Adopted Levels, Gammas

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	F. G. Kondev	NDS 187,355 (2023)	20-Sep-2022

Q(β^-)=−3842 *18*; S(n)=7091 *17*; S(p)=5513 *15*; Q(α)=2844 *14* 2021Wa16

^{201}Pb Levels

Cross Reference (XREF) Flags

A ^{201}Bi ε decay
B ^{205}Po α decay
C ^{200}Hg(α,3nγ)
D ^{192}Os(^{14}C,5nγ)
E ^{197}Au(^{207}Pb,Xγ)

E(level)[†]	J$^\pi$	$T_{1/2}$	XREF	Comments
0[‡]	5/2$^-$	9.33 h *5*	ABCD	%ε+%β^+=100 μ=+0.6731 *6* (2019StZV) Q=−0.01 *4* (1986An06,2021StZZ) J$^\pi$: Atomic beam magnetic resonance (1977Gu18); Favored α decay from ^{205}Po g.s. (J^π=5/2$^-$); μ. $T_{1/2}$: Weighted average of 9.300 *75* (330.7γ(t)), 9.40 *15* (691.9γ(t)) and 9.350 *78* (945.4γ(t)) in 1981An11. Others: 8 h *2* (1950Ne77), 8.4 h *10* (1954Wa12), 9.4 h 2 (1955Be12) and 10.0 h *8* (1960Li08). μ,Q: From 1986An06, using the atomic beam with laser fluorescence spectroscopy technique. μ=+0.6753 *5* in 1986An06, but diamagnetic correction applied in 2019StZV. δ<r^2>=−0.4093 fm^2 *34* (1986An06). Other: −0.4225 *5* fm^2 (1982Th05).
88.5[#] *5*	3/2$^-$		A C	J$^\pi$: 88.6γ M1+E2 to 5/2$^-$; systematics in neighboring nuclei.
169.9[@] *5*	(1/2$^-$)		A C	J$^\pi$: 81.4γ to 3/2$^-$; systematics in neighboring nuclei.
538.7 *7*	(3/2$^-$)		A C	J$^\pi$: 368.8γ to (1/2$^-$), 538.7γ to 5/2$^-$; systematics in neighboring nuclei.
629.1[&] *3*	13/2$^+$	60.8 s *18*	A CDE	%IT=100 J$^\pi$: 629.1γ M4 to 5/2$^-$. $T_{1/2}$: Weighted average of 60.1 s *44* (1955Fi30) and 61 s *2* (1956St05). Other: 50 s (1952Ho41).
879.6 *10*	(5/2)$^-$		A C	J$^\pi$: 791.0γ M1 to 3/2$^-$, 2170γ from 7/2$^+$.
910.5? *12*	5/2$^-$		A	J$^\pi$: 822.6γ M1(+E2) to 3/2$^-$, 740.7γ from 7/2$^+$.
936.1[b] *3*	7/2$^-$		A C	J$^\pi$: 847.7γ E2 to 3/2$^-$; direct population in ^{201}Bi ε decay (J^π=9/2$^-$).
990.5[c] *3*	7/2$^-$		A	J$^\pi$: 902.0γ E2 to 3/2$^-$; direct population in ^{201}Bi ε decay (J^π=9/2$^-$).
1014.2[b] *4*	9/2$^-$		A C	J$^\pi$: 1014.1γ E2 to 5/2$^-$; direct population in ^{201}Bi ε decay (J^π=9/2$^-$).
1185.8 *4*	(7/2)$^-$		A C	J$^\pi$: 171.7γ M1(+E2) to 9/2$^-$, 1186.5γ to 5/2$^-$.
1325.4[a] *5*	7/2$^-$		A	J$^\pi$: 1325.2γ M1+E2 to 5/2$^-$; direct population in ^{201}Bi ε decay (J^π=9/2$^-$).
1415.4[d] *4*	9/2$^+$		A	J$^\pi$: 786.4γ E2 to 13/2$^+$, 424.5γ (E1) to 7/2$^-$; direct population in ^{201}Bi ε decay (J^π=9/2$^-$).
1447.9 *5*	(11/2)$^+$		A C	J$^\pi$: 818.9γ E2+M1 to 13/2$^+$; direct population in ^{201}Bi ε decay (J^π=9/2$^-$).
1490.3 *6*	7/2$^-$,9/2$^-$		A	J$^\pi$: 499.9γ M1(+E2) to 7/2$^-$; direct population in ^{201}Bi ε decay (J^π=9/2$^-$).
1541.8[e] *4*	17/2$^+$		CDE	J$^\pi$: 912.7γ E2 to 13/2$^+$.
1545.8 *4*	15/2$^+$		CDE	J$^\pi$: 916.7γ M1+E2 to 13/2$^+$.
1651.0 *4*	7/2$^+$		A	J$^\pi$: 1650.9γ E1 to 5/2$^-$; direct population in ^{201}Bi ε decay (J^π=9/2$^-$).
1737.3 *4*	9/2$^+$		A	J$^\pi$: 746.8γ E1 to 7/2$^-$, 1108.1γ E2 to 13/2$^+$.
1843.8 *5*	11/2$^+$		A	J$^\pi$: 1214.5γ M1(+E2) to 13/2$^+$; direct population in ^{201}Bi ε decay (J^π=9/2$^-$).
1875.6 *5*	9/2$^+$		A	J$^\pi$: 224.5γ M1(+E2) to 7/2$^+$, 428.0γ M1(+E2) to 11/2$^+$.
1896.1[f] *4*	19/2$^+$	3.3 ns *3*	CDE	J$^\pi$: 350.3γ E2 to 15/2$^+$, 354.3γ M1 to 17/2$^+$.

