Adopted Levels, Gammas

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Coral M. Baglin	NDS 113,2187 (2012)	15-Sep-2012

Q(β^-)=−7882 *4*; S(n)=12670 *7*; S(p)=7458 *4*; Q(α)=−5604 *6* 2012Wa38

Note: Current evaluation has used the following Q record −7885 5 *12672* 11 *7459* 5 −5605 6 2011AuZZ,2003Au03.

Q(β^-),S(p),Q(α): from 2011AuZZ; −7870 *26*, 7462 *5*, −5607 *11*, respectively, from 2003Au03.

A new, higher-precision ^{92}Mo mass measurement is available from 2012Ka13.

For theory or systematics see, e.g., 1972Bb08, 1974Gl01, 1977Ha44, 1992Si03, 1992Si14, 1993Ha37, 1999Zh32, 2009Zh11, 2009St05.

Other Reactions:

(HI,xnγ) (1985Ra09): E(^{12}C,^{13}C)=48 MeV, E(^{16}O)=56 MeV. Measured 148γ(θ,H,t) in single-crystal Zr; θ=0°, 90°. Determined Q=0.34 for 2760, 8$^+$ level.

^{64}Ni+^{28}Si, E=137 MeV (1990Gu20); ^{16}O+^{76}Se, E=50, 72.2 MeV (1992Ki01): measured high-energy γ spectra and γ(θ) from decay of GDR built on highly-excited high-spin states. Deduced Γ(GDR)=7.6 MeV *1* (1992Ki01), 8.6 MeV *2* (1992Ki01), 12.1 MeV *10* (1990Gu20) for average spins of 9$\hbar$, 19.5$\hbar$, 33$\hbar$, respectively.

^{92}Mo Levels

Cross Reference (XREF) Flags

A	^{92}Tc ε decay	I	^{92}Mo(p,p′), (pol p,p′)	Q	^{90}Zr(^{12}C,^{10}Be), (^{16}O,^{14}C)
B	^{64}Ni(^{32}S,2n2pγ),	J	^{92}Mo(d,d′), (pol d,d)	R	^{92}Mo(^{14}C,^{14}C′), (^{14}N,^{14}N′)
C	^{90}Zr(α,2nγ)	K	^{92}Mo(^{3}He,dp)	S	^{92}Mo(γ,xn), (γ,pn)
D	^{92}Mo(γ,γ'), (pol γ,γ')	L	^{92}Mo(α,α')	T	^{92}Mo(^{3}He,^{3}He′)
E	^{92}Mo($\alpha,\alpha'\gamma$)	M	^{94}Mo(p,t), (pol p,t)	U	^{92}Mo(^{16}O,^{16}O′)
F	^{92}Mo(p,p′γ)	N	^{59}Co(^{37}Cl,2p2nγ),	V	^{93}Ru εp decay
G	^{92}Mo(n,n′), (n,n′γ)	O	^{90}Zr(^{3}He,n)	W	^{74}Ge(^{28}Si,2α2nγ)
H	^{92}Mo(e,e′)	P	Coulomb excitation	X	^{82}Se(^{16}O,6nγ)

E(level)†	J$^\pi$	T$_{1/2}$	XREF	Comments
0.0&	0$^+$	stable	ABCDEFGHIJKLMNOPQR TU WX	T$_{1/2}$: For (0ν+2ν) double β decay, 1997Ba35 report (at 90% confidence level) lower limits of 1.9×10^{20} y, 8.9×10^{20} y and 8.1×10^{20} y, respectively, for $\beta^+\varepsilon$(to Zr g.s.), $\varepsilon\varepsilon$(to Zr 449 level) and $\varepsilon\varepsilon$(Zr 935 level); these data supersede earlier data from the same research group (1995Au09). For neutrinoless double β decay of ^{92}Mo, 2011Le23 report a lower limit of 2.3×10^{20} y at 90% confidence level. Other lower limits on T$_{1/2}$: 3×10^{17} y, from nonobservation of $\beta^+,\varepsilon(2\nu)$ double β decay (1985No03); 2.7×10^{18} y for $\beta^+,\varepsilon(0\nu)$ (1987El13); 3×10^{18} y for double-ε decay (1982Be20). <r^2>$^{1/2}$(charge)=4.3156 fm *11* (2004An14).
1509.51& *3*	2$^+$	0.35 ps *2*	ABCDEFGHIJKLMNOPQR TU WX	μ=+2.3 *3* μ: From g=+1.15 *14*, weighted average of +1.3 *5* (2001Ma17, transient field) from Coulomb excitation and +1.14 *14* from reevaluation by 2001Ma17 of g=1.07 *19* (TDPAD) from 1978HaYJ. The g-factor is consistent with that expected for a g$^2_{9/2}$ configuration. J$^\pi$: E2 1509γ to 0$^+$ g.s. T$_{1/2}$: weighted average of 0.344 ps *20* from Coulomb excitation, 0.331 ps *15* from (e,e′) and 0.404 ps *25* (1977Me01) in (γ,γ') is 0.348 ps *19*. Others: 0.36 ps *+8−5* (p,p′γ), 0.30 ps *+15−10* ($\alpha,\alpha'\gamma$).

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Adopted Levels, Gammas (continued)

^{92}Mo Levels (continued)

E(level)[†]	Jπ	$T_{1/2}$	XREF	Comments
2282.61[&] *5*	4^+	>3.4 ps	ABC FGHIJKLMN WX	B(E4)↑=0.0034 *9* (1987MiZL) Jπ: L=4 in (p,p′), (α,α′), (p,t). $T_{1/2}$: from (p,p′γ).
2519.53 *21*	0^+	>3.4 ps	D FG k M O	Jπ: L=0 in (p,t), (^{3}He,n). $T_{1/2}$: from (p,p′γ).
2526.96[a] *6*	5^-	1.55 ns *4*	ABC FGHIJkL N X	B(E5)↑=0.00341 *17* (1987MiZL) XREF: k(2530). Jπ: L=5 in (p,p′), (α,α′). $T_{1/2}$: from 1971Co08 in (p,p′γ).
2612.41[&] *6*	6^+	1.53 ns *4*	A C FGHI L N WX	B(E6)↑=0.00027 *5* (1987MiZL) Jπ: L=6 in (α,α′). $T_{1/2}$: from ^{92}Tc ε decay.
2634.2?[#] *15*	(1)[@]		D	
2760.52[&] *14*	8^+	190 ns *3*	A C GHI N WX	Q=−0.34; μ=+11.30 *5* Q: differential perturbed angular distribution (1989Ra17 from 1985Ra09). Sign of Q from 1991Ha04 (TDPAD) in ^{59}Co(^{37}Cl,2p2nγ)). μ: from (α,2nγ); TDPAD (1977Ha49). Other: +11.35 *8* (1989Ra17, recalculation of datum from 1977Ku22, TDPAD). μ calculation: 1998Jo17. Jπ: E8 excitation in (e,e′). $T_{1/2}$: weighted average of 192 ns *7* (^{92}Tc decay), 206 ns *11* and 191 ns *7* and 219 ns *22* in (α,2nγ), and 184 ns *5* and 195 ns *13* from (n,n′γ).
2838.6?[#] *5*	(1)[@]		D	
2849.81 *5*	3^-	0.27 ps +*10*−*5*	EFGHIJKLM R	B(E3)↑=0.0760 *25* (1987MiZL) Jπ: L=3 in (p,p′), (α,α′), (p,t), (^{14}C,^{14}C′). $T_{1/2}$: weighted average from (α,α′γ), (p,p′γ). For summary of B(E3)↑ data, see 1989Sp01; recommended value is 0.070 *24* based on b_3 from angular distribution in (p,p′). This corresponds to 5.3% *18* of energy-weighted E3 sum rule.
2922.6?[#] *6*	(1)[@]		D	
3006.96 *8*	$(4,5)^-$		C FG I	Jπ: D+Q 480γ to 5^- 2527; weak 157γ to 3^- 2850; level population in (n,n′γ) rules out J=6 and favors J=4 (2010Go15). L=5 in (p,p′) but level only weakly excited.
3063.63 *7*	(4^-)		C FG I	Jπ: D+Q 537γ to 5^- 2527; 214γ to 3^- 2850; δ(537γ)=14 *3* makes π=+ unlikely; 1123γ from (6^+) 4187. However, B(M2)(W.u.) for 306γ from 4^+ 3369 exceeds RUL, unless $T_{1/2}$(3369) exceeds 80 ns (which seems far too large to have remained unobserved); alternatively, the 305γ may be complex in (n,n′γ) making δ unreliable (see comment on 305γ).
3091.35 *6*	2^+[@]	27 fs *3*	DEFGHIJ LM	XREF: J(3120). $T_{1/2}$: unweighted average of 22 fs *12* (1971Yo02), 35 fs *3* (1973DoZB in (p,p′γ)), 30.3 fs *21* from B(E2) (1987MiZL in (e,e′)), 27 fs *3* (1977Me01 in (γ,γ′)), and 21 fs *6* (1975Pa19 in (p,p′γ).
3368.68 *7*	(4^+)	>3.4 ps	C FGHI	B(E4)↑=0.00037 *11* (1987MiZL) Jπ: E4 excitation of 3369 level in (e,e′). Also: Q 1859γ to 2^+ 1510, D+Q 362γ to $(4,5)^-$ 3007 and

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Adopted Levels, Gammas (continued)

^{92}Mo Levels (continued)

E(level)†	Jπ	$T_{1/2}$	XREF	Comments
				D+Q 1086γ to 4+ 2283. However, δ(362γ) and δ(305γ) are too large for Δπ=yes transitions, unless the 3369 level has a significantly long half-life.
				$T_{1/2}$: from (p,p′γ).
3380.4 *8*	(6−)		W	Jπ: M2 1098γ to 4+ 2283.
3384.5?# *8*	(1)@		D	
3542.31 *7*	2+	35 fs *16*	D FGHI M	Jπ: L=2 in (p,t), (p,p′); E2 3542γ to 0+ g.s.
				$T_{1/2}$: from B(E2)=0.0020 *6* in (e,e′) and adopted branching. Others: 90 fs *+40−30* (1973DoZB), 61 fs *+24−17* (1975Pa19) in (p,p′γ).
3579.81 *6*	3−	>0.21 ps	FGHI L	B(E3)↑=0.0044 *4* (1987MiZL)
				Jπ: L=3 in (α,α′), (p,p′).
				$T_{1/2}$: from (p,p′γ).
3621.06 *7*	(≤4)	>0.21 ps	FG i	Jπ: 2112γ to 2+ 1510.
				$T_{1/2}$: from (p,p′γ).
3624.13a *17*	7−		BC GHi N	WX Jπ: E7 excitation in (e,e′).
3651.8?# *11*	(1)@		D	
3688.77 *7*	1(−),2,3	>0.69 ps	FG	Jπ: D(+Q) 2179γ to 2+ 1510; 838γ to 3− 2850.
				$T_{1/2}$: from (p,p′γ).
3692 *7*	4+		I	Jπ: L(p,p′)=4.
3753.2 *8*			C	Jπ: 385γ to 4+ 3369, 689γ to (4−) 3064 so J^{π}=(3,4,5).
3757.25 *10*			C G I	XREF: I(3765).
				Jπ: 1230γ to 5− 2527 suggests J=(3 to 7).
3814.58 *8*	2,3	>0.48 ps	FG I	Jπ: D(+Q) 2305γ to 2+ 1510; D(+Q) 965γ to 3− 2850.
				$T_{1/2}$: from (p,p′γ).
3841.87 *12*	0+	>0.21 ps	FG I M	Jπ: L=0 in (p,t).
				$T_{1/2}$: from DSAM in (p,p′γ).
3871.5 *10*	(≤4)		C	Jπ: 2362γ ray to 2+ 1510.
3876.62 *9*	4+		FGHI	B(E4)↑=0.0015 *3* (1987MiZL)
				Jπ: L(p,p′)=4; Q 2367γ to 2+ 1510.
3926.36 *9*	2+@	10.6 fs *12*	D FGHI LM	$T_{1/2}$: weighted average of 10.7 fs *22* from (γ,γ′) and 10.5 fs *13* from B(E2)=0.0188 *20* in (e,e′), with uncertainty (1.1 fs) increased to that for most precise measurement. Others: 17 fs *+17−10* (1973DoZB), 20 fs *+20−12* (1975Pa19).
3944.92 *13*	1@	6 fs *4*	D FG i	XREF: i(3952).
				$T_{1/2}$: from (γ,γ′); value rises to 9.7 fs *14* if only the 3945γ deexcites this level. Others: 10 fs *+10−3* (1973DoZB), 21 fs *+20−12* (1975Pa19) in (p,p′γ).
3953.2? *4*			G i	XREF: i(3952).
				Jπ: 1341γ to 6+ 2612, so J=(4 to 8).
3963.19 *16*	4+	>0.21 ps	FG I	Jπ: L=4 in (p,p′).
				$T_{1/2}$: from DSAM in (p,p′γ).
3964.3? *13*	(2)@		D	
4019.31 *11*			GHI	Jπ: 1492γ to 5− 2527, so J=(3 to 7).
4115.81 *10*	3(−),4		GHI	Jπ: D(+Q) 1833γ to 4+ 2283; D+Q 1266γ to 3− 2850. 1589γ to 5− 2527 makes 3+ unlikely.
4140 *5*	4+		M	Jπ: L(p,t)=4.
4148.08 *15*	1(−)		D G i l	XREF: i(4159)l(4160).
				Jπ: D 2639γ to 2+ 1509; D, Δπ=(yes) 4148γ to 0+ g.s.
4150.36 *9*	4(+),5(−)		G i l	XREF: i(4159)l(4160).
				Jπ: D+Q 1623γ to 5− 2527; D(+Q) 1868γ to 4+ 2283;

