α(M)=1.918×10^{-7} *27* α(N)=1.647×10^{-8} *23*; α(IPF)=0.002256 *32*
5879.6	1⁻	5879.4 *6*	100	0.0	0⁺	E1	2.27×10^{-3} *3*	B(E1)(W.u.)=1.25×10^{-4} *+18−14* α(K)=1.208×10^{-5} *17*; α(L)=1.230×10^{-6} *17*; α(M)=1.912×10^{-7} *27* α(N)=1.642×10^{-8} *23*; α(IPF)=0.002260 *32*
5892.30	1⁻	5333.1 *4*	81 *11*	559.103	2⁺	(E1)	2.13×10^{-3} *3*	B(E1)(W.u.)=3.3×10^{-4} *+7−5* α(K)=1.357×10^{-5} *19*; α(L)=1.383×10^{-6} *19*; α(M)=2.149×10^{-7} *30* α(N)=1.845×10^{-8} *26*; α(IPF)=0.002111 *30*
		5891.9 *5*	100 *11*	0.0	0⁺	E1	2.28×10^{-3} *3*	B(E1)(W.u.)=3.0×10^{-4} *+6−5* α(K)=1.205×10^{-5} *17*; α(L)=1.227×10^{-6} *17*; α(M)=1.907×10^{-7} *27* α(N)=1.638×10^{-8} *23*; α(IPF)=0.002263 *32*
5996.1	1⁻	5435.2 *11*	100 *22*	559.103	2⁺	(E1)	2.15×10^{-3} *3*	B(E1)(W.u.)=2.6×10^{-4} *+9−6* α(K)=1.327×10^{-5} *19*; α(L)=1.351×10^{-6} *19*; α(M)=2.101×10^{-7} *29* α(N)=1.804×10^{-8} *25*; α(IPF)=0.002139 *30* E_γ: 5438.0 *4* in (γ,γ′) due to very different branching ratio.
		5998.4 *14*	69 *19*	0.0	0⁺	E1	2.30×10^{-3} *3*	B(E1)(W.u.)=1.3×10^{-4} *+5−4* α(K)=1.180×10^{-5} *17*; α(L)=1.201×10^{-6} *17*; α(M)=1.867×10^{-7} *26* α(N)=1.603×10^{-8} *22*; α(IPF)=0.002289 *32* I_γ: 21 *5* IN (γ,γ′).
6035.4	1⁻	5474.6[&] *13*	52 *11*	559.103	2⁺	[E1]	2.16×10^{-3} *3*	B(E1)(W.u.)=3.0×10^{-4} *+8−6* α(K)=1.315×10^{-5} *18*; α(L)=1.340×10^{-6} *19*; α(M)=2.082×10^{-7} *29* α(N)=1.788×10^{-8} *25*; α(IPF)=0.002149 *30*

$^{76}_{34}Se_{42}$-53

Adopted Levels, Gammas (continued)

γ(^{76}Se) (continued)

E_i(level)	J_i^π	E_γ[‡]	I_γ[‡]	E_f	J_f^π	Mult.[#]	α[†]	Comments
6035.4	1⁻	6035.4 *5*	100 *12*	0.0	0⁺	E1		B(E1)(W.u.)=4.3×10^{-4} *+9−7*
6099.3	1⁻	5540.2 *7*	54 *6*	559.103	2⁺	(E1)	2.18×10^{-3} *3*	B(E1)(W.u.)=2.8×10^{-4} *+7−5* α(K)=1.297×10^{-5} *18*; α(L)=1.321×10^{-6} *18*; α(M)=2.053×10^{-7} *29* α(N)=1.763×10^{-8} *25*; α(IPF)=0.002168 *30*
		6098.9 *5*	100 *11*	0.0	0⁺	E1		B(E1)(W.u.)=3.9×10^{-4} *+9−6*
6131.5	1⁻	6131.2 *6*	100	0.0	0⁺	E1		B(E1)(W.u.)=1.42×10^{-4} *+27−19*
6156.6	1⁻	6156.3 *14*	100	0.0	0⁺	E1		B(E1)(W.u.)=2.9×10^{-5} *+7−5*
6165.1	1⁻	6164.8 *11*	100	0.0	0⁺	E1		B(E1)(W.u.)=7.7×10^{-5} *+30−17*
6196.2	1⁻	6195.9 *11*	100	0.0	0⁺	E1		B(E1)(W.u.)=1.59×10^{-4} *+24−18*
6208.7	1⁻	6208.4 *15*	100	0.0	0⁺	E1		B(E1)(W.u.)=3.2×10^{-4} *+8−5*
6242.7	1⁻	6242.4 *6*	100	0.0	0⁺	E1		B(E1)(W.u.)=6.0×10^{-4} *+41−18* E_γ: 6247.4 *9* in (γ,γ′).
6250.7	1⁻	6250.4 *5*	100	0.0	0⁺	E1		B(E1)(W.u.)=2.76×10^{-4} *+47−34* E_γ: 6254.0 *9* in (γ,γ′).
6297.9	1⁻	6297.6 *14*	100	0.0	0⁺	E1		B(E1)(W.u.)=1.51×10^{-4} *+27−20*
6315.9	1⁻	6315.6 *4*	100	0.0	0⁺	E1		B(E1)(W.u.)=4.8×10^{-4} *+7−6*
6336.8	1⁻	6336.5 *20*	100	0.0	0⁺	E1		B(E1)(W.u.)=3.4×10^{-4} *+30−12*
6342.64	1⁻	5783.3[&] *3*	100 *14*	559.103	2⁺	[E1]	2.25×10^{-3} *3*	B(E1)(W.u.)=0.0054 *+19−12* α(K)=1.232×10^{-5} *17*; α(L)=1.255×10^{-6} *18*; α(M)=1.950×10^{-7} *27* α(N)=1.674×10^{-8} *23*; α(IPF)=0.002236 *31*
		6342.3 *11*	30 *7*	0.0	0⁺	E1		B(E1)(W.u.)=0.00122 *+50−34*
6387.5	1⁻	6387.2 *14*	100	0.0	0⁺	E1		B(E1)(W.u.)=2.16×10^{-4} *+38−28*
6438.1	1	6437.8 *19*	100	0.0	0⁺	D		If M1, B(M1)(W.u.)=0.0098 *23*. If E1, B(E1)(W.u.)=0.00017 *4*.
6449.0	1⁻	6448.7 *20*	100	0.0	0⁺	E1		B(E1)(W.u.)=2.31×10^{-4} *+43−33*
6497.7	1⁻	6497.4 *6*	100	0.0	0⁺	E1		B(E1)(W.u.)=3.8×10^{-4} *+23−11*
6500.8	(13⁺)	1069.3		5431.8	12⁺			
		1132.0		5368.3	(11⁺)			
6532.7	1⁻	6532.4 *4*	100	0.0	0⁺	E1		B(E1)(W.u.)=4.43×10^{-4} *+45−38*
6551.00	1⁺	6550.7 *3*	100	0.0	0⁺	M1		B(M1)(W.u.)=0.0071 *+15−11*
6562.9	1⁻	6562.6 *9*	100	0.0	0⁺	E1		B(E1)(W.u.)=1.74×10^{-4} *6*
6570.4	1⁻	6570.1 *9*	100	0.0	0⁺	E1		B(E1)(W.u.)=2.71×10^{-4} *+38−31*
6596.2	1⁻	6595.9 *7*	100	0.0	0⁺	E1		B(E1)(W.u.)=2.39×10^{-4} *+35−27*
6608.5	1⁻	6608.2 *9*	100	0.0	0⁺	E1		B(E1)(W.u.)=2.18×10^{-4} *+33−26*
6631.8	1⁻	6071.8 *8*	40 *15*	559.103	2⁺	(E1)		B(E1)(W.u.)=3.5×10^{-4} *+15−12*
		6632.9 *12*	100 *23*	0.0	0⁺	E1		B(E1)(W.u.)=6.6×10^{-4} *+20−14* E_γ: 6630.8 *4* in (γ,γ′).

$^{76}_{34}Se_{42}$-54

Adopted Levels, Gammas (continued)

γ(^{76}Se) (continued)

E_i(level)	J_i^π	E_γ[‡]	I_γ[‡]	E_f	J_f^π	Mult.[#]	Comments
6641.3	1^-	6641.0 *17*	100	0.0	0^+	E1	B(E1)(W.u.)=2.3×10^{-4} *+7−4*
6653.7	1^-	6653.4 *14*	100	0.0	0^+	E1	B(E1)(W.u.)=3.9×10^{-4} *+11−7*
6680.0	1^-	6679.7 *18*	100	0.0	0^+	E1	B(E1)(W.u.)=2.07×10^{-4} *+26−22*
6691.5	1^-	6691.2 *8*	100	0.0	0^+	E1	B(E1)(W.u.)=1.27×10^{-4} *+24−18*
6700.3	1^-	6700.0 *20*	100	0.0	0^+	E1	B(E1)(W.u.)=1.5×10^{-4} *+6−3*
6709.0	1^-	6708.7 *21*	100	0.0	0^+	E1	B(E1)(W.u.)=1.4×10^{-4} *+5−3*
6736.2	1^-	6735.9 *15*	100	0.0	0^+	E1	B(E1)(W.u.)=1.4×10^{-4} *+5−3*
6743.31	1^-	6182.8 *7*	30 *5*	559.103	2^+	(E1)	B(E1)(W.u.)=3.3×10^{-4} *+7−6*
		6743.2 *3*	100 *8*	0.0	0^+	E1	B(E1)(W.u.)=8.5×10^{-4} *+13−10*
6749.2	1^-	6190.0 *6*	52 *13*	559.103	2^+	(E1)	B(E1)(W.u.)=4.1×10^{-4} *+12−10*
		6748.7 *5*	100 *18*	0.0	0^+	E1	B(E1)(W.u.)=6.1×10^{-4} *+13−11*
6751.5	(14^+)	1319.8		5431.8	12^+		
6813.9	1^-	6813.6 *20*	100	0.0	0^+	E1	B(E1)(W.u.)=7.5×10^{-5} *+43−21*
6830.2	1^-	6829.9 *15*	100	0.0	0^+	E1	B(E1)(W.u.)=1.43×10^{-4} *+39−26*
6882.7	1^-	6323.4 *6*	86 *24*	559.103	2^+	(E1)	B(E1)(W.u.)=4.5×10^{-4} *+12−11*
		6881.9 *14*	100 *14*	0.0	0^+	E1	B(E1)(W.u.)=4.1×10^{-4} *+12−8*
6908.3	1^-	6908.0 *20*	100	0.0	0^+	E1	B(E1)(W.u.)=7.6×10^{-5} *+27−16*
6913.3	1^+	6913.0 *17*	100	0.0	0^+	M1	B(M1)(W.u.)=0.0048 *+19−11*
6922.2	1^-	6921.9 *18*	100	0.0	0^+	E1	B(E1)(W.u.)=9.0×10^{-5} *+32−18*
6970.3	1^-	6970.0 *5*	100	0.0	0^+	E1	B(E1)(W.u.)=2.8×10^{-4} *+8−5* E_γ: 6973.0 *8* in (γ,γ′).
6992.9	1^-	6992.5 *5*	100	0.0	0^+	E1	B(E1)(W.u.)=3.3×10^{-4} *+6−5*
7018.1	1^-	7017.7 *18*	100	0.0	0^+	E1	B(E1)(W.u.)=1.0×10^{-4} *+8−3*
7025.1	1^+	7024.7 *20*	100	0.0	0^+	M1	B(M1)(W.u.)=0.0053 *+26−14*
7047.4	1^+	7047.0 *15*	100	0.0	0^+	M1	B(M1)(W.u.)=0.0045 *+25−12*
7053.1	1^-	7052.7 *19*	100	0.0	0^+	E1	B(E1)(W.u.)=8.6×10^{-5} *+37−20*
7084.5	(14^+)	1287.5		5796.7	(12^+)		
		1653.0		5431.8	12^+		
7093.1	1^-	7092.7 *20*	100	0.0	0^+	E1	B(E1)(W.u.)=9.4×10^{-5} *+34−21*
7101.1	1^-	7100.7 *19*	100	0.0	0^+	E1	B(E1)(W.u.)=9.2×10^{-5} *+40−22*
7110.1	1^+	7109.7 *19*	100	0.0	0^+	M1	B(M1)(W.u.)=0.0061 *+26−14*
7115.5	1^-	6557.2 *16*	100 *37*	559.103	2^+	[E1]	B(E1)(W.u.)=2.4×10^{-4} *+15−9*
		7113.6 *19*	96 *35*	0.0	0^+	E1	B(E1)(W.u.)=1.8×10^{-4} *+11−6*
7128.4	1^-	6570.6 *19*	30 *22*	559.103	2^+	[E1]	B(E1)(W.u.)=3.8×10^{-4} *+31−19*
		7127.3 *13*	100 *30*	0.0	0^+	E1	B(E1)(W.u.)=0.00100 *+37−28*
7156.0	1^-	7155.6 *17*	100	0.0	0^+	E1	B(E1)(W.u.)=1.4×10^{-4} *+5−3*
7168.1	1^-	7167.7 *18*	100	0.0	0^+	E1	B(E1)(W.u.)=8.7×10^{-5} *+36−20*
7195.6	1^-	7195.2 *14*	100	0.0	0^+	E1	B(E1)(W.u.)=1.6×10^{-4} *+7−4*

$^{76}_{34}Se_{42}$-55

Adopted Levels, Gammas (continued)

γ(^{76}Se) (continued)

E_i(level)	J_i^π	E_γ[‡]	I_γ[‡]	E_f	J_f^π	Mult.[#]	Comments
7225.6	1^-	7225.2 *20*	100	0.0	0^+	E1	B(E1)(W.u.)=1.7×10^{-4} *+6−4*
7241.6	1^-	7241.2 *7*	100	0.0	0^+	E1	B(E1)(W.u.)=2.21×10^{-4} *+49−34*
7292.8	1^-	7292.4 *15*	100	0.0	0^+	E1	B(E1)(W.u.)=2.4×10^{-4} *+8−5*
7324.6	1^-	7324.2 *18*	100	0.0	0^+	E1	B(E1)(W.u.)=1.16×10^{-4} *+47−26*
7335.0	1^-	7334.6 *20*	100	0.0	0^+	E1	B(E1)(W.u.)=9.3×10^{-5} *+44−23*
7342.2	1^-	7341.8 *14*	100	0.0	0^+	E1	B(E1)(W.u.)=2.1×10^{-4} *+7−4*
7362.2	1^-	7361.8 *21*	100	0.0	0^+	E1	B(E1)(W.u.)=7.9×10^{-5} *+37−20*
7392.6	1^-	7392.2 *8*	100	0.0	0^+	E1	B(E1)(W.u.)=7.2×10^{-5} *+31−17*
7406.0	1^-	6846.0 *17*	45 *29*	559.103	2^+	[E1]	B(E1)(W.u.)=1.5×10^{-4} *+18−8*
		7406.0 *15*	100 *38*	0.0	0^+	E1	B(E1)(W.u.)=2.7×10^{-4} *+23−11*
7427.1	1^-	7426.7 *14*	100	0.0	0^+	E1	B(E1)(W.u.)=2.2×10^{-4} *+8−5*
7455.5	1^-	7455.1 *13*	100	0.0	0^+	E1	B(E1)(W.u.)=2.3×10^{-4} *+12−6*
7464.9	1^-	6905.8 *21*	82 *35*	559.103	2^+	[E1]	B(E1)(W.u.)=2.9×10^{-4} *+18−11*
		7464.3 *18*	100 *36*	0.0	0^+	E1	B(E1)(W.u.)=2.8×10^{-4} *+16−10*
7508.4	1^-	7508.0 *8*	100	0.0	0^+	E1	B(E1)(W.u.)=2.23×10^{-4} *+32−25*
7522.7	1^-	6963.9 *7*	56 *12*	559.103	2^+	(E1)	B(E1)(W.u.)=3.4×10^{-4} *+10−8*
		7521.7 *7*	100 *19*	0.0	0^+	E1	B(E1)(W.u.)=4.8×10^{-4} *+12−9*
7546.9	1^-	7546.5 *6*	100	0.0	0^+	E1	B(E1)(W.u.)=5.4×10^{-4} *+5−4*
7580.5	1^-	7580.1 *16*	100	0.0	0^+	E1	B(E1)(W.u.)=1.04×10^{-4} *+41−23*
7617.2	1^-	7616.8 *17*	100	0.0	0^+	E1	B(E1)(W.u.)=1.55×10^{-4} *+40−27*
7627.8	1^-	7627.4 *15*	100	0.0	0^+	E1	B(E1)(W.u.)=2.1×10^{-4} *+5−3*
7643.3	1^-	7642.9 *17*	100	0.0	0^+	E1	B(E1)(W.u.)=1.13×10^{-4} *+39−23*
7652.9	1^-	7652.5 *17*	100	0.0	0^+	E1	B(E1)(W.u.)=2.05×10^{-4} *+49−34*
7658.71	1^-	7658.3 *2*	100	0.0	0^+	E1	B(E1)(W.u.)=1.31×10^{-4} *+24−18*
7698.3	1^-	7137.0[&] *20*	54 *22*	559.103	2^+	[E1]	B(E1)(W.u.)=3.8×10^{-4} *+20−14*
		7698.2 *9*	100 *25*	0.0	0^+	E1	B(E1)(W.u.)=5.5×10^{-4} *+25−15*
7729.7	1^-	7729.3 *16*	100	0.0	0^+	E1	B(E1)(W.u.)=2.2×10^{-4} *+6−4*
7781.6	1^-	7781.2 *18*	100	0.0	0^+	E1	B(E1)(W.u.)=1.2×10^{-4} *+6−3*
7817.5	1^-	7817.1 *10*	100	0.0	0^+	E1	B(E1)(W.u.)=8.1×10^{-5} *+44−22*
7830.0	1^-	7829.6 *9*	100	0.0	0^+	E1	B(E1)(W.u.)=9×10^{-5} *+6−3*
7846.9	(15^+)	1095.5		6751.5	(14^+)		
		1346.0		6500.8	(13^+)		
7866.1	1^-	7865.7 *17*	100	0.0	0^+	E1	B(E1)(W.u.)=9.3×10^{-5} *+43−23*
7890.9	1^-	7890.5 *18*	100	0.0	0^+	E1	B(E1)(W.u.)=9.8×10^{-5} *+44−25*
7920.1	1^-	7919.7 *17*	100	0.0	0^+	E1	B(E1)(W.u.)=1.5×10^{-4} *+7−4*
7927.6	1^-	7927.2 *17*	100	0.0	0^+	E1	B(E1)(W.u.)=1.4×10^{-4} *+7−4*
7952.1	1^-	7951.6 *21*	100	0.0	0^+	E1	B(E1)(W.u.)=1.1×10^{-4} *+6−3*
7960.4	1^-	7959.9 *18*	100	0.0	0^+	E1	B(E1)(W.u.)=1.3×10^{-4} *+6−3*