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Adopted Levels, Gammas (continued)

^{92}Mo Levels (continued)

E(level)[†]	Jπ	$T_{1/2}$	XREF	Comments
				1301γ to 3⁻ 2850. L(p,p′)=4+5 for E=4159 *7*; probably this is L=4 component.
4159.47 *15*	5⁻		GHi	B(E5)↑=0.0048 *4* (1987MiZL) XREF: i(4159). Jπ: L(p,p′)=4+5 for E=4159 *7* doublet. E5 excitation in (e,e′).
4187.20 *18*	(6⁺)		GHI	Jπ: L=(6) in (p,p′); Q 1905γ to 4⁺ 2283.
4241.29 *16*	5,6,7		G	Jπ: D(+Q) 1629γ to 6⁺ 2612.
4251.0[a] *3*	9⁻		BC G N WX	Jπ: stretched E2 627γ to 7⁻ 3624.
4280.73 *14*			G I	Jπ: 1998γ to 4⁺ 2283 so J=(2 to 6).
4300 *5*	2⁺		lM	XREF: l(4310). Jπ: L=2 in (p,t).
4307.44 *10*	2,3		G	Jπ: D(+Q) 2798γ to 2⁺ 1510; D(+Q) 1458γ to 3⁻ 2850.
4315.2 *4*	5⁻		GHI l	B(E5)↑=0.00035 *5* (1987MiZL) XREF: l(4310). Jπ: E5 excitation in (e,e′).
4328.5? *10*			C G l	XREF: l(4310). Jπ: 1568γ to 8⁺ 2761, so J=(6 to 10); J=7,8 favored by level population in (n,n′γ).
4345.78 *19*			GHI	Jπ: 2063γ to 4⁺ 2283; 1339γ to (4,5)⁻ 3007.
4429.51 *11*	3		G I	Jπ: D+Q 2147γ to 4⁺ 2283; D(+Q) 1579γ to 3⁻ 2850; 2920γ to 2⁺ 1510; γ(θ) in (n,n′γ) rules out J=4 (2010Go15).
4436.05 *13*	3,4,5		G	Jπ: D+Q 2154γ to 4⁺ 2283; 1372γ to (4⁻) 3064.
4436.42 *16*			G	Jπ: 1429γ to (4,5)⁻ 3007.
4455.01 *15*	(3,4,5)		G	Jπ: 2173γ to 4⁺ 2283, 1391γ to (4⁻) 3064.
4477.80 *18*	3(−),4(+),5		G	Jπ: D+Q 2195γ to 4⁺ 2283 allows J=3,5, but makes $J^{\pi}=4^-$ unlikely; 1951γ to 5⁻ 2527; absence of level in (e,e′) possibly suggests an unnatural parity state, thereby favoring $J^{\pi}=5^+$.
4483.36 *22*			G	Jπ: 1956γ to 5⁻ 2527, so J=(3 to 7).
4486.0[a] *3*	11⁻	8.74 ns *18*	BC N WX	μ=+13.9 *3* Jπ: E2 235γ to 9⁻ 4251. $T_{1/2}$: weighted average of 8.7 ns *2* (1971Le19), 9.2 ns *5* (1977Ha49), 8.2 ns *8* (from (α,2nγ), (^{32}S,2n2pγ) and (^{16}O,6nγ), respectively). μ: differential perturbed angular distribution (1989Ra17 from 1977Ha49), if J=11, from (^{32}S,2n2pγ). Other: +14.17 *13* (1989Ra17, revision of datum from 1977Ku22), TDPAD.
4493.92 *17*	2⁺		D GHI M	B(E2)↑=0.0065 *7* (1987MiZL) Jπ: L=2 in (p,t).
4509.6 *10*	4⁺		E L	E(level): ΔE(level) assumes unstated ΔE for 3000γ is 3 keV. Jπ: L(α,α′)=4.
4544.40 *17*			G	Jπ: 2262γ to 4⁺ 2283, so J=(2 to 6).
4554 *7*	7⁻		HI	B(E7)↑=0.000107 *11* (1987MiZL) Jπ: E7 excitation in (e,e′).
4573.3 *3*	(≤4)		G	Jπ: 3064γ to 2⁺ 1510.
4589.64 *23*	2(+)		D GHI L	B(E2)↑=0.052 *12* (1987MiZL) XREF: I(4598). Jπ: (E2) excitation in (e,e′); Q 4590γ to 0⁺ g.s.
4630.65 *19*	(2⁺,3,4⁺)		G	Jπ: 3121γ to 2⁺ 1510; 2349γ to 4⁺ 2283.
4633.73 *10*	(1⁻)[@]	3.7 fs *6*	D GHI	$T_{1/2}$: from (γ,γ′), assuming only 2 gammas deexcite

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Adopted Levels, Gammas (continued)

^{92}Mo Levels (continued)

E(level)†	Jπ	$T_{1/2}$	XREF	Comments
				level. However, see comment on 3125γ from this level.
4652.7 *3*	(≤4)		G I	Jπ: 3143γ to 2+ 1510; 1803γ to 3− 2850, so Jπ=(1−,2,3,4+).
4663.2 *6*	1@		D	
4685.1 *3*	(6−)		GHI	Jπ: (M6) excitation in (e,e′); D+Q 2158γ to 5− 2527.
4702.73 *24*	(≤4)		G	Jπ: 3193γ to 2+ 1510.
4725.2 *3*	4+		GHI	B(E4)↑=0.0012 *3* (1987MiZL) Jπ: L=4 in (p,p′).
4734.3? *4*			G	Jπ: 1366γ to 4+ 3369.
4781.51 *21*	(2,3+,4+)		G I	Jπ: 3272γ(θ) to 2+ 1510 in (n,n′γ) allows Jπ=2,3+,4+ (2010Go15).
4848.3 *10*	(10+)		W	Jπ: stretched Q 2088γ to 8+ 2760.
4874 *7*			HI	
4893.3 *3*	4+		GHI	Jπ: L=4 in (p,p′).
4917.9 *5*	7+		A H	Jπ: M7 excitation in (e,e′).
4924 *7*	3−		I lM	XREF: l(4940). Jπ: L=3 in (p,t).
4936.1 *6*	(1)@		D	
4944.7 *10*	(1)@		D	
4948.7 *3*	(3,4+)		G	Jπ: 3440γ to 2+ 1510; 2666γ to 4+ 2283; 1941γ to (4,5)− 3007; level population is not consistent with 2+.
4970.7 *5*	(1,2+)		D GHI l	XREF: I(4964)l(4940). Jπ: (D) 3462γ to 2+ 1510; excitation in resonance fluorescence.
4979	4		H	Jπ: E4,M4 excitation in (e,e′).
5003.6 *4*	(2)+@	22 fs *15*	D G i	T1/2: from DSAM in (p,p′γ).
5007	(1−)		Hi	B(E1)↑=0.0005 *4* (1987MiZL) XREF: H(5007). Jπ: (E1) excitation in (e,e′).
5076.6 *3*	4+		G I lm	XREF: l(5090)m(5090). Jπ: L=4 in (p,p′).
5088 *6*	4+		HI lm	B(E4)↑=0.0032 *4* (1987MiZL) XREF: l(5090)m(5090). Jπ: E4 excitation in (e,e′). Predominant configuration=$((\pi\ 1g_{9/2})^{-1}(\pi\ 2d_{5/2}))$.
5121.7 *4*	(10+)	<0.7 ps	C N WX	T1/2: from RDM in (^{30}Si,2p2nγ). Jπ: stretched Q 2361γ to 8+ 2760.
5150 *5*	0+		M	Jπ: L=0 in (p,t).
5151.3 *4*	(10−,11−,12−)		C	Jπ: (M1) transition to (11−) level.
5174 *7*			I	
5190 *7*			I	
5271 *7*			I	
5283.0 *21*	(1)@		D	
5289 *7*	(5−)		I	Jπ: L=(5) in (p,p′).
5312.6 *10*			C	Jπ: γ to (8)+ in (α,2nγ), so J=(6 to 10).
5316 *6*	3−		I LM	Jπ: L=3 in (α,α′), (p,t).
5331.7 *9*	(1)@		D	
5353 *7*			I	
5388 *7*			I	E(level): doublet in (p,p′).
5432 *7*			I	
5451.6 *9*	(1)@		D I	
5462.9 *5*	(7,8)+		A	Jπ: log *ft*=5.7 for ε decay from (8)+ ^{92}Tc. Feeds 6+

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Adopted Levels, Gammas (continued)

^{92}Mo Levels (continued)

E(level)†	Jπ	$T_{1/2}$	XREF	Comments
				and 8^+ levels.
5467 *7*	(4^+)		I	L(p,p′)=(4).
5517? *7*			I	
5527.4 *5*	(1)@		D	
5601 *7*			I m	XREF: m(5620). Jπ: L(p,t)=3 for level with E=5620 *25*.
5611.2 *15*			W	Jπ: 763γ to (10^+) 4848.
5623.8 *10*	(1)@		D	
5629.9 *19*	1@		D	
5631 *7*	$(2^+,3^-)$		I lm	XREF: l(5656)m(5620). Jπ: L(p,p′)=(2,3). L(p,t)=3 for level whose E=5620 *25*.
5658 *7*			I l	XREF: l(5656).
5679 *7*			I l	XREF: l(5656).
5703.4 *4*	1@		D	
5710 *7*			I	
5745 *7*			I l	XREF: l(5780).
5784 *7*	$(3^-,2^+)$		I l	XREF: l(5780). Jπ: L(p,p′)=(3,2).
5789.1 *3*	1@		D	
5801.3 *7*	(1)@		D	
5806 *7*	(0^+)		I	Jπ: L(p,p′)=(0).
5841.7 *11*	1@		D	
5844 *7*	3^-		I M	E(level): doublet in (p,p′). Jπ: L=3 in (p,t).
5861.9 *4*	(12^+)	35 ps *3*	C N	WX Jπ: stretched E2 740γ to (10^+) 5122; 1374γ to 11^- 4486. $T_{1/2}$: from RDM in (^{30}Si,2p2nγ).
5894 *7*	(3^-)		I L	Jπ: L=(3) in (α,α′).
5950 *7*	5^-		I M	Jπ: L(p,t)=5.
5981.4 *4*	1@		D	
6100 *25*	$(2^+,4^+)$		M	Jπ: L(2,4) in (p,t).
6125.92 *20*	$1^{(-)}$@		D	
6184.3 *25*	(2)@		D	
6191.52 *20*	1^-@		D	
6300.2 *3*	1^-@		D	
6329.9 *11*	(1)@		D	
6362.7 *6*	(1)@		D	
6377.6 *3*	1^-@		D	
6400.0 *15*			W	Jπ: 1552γ to (10^+) 4848.
6524.45 *20*	1^-@		D	
6550.3‡b *4*	(12^-)	<0.7 ps	C N	WX Jπ: M1 2064γ to (11^-) 4487. $T_{1/2}$: from RDM in (^{30}Si,2p2nγ).
6566.2 *6*	1@		D	
6606.4 *3*	1^-@		D	
6608.5 *11*			W	Jπ: 2122γ to 11^- 4486.
6645.6 *5*	$1^{(-)}$@		D	
6661.5‡b *5*	(13^-)	22 ps *3*	C N	WX Jπ: D 112γ to (12^-) 6550; D 800γ to (12^+) 5862. $T_{1/2}$: from RDM in (^{30}Si,2p2nγ).
6718.5 *9*	(2^-)@		D	
6761.4 *4*	$1^{(-)}$@		D	

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Adopted Levels, Gammas (continued)

^{92}Mo Levels (continued)

E(level)[†]	Jπ	$T_{1/2}$	XREF	Comments
6787.3 *4*	1⁻@		D	
6818.1 *4*	1⁻@		D	
6883.1 *4*	1⁻@		D	
6995.89 *20*	1⁻@	0.38 fs *5*	D	$T_{1/2}$: from DSAM in (p,p′γ).
7031.3 *3*	1⁻@	0.57 fs *12*	D	$T_{1/2}$: from DSAM in (p,p′γ).
7069.6 *4*	1⁻@		D	
7076.9 *12*	1@		D	
7134.1 *10*	(14⁺)		W	Jπ: E1 472γ to (13⁻) 6662.
7239.7 *11*	1(−)@		D	
7271.7 *5*	−@		D	
7279.0 *11*	(2)@		D	
7312.4[‡b] *5*	(14⁻)	<1.4 ps	C N	WX Jπ: M1 651γ to (13⁻) 6662. $T_{1/2}$: from RDM in (^{30}Si,2p2nγ).
7384.3 *6*	1@		D	
7394.4 *4*	1@		D	
7422.5 *11*			D	
7447.2 *16*			D	
7469.1 *4*	1(−)@	0.7 fs *3*	D	$T_{1/2}$: from (p,p′γ).
7486.6 *5*	1(−)@		D	
7518.4 *6*	1⁻@		D	
7573.6 *7*	1@		D	
7604.4 *7*	(1)@		D	
7619.5 *9*	(1)@		D	
7681.1 *5*	1⁻@		D	
7711.3 *5*	1@		D	
7731.7 *5*	1⁻@		D	
7782.3 *9*	1@		D	
7784.0 *6*	(2)@		D	
7787.6 *10*	(1)@		D	
7808.1 *11*	1@		D	
7831.4 *13*			D	
7837.7 *15*	(2)@		D	
7856.6 *5*	1⁻@		D	
7877.6 *10*	(1)@	0.34 fs *20*	D	$T_{1/2}$: from DSAM in (p,p′γ).
7881.8 *5*	1@		D	
7894.3 *7*	1@		D	
7919.4 *10*	(1)@		D	
7931.4 *9*	1@		D	
7950.4 *4*	1(+)@	0.70 MeV *5*	D I	Jπ: D 7950γ to 0⁺ g.s.; M1 resonance from (p,p′); possible conf=$(\nu\ g_{7/2})(\nu\ g_{9/2})^{-1}$ (1982Dj04). $T_{1/2}$: Γ from (p,p′).
7963.3 *7*			D	
8007.0 *14*	1⁻@		D	
8042.0 *12*	1@	0.66 fs *18*	D	$T_{1/2}$: from DSAM in (p,p′γ).
8063.4 *11*	1(−)@		D	

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Adopted Levels, Gammas (continued)

^{92}Mo Levels (continued)

E(level)†	Jπ	$T_{1/2}$	XREF	Comments
8088.1 *10*	(2)@		D	
8096.4 *10*	1@		D	
8168.4 *5*	1−@		D	
8211.0 *11*	1@	0.42 fs *12*	D	$T_{1/2}$: from DSAM in (p,p′γ).
8220.8 *10*	(1)@		D	
8221.2‡ *12*	(14)		N W	Jπ: D γ to (13−) 6662.
8229.9 *7*	1−@		D	
8319.5 *6*	1@		D	
8355.1 *16*	1@		D	
8381.7 *8*	(1)@		D	
8387.4‡ *6*	(15+)	<1.4 ps	N WX	Jπ: E1 1075γ to (14−) 7312. $T_{1/2}$: from RDM (1994Da15) in (^{30}Si,2p2nγ).
8422.2 *9*	(−)@		D	
8486.5 *14*	1@		D	
8501.0 *17*	1@		D	
8553.0 *13*	1@		D	
8594.7 *11*			W	
8606.6 *8*	(1)@		D	
8660.4 *3*	1−@		D	
8695.2 *14*	1@		D	
8763.4 *5*	1@		D	
8774.4 *4*	1−@		D	
8791.5 *8*	(1)@		D	
8819.8 *6*	1@		D	
8834.3 *20*	(1)@		D	
8902.5 *9*	1@		D	
8924.0‡ *7*	(16+)	<1.4 ps	N WX	Jπ: (M1) 537γ to (15+) 8387. $T_{1/2}$: from RDM in (^{30}Si,2p2nγ).
8926.3 *15*	(1)@		D	
8955.5 *6*	1(−)@		D	
9.00×10^3 *10*	(1+)	1.1 MeV *1*	I	Jπ: M1 resonance in (p,p′); possible conf=(ν $g_{7/2}$)(ν $g_{9/2}$)$^{-1}$ (1982Dj04). $T_{1/2}$: Γ from (p,p′).
9022.1 *8*			D	
9096.6 *6*	1−@		D	
9126.5 *10*	1@		D	
9187.0 *8*	1@		D	
9206.4 *8*	1(−)@		D	
9237.4 *8*	1@		D	
9280.2 *23*	(2)@		D	
9296 *3*	(2)@		D	
9337.6 *8*	1@		D	
9359.3 *10*	(15+)		W	Jπ: M1 2225γ to (14+) 7134; D 2048γ to (14−) 7312.
9360.9 *7*	1@		D	
9418.9 *12*	(−)@		D	

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Adopted Levels, Gammas (continued)

^{92}Mo Levels (continued)

E(level)[†]	Jπ	$T_{1/2}$	XREF	Comments
9443.2 *8*	1[@]		D	
9481.0[‡] *8*	(17+)	<1.4 ps	N WX	Jπ: M1 557γ to (16+) 8924. $T_{1/2}$: from RDM in (^{30}Si,2p2nγ).
9502.8 *8*	1[@]		D	
9559.3 *13*	(1)[@]		D	
9592.3 *10*	(1−)[@]		D	
9646.7 *13*	(1)[@]		D	
9691 *3*			D	
9710.6 *11*	1[@]		D	
9827.0 *17*	1[@]		D	
9843.0 *10*	(1)[@]		D	
10020.3 *14*	(16+)		W	Jπ: M1 661γ to (15+) 9359.
10102.9[‡] *13*	(18+)		N W	Jπ: M1 622γ to (17+) 9481.
10579.2 *17*	(17+)		W	Jπ: M1 559γ to (16+) 10020.
11215.5 *20*	(18+)		W	Jπ: D 636γ to (17+) 10579.
14.13×10^3 *20*	2+	4.6 MeV *3*	L T	Jπ: L(α,α′)=2. $T_{1/2}$: Γ from (α,α′). GQR; E=14550, Γ=5.0 MeV *4* in (^{3}He,^{3}He′).
16.22×10^3 *20*	0+	4.8 MeV *3*	L	Jπ: L(α,α′)=0. $T_{1/2}$: Γ from (α,α′). GMR.
16.65×10^3 *5*	1−	4.14 MeV	S	GDR; Γ from (γ,xn). Not a discrete state.

[†] From least-squares fit to adopted Eγ, except as noted, whenever deexciting gammas have been observed; from cross-referenced reactions otherwise.
[‡] Note that E(level) here differs significantly from that deduced in source data set on account of the cumulative effect of apparently systematically low Eγ values in that data set.
[#] Absence of level in (n,n′γ) makes its existence highly questionable; possibly the γ observed in (γ,γ′) was an inelastic one.
[@] From resonance fluorescence.
[&] Band(A): π=+, ΔJ=2 sequence.
[a] Band(B): π=−, ΔJ=2 sequence.
[b] Band(C): sequence based on 12−.

Adopted Levels, Gammas (continued)

γ(^{92}Mo)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[†]	δ[‡]	α^i	Comments
1509.51	2^+	1509.50 *3*	100	0.0	0^+	E2			B(E2)(W.u.)=8.4 *5* E_γ: other Eγ: 1509.58 *13* in (α,2nγ), 1509.47 *3* in (p,p′γ), 1509.68 *15* in (^{32}S,2p2nγ). Mult.: from Coulomb excitation; Q from γ(θ) in (α,2nγ).
2282.61	4^+	773.09 *3*	100	1509.51	2^+	E2[f]			B(E2)(W.u.)<24 E_γ: weighted average of 773.09 *3* in (n,n′γ), 773.05 *12* in (α,2nγ), 773.10 *8* in (p,p′γ), 772.97 *15* in (^{32}S,2p2nγ). δ(Q,O)=−0.12 *+22−14* from (p,p′γ).
2519.53	0^+	1010.02 *20*	100	1509.51	2^+	[E2]			B(E2)(W.u.)<6.4 E_γ: unweighted average of 1010.22 *7* in (p,p′γ) and 1009.82 *3* in (n,n′γ).
2526.96	5^-	244.39 *9*	100	2282.61	4^+	(E1(+M2))	<0.05[@]	0.0098	B(E1)(W.u.)=1.45×10^{-5} *4*; B(M2)(W.u.)<2.9 E_γ: unweighted average of 244.30 *5* in (n,n′γ) and 244.47 *7* in (p,p′γ). Others: 244.5 *2* in (α,2nγ), 243.6 *3* in (^{37}Cl,2p2nγ), 243.7 *6* in ε decay. Mult.: D(+Q) from (n,n′γ); Δπ=yes from level scheme.
2612.41	6^+	85.38 *14*	13.5 *16*	2526.96	5^-	(E1)		0.200	B(E1)(W.u.)=4.0×10^{-5} *5* E_γ: weighted average of 85.25 *20* in (n,n′γ), 85.5 *2* in (α,2nγ). Others: 84.3 *3* in (^{37}Cl,2p2nγ), 85.0 *5* in ε decay, 84.6 from (^{16}O,6nγ). I_γ: unweighted average of 11.9 *3* in (α,2nγ), 15.1 *10* in ε decay. Mult.: E1 or M1 from RUL; adopted Δπ=yes.
		329.82 *5*	100.0 *5*	2282.61	4^+	E2		0.01761	B(E2)(W.u.)=3.26 *11* E_γ: weighted average of 329.83 *5* in (n,n′γ), 329.76 *12* in (α,2nγ). Others: 329.1 *3* in (^{37}Cl,2p2nγ), 329.3 *3* in ε decay, 330.9 *4* in (p,p′γ). I_γ: from (α,2nγ). Mult.: Q from (α,2nγ); not M2 from RUL.
2634.2?	(1)	2634.2[hj] *15*	100	0.0	0^+	(D)[g]			
2760.52	8^+	148.14 *13*	100	2612.41	6^+	E2		0.291	B(E2)(W.u.)=1.311 *22* Other Eγ: 148.0 *2* in (α,2nγ), 147.3 *3* in (^{37}Cl,2p2nγ). Mult.: stretched Q from γ(θ) in (^{37}Cl,2p2nγ); not M2 from α(exp)=0.24 *10* in (α,2nγ).
2838.6?	(1)	2838.6[hj] *5*	100	0.0	0^+	(D)[g]			
2849.81	3^-	567.3 *2*	3.3 *5*	2282.61	4^+	[E1]			B(E1)(W.u.)=0.00022 *+6−9* E_γ,I_γ: from (n,n′γ). Other Eγ (Iγ): Eγ=567.05 *12* (19.0 *24*) from (p,p′γ).
		1340.26 *4*	100 *5*	1509.51	2^+	(E1+M2)	−0.015[@] *10*		B(E1)(W.u.)=0.00049 *+10−19*; B(M2)(W.u.)=0.3 *+4−3* Other δ: −0.09 *+5−21* from γ(θ) in (p,p′γ); δ≤0.04 from RUL. Mult.: D+Q from γ(θ) in (p,p′γ) and (n,n′γ); adopted Δπ=yes.