$^{76}_{34}Se_{42}$-56

Adopted Levels, Gammas (continued)

γ(^{76}Se) (continued)

E_i(level)	J_i^π	E_γ[‡]	I_γ[‡]	E_f	J_f^π	Mult.[#]	Comments
7979.0	1^-	7978.5 *8*	100	0.0	0^+	E1	B(E1)(W.u.)=2.5×10^{-4} *+6−4*
8017.9	1^-	8017.4 *23*	100	0.0	0^+	E1	B(E1)(W.u.)=1.1×10^{-4} *+5−3*
8062.5	1^-	8062.0 *22*	100	0.0	0^+	E1	B(E1)(W.u.)=1.3×10^{-4} *+6−3*
8082.7	1^-	7521.3 *25*	100 *58*	559.103	2^+	[E1]	B(E1)(W.u.)=2.1×10^{-4} *+14−9*
		8084.2 *26*	85 *46*	0.0	0^+	E1	B(E1)(W.u.)=1.4×10^{-4} *+11−7*
8107.3	1^-	8106.8 *22*	100	0.0	0^+	E1	B(E1)(W.u.)=1.2×10^{-4} *+6−3*
8132.1	1^-	8131.6 *22*	100	0.0	0^+	E1	B(E1)(W.u.)=1.23×10^{-4} *+50−29*
8154.9	1^-	8154.4 *21*	100	0.0	0^+	E1	B(E1)(W.u.)=1.07×10^{-4} *+42−25*
8170.1	1^-	8169.6 *22*	100	0.0	0^+	E1	B(E1)(W.u.)=1.15×10^{-4} *+45−26*
8198.0	1^-	6982.8 *15*	92 *22*	1216.154	2^+	(E1)	B(E1)(W.u.)=7.0×10^{-4} *+19−15*
		8196.5 *13*	100 *15*	0.0	0^+	E1	B(E1)(W.u.)=4.7×10^{-4} *+13−9*
8210.5	1^-	8210.0 *20*	100	0.0	0^+	E1	B(E1)(W.u.)=1.7×10^{-4} *+6−4*
8222.5	1^-	8222.0 *20*	100	0.0	0^+	E1	B(E1)(W.u.)=2.7×10^{-4} *+9−6*
8251.9	1^-	8251.4 *23*	100	0.0	0^+	E1	B(E1)(W.u.)=5.6×10^{-5} *+37−17*
8268.5	(16^+)	1517.0		6751.5	(14^+)		
8288.5	1^-	8288.0 *23*	100	0.0	0^+	E1	B(E1)(W.u.)=1.8×10^{-4} *+6−4*
8316.7	1^-	8316.2 *22*	100	0.0	0^+	E1	B(E1)(W.u.)=1.1×10^{-4} *+6−3*
8340.7	1^-	8340.2 *10*	100	0.0	0^+	E1	B(E1)(W.u.)=1.5×10^{-4} *+7−3*
8394.9	1^-	8394.4 *19*	100	0.0	0^+	E1	B(E1)(W.u.)=2.55×10^{-4} *+42−31*
8453.5	1^-	8453.0 *21*	100	0.0	0^+	E1	B(E1)(W.u.)=2.2×10^{-4} *+7−5*
8486.5	1^-	8486.0 *18*	100	0.0	0^+	E1	B(E1)(W.u.)=6.8×10^{-4} *+23−14*
8528.1	1^-	7970.8 *6*	100 *28*	559.103	2^+	(E1)	B(E1)(W.u.)=7.9×10^{-4} *+25−19* E_γ: not used in the fitting procedure due to its poor fit. Level-energy difference=7967.4.
		8526.0 *5*	97 *22*	0.0	0^+	E1	B(E1)(W.u.)=6.2×10^{-4} *+22−15*
8539.8	1^-	7979.7 *13*	100 *29*	559.103	2^+	[E1]	B(E1)(W.u.)=4.9×10^{-4} *+15−12*
		8540.4 *20*	61 *24*	0.0	0^+	E1	B(E1)(W.u.)=2.4×10^{-4} *+10−8*
8571.7	1^-	8571.2 *19*	100	0.0	0^+	E1	B(E1)(W.u.)=3.5×10^{-4} *+15−8*
8573.8	(16^+)	1489.3		7084.5	(14^+)		
8590.1	1^-	8589.6 *20*	100	0.0	0^+	E1	B(E1)(W.u.)=2.6×10^{-4} *+14−7*
8654.9	1^-	8654.4 *19*	100	0.0	0^+	E1	B(E1)(W.u.)=2.9×10^{-4} *+13−7*
8709.9	1^-	8709.4 *13*	100	0.0	0^+	E1	B(E1)(W.u.)=3.4×10^{-4} *+7−5*
8719.5	1^-	8719.0 *21*	100	0.0	0^+	E1	B(E1)(W.u.)=1.9×10^{-4} *+10−5*
8770.9	1^-	8770.4 *23*	100	0.0	0^+	E1	B(E1)(W.u.)=2.9×10^{-4} *+14−7*
8843.4	1^-	8283.3 *20*	47 *29*	559.103	2^+	[E1]	B(E1)(W.u.)=2.6×10^{-4} *+28−13*
		8843.2 *18*	100 *38*	0.0	0^+	E1	B(E1)(W.u.)=4.5×10^{-4} *+40−18*
8864.8	1^-	8864.2 *20*	100	0.0	0^+	E1	B(E1)(W.u.)=1.9×10^{-4} *+9−5*
8890.8	1^-	8890.2 *19*	100	0.0	0^+	E1	B(E1)(W.u.)=2.6×10^{-4} *+10−6*
8918.8	1^-	8918.2 *19*	100	0.0	0^+	E1	B(E1)(W.u.)=2.5×10^{-4} *+10−6*

$^{76}_{34}Se_{42}$-57

Adopted Levels, Gammas (continued)

γ(^{76}Se) (continued)

E_i(level)	J_i^π	E_γ[‡]	I_γ[‡]	E_f	J_f^π	Mult.[#]	Comments
8935.6	1^-	8935.0 *20*	100	0.0	0^+	E1	B(E1)(W.u.)=2.0×10^{-4} *+9−5*
9394.7	(17^+)	1547.8		7846.9	(15^+)		
9963.8	(18^+)	1695.3		8268.5	(16^+)		
11147.1	(19^+)	1752.4		9394.7	(17^+)		
(11154.19)	$2^+,3^+$	8284.0 *5*	4.1 *3*	2869.34	$(1^+,2^+)$		
		8293.2 *5*	3.8 *3*	2859.781	4^-		
		8336.5 *5*	8.0 *9*	2817.24	(2^+)		
		8341.8 *5*	8.1 *9*	2812.130	(3^+)		
		8483.7 *4*	11.2 *6*	2669.904	2^-		
		8639.6 *10*	0.61 *11*	2514.681	2^+		
		8724.4 *5*	100 *5*	2429.131	3^-		
		9027.4 *13*	0.40 *10*	2127.224	$(2)^+$		
		9127.3 *7*	2.45 *16*	2026.020	4^+		
		9365.9 *9*	2.07 *14*	1787.655	2^+		
		9464.9 *9*	2.06 *14*	1688.971	3^+		
		9937.5 *14*	4.7 *4*	1216.154	2^+		
		10031.5 *16*	1.22 *10*	1122.279	0^+		
		10594.5 *25*	16.0 *9*	559.103	2^+		
		11153.0 *40*	1.01 *11*	0.0	0^+		
11774.8	(20^+)	1810.9		9963.8	(18^+)		
13681.3	(22^+)	1906.5		11774.8	(20^+)		

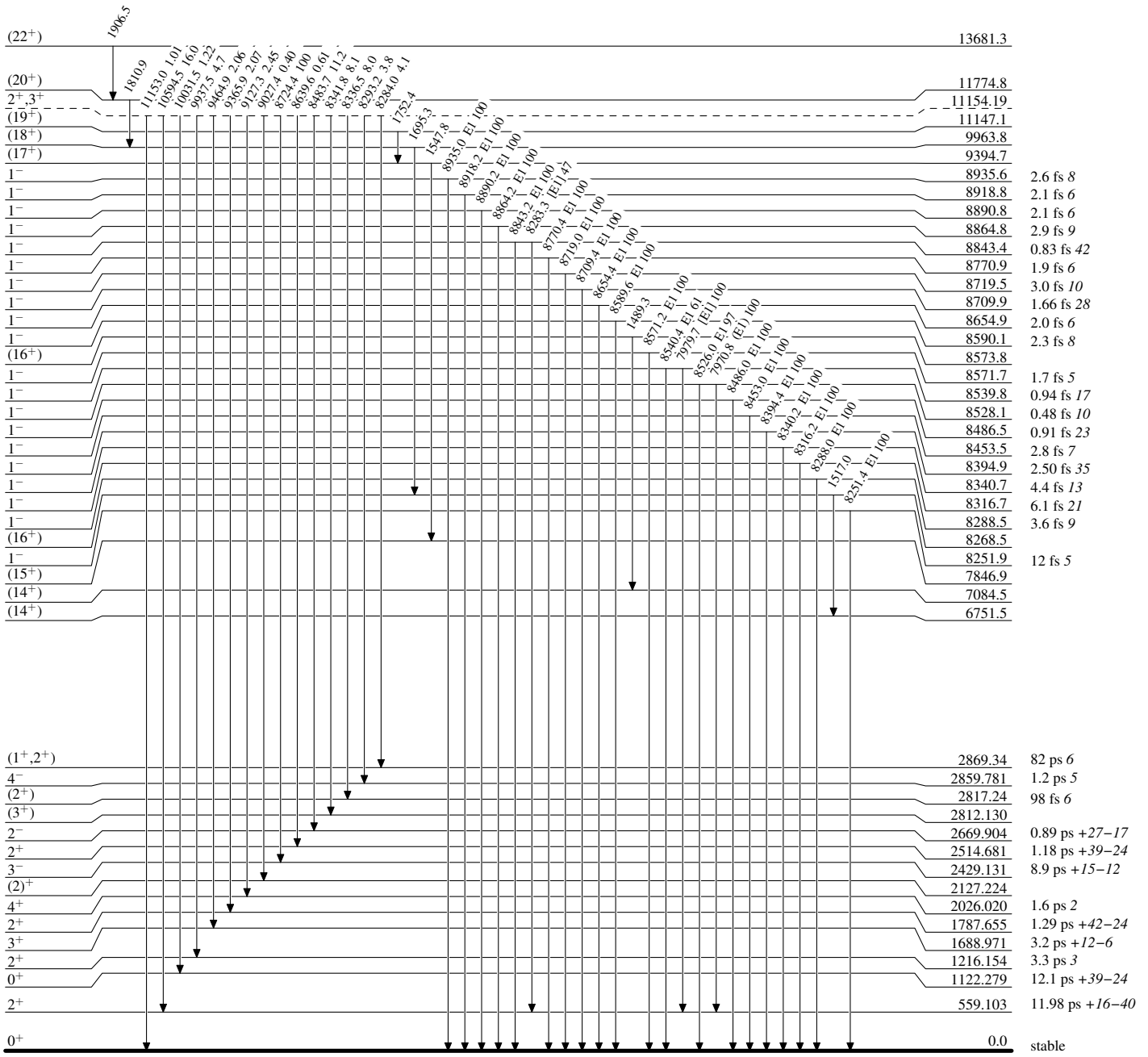
† Additional information 4.
‡ Weighted average of available values from various γ-ray studies.
# From γ(θ), γγ(θ), γ(lin pol) in (α,2nγ), ^{76}As β^- and some data in ^{76}Br ε decay, unless otherwise noted.
@ The γ from (γ,γ′); not given in (pol γ,γ′).
& The γ from (pol γ,γ′); not given in (γ,γ′).
a Multiply placed.
b Placement of transition in the level scheme is uncertain.