$^{92}_{42}Mo_{50}$-10

Adopted Levels, Gammas (continued)

γ(^{92}Mo) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[†]	δ[‡]	Comments
2922.6?	(1)	2922.6[h j] *6*	100	0.0	0^+	(D)[g]		
3006.96	$(4,5)^-$	157.03 *11*	1.0 *5*	2849.81	3^-			
		480.01 *8*	100 *6*	2526.96	5^-	D+Q	−0.10[@] *4*	E_γ: weighted average of 479.95 *11* from (n,n′γ), 480.12 *14* from (p,p′γ) and 480.0 *2* from (α,2nγ). δ: D+Q from γ(θ) in (n,n′γ).
3063.63	(4^-)	213.85 *11*	7.3 *7*	2849.81	3^-			
		536.88 *19*	100 *7*	2526.96	5^-	D+Q	+14[@] *3*	E_γ: unweighted average of 537.07 *4* in (p,p′γ) and 536.69 *2* in (n,n′γ).
3091.35	2^+	1581.83 *7*	21.6 *19*	1509.51	2^+	(E2+M1)	+0.63 *11*	B(M1)(W.u.)=0.026 *5*; B(E2)(W.u.)=4.3 *13* I_γ: unweighted average of 19.7 *11* in (n,n′γ) and 23.5 *25* in (p,p′γ). Mult.,δ: D+Q from γ(θ) in (p,p′γ); adopted Δπ=no. Other δ: +2.5 *+6−4* or possibly −0.04 *+7−6* from γ(θ) in (n,n′γ), neither of which is consistent with the (p,p′γ) result.
		3091.30 *8*	100.0 *25*	0.0	0^+	E2		B(E2)(W.u.)=2.5 *3* I_γ: from (p,p′γ). Mult.: Q to 0^+ from γ(θ) in (p,p′γ); not M2, from RUL.
3368.68	(4^+)	305.06 *3*	100 *5*	3063.63	(4^-)	D+Q	[@]	Additional information 1. Other Eγ: 304.8 *2* in (p,p′γ). Mult.,δ: D+Q from γ(θ) in (n,n′γ). Adopted Δπ=yes; however, if δ=−0.73 *10* as reported in (n,n′γ), B(M2)(W.u.) will exceed RUL, unless $T_{1/2}$(3369) exceeds 80 ns. Alternatively, 305γ may be complex in (n,n′γ), possibly making δ unreliable; the 305γ branch is relatively stronger in (n,n′γ) than in (p,p′γ).
		361.65 *11*	27.5 *21*	3006.96	$(4,5)^-$	D+Q	−0.44 *15*	B(M1)(W.u.)<0.013; B(E2)(W.u.)<29 Other Eγ (Iγ): 362.3 *2* (49 *6*) in (p,p′γ). Mult.: D+Q from γ(θ) in (n,n′γ); adopted Δπ=no.
		842.1[j] *2*	106 *6*	2526.96	5^-			E_γ,I_γ: from (p,p′γ). Placement is considered to be tentative since no evidence for this γ could be found from excit or γγ coin in (n,n′γ).
		1085.88 *11*	23.2 *21*	2282.61	4^+	(M1+E2)		B(M1)(W.u.)<0.00052; B(E2)(W.u.)<0.12 Other Eγ (Iγ): 1086.4 *2* (32 *5*) in (p,p′γ). Mult.: D+Q from γ(θ) in (p,p′γ) and (n,n′γ); adopted Δπ=no. δ: +0.27 *+51−24* from (p,p′γ) but −0.6 *2* or possibly +4 *+4−2* from γ(θ) in (n,n′γ).
		1858.5 *7*	4.8 *12*	1509.51	2^+	(E2)		B(E2)(W.u.)<0.0056 Mult.: Q from (n,n′γ); adopted Δπ=no.
3380.4	(6^-)	1097.9[d]	100[d]	2282.61	4^+	M2[f]		
3384.5?	(1)	3384.4[h j] *8*	100	0.0	0^+	(D)[g]		
3542.31	2^+	2032.80 *6*	100 *4*	1509.51	2^+	E2+M1	−1.7 *+9−26*	B(M1)(W.u.)=0.017 *16*; B(E2)(W.u.)=12 *7* Mult.: D+Q from γ(θ) in (n,n′γ); Δπ=no from RUL. δ: other δ: −0.80 *7* or possibly −3.7 *7* from (n,n′γ).
		3541.96 *24*	14.1 *15*	0.0	0^+	E2		B(E2)(W.u.)=0.15 *7* Mult.: Q from γ(θ) in (n,n′γ); E1, M1 or E2 from RUL.

$^{92}_{42}Mo_{50}$-11

Adopted Levels, Gammas (continued)

γ(^{92}Mo) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[†]	α[i]	Comments
3579.81	3⁻	1052.88 *8*	100 *5*	2526.96	5⁻	(E2)		B(E2)(W.u.)<38 Other Eγ: 1053.4 *2* from (p,p′γ). Mult.: Q from γ(θ) in (p,p′γ); adopted Δπ=no. δ(Q,O)=−0.12 +*19*−*32* from (p,p′γ).
		1297.22 *9*	87 *5*	2282.61	4⁺	(E1)		B(E1)(W.u.)<0.00029 Other Eγ: 1297.6 *2* from (p,p′γ). Mult.,δ: D, δ(D,Q)=0.00 *6* from γ(θ) in (n,n′γ); Δπ=yes from level scheme.
		2070.21 *9*	≈33	1509.51	2⁺			
3621.06	(≤4)	2111.53 *6*	100	1509.51	2⁺			
3624.13	7⁻	243.8		3380.4	(6⁻)	(M1)	0.0229	E_γ,Mult.: from ^{74}Ge(^{28}Si,2α2nγ).
		1097.10 *16*	100	2526.96	5⁻	(E2)		Other Eγ: 1097.7 *2* in (α,2nγ), 1098 *1* in (^{32}S,2p2nγ), 1096.8 *3* in (^{37}Cl,2p2nγ). Mult.: yrast cascade γ, mult=Q to 5⁻, from (α,2nγ), (^{32}S,2n2pγ).
3651.8?	(1)	3651.7[h,j] *11*	100	0.0	0⁺	(D)[g]		
3688.77	1(−),2,3	838.9 *2*	15.8 *15*	2849.81	3⁻			Other Iγ: 92 *6* from (p,p′γ).
		2179.24 *6*	100 *4*	1509.51	2⁺	D(+Q)		Other Eγ: 2178.48 *13* from (p,p′γ). δ: −0.02 *6* or +2.5 *5* if J(3689)=2; +0.35 *4* if J(3689)=3 (2010Go15) in (n,n′γ).
3753.2		385[#] *1*		3368.68	(4⁺)			
		689[#] *1*		3063.63	(4⁻)			
3757.25		1230.28 *8*	100	2526.96	5⁻			
3814.58	2,3	234.83 *13*	91 *9*	3579.81	3⁻			Other Iγ: 58 *9* from 2000Ga30 in (n,n′γ).
		750.8[j]		3063.63	(4⁻)			E_γ: from (p,p′γ).
		807.7[j]	36.1 *12*	3006.96	(4,5)⁻			E_γ: tentative placement from (p,p′γ). Eγ=807.7 *3*, branching=36.1 *12* from (n,n′γ) if correctly placed.
		964.59 *11*	94 *9*	2849.81	3⁻	D(+Q)		Other Iγ: 82 *5* in (p,p′γ); 119 *18* (2000Ga30) in (n,n′γ). Mult.,δ: δ(D,Q)=0.00 *12* or −6 +*2*−*15* if J(3815)=2; from (n,n′γ).
		2305.20 *12*	100 *6*	1509.51	2⁺	D(+Q)		Other Eγ: 2304.3 *3* in (p,p′γ). Mult.,δ: δ(D,Q)=−0.01 +*15*−*11* or +2.3 +*9*−*7* if J(3815)=2; from γ(θ) in (n,n′γ).
3841.87	0⁺	2332.33 *11*	100	1509.51	2⁺	[E2]		B(E2)(W.u.)<1.6
3871.5	(≤4)	2362[#] *1*	100	1509.51	2⁺			
3876.62	4⁺	1593.76 *13*	33 *3*	2282.61	4⁺			I(1594γ):I(2367γ)=61 *11*:100 *11* in (p,p′γ).
		2367.22 *10*	100 *4*	1509.51	2⁺	(E2)		Mult.: Q from γ(θ) in (n,n′γ); Δπ=no from level scheme.
3926.36	2⁺	1643.9 *5*	13.6 *13*	2282.61	4⁺			
		2416.86 *12*	54.8 *24*	1509.51	2⁺	D+Q		Other Eγ: 2416.9 *5* in (γ,γ′), 2415.5 *5* in (p,p′γ). Other Iγ: 49 *24* in (γ,γ′) for uncertain γ, 54 *8* from (p,p′γ). Mult.,δ: from γ(θ) in (n,n′γ); δ=+0.30 +*17*−*10* or +1.15 *26*.
		3926.22 *13*	100 *11*	0.0	0⁺	(E2)		B(E2)(W.u.)=1.38 *24*

$^{92}_{42}Mo_{50}$-12

Adopted Levels, Gammas (continued)

γ(^{92}Mo) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[†]	δ[‡]	Comments
								Other Eγ: 3924.9 *5* in (p,p′γ), 3925.7 *2* in (γ,γ′). Mult.: Q from (γ,γ′); not M2 from RUL.
3944.92	1	3944.83 *13*	100	0.0	0^+	D		Other Eγ: 3943.96 *17* in (p,p′γ), 3944.1 *3* in (γ,γ′). I_γ: % photon branching=78 *28* from (γ,γ′). However, no other γ is known to deexcite this level. Mult.: from (γ,γ′) and (n,n′γ).
3953.2?		1340.8[j] *4*	100	2612.41	6^+			Placement shown as uncertain because γ seen by 2000Ga30 was not reported by 2010Go15 in (n,n′γ).
3963.19	4^+	594.9[j]		3368.68	(4^+)			E_γ: from (p,p′γ).
		899.3 *5*	100 *8*	3063.63	(4^-)			I_γ: from (p,p′γ). Other Eγ: 898.0 *2* in (p,p′γ).
		1113.2 *3*	55 *6*	2849.81	3^-			I_γ: from (p,p′γ).
		2453.77 *20*	49 *6*	1509.51	2^+			I_γ: from (p,p′γ).
3964.3?	(2)	3964.2[h,j] *13*	100	0.0	0^+	(Q)[g]		
4019.31		1492.33 *9*	100	2526.96	5^-			
4115.81	$3^{(-)}$,4	747.7 *9*	19 *5*	3368.68	(4^+)			
		1266.06 *13*	100 *8*	2849.81	3^-	D+Q	+0.07[@] *4*	
		1589.00 *19*	23 *4*	2526.96	5^-			
		1832.99 *15*	45 *5*	2282.61	4^+	D(+Q)	+0.4[@] *5*	
4148.08	$1^{(-)}$	1864.86[j] *23*	67 *14*	2282.61	4^+			
		2638.53 *16*	80 *8*	1509.51	2^+	D		
		4148.0 *4*	100 *14*	0.0	0^+	(E1)		Mult.: D from (n,n′γ); Δπ=(yes) from (γ,γ′).
4150.36	$4^{(+)}$,$5^{(-)}$	1300.91 *14*	13 *3*	2849.81	3^-			
		1623.15 *17*	30 *4*	2526.96	5^-	D+Q	−0.9[@] *+4−8*	
		1867.58 *12*	100 *6*	2282.61	4^+	D(+Q)	−0.08[@] *12*	
4159.47	5^-	1309.7 *8*	16 *5*	2849.81	3^-			
		1632.49 *14*	100 *9*	2526.96	5^-	D(+Q)	+0.3[@] *+4−3*	
4187.20	(6^+)	1122.9 *9*	27 *11*	3063.63	(4^-)			Other Iγ: 89 *13* from 2000Ga30 in (n,n′γ).
		1574.6 *6*	24 *7*	2612.41	6^+			
		1904.61 *18*	100 *7*	2282.61	4^+	Q		
4241.29	5,6,7	1628.87 *14*	100	2612.41	6^+	D(+Q)		
4251.0	9^-	626.8[b] *2*	100	3624.13	7^-	E2		Other Eγ: 628.25 *11* from 2000Ga30 in (n,n′γ), but this γ was not confirmed by 2010Go15 in that reaction. Mult.: Q yrast decay γ ray to 7^-, from (α,2nγ), (^{32}S,2n2pγ). Electric from positive IPDCO in (^{28}Si,2α2nγ).
4280.73		912.04 *12*	100 *8*	3368.68	(4^+)			
		1998.3 *5*	15 *5*	2282.61	4^+			
4307.44	2,3	1215.8 *7*	27 *8*	3091.35	2^+			

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Adopted Levels, Gammas (continued)