$^{76}_{34}Se_{42}$-58

Adopted Levels, Gammas

Level Scheme

Intensities: Relative photon branching from each level

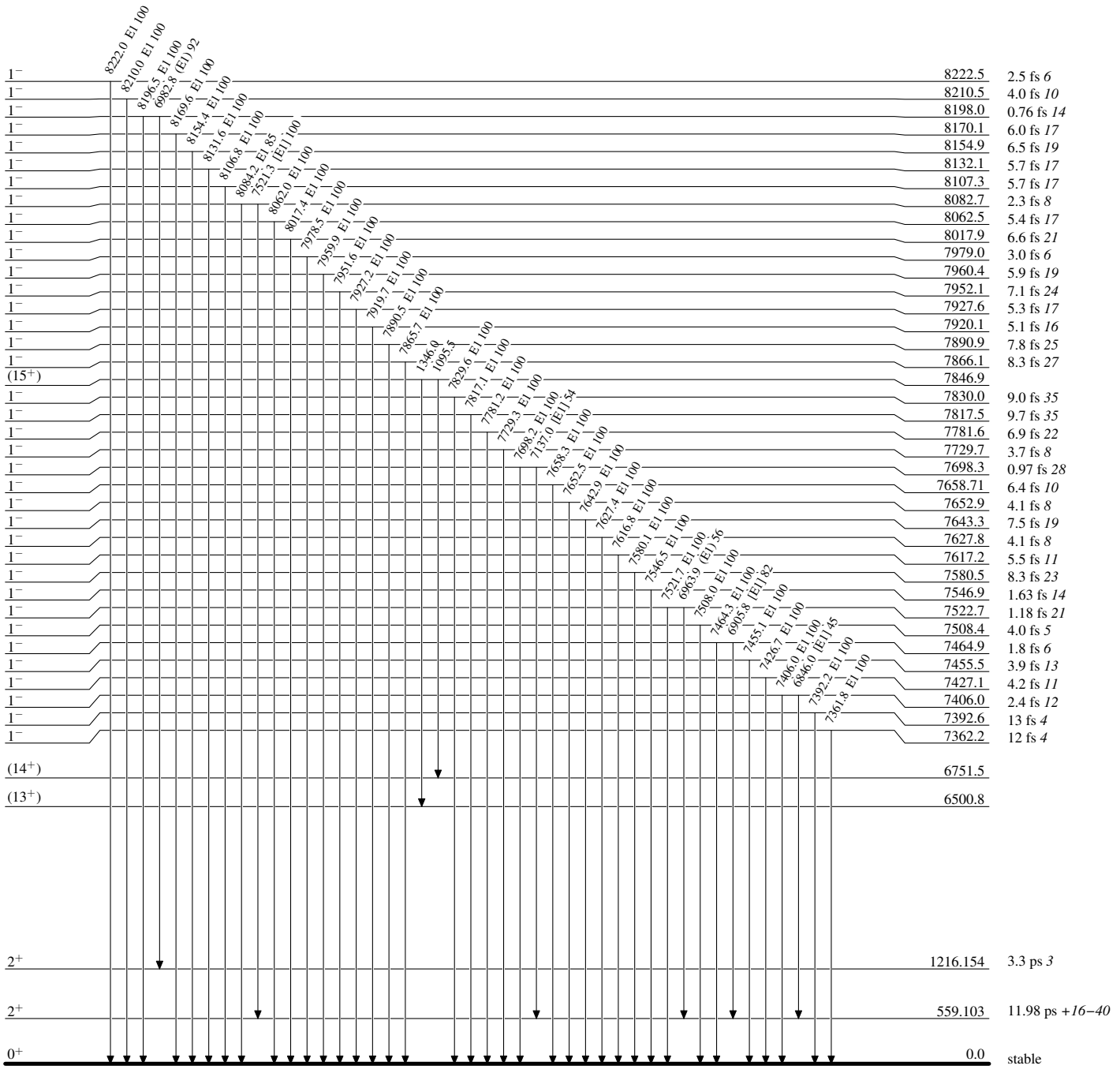


$^{76}_{34}Se_{42}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

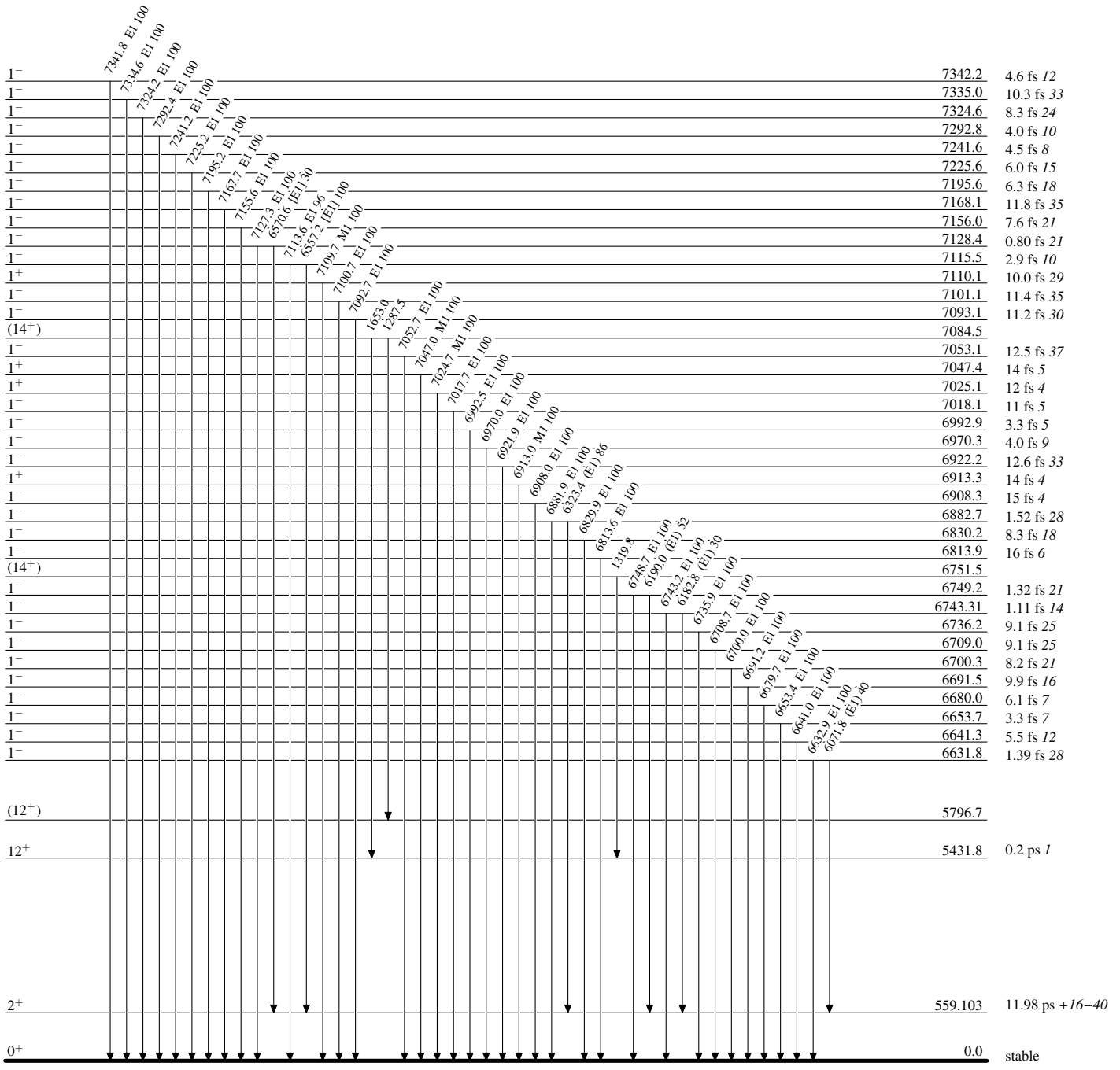


$^{76}_{34}Se_{42}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

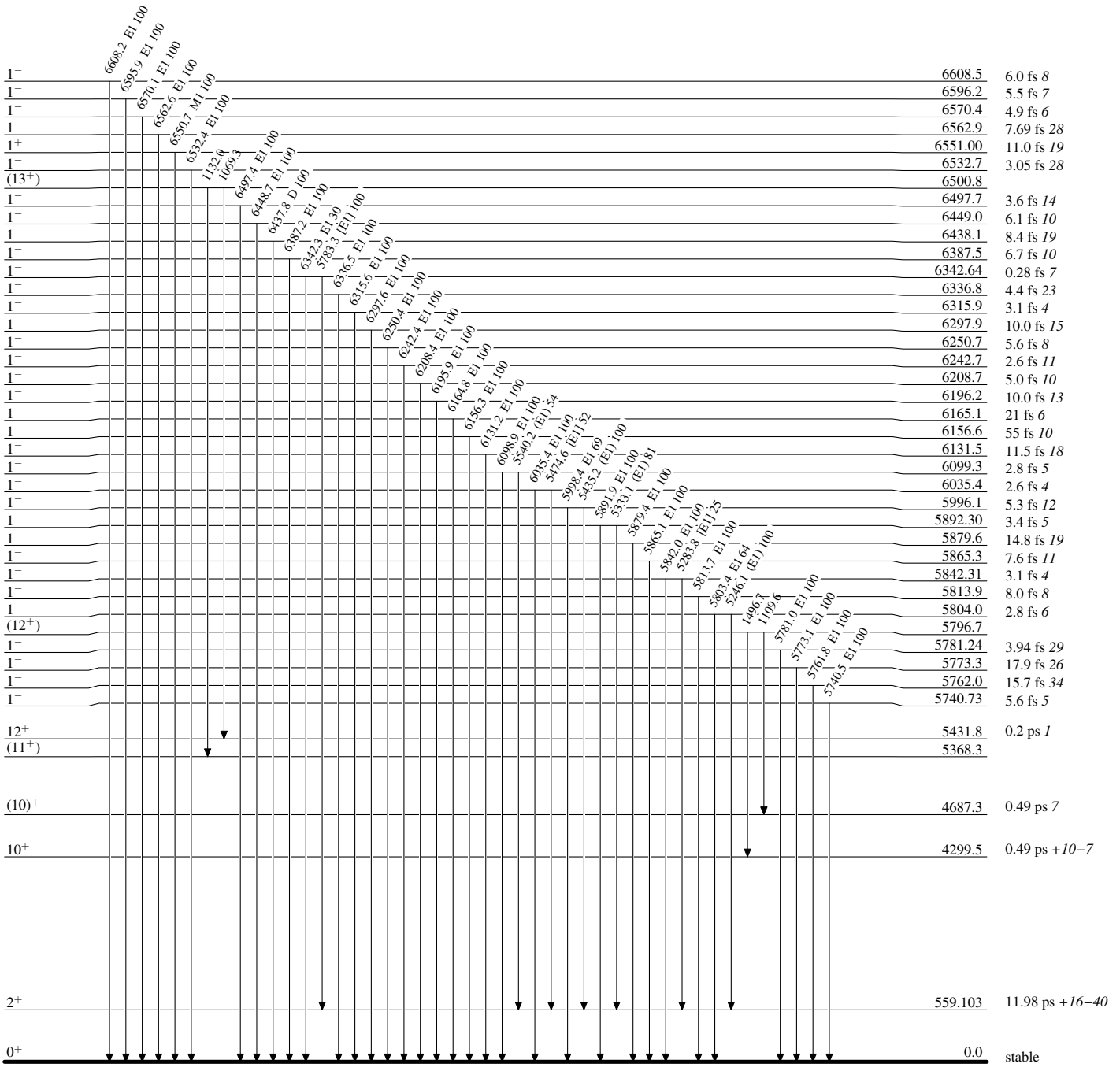


$^{76}_{34}Se_{42}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

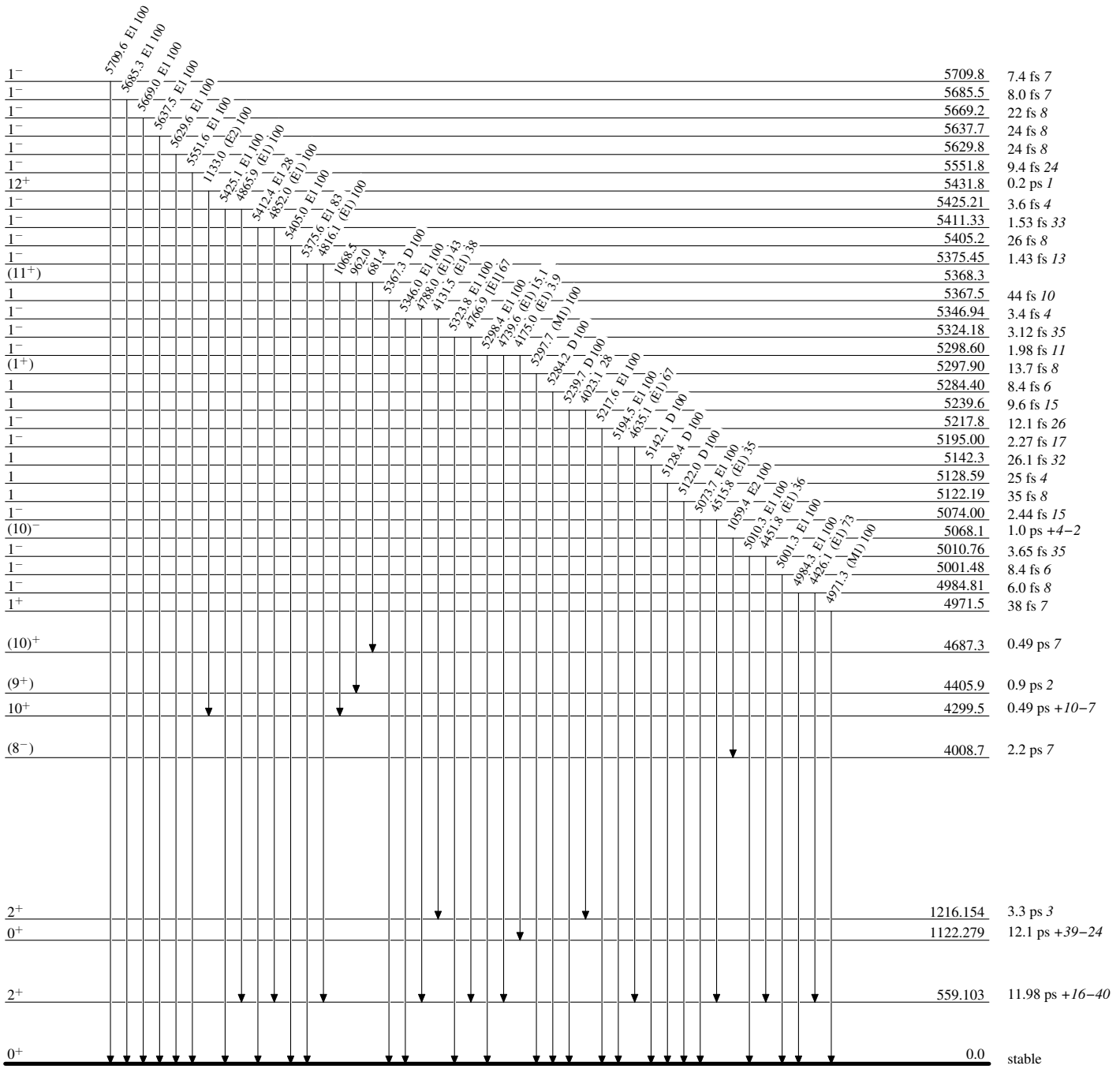


$^{76}_{34}Se_{42}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

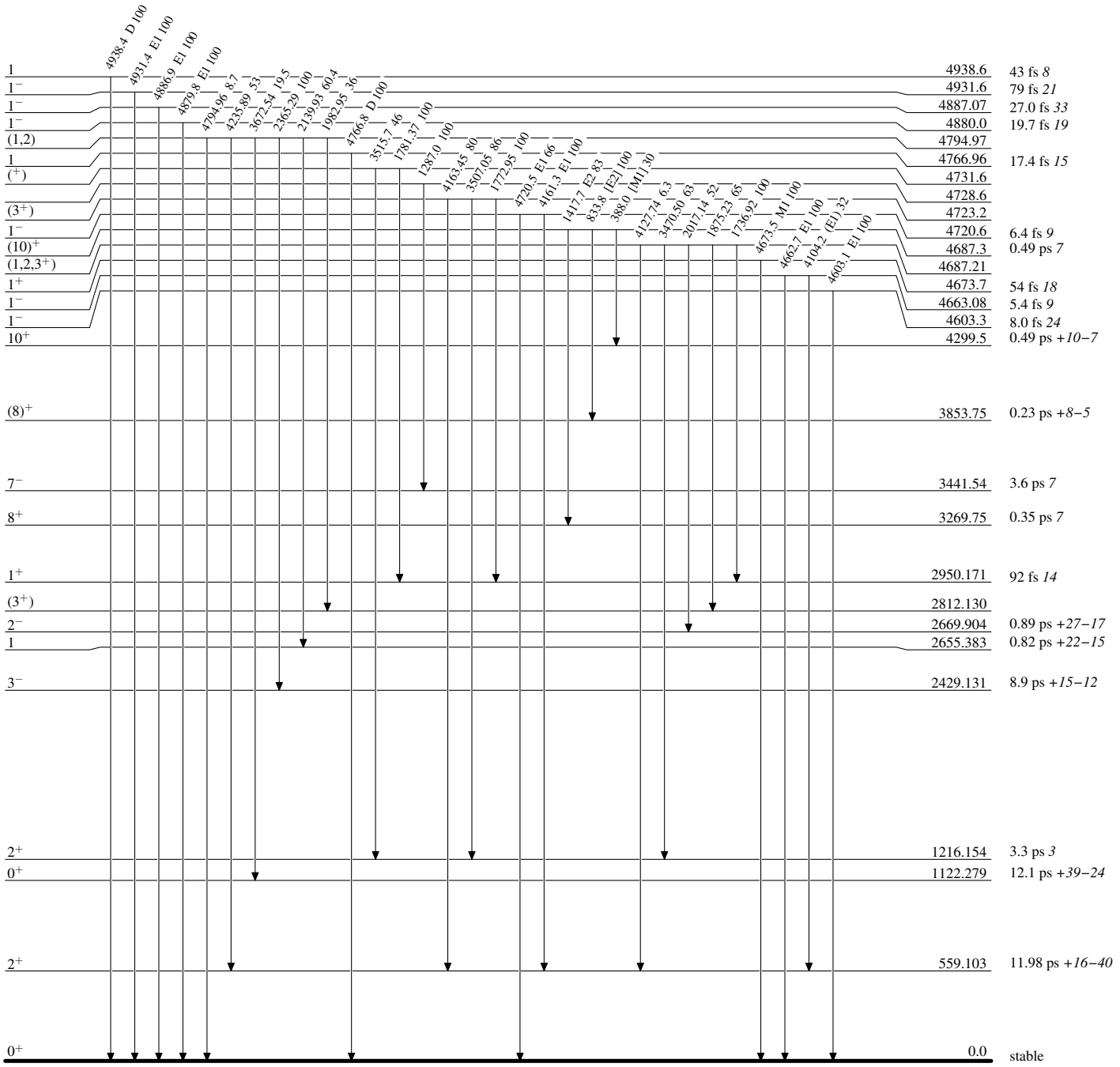


$^{76}_{34}Se_{42}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

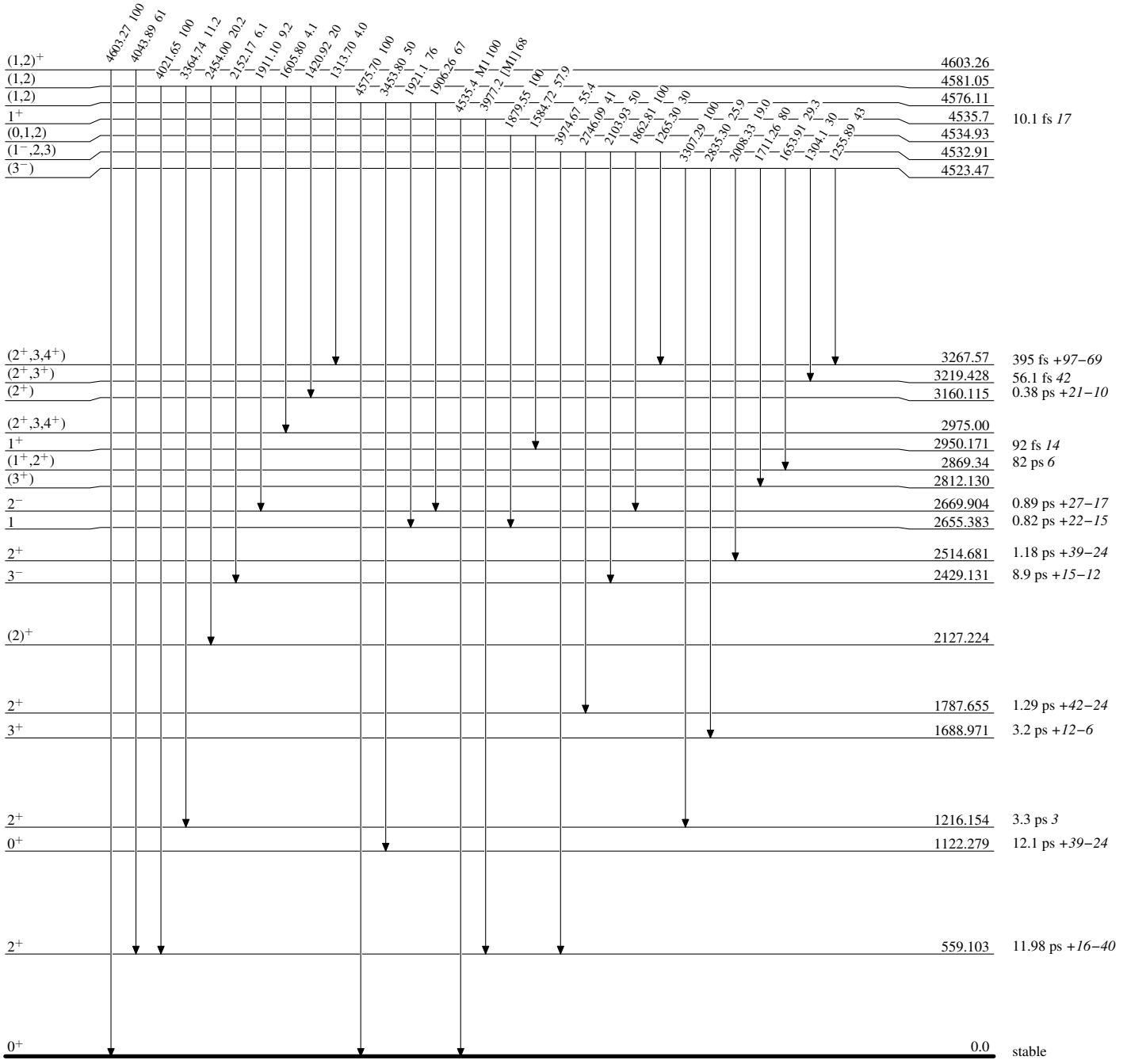


$^{76}_{34}Se_{42}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

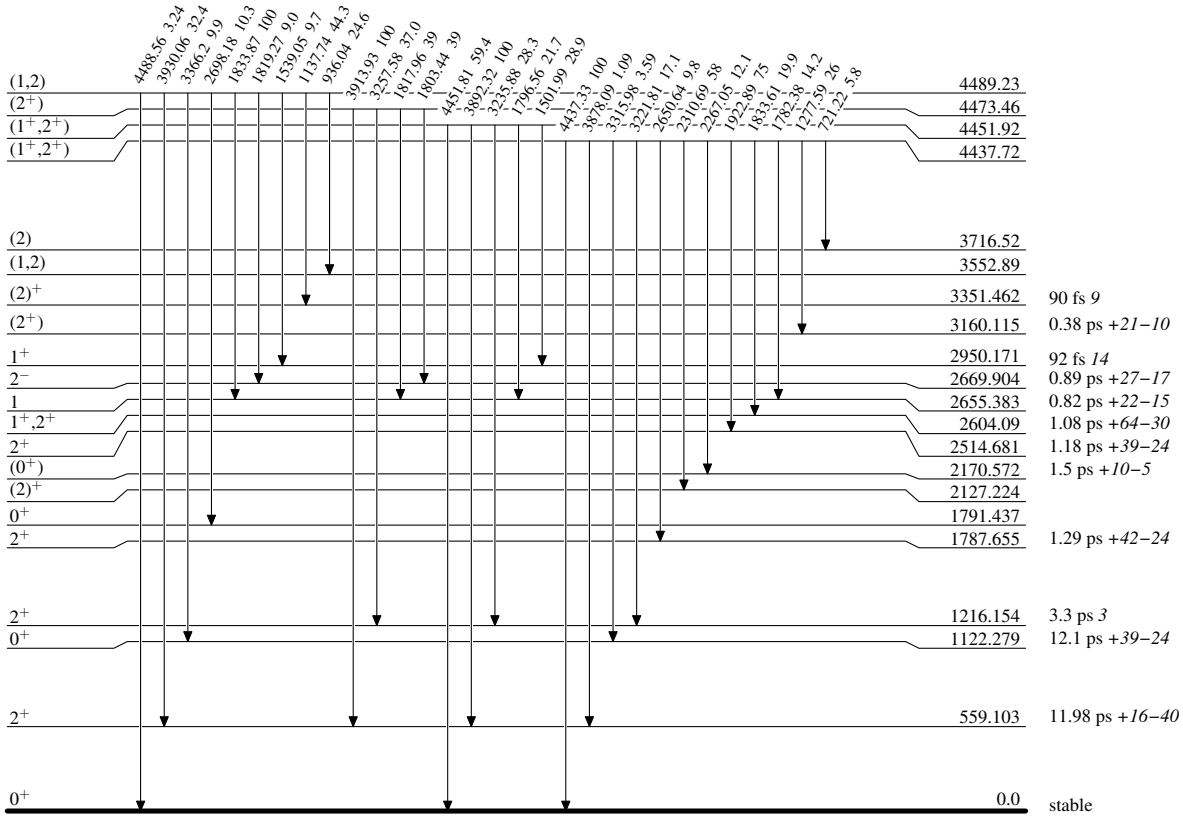


$^{76}_{34}Se_{42}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level



$^{76}_{34}Se_{42}$

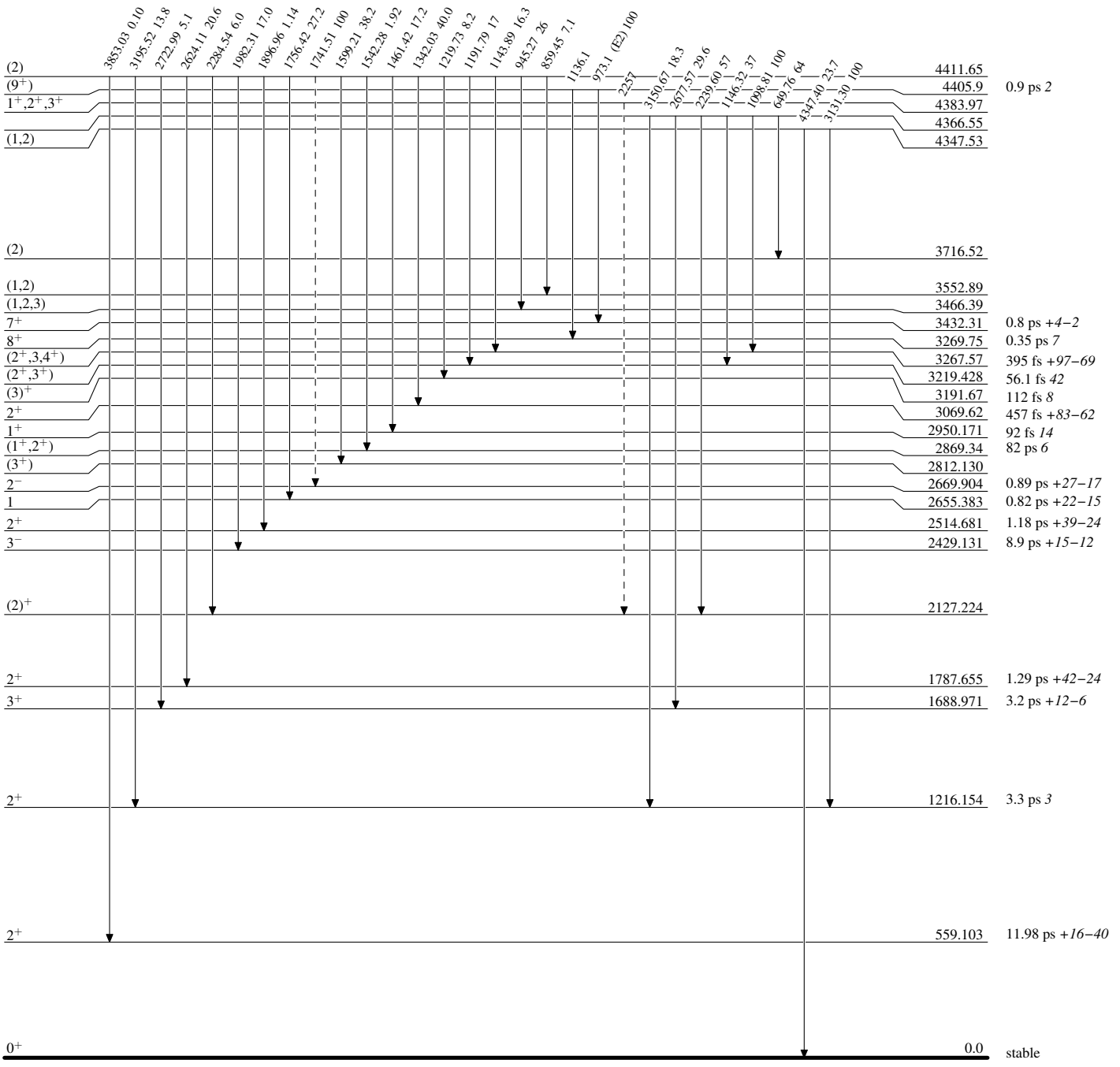
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

γ Decay (Uncertain)