γ(^{92}Mo) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[†]	δ[‡]	α[i]	Comments
4307.44	2,3	1457.57 *13*	≈96	2849.81	3^-	D(+Q)			δ: −0.02 *+9−11* or −5 *+2−5* if J(4308)=2; +0.14 *5* if J(4308)=4 (2010Go15) from (n,n′γ).
		2797.94 *13*	100 *12*	1509.51	2^+	D(+Q)			δ: +0.1 *+4−2* or +1.7 *+11−9* if J(4308)=2 (2010Go15) from (n,n′γ).
4315.2	5^-	1703.3 *4*	100 *8*	2612.41	6^+				
		1787.3 *5*	86 *9*	2526.96	5^-				
4328.5?		1568[#j] *1*	100	2760.52	8^+				
4345.78		1339.1 *5*		3006.96	$(4,5)^-$				Reported in (n,n′γ) by 2000Ga30, but not by 2010Go15 (possibly unresolved from strong 1340γ there).
		2063.1 *2*	100 *10*	2282.61	4^+				
4429.51	3	1579.27 *22*	95 *11*	2849.81	3^-	D(+Q)	+0.3[@] *+1−4*		Other Iγ: 80 *12* from 2000Ga30 in (n,n′γ).
		2147.08 *14*	100 *11*	2282.61	4^+	D+Q			δ: +0.25 *14* or +8 *+70−4* from (n,n′γ).
		2919.84 *23*	42 *9*	1509.51	2^+				
4436.05	3,4,5	1371.91 *24*	47 *12*	3063.63	(4^-)				Other Iγ: 28.9 *22* from 2000Ga30 in (n,n′γ).
		2153.59 *14*	100 *10*	2282.61	4^+	D+Q			
4436.42		1429.45 *14*	100	3006.96	$(4,5)^-$				
4455.01	(3,4,5)	1391.31 *16*	100 *18*	3063.63	(4^-)				
		2172.50 *23*	75 *10*	2282.61	4^+				Other Iγ: 59 *9* from 2000Ga30 in (n,n′γ).
4477.80	$3^{(-)},4^{(+)},5$	1951.4 *10*	19 *8*	2526.96	5^-				
		2195.15 *17*	100 *7*	2282.61	4^+	D+Q			Mult.: γ(θ) in (n,n′γ) excludes pure Q or pure D, ΔJ=0. Other Eγ: 2195.54 *14* from 2000Ga30 in (n,n′γ).
4483.36		1956.37 *21*	100	2526.96	5^-				
4486.0	11^-	234.9[b] *2*	100	4251.0	9^-	E2[f]		0.0562	B(E2)(W.u.)=3.47 *8*
4493.92	2^+	2984.29 *17*	100 *10*	1509.51	2^+	D+Q			Other E: 2983.6 *6* in (γ,γ′). δ: +0.23 *+24−15* or +1.3 *+5−6* (2010Go15) from (n,n′γ).
		4494.7[h] *6*	≤43	0.0	0^+	(E2)[g]			Mult.: Q from γ(θ) in (γ,γ′); Δπ=no from level scheme.
4509.6	4^+	3000	100	1509.51	2^+				E_γ: from (α,α′γ).
4544.40		2261.76 *16*	100	2282.61	4^+				
4573.3	(≤4)	3063.75 *25*	100	1509.51	2^+				
4589.64	$2^{(+)}$	3080.05 *24*	92 *13*	1509.51	2^+				δ(D,Q)=0.0 *+6−12* or 1/δ=+0.3 *+16−7* from (n,n′γ).
		4589.7 *7*	100 *19*	0.0	0^+	Q			Other Eγ: 4590.8 *9* in (γ,γ′).
4630.65	$(2^+,3,4^+)$	2348.6 *11*	13 *5*	2282.61	4^+				
		3121.07 *19*	100 *16*	1509.51	2^+				
4633.73	(1^-)	3124.7[h] *8*	11 *9*	1509.51	2^+	(E1)[g]			B(E1)(W.u.)=2.9×10^{-4} *25* E_γ: from (γ,γ′). Eγ=3121.07 *19* from (n,n′γ) is too low for this placement, suggesting the presence of a second level near 4630 keV (as adopted here). I_γ: from (γ,γ′). Mult.: (D) from (γ,γ′); Δπ=(yes) from level scheme.
		4633.6[h] *1*	100 *9*	0.0	0^+	(E1)[g]			B(E1)(W.u.)=0.00081 *18*

Adopted Levels, Gammas (continued)

γ(^{92}Mo) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[†]	Comments
							Mult.: D, Δπ=(yes) from (γ,γ′). Other Eγ: 4634.1 *8* in (n,n′γ).
4652.7	(≤4)	1802.8 *6*	29 *14*	2849.81	3⁻		
		3143.1 *3*	100 *18*	1509.51	2⁺		
4663.2	1	4663.1[h] *6*	100	0.0	0⁺	D[g]	
4685.1	(6⁻)	1677.5 *13*	86 *21*	3006.96	(4,5)⁻		
		2158.1 *3*	100 *20*	2526.96	5⁻	D+Q	
4702.73	(≤4)	1612.5 *11*	31 *13*	3091.35	2⁺		
		3193.11 *24*	100 *14*	1509.51	2⁺		
4725.2	4⁺	1661.4 *3*	≤291	3063.63	(4⁻)		
		2443.8 *10*	100 *16*	2282.61	4⁺		
4734.3?		1365.6[j] *3*	100	3368.68	(4⁺)		
4781.51	(2,3⁺,4⁺)	3271.94 *20*	100	1509.51	2⁺		
4848.3	(10⁺)	2087.8[d]	100[d]	2760.52	8⁺	Q[f]	
4893.3	4⁺	3383.7 *3*	100	1509.51	2⁺		
4917.9	7⁺	2157.0[c] *6*	100[c] *8*	2760.52	8⁺		
		2305.8[c] *6*	77[c] *7*	2612.41	6⁺		
4936.1	(1)	4936.0[h] *6*	100	0.0	0⁺	(D)[g]	
4944.7	(1)	4944.6[h] *10*	100	0.0	0⁺	(D)[g]	
4948.7	(3,4⁺)	1940.8 *6*	100 *21*	3006.96	(4,5)⁻		
		2666.1 *5*	41 *18*	2282.61	4⁺		
		3439.8 *5*	22 *6*	1509.51	2⁺		
4970.7	(1,2⁺)	3461.1 *5*	100	1509.51	2⁺	(D)	Eγ: weighted average of 3461.3 *7* in (n,n′γ) and 3460.9 *7* in (γ,γ′). Mult.: from (γ,γ′).
5003.6	(2)⁺	3493.78[j] *24*	45 *33*	1509.51	2⁺	(M1)	B(M1)(W.u.)=0.007 *+8−7* Eγ: weighted average of 3494.1 *4* in (γ,γ′) and 3493.6 *3* in (n,n′γ). Iγ: from (γ,γ′). Mult.: (D) in (γ,γ′); Δπ=no from level scheme.
		5003.5[h] *4*	100 *33*	0.0	0⁺	(E2)[g]	B(E2)(W.u.)=0.23 *19* Iγ: from (γ,γ′). Mult.: (Q), Δπ=no from (γ,γ′).
5076.6	4⁺	2793.5 *18*	17 *10*	2282.61	4⁺		
		3567.0 *3*	≈100	1509.51	2⁺		
5121.7	(10⁺)	2361.4[a] *3*	100	2760.52	8⁺	(E2)	B(E2)(W.u.)>0.45 Mult.: stretched Q, from γ(θ) in (^{37}Cl,2p2nγ).
5151.3	(10⁻,11⁻,12⁻)	665.3[b] *2*	100	4486.0	11⁻	(M1)	Mult.: from γ(θ) in (α,2nγ).
5283.0	(1)	5282.8[h] *21*	100	0.0	0⁺	(D)[g]	
5312.6		2552[#] *1*	100	2760.52	8⁺		

Adopted Levels, Gammas (continued)

γ(^{92}Mo) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[†]	Comments
5331.7	(1)	5331.5[h] *9*	100	0.0	0^+	(D)[g]	
5451.6	(1)	5451.4[h] *9*	100	0.0	0^+	(D)[g]	
5462.9	$(7,8)^+$	2702.4[c] *6*	100[c] *16*	2760.52	8^+		
		2850.3[c] *6*	91[c] *16*	2612.41	6^+		
5527.4	(1)	5527.2[h] *5*	100	0.0	0^+	(D)[g]	
5611.2		762.9[d]	100[d]	4848.3	(10^+)		
5623.8	(1)	5623.6[h] *10*	100	0.0	0^+	(D)[g]	
5629.9	1	5629.7[h] *19*	100	0.0	0^+	D[g]	
5703.4	1	5703.2[h] *4*	100	0.0	0^+	D[g]	
5789.1	1	5788.9[h] *3*	100	0.0	0^+	D[g]	
5801.3	(1)	5801.1[h] *7*	100	0.0	0^+	(D)[g]	
5841.7	1	5841.5[h] *11*	100	0.0	0^+	D[g]	
5861.9	(12^+)	740.3 *2*	100 *14*	5121.7	(10^+)	E2	B(E2)(W.u.)=2.2 *5* E_γ: from (α,2nγ). I_γ: from (^{16}O,6nγ). Mult.: stretched Q from $\gamma(\theta)$ in (^{37}Cl,2p2nγ); not M2 from RUL.
		1374.7[e]	36[e] *14*	4486.0	11^-	E1[f]	B(E1)(W.u.)=1.0×10^{-6} *4*
5981.4	1	4473.2[h j] *11*		1509.51	2^+	(D)[g]	
		5981.2[h] *4*	100	0.0	0^+	D[g]	
6125.92	$1^{(-)}$	6125.7[h] *2*	100	0.0	0^+	(E1)[g]	α(IPF)=0.00232 *4* Mult.: D, $\Delta\pi$=(yes) in (γ,γ').
6184.3	(2)	6184.1[h] *25*	100	0.0	0^+	(Q)[g]	
6191.52	1^-	6191.3[h] *2*	100	0.0	0^+	E1[g]	α(IPF)=0.00234 *4*
6300.2	1^-	6300.0[h] *3*	100	0.0	0^+	E1[g]	α(IPF)=0.00236 *4*
6329.9	(1)	6329.7[h] *11*	100	0.0	0^+	(D)[g]	
6362.7	(1)	6362.5[h] *6*	100	0.0	0^+	(D)[g]	
6377.6	1^-	4868.8[h j] *10*		1509.51	2^+	(D)[g]	
		6377.4[h] *3*	100	0.0	0^+	E1[g]	α(IPF)=0.00238 *4*
6400.0		1551.6[d]	100[d]	4848.3	(10^+)		
6524.45	1^-	6524.2[h] *2*	100	0.0	0^+	E1[g]	α(IPF)=0.00242 *4*
6550.3	(12^-)	2064.1[a] *3*	100	4486.0	11^-	M1[f]	B(M1)(W.u.)>0.0036 Eγ=2085.4 *20* in (α,2nγ) is presumed to be erroneous. Other Eγ: 2064.5 in (^{28}Si,2α2nγ).
6566.2	1	6565.9[h] *6*	100	0.0	0^+	D[g]	

Adopted Levels, Gammas (continued)

γ(^{92}Mo) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[†]	α[i]	Comments
6606.4	1⁻	6606.1[h] *3*	100	0.0	0⁺	E1[g]		α(IPF)=0.00244 *4*
6608.5		2122.4[d]	100[d]	4486.0	11⁻			
6645.6	1(−)	6645.3[h] *5*	100	0.0	0⁺	(E1)[g]		α(IPF)=0.00244 *4* Mult.: D, Δπ=(yes) in (γ,γ′).
6661.5	(13⁻)	111.2[b] *2*	100 *9*	6550.3	(12⁻)	(M1+E2)	0.5 *4*	Other Eγ: 110.4 from (^{16}O,6nγ), 110.7 from (^{28}Si,2α2nγ). I_γ: from (^{28}Si,2α2nγ). Mult.: D from γ(θ) and anisotropy in (^{37}Cl,2p2nγ); authors assume ΔJ=1 transitions are M1(+E2).
		800.7[d]	9[d] *4*	5861.9	(12⁺)	D[f]		Other Iγ: 118 *27* from (^{16}O,6nγ).
6718.5	(2⁻)	6718.2[h] *9*	100	0.0	0⁺	(M2)[g]		α(IPF)=0.001520 *22* Mult.: Δπ=(yes) for (Q) transition in (γ,γ′).
6761.4	1(−)	6761.1[h] *4*	100	0.0	0⁺	(E1)[g]		α(IPF)=0.00246 *4* Mult.: D, Δπ=(yes) in (γ,γ′).
6787.3	1⁻	6787.0[h] *4*	100	0.0	0⁺	E1[g]		α(IPF)=0.00247 *4*
6818.1	1⁻	6817.8[h] *4*	100	0.0	0⁺	E1[g]		α(IPF)=0.00248 *4*
6883.1	1⁻	6882.8[h] *4*	100	0.0	0⁺	E1[g]		α(IPF)=0.00249 *4*
6995.89	1⁻	5487.0[h,j] *10*	6 *9*	1509.51	2⁺	(E1)[g]		B(E1)(W.u.)=0.0003 *+5−3* I_γ: from (γ,γ′). Mult.: (D) from (γ,γ′); Δπ=yes from level scheme.
		6995.6[h] *2*	100 *9*	0.0	0⁺	E1[g]		α(IPF)=0.00252 *4* B(E1)(W.u.)=0.0024 *5* I_γ: from (γ,γ′).
7031.3	1⁻	5519.8[j] *17*	8 *11*	1509.51	2⁺	(E1)		B(E1)(W.u.)=0.0003 *+4−3* I_γ,E_γ: from (γ,γ′). Mult.: (D) from (γ,γ′); Δπ=yes from level scheme.
		7031.0[h] *3*	100 *11*	0.0	0⁺	E1[g]		α(IPF)=0.00253 *4* B(E1)(W.u.)=0.0016 *5* I_γ: from (γ,γ′).
7069.6	1⁻	7069.3[h] *4*	100	0.0	0⁺	E1[g]		α(IPF)=0.00254 *4*
7076.9	1	7076.6[h] *12*	100	0.0	0⁺	D[g]		
7134.1	(14⁺)	471.9[d]	100[d]	6661.5	(13⁻)	E1[f]		
7239.7	1(−)	7239.4[h] *11*	100	0.0	0⁺	(E1)[g]		α(IPF)=0.00257 *4* Mult.: D, Δπ=(yes) in (γ,γ′).
7271.7	−	7271.4 *5*	100	0.0	0⁺			From (γ,γ′); Δπ=yes.
7279.0	(2)	7278.7[h] *11*	100	0.0	0⁺	(Q)[g]		
7312.4	(14⁻)	650.9[b] *2*	100	6661.5	(13⁻)	M1[f]		B(M1)(W.u.)>0.057
7384.3	1	7384.0[h] *6*	100	0.0	0⁺	D[g]		