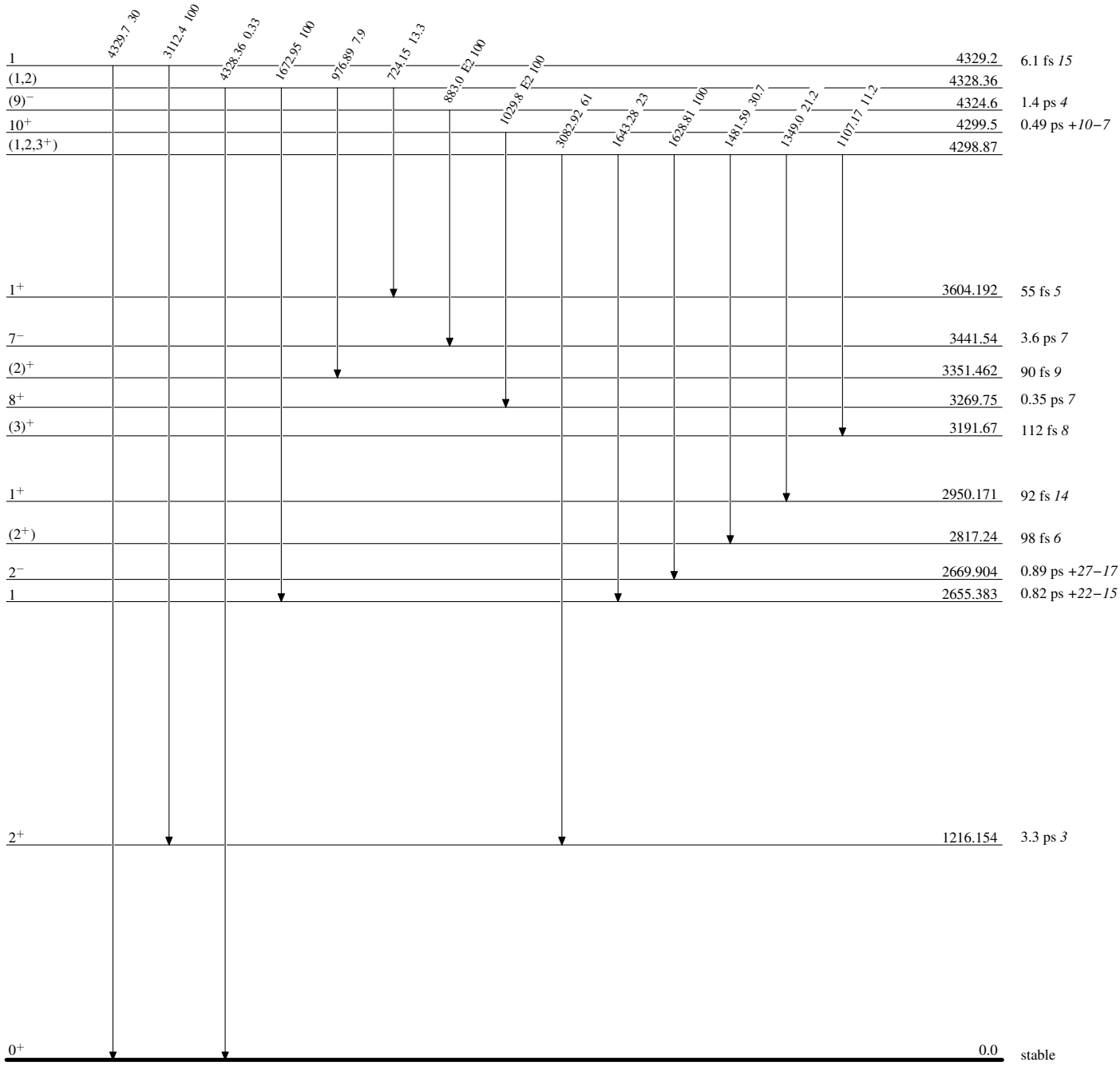


$^{76}_{34}Se_{42}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

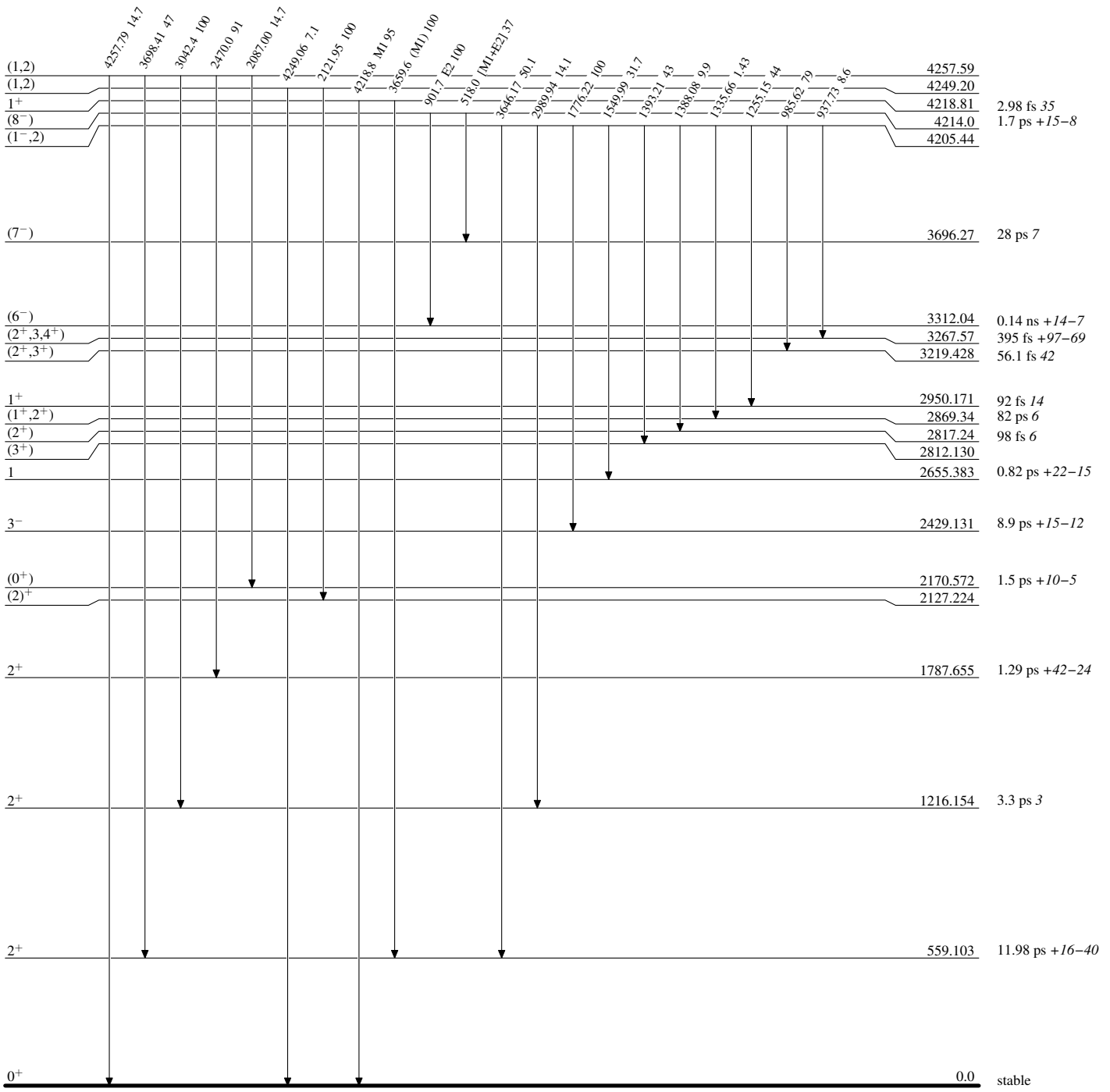


$^{76}_{34}Se_{42}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

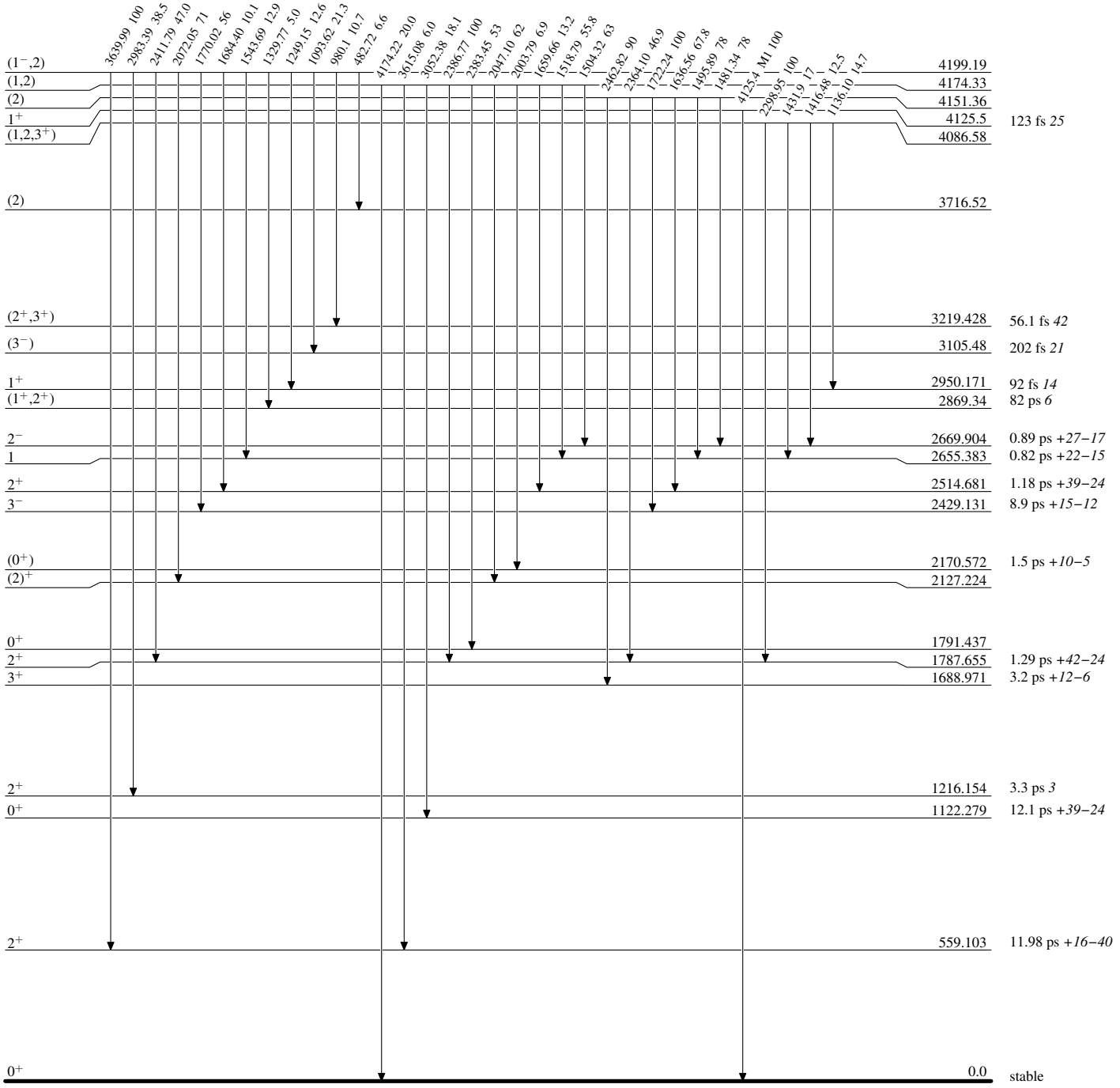


$^{76}_{34}Se_{42}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

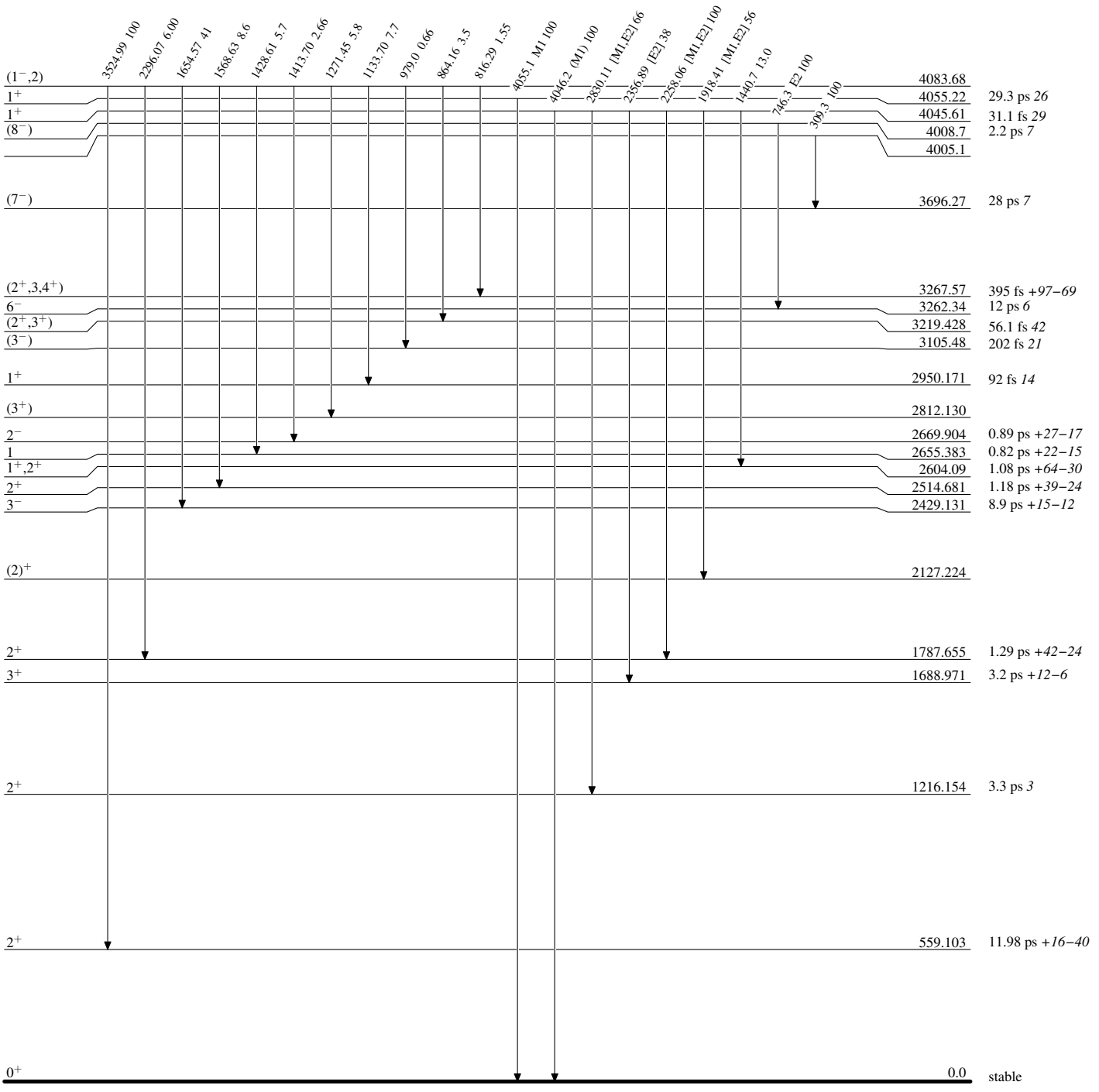


$^{76}_{34}Se_{42}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

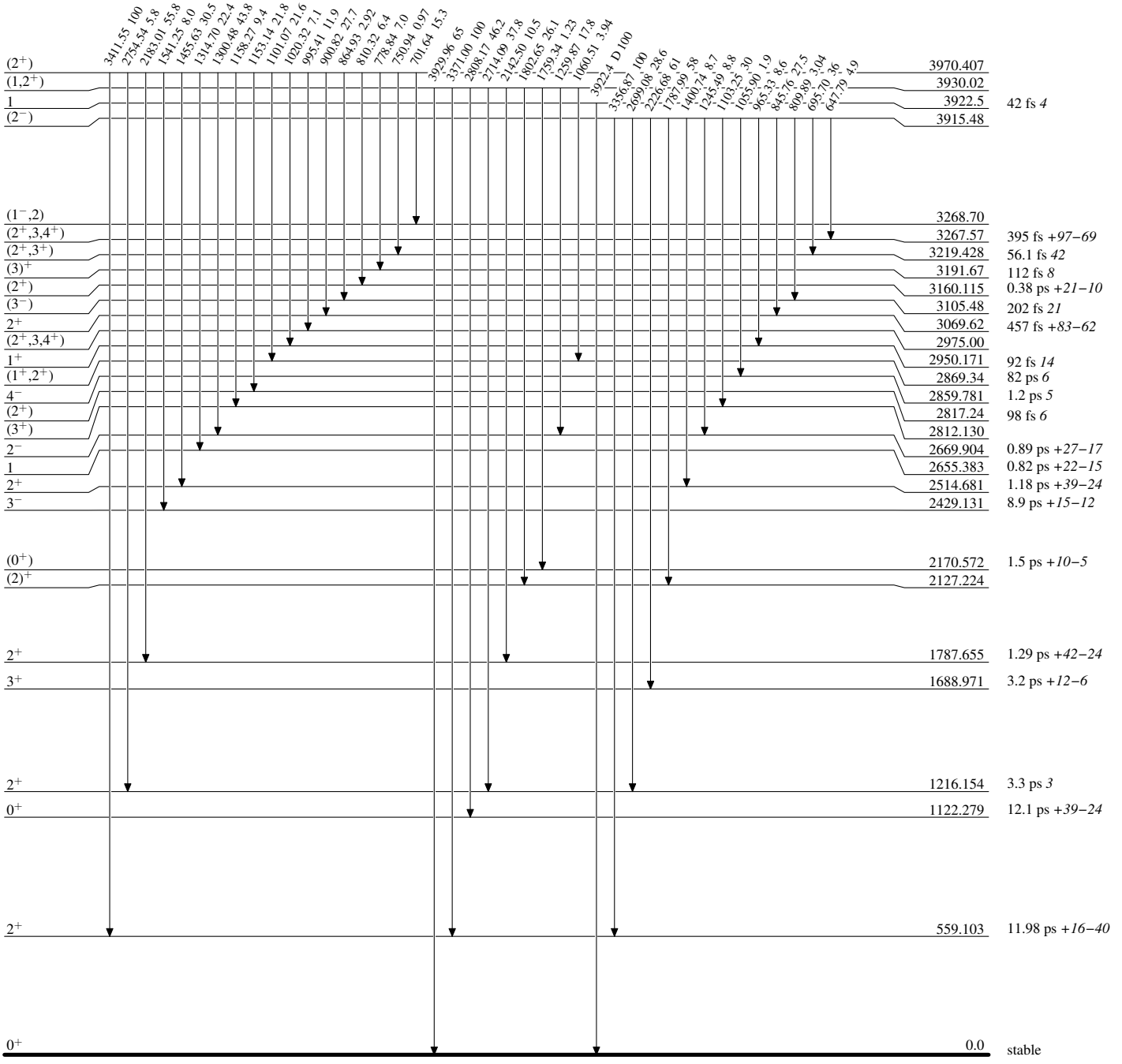


$^{76}_{34}Se_{42}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

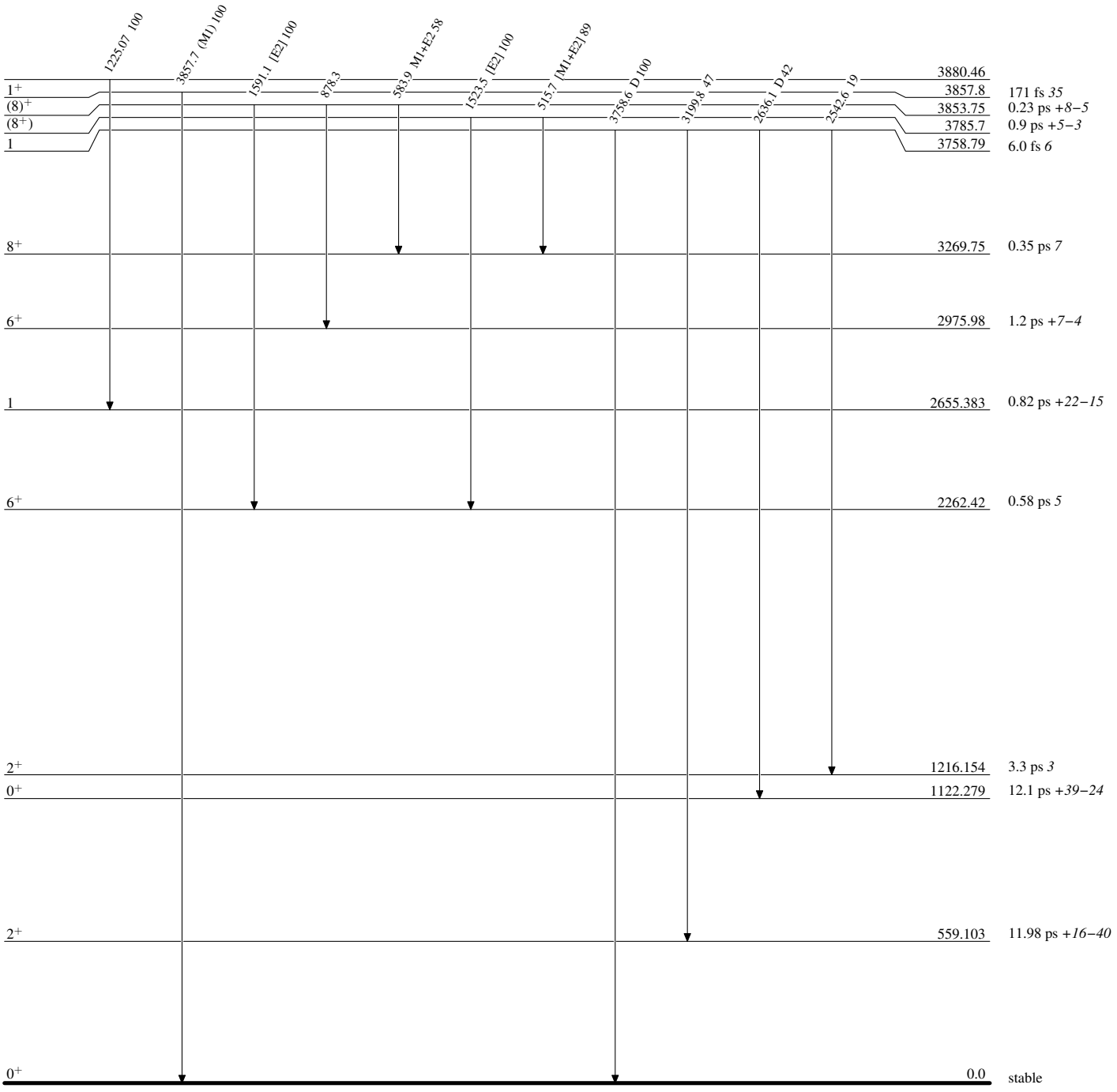


$^{76}_{34}Se_{42}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level



$^{76}_{34}Se_{42}$

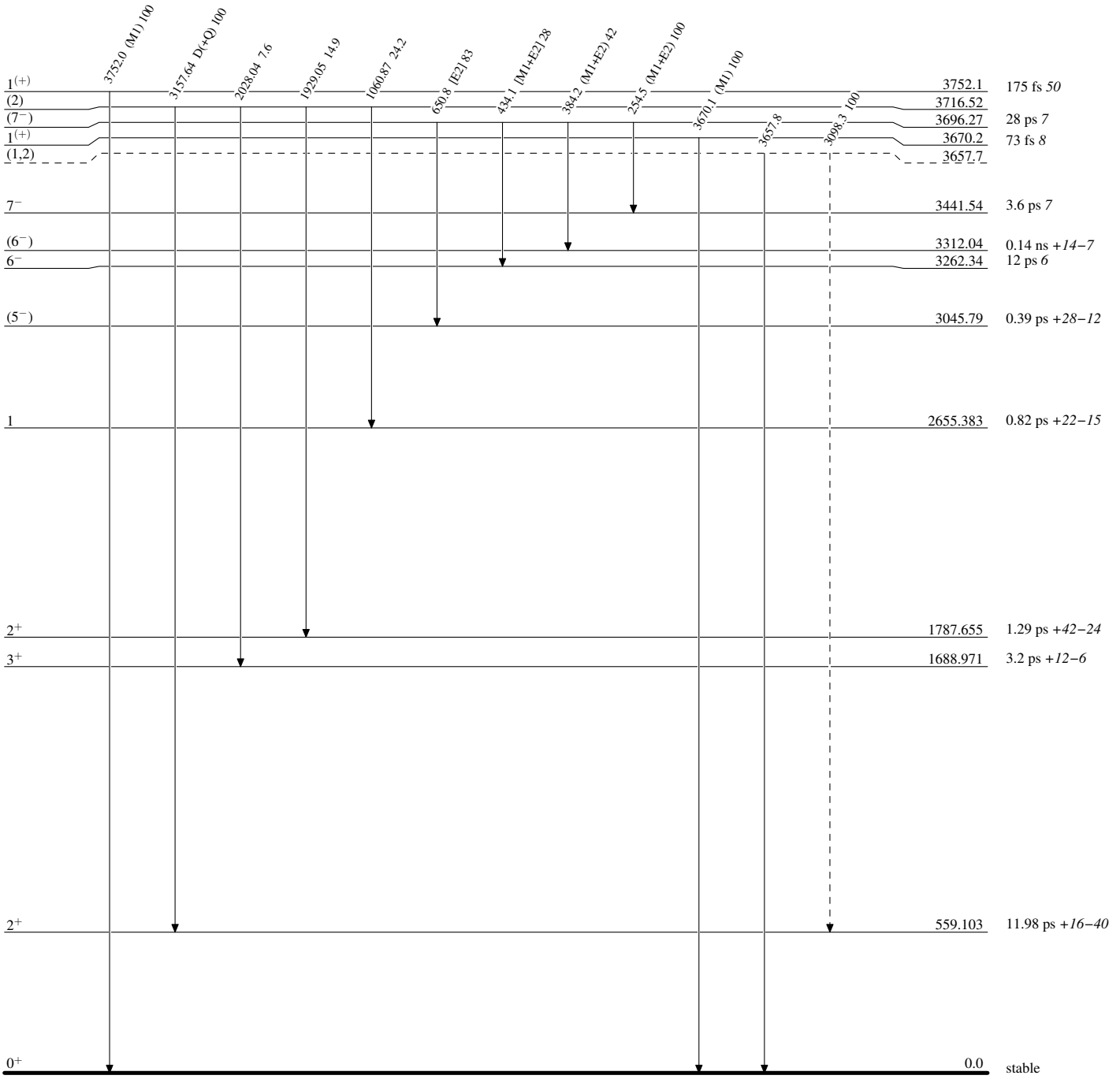
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

γ Decay (Uncertain)

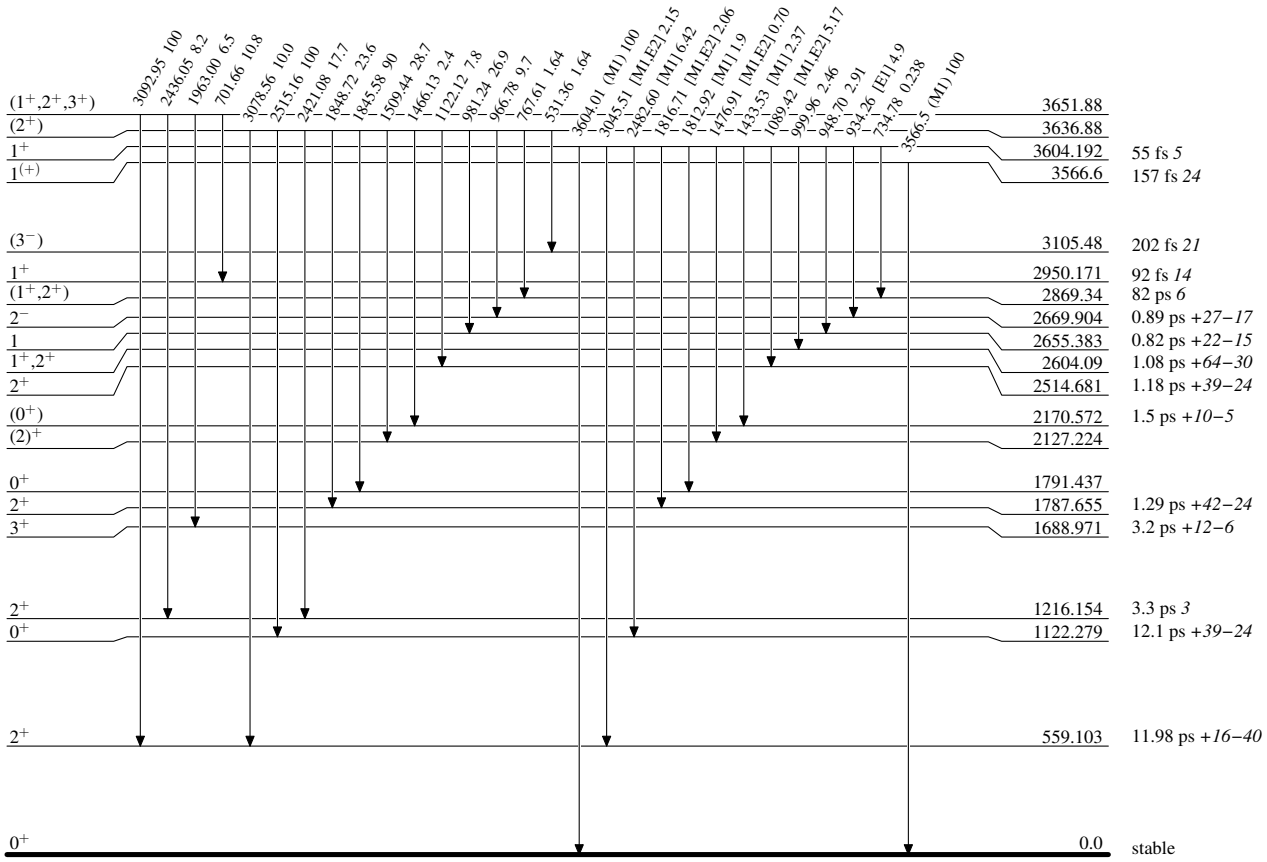


$^{76}_{34}Se_{42}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

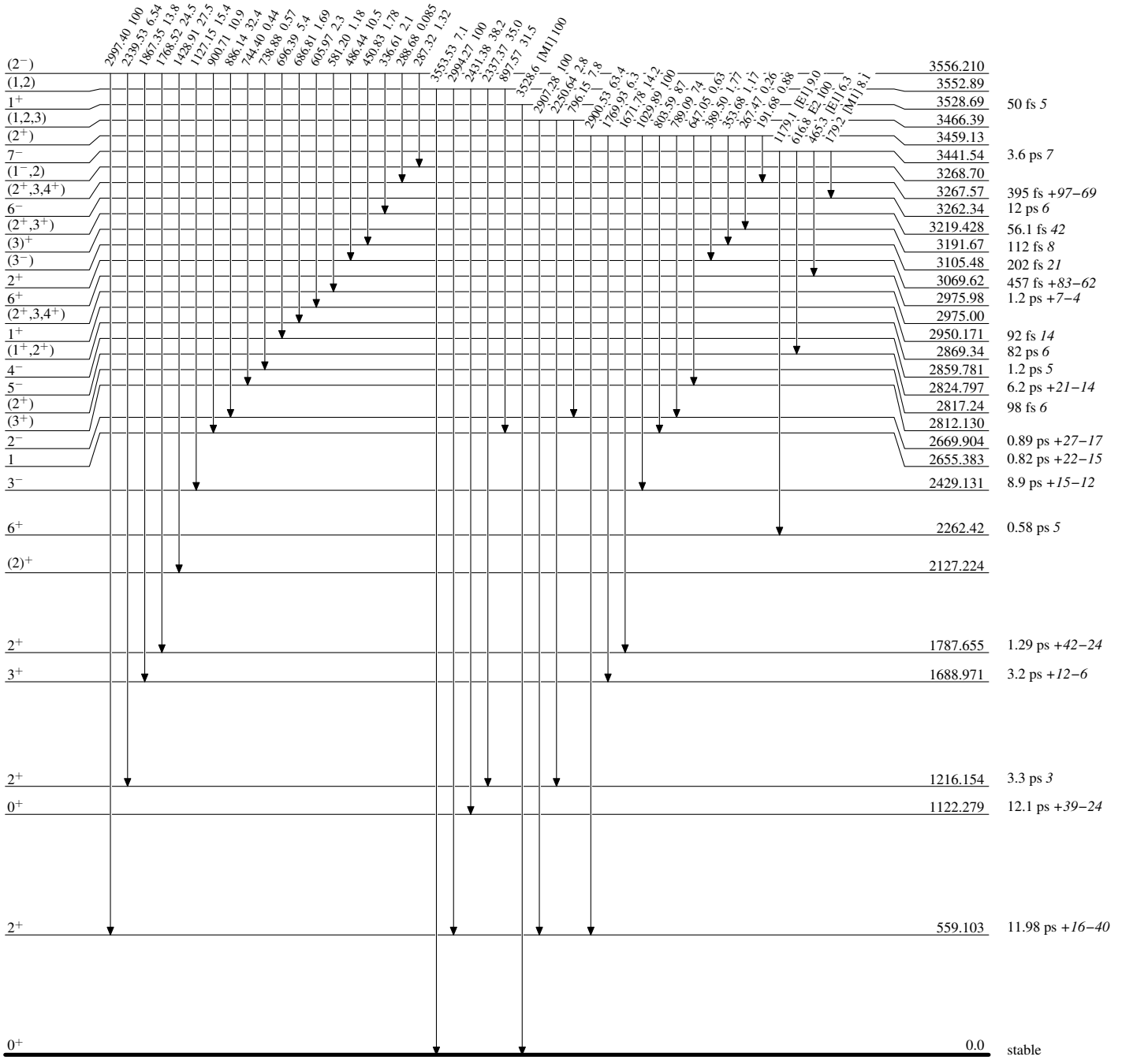


$^{76}_{34}Se_{42}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

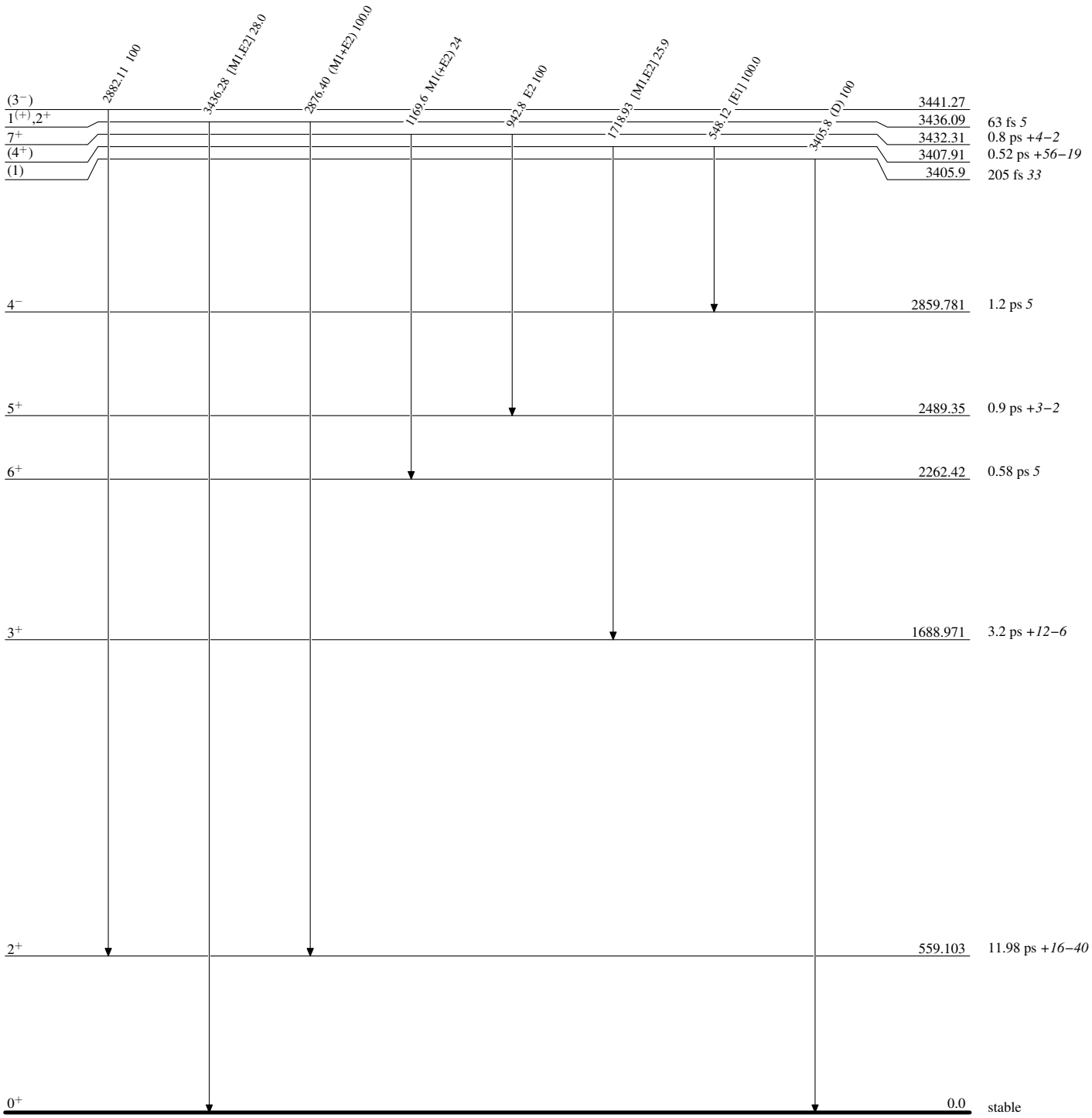


$^{76}_{34}Se_{42}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

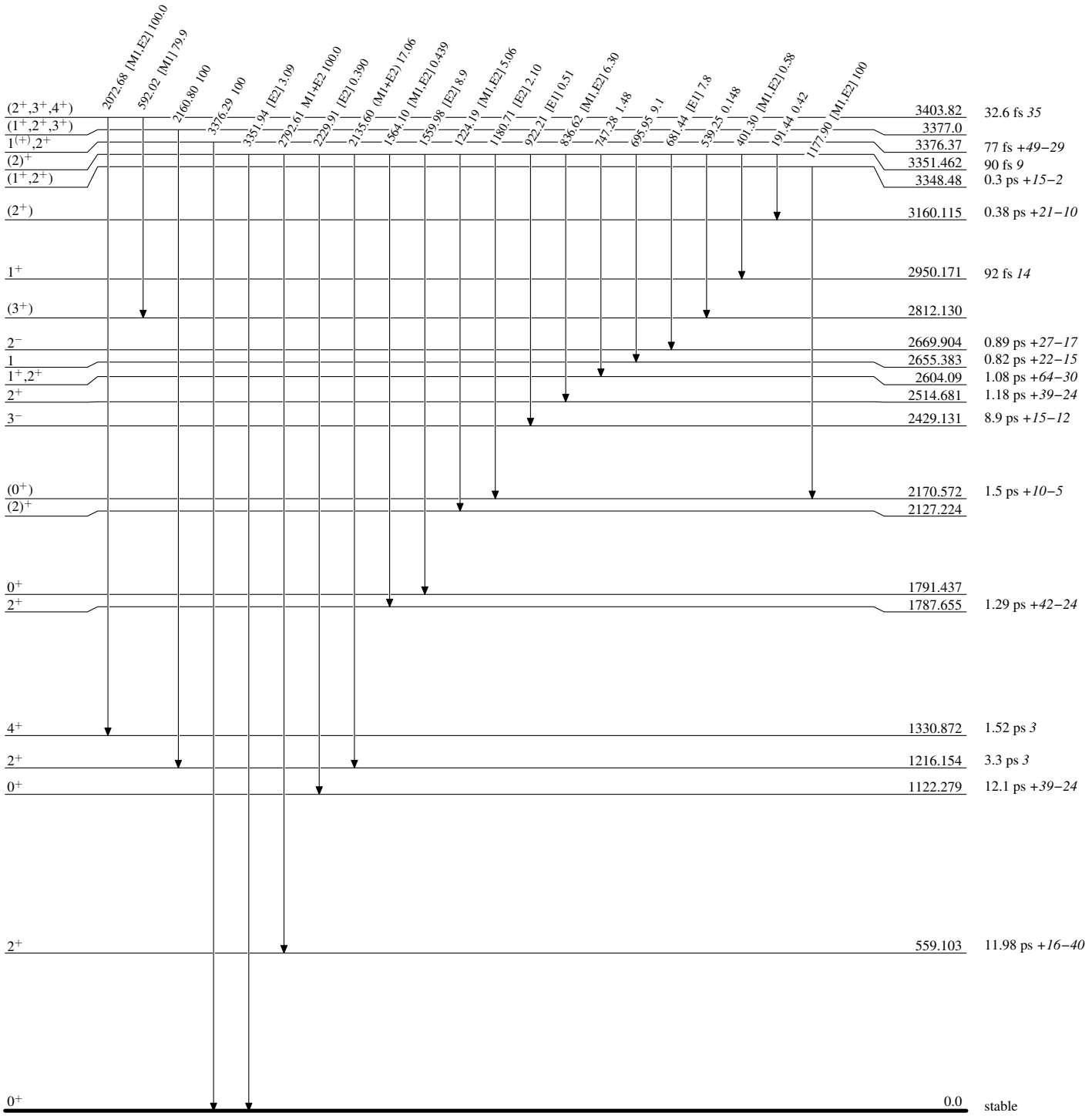


$^{76}_{34}Se_{42}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

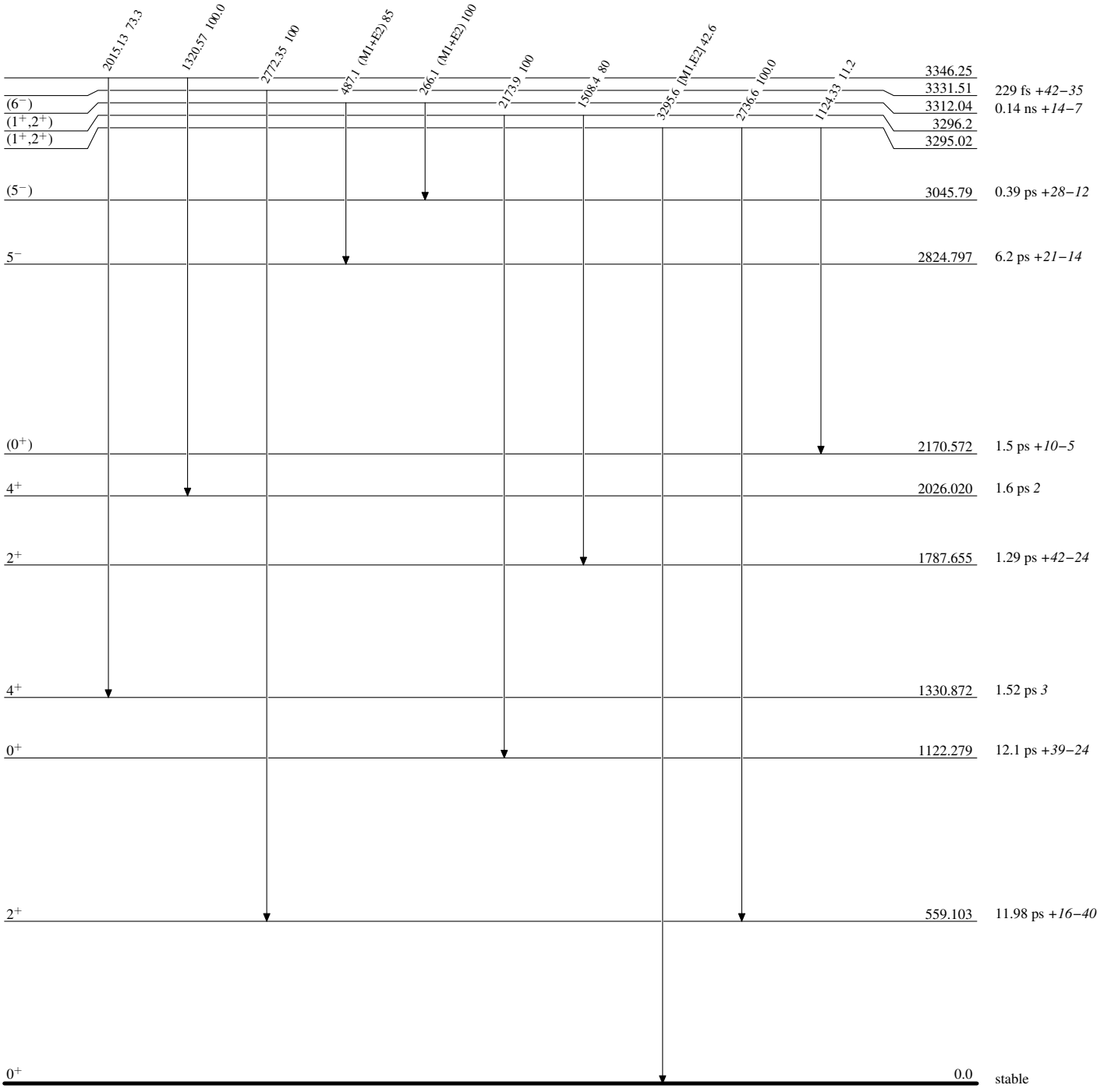