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Adopted Levels, Gammas (continued)

γ(^{92}Mo) (continued)

E_i(level)	J_i^π	E_γ †	I_γ †	E_f	J_f^π	Mult. †	Comments
7394.4	1	7394.1[h] *4*	100	0.0	0^+	D[g]	
7422.5		7422.2 *11*	100	0.0	0^+		E_γ: from (γ,γ′).
7447.2		7446.9 *16*	100	0.0	0^+		E_γ: from (γ,γ′).
7469.1	$1^{(-)}$	4950.7[h j] *14*	52 *24*	2519.53	0^+	(E1)[g]	B(E1)(W.u.)=0.0013 *9* Mult.: (D) from (γ,γ′); Δπ=(yes) from level scheme.
		7468.8[h] *4*	100 *24*	0.0	0^+	(E1)[g]	α(IPF)=0.00261 *4* B(E1)(W.u.)=0.0007 *4* Mult.: D, Δπ=(yes) from (γ,γ′).
7486.6	$1^{(-)}$	7486.3[h] *5*	100	0.0	0^+	(E1)[g]	α(IPF)=0.00261 *4* Mult.: D, Δπ=(yes) in (γ,γ′).
7518.4	1^-	7518.1[h] *6*	100	0.0	0^+	E1[g]	α(IPF)=0.00262 *4*
7573.6	1	7573.3[h] *7*	100	0.0	0^+	D[g]	
7604.4	(1)	7604.1[h] *7*	100	0.0	0^+	(D)[g]	
7619.5	(1)	7619.2[h] *9*	100	0.0	0^+	(D)[g]	
7681.1	1^-	7680.8[h] *5*	100	0.0	0^+	E1[g]	α(IPF)=0.00265 *4*
7711.3	1	7711.0[h] *5*	100	0.0	0^+	D[g]	
7731.7	1^-	7731.4[h] *5*	100	0.0	0^+	E1[g]	α(IPF)=0.00266 *4*
7782.3	1	7781.9[h] *9*	100	0.0	0^+	D[g]	
7784.0	(2)	7783.6[h] *6*	100	0.0	0^+	(Q)[g]	
7787.6	(1)	7787.2[h] *10*	100	0.0	0^+	(D)[g]	
7808.1	1	7807.7[h] *11*	100	0.0	0^+	D[g]	
7831.4		7831.0 *13*	100	0.0	0^+		E_γ: from (γ,γ′).
7837.7	(2)	7837.3[h] *15*	100	0.0	0^+	(Q)[g]	
7856.6	1^-	7856.2[h] *5*	100	0.0	0^+	E1[g]	α(IPF)=0.00269 *4*
7877.6	(1)	4954.2[h j] *12*	100 *14*	2922.6?	(1)	(D)[g]	I_γ: from (γ,γ′).
		7877.2[h] *10*	43 *14*	0.0	0^+	(D)[g]	I_γ: from (γ,γ′).
7881.8	1	7881.4[h] *5*	100	0.0	0^+	D[g]	
7894.3	1	7893.9[h] *7*	100	0.0	0^+	D[g]	
7919.4	(1)	7919.0[h] *10*	100	0.0	0^+	(D)[g]	
7931.4	1	7931.0[h] *9*	100	0.0	0^+	D[g]	
7950.4	$1^{(+)}$	7950.0[h] *4*	100	0.0	0^+	(M1)[g]	Mult.: D, Δπ=(no) in (γ,γ′).
7963.3		7962.9 *7*	100	0.0	0^+		E_γ: from (γ,γ′).
8007.0	1^-	8006.6[h] *14*	100	0.0	0^+	E1[g]	
8042.0	1	6532.2[h j] *8*	33 *19*	1509.51	2^+	D[g]	I_γ: from (γ,γ′).
		8041.6[h] *12*	100 *19*	0.0	0^+	D[g]	I_γ: from (γ,γ′).

$^{92}_{42}Mo_{50}$-18

Adopted Levels, Gammas (continued)

γ(^{92}Mo) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[†]	Comments
8063.4	$1^{(-)}$	8063.0[h] *11*	100	0.0	0^+	(E1)[g]	Mult.: D, Δπ=(yes) in (γ,γ′).
8088.1	(2)	8087.7[h] *10*	100	0.0	0^+	(Q)[g]	
8096.4	1	8096.0[h] *10*	100	0.0	0^+	D[g]	
8168.4	1^-	8168.0[h] *5*	100	0.0	0^+	E1[g]	
8211.0	1	6701.2[h j] *15*	37 *18*	1509.51	2^+	(D)[g]	I_γ: from (γ,γ′).
		8210.6[h] *11*	100 *18*	0.0	0^+	D[g]	I_γ: from (γ,γ′).
8220.8	(1)	8220.4[h] *10*	100	0.0	0^+	(D)[g]	
8221.2	(14)	1559.7[a]	100	6661.5	(13^-)	D[&]	
8229.9	1^-	8229.5[h] *7*	100	0.0	0^+	E1[g]	
8319.5	1	8319.1[h] *6*	100	0.0	0^+	D[g]	
8355.1	1	8354.7[h] *16*	100	0.0	0^+	D[g]	
8381.7	(1)	8381.3[h] *8*	100	0.0	0^+	(D)[g]	
8387.4	(15^+)	1075.0[a] *3*	100	7312.4	(14^-)	E1[f]	B(E1)(W.u.)>0.00019
8422.2	$(^-)$	8421.8 *9*	100	0.0	0^+		From (γ,γ′); Δπ=(yes).
8486.5	1	8486.1[h] *14*	100	0.0	0^+	D[g]	
8501.0	1	8500.6[h] *17*	100	0.0	0^+	D[g]	
8553.0	1	8552.6[h] *13*	100	0.0	0^+	D[g]	
8594.7		1933.2[d]	100[d]	6661.5	(13^-)		
8606.6	(1)	8606.2[h] *8*	100	0.0	0^+	(D)[g]	
8660.4	1^-	8660.0[h] *3*	100	0.0	0^+	E1[g]	
8695.2	1	8694.8[h] *14*	100	0.0	0^+	D[g]	
8763.4	1	8763.0[h] *5*	100	0.0	0^+	D[g]	
8774.4	1^-	8774.0[h] *4*	100	0.0	0^+	E1[g]	
8791.5	(1)	8791.0[h] *8*	100	0.0	0^+	(D)[g]	
8819.8	1	8819.3[h] *6*	100	0.0	0^+	D[g]	
8834.3	(1)	8833.8[h] *20*	100	0.0	0^+	(D)[g]	
8902.5	1	8902.0[h] *9*	100	0.0	0^+	D[g]	
8924.0	(16^+)	536.6[a] *3*	100	8387.4	(15^+)	(M1)[f]	B(M1)(W.u.)>0.10
8926.3	(1)	8925.8[h] *15*	100	0.0	0^+	(D)[g]	
8955.5	$1^{(-)}$	8955.0[h] *6*	100	0.0	0^+	(E1)[g]	Mult.: D, Δπ=(yes) in (γ,γ′).
9022.1		9021.6 *8*	100	0.0	0^+		E_γ: from (γ,γ′).
9096.6	1^-	9096.1[h] *6*	100	0.0	0^+	E1[g]	
9126.5	1	9126.0[h] *10*	100	0.0	0^+	D[g]	

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Adopted Levels, Gammas (continued)

γ(^{92}Mo) (continued)

E_i(level)	J_i^π	E_γ †	I_γ †	E_f	J_f^π	Mult. †	Comments
9187.0	1	9186.5[h] *8*	100	0.0	0^+	D[g]	
9206.4	$1^{(-)}$	9205.9[h] *8*	100	0.0	0^+	(E1)[g]	Mult.: D, Δπ=(yes) in (γ,γ′).
9237.4	1	9236.9[h] *8*	100	0.0	0^+	D[g]	
9280.2	(2)	9279.7[h] *23*	100	0.0	0^+	(Q)[g]	
9296	(2)	9295[h] *3*	100	0.0	0^+	(Q)[g]	
9337.6	1	9337.1[h] *8*	100	0.0	0^+	D[g]	
9359.3	(15^+)	2047.6[d]	100[d] *10*	7312.4	(14^-)	D[f]	
		2224.5[d]	53[d] *19*	7134.1	(14^+)	M1[f]	
9360.9	1	9360.4[h] *7*	100	0.0	0^+	D[g]	
9418.9	$(^-)$	9418.4 *12*	100	0.0	0^+		Eγ from (γ,γ′); Δπ=(yes) in (γ,γ′).
9443.2	1	9442.7[h] *8*	100	0.0	0^+	D[g]	
9481.0	(17^+)	557.0[a] *3*	100	8924.0	(16^+)	M1[f]	
9502.8	1	9502.3[h] *8*	100	0.0	0^+	D[g]	
9559.3	(1)	9558.8[h] *13*	100	0.0	0^+	(D)[g]	
9592.3	(1^-)	9591.8[h] *10*	100	0.0	0^+	(E1)[g]	
9646.7	(1)	9646.2[h] *13*	100	0.0	0^+	(D)[g]	
9691		9690 *3*	100	0.0	0^+		Eγ from (γ,γ′).
9710.6	1	9710.0[h] *11*	100	0.0	0^+	D[g]	
9827.0	1	9826.4[h] *17*	100	0.0	0^+	D[g]	
9843.0	(1)	9842.4[h] *10*	100	0.0	0^+	(D)[g]	
10020.3	(16^+)	660.7[d]	100[d]	9359.3	(15^+)	M1[f]	
10102.9	(18^+)	621.9[d]	100[d]	9481.0	(17^+)	M1[f]	
10579.2	(17^+)	559.2[d]	100[d]	10020.3	(16^+)	M1[f]	
11215.5	(18^+)	636.3[d]	100[d]	10579.2	(17^+)	D[f]	

† From (n,n′γ), except as noted. Note, however, that stated Iγ from 2000Ga30 may be subject to an additional uncertainty of as much as 15% due to angular distribution effects and, in this evaluation, this has been combined in quadrature with the statistical uncertainty in those data. The Iγ(125°) data of 2010Go15 should not have been significantly influenced by such effects.

‡ From γ(θ) in (p,p′γ), except as noted.

From (α,2nγ). ΔE_γ not stated by authors; uncertainty assigned by evaluator.

@ From γ(θ) in (n,n′γ).

& D or (D) from γ(θ) in (^{37}Cl,2p2nγ), (^{30}Si,2p2nγ), (^{16}O,4nγ); ΔJ=1 transitions assumed by 1992Si03 to be M1(+E2).

a From (^{37}Cl,2p2nγ); note that Eγ values appear to be systematically low in this study.

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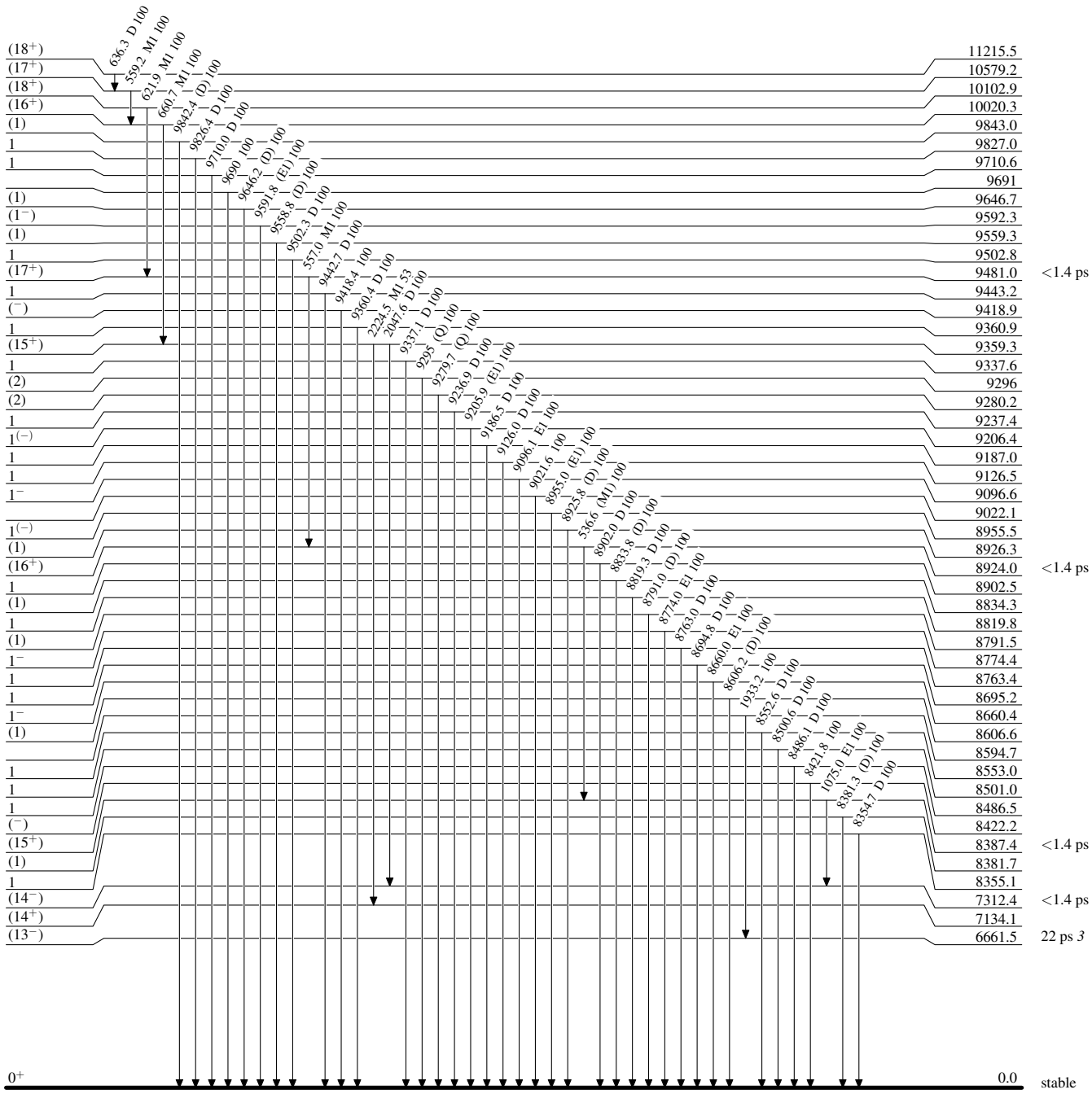
$\gamma(^{92}Mo)$ (continued)

[b] From (α,2nγ).
[c] From ^{92}Tc ε decay.
[d] From ^{74}Ge(^{28}Si,2α2nγ).
[e] From (^{16}O,6nγ).
[f] From DCO ratios and γ asymmetry parameters from polarization measurements in ^{74}Ge(^{28}Si,2α2nγ).
[g] From (γ,γ'), (pol γ,γ'). $\Delta\pi$ (if given) is based on comparison between polarized and unpolarized photon data; ΔJ is from measured $\gamma(\theta)$.
[h] From (γ,γ').
[i] Total theoretical internal conversion coefficients, calculated using the BrIcc code (2008Ki07) with Frozen orbital approximation based on γ-ray energies, assigned multipolarities, and mixing ratios, unless otherwise specified.
[j] Placement of transition in the level scheme is uncertain.

Adopted Levels, Gammas

Level Scheme

Intensities: Relative photon branching from each level



$^{92}_{42}Mo_{50}$

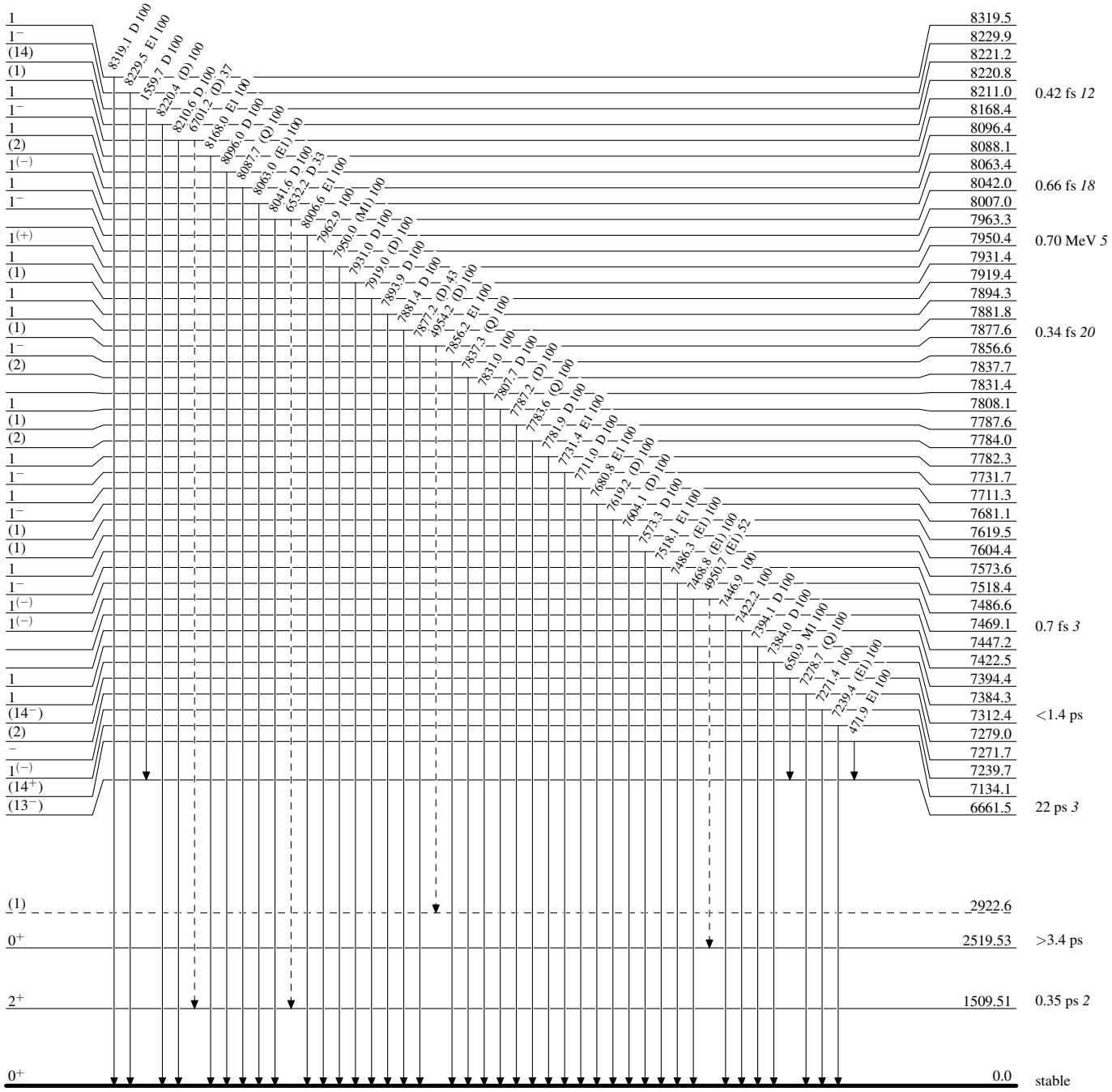
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

γ Decay (Uncertain)



$^{92}_{42}Mo_{50}$

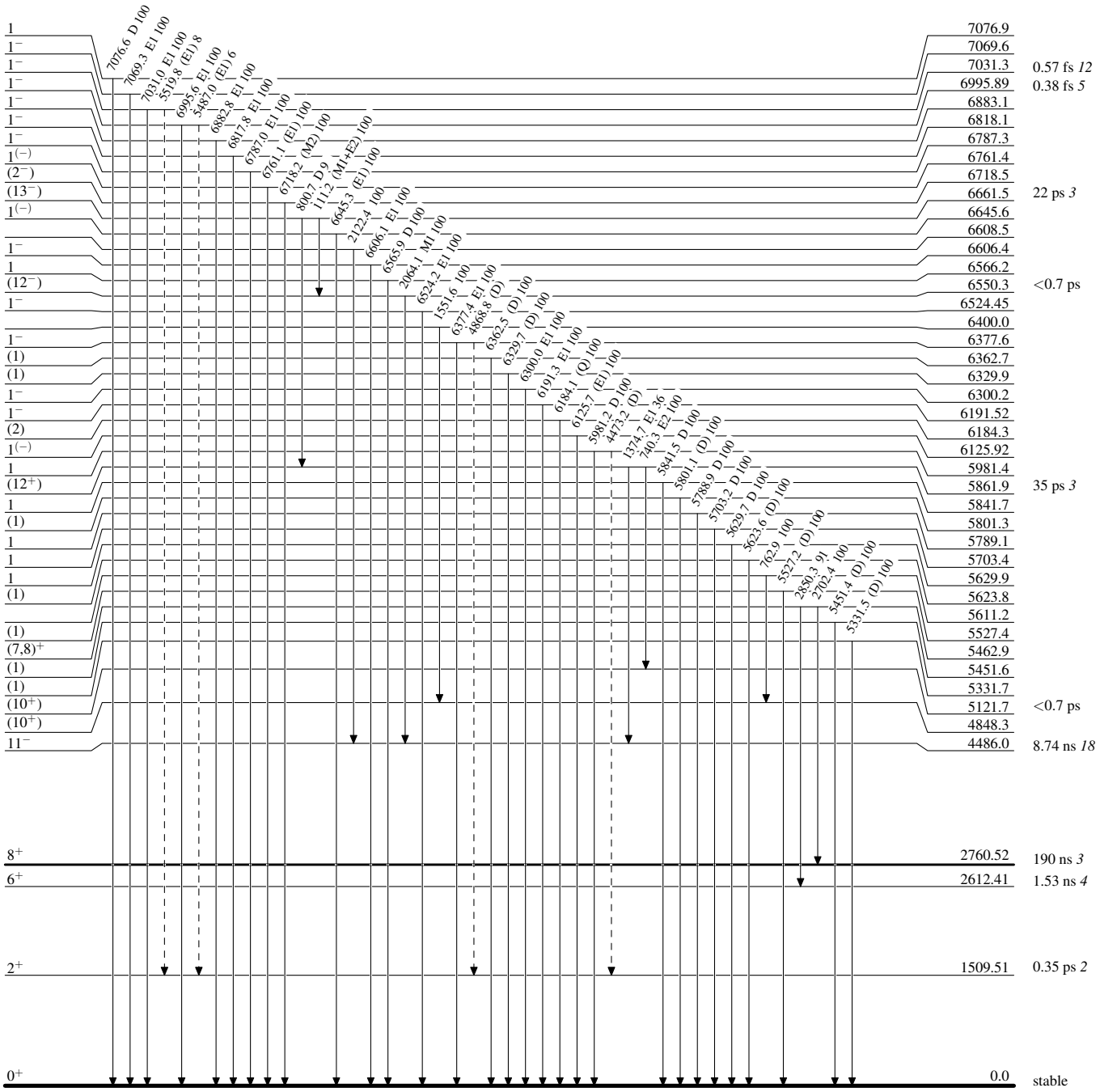
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

– – – – – – ► γ Decay (Uncertain)



$^{92}_{42}Mo_{50}$

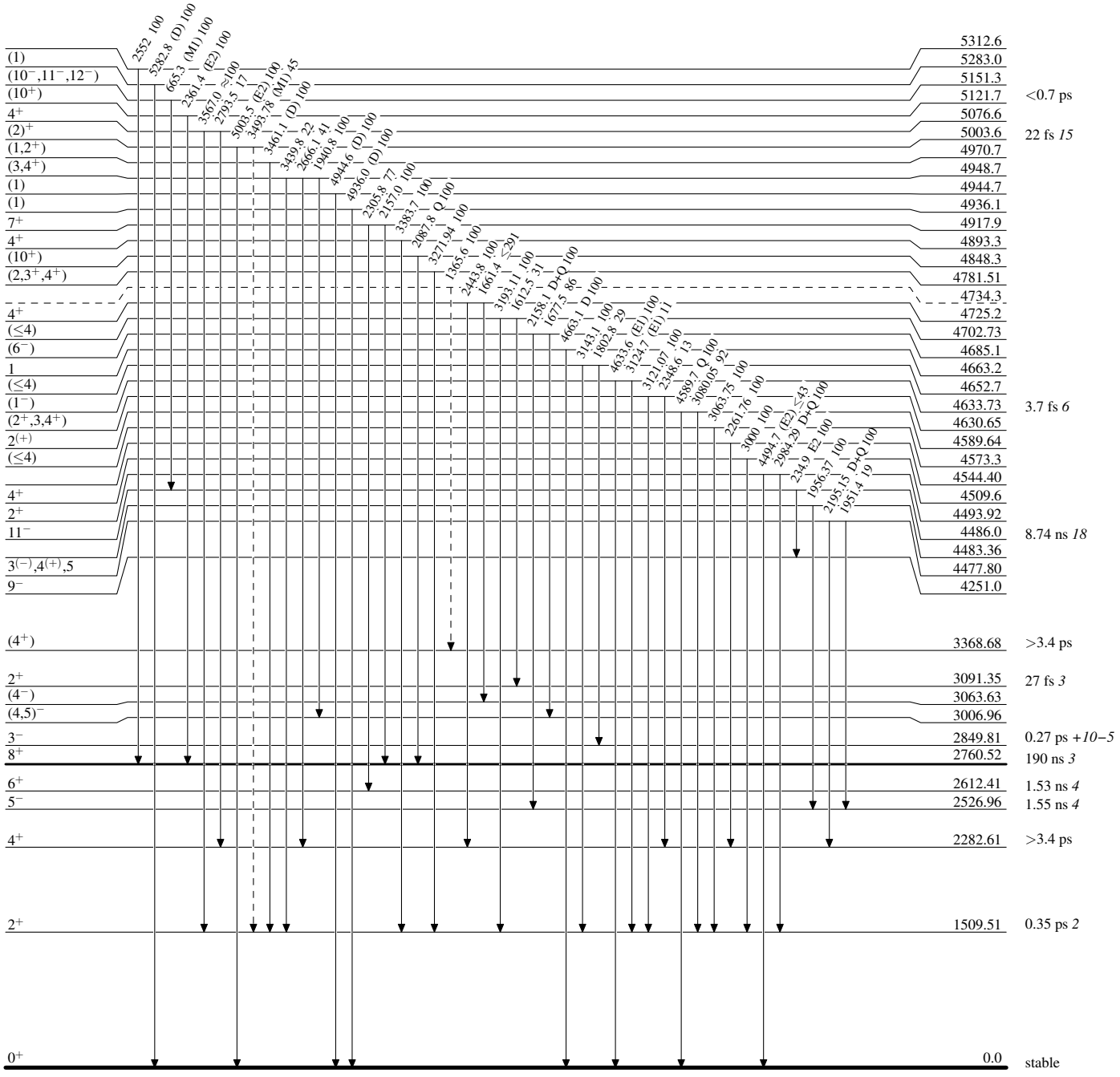
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