$^{76}_{34}Se_{42}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

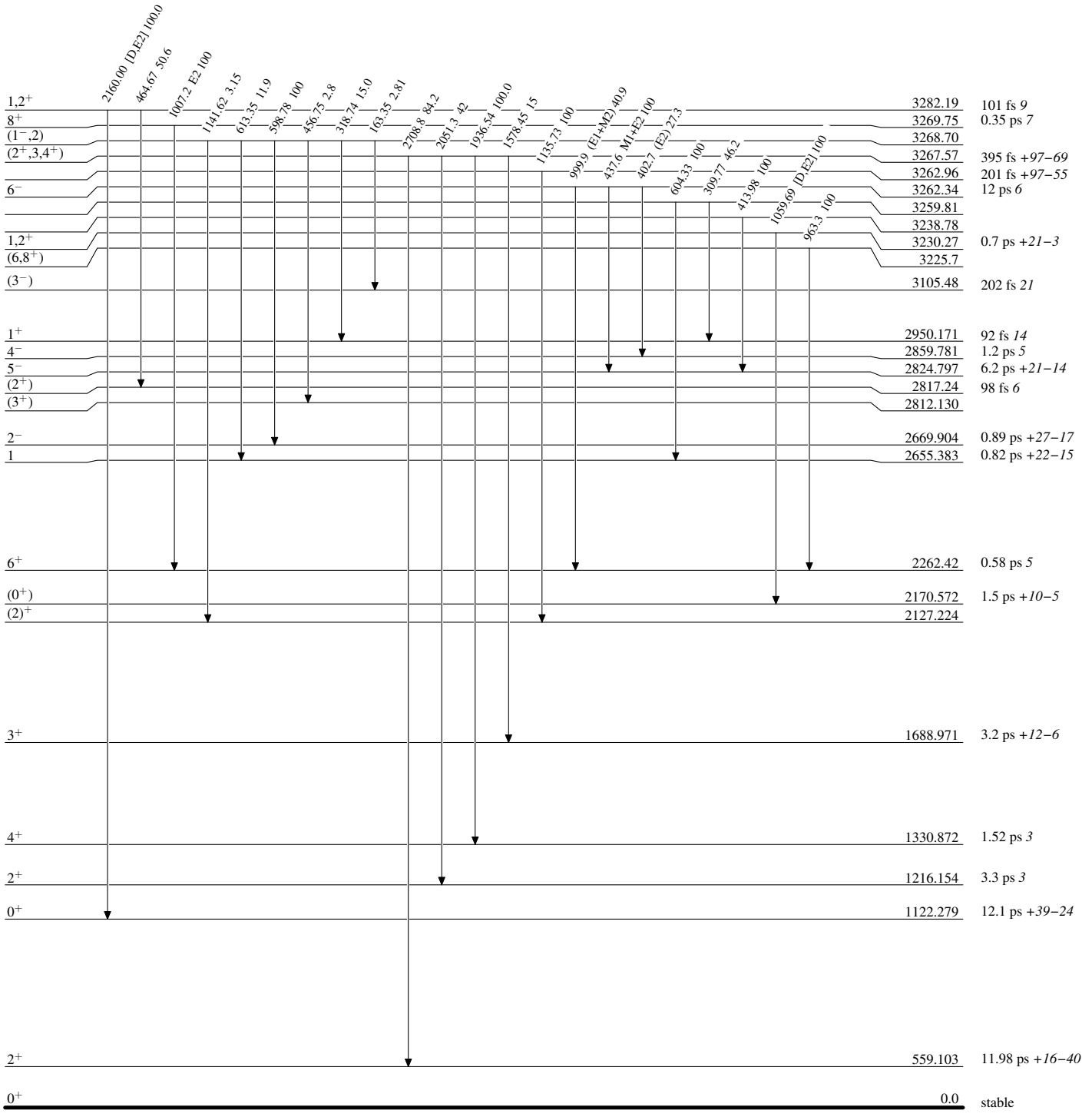


$^{76}_{34}Se_{42}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

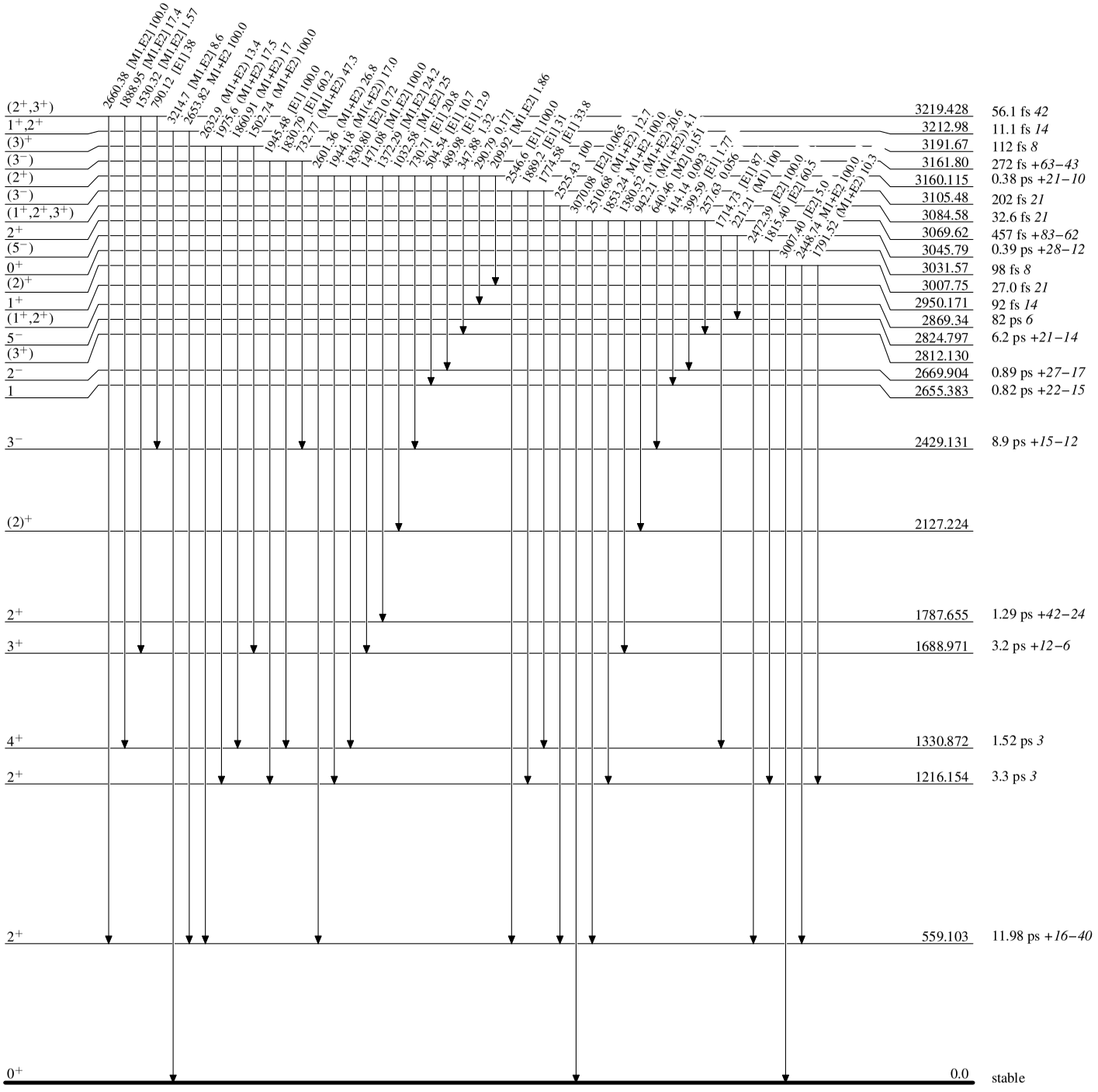


$^{76}_{34}Se_{42}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

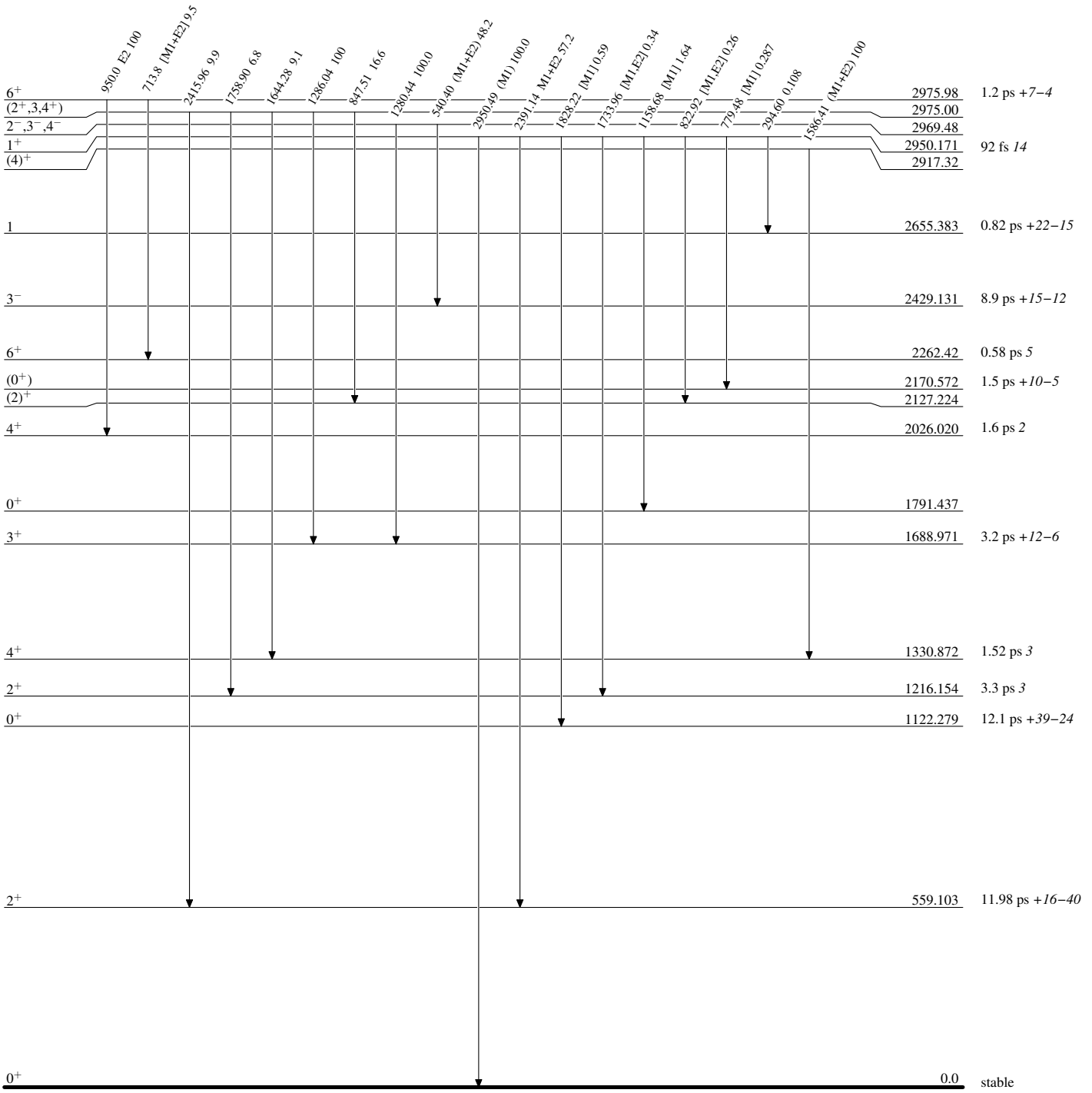


$^{76}_{34}Se_{42}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level



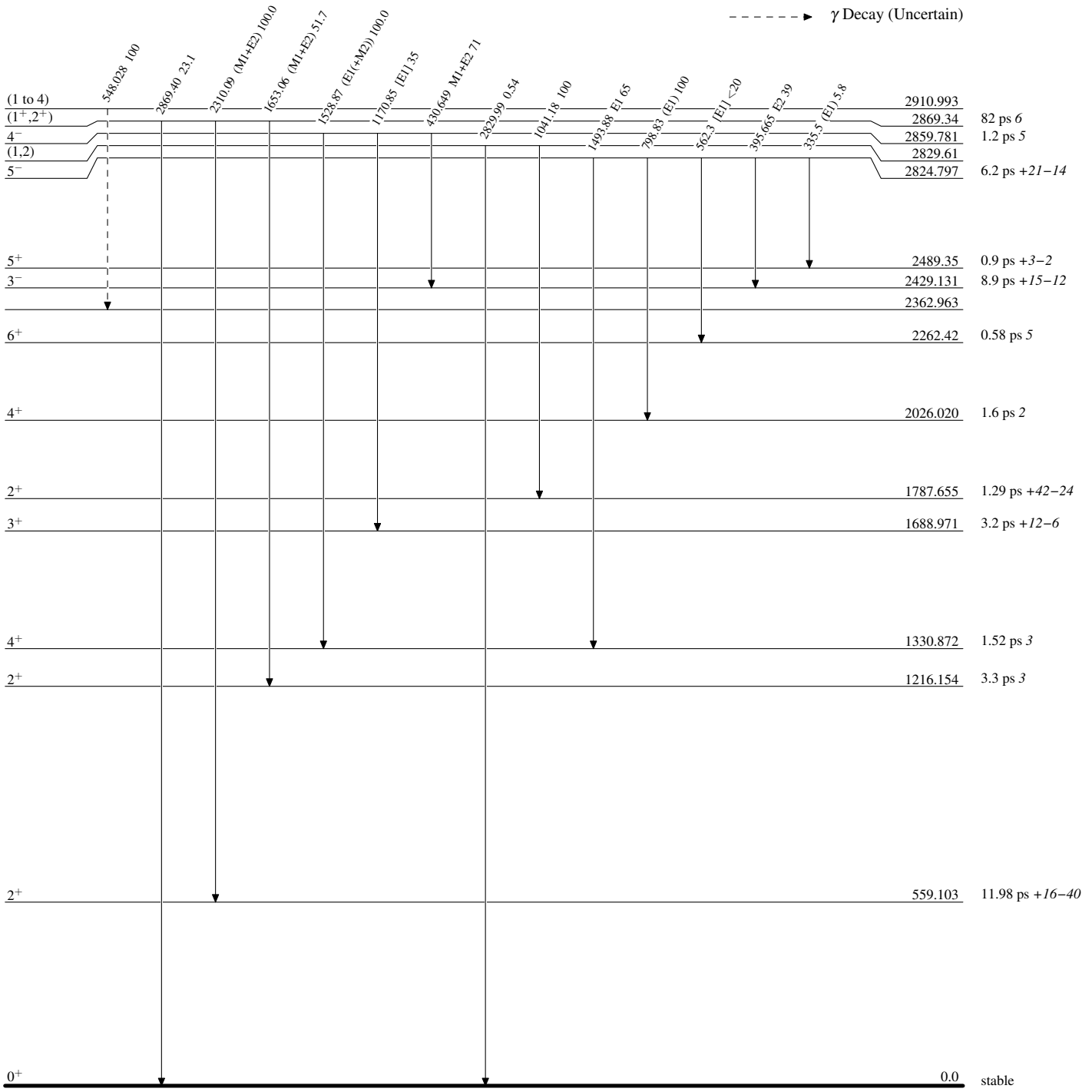
$^{76}_{34}Se_{42}$

Adopted Levels, Gammas

Level Scheme (continued)

Legend

Intensities: Relative photon branching from each level

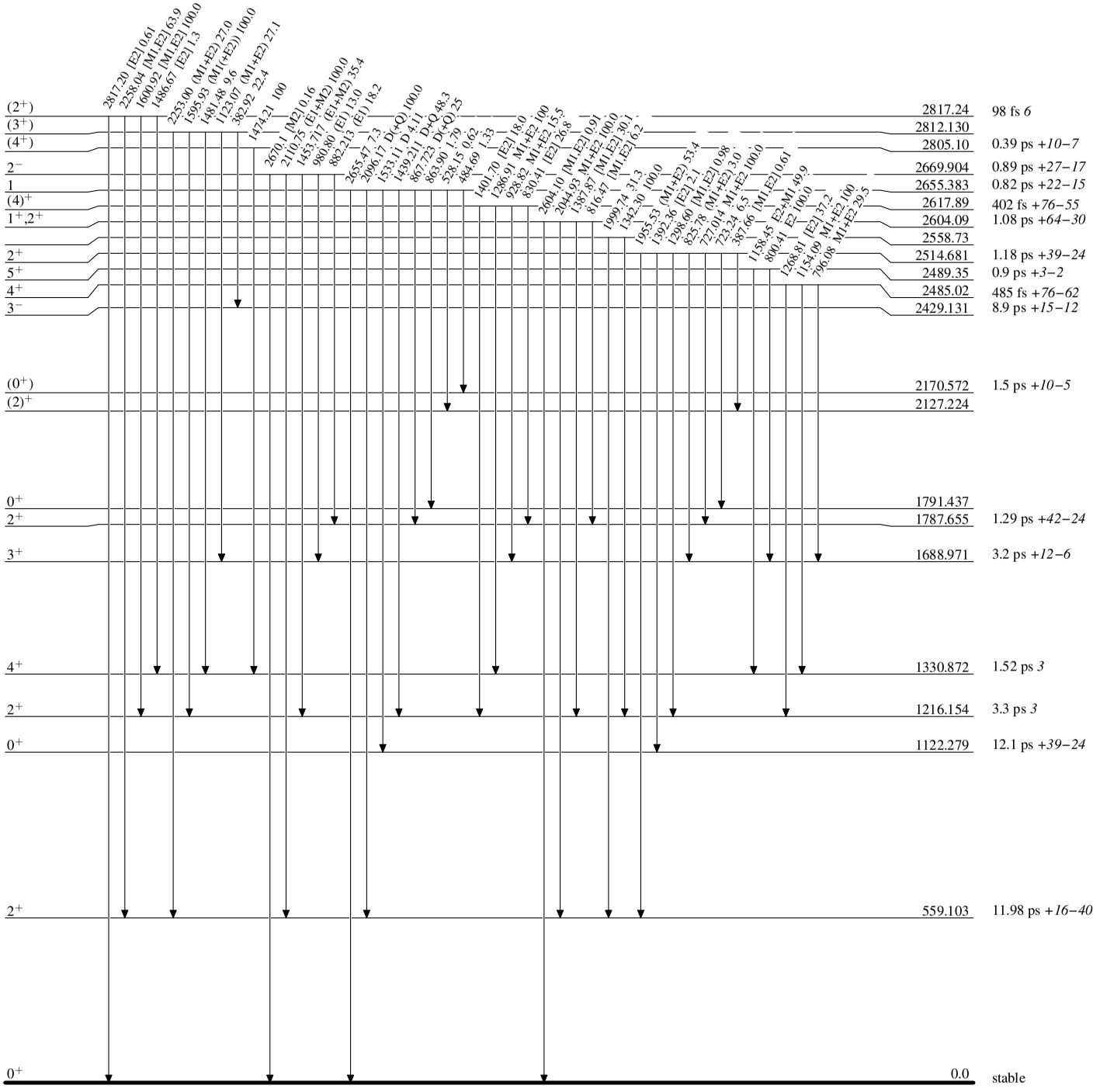


$^{76}_{34}Se_{42}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level



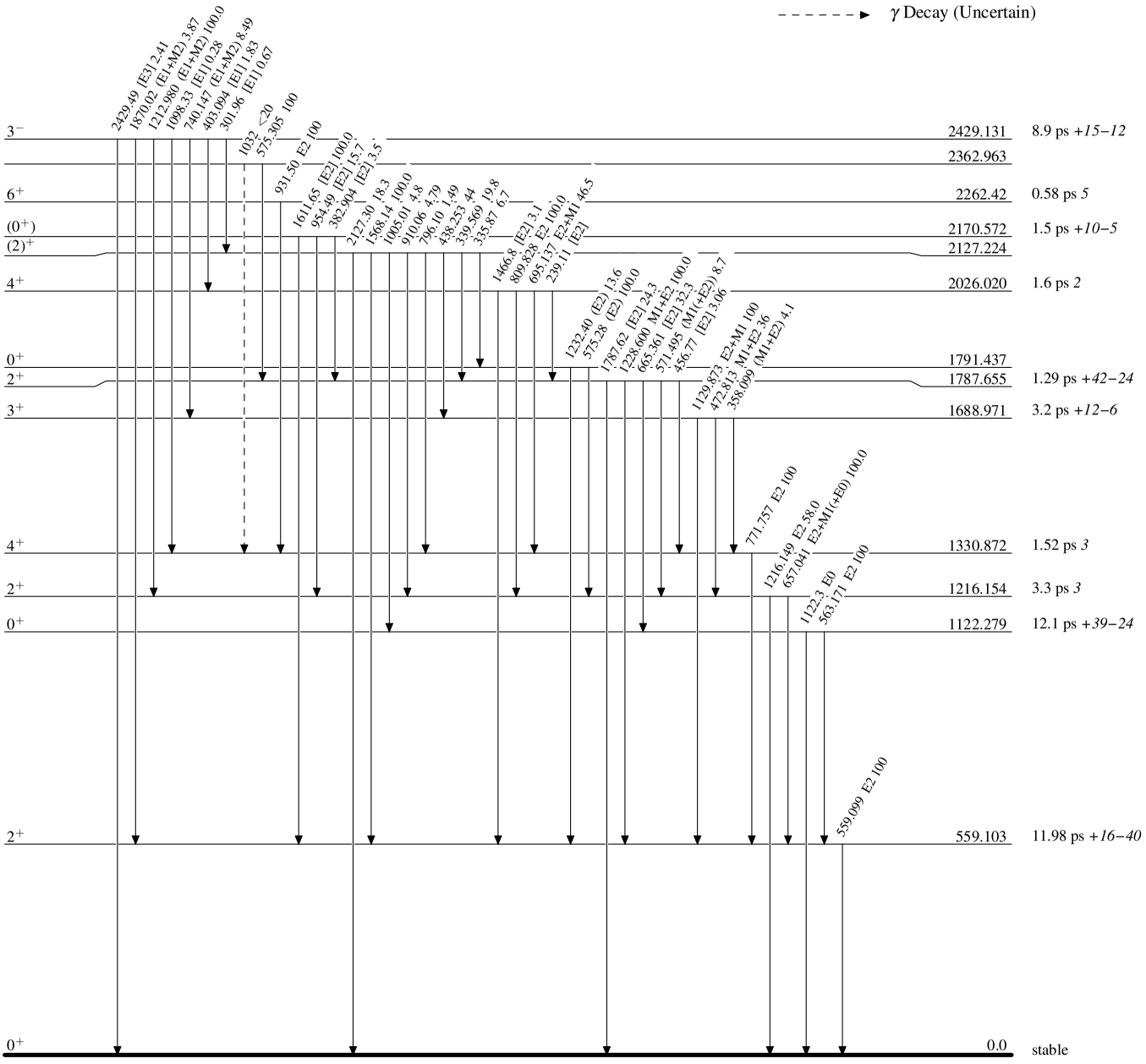
$^{76}_{34}Se_{42}$

Adopted Levels, Gammas

Legend

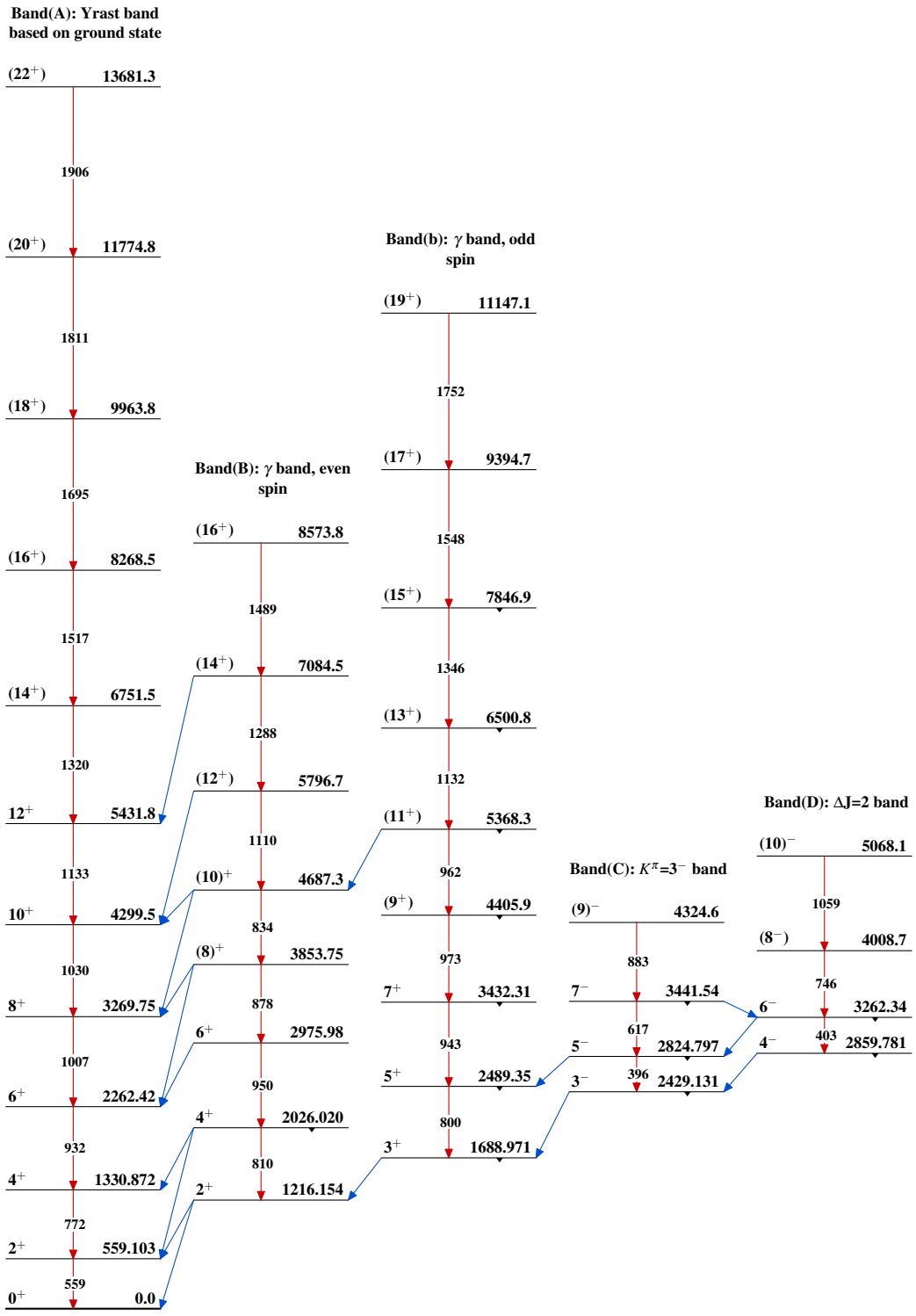
Level Scheme (continued)

Intensities: Relative photon branching from each level



$^{76}_{34}Se_{42}$

Adopted Levels, Gammas



$^{76}_{34}Se_{42}$