γ Decay (Uncertain)



$^{92}_{42}Mo_{50}$

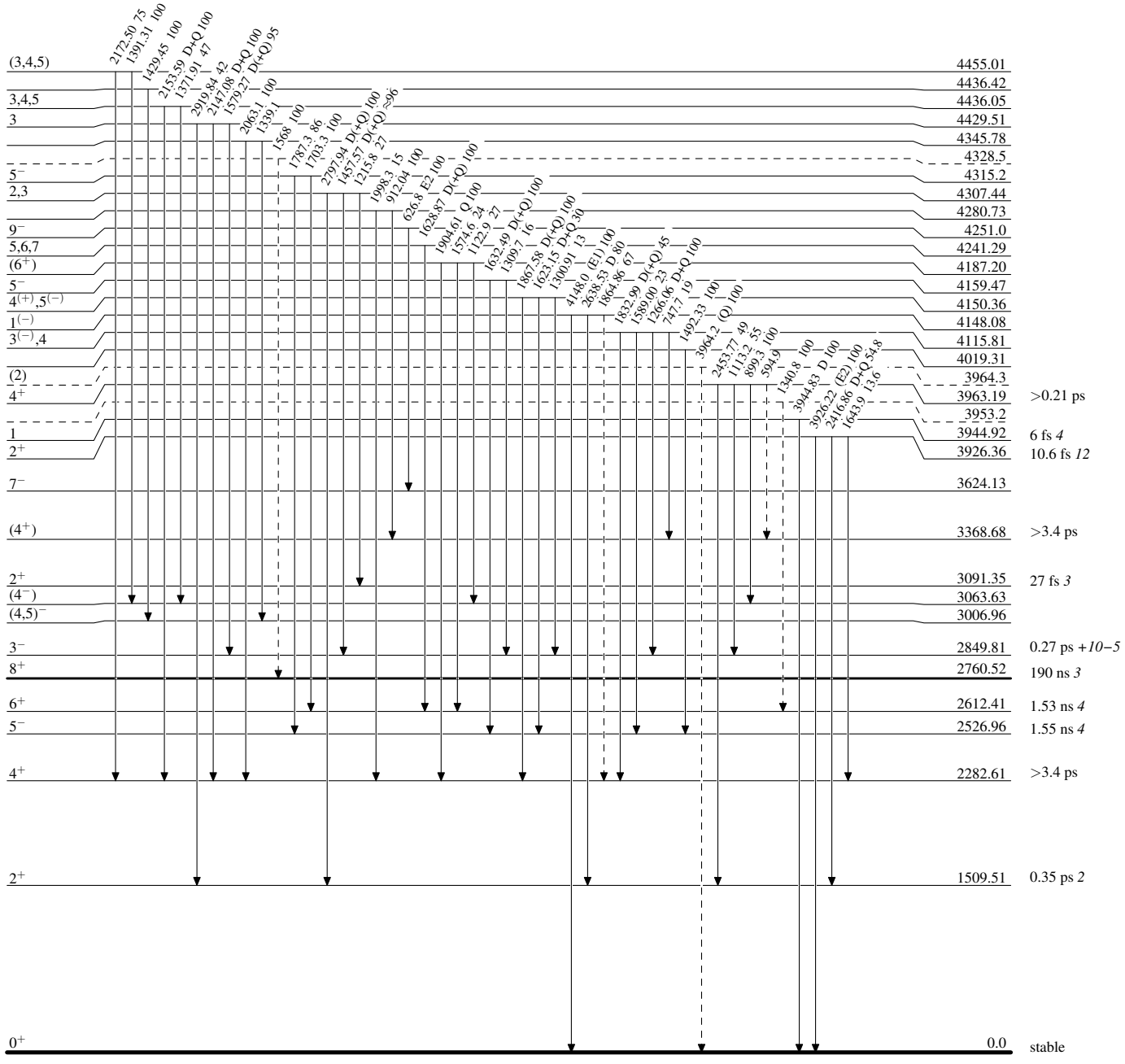
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

γ Decay (Uncertain)



$^{92}_{42}Mo_{50}$

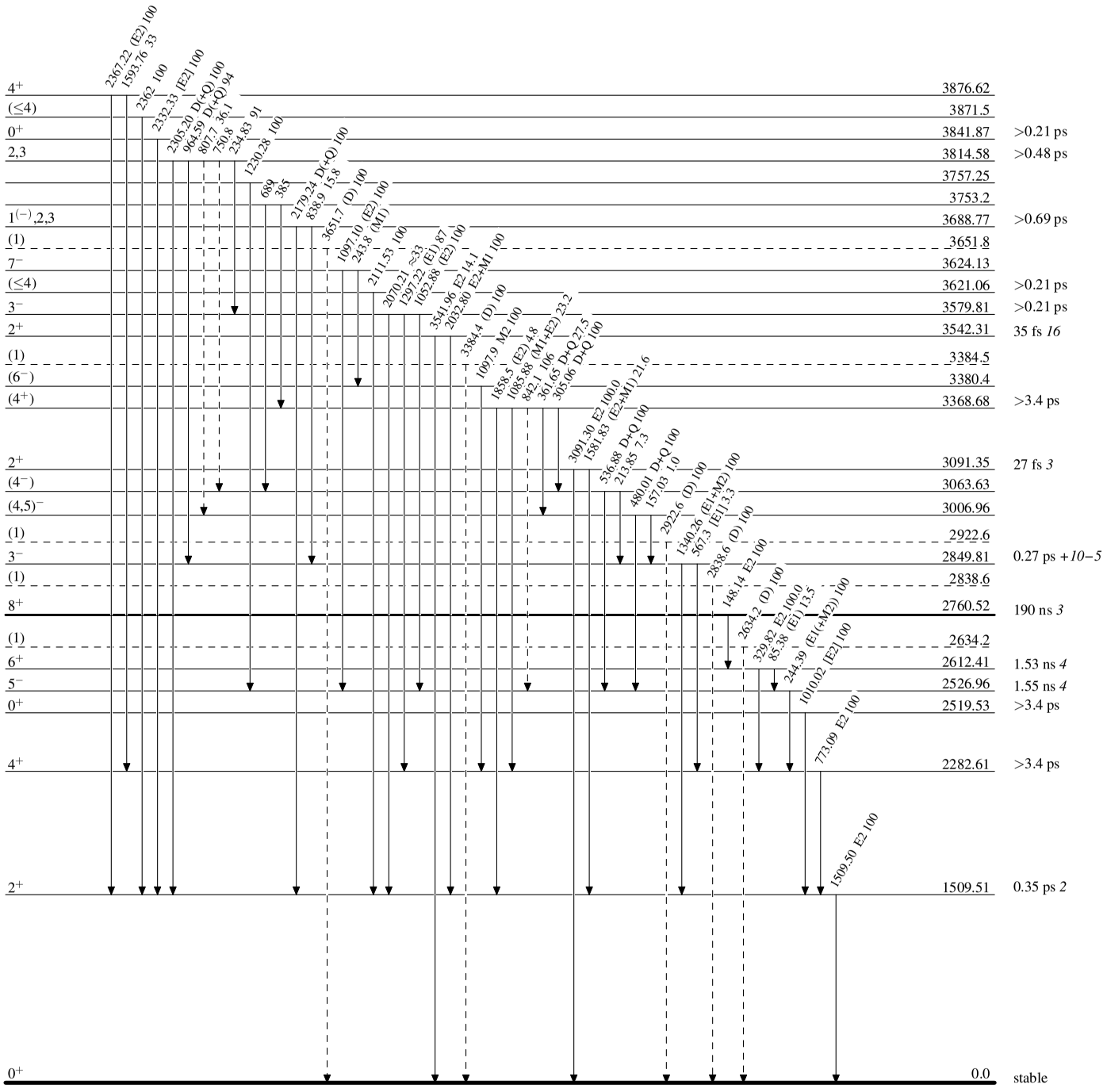
Adopted Levels, Gammas

Legend

Level Scheme (continued)

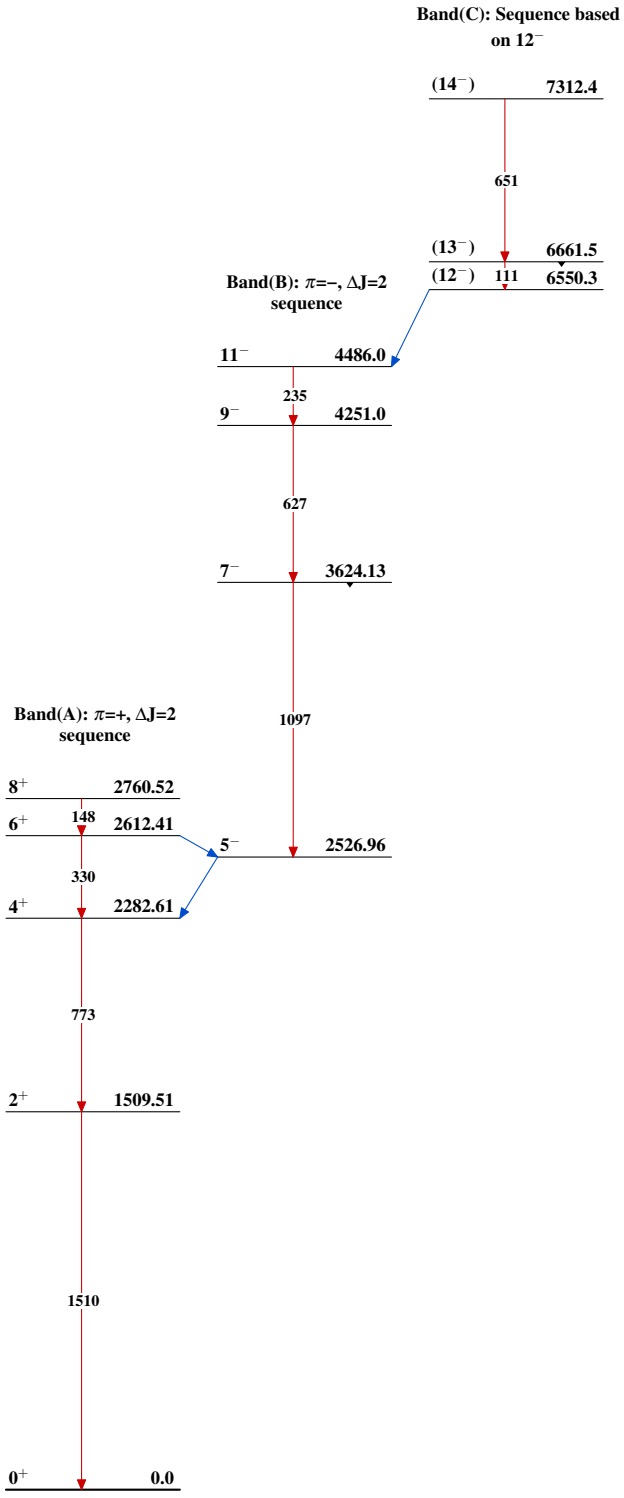
Intensities: Relative photon branching from each level

γ Decay (Uncertain)



$^{92}_{42}Mo_{50}$

Adopted Levels, Gammas



$^{92}_{42}Mo_{50}$