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Adopted Levels, Gammas (continued)

^{201}Pb Levels (continued)

E(level)†	Jπ	$T_{1/2}$	XREF	Comments
				$T_{1/2}$: Weighted average of 3.2 ns *6* using (350γ,354γ,913γ,917γ)(t) in 1981He07 (^{200}Hg(α,3nγ)) and 3.3 ns *3* from γγ(Δt) and centroid-shift analysis in 2020Wa24 (^{197}Au(^{207}Pb,Xγ)).
1902.2[g] *5*	21/2+		CD	Jπ: 360.4γ E2 to 17/2+.
1977.6 *5*	7/2+,9/2+		A	Jπ: 986.5γ E1 to 7/2−, 529.8γ to 11/2+.
2068.5 *5*	21/2		CD	Jπ: 166.2γ D,E2 ΔJ=0 to 21/2+.
2119.5 *5*	9/2+		A	Jπ: 275.5γ M1(+E2) to 11/2+, 1183.7γ to 7/2−.
2151.9 *6*	7/2+		A	Jπ: 414.6γ M1(+E2) to 9/2+, 1241.4γ (E1) to 5/2−.
2208.9 *6*	(9/2+)		A	Jπ: 557.7γ to 7/2+, 1579.8γ to 13/2+, 1298.4γ to 5/2−.
2279.8 *8*	(9/2)+		A	Jπ: 832.0γ M1(+E2) to 11/2+, 1265.7γ to 9/2−, 1400.3γ to (5/2)−.
2439.4 *7*	7/2+,9/2+		A	Jπ: 1024.4γ M1(+E2) to 9/2+, 1503.0γ to 7/2−.
2459.9 *6*	7/2+,9/2+		A	Jπ: 250.9γ M1+E2 to (9/2+), 1469.5γ to 7/2−.
2474.6 *5*	(7/2+,9/2+)		A	Jπ: 1288.9γ (E1) to (7/2)−; direct population in ^{201}Bi ε decay (J^π=9/2−).
2496.3[h] *4*	21/2−		CDE	Jπ: 594.5γ (E1) to 21/2+, 600.5γ (E1) to 19/2+, 222.4γ E2 from 25/2−.
2506.8 *4*	9/2+		A	Jπ: 1570.8γ E1 to 7/2−, 1877.4γ to 13/2+.
2548.9 *6*	(11/2−)		A	Jπ: 1558.6γ (E2) to 7/2−, 1919.4γ to 13/2+.
2604.0 *7*	(21/2)		C	Jπ: 707.9γ D to 19/2+.
2718.5[i] *4*	25/2−	63 ns *3*	CDE	μ=−0.79 *4* (1988Ro08,2020StZV); Q=0.46 *2* (1979MaYQ,2021StZZ) XREF: D(2719.6)E(2719.1). Jπ: μ; π from 222.2γ E2 to negative parity state; systematics of similar isomers in neighboring Pb nuclei; proposed configuration. $T_{1/2}$: From (222.3γ,350.3γ,354.3γ,600.3γ,913.2γ,917.1γ)(t) in 1988Ro08 (^{200}Hg(α,3nγ)). Other: ≈55 ns in 1981He07. μ,Q: Using the time dependent perturbed angular distribution technique.
2718.5+x[j] *4*	(29/2−)	508 ns *5*	CDE	μ=−1.011 *6* (1988Ro08,2020StZV) Additional information 1. E(level): X<70 keV in 1981He07. Jπ: From systematics. Consistent with the proposed configuration and μ. $T_{1/2}$: From (222.3γ,350.3γ,354.3γ,600.3γ,913.2γ,917.1γ)(t) in 1988Ro08 (^{200}Hg(α,3nγ)). Other: 540 ns *40* γ(t) in 1981He07 (^{200}Hg(α,3nγ)). μ: Using the time dependent perturbed angular distribution technique.
2732.8 *6*			D	
2736.2 *6*			D	
2788.8 *6*	11/2−		A	Jπ: 239.7γ M1+E2 to 11/2−, 1051.6γ E1 to 9/2+, 2159.7 to 13/2+.
2794.2 *5*	(19/2,21/2,23/2)−		C	Jπ: 297.9γ M1+E2 to 21/2−.
2961.8 *6*	(7/2,9/2−)		A	Jπ: 1971.0γ to 7/2−, 2082.0γ to (5/2)−; direct population in ^{201}Bi ε decay (J^π=9/2−).
3050.7 *5*	(7/2)+		A	Jπ: 931.6γ M1(+E2) to 9/2+, 2170.4γ to (5/2)−.
3509.5+x *4*	(31/2−)		CD	Jπ: 791.0γ M1+E2 to (29/2−).
3545.0+x *4*	(33/2−)		CDE	Jπ: 826.6γ E2 to (29/2−).
3638.0+x *4*	(31/2)		CD	Jπ: 919.4γ (D) to (29/2−).
3832.3+x *6*	(35/2−)		CDE	Jπ: 287.2γ M1+E2 to (33/2−).
3932.0+x[k] *4*	(33/2+)		CD	Jπ: 293.9γ D to (31/2),387.0γ (D) to (33/2−), 422.5γ (D) to (31/2−); proposed configuration.
4059.5 *7*			D	
4059.5+y[n] *7*			D	Additional information 2.
4168.7+y[n] *5*			D	
4350.3+y[n] *7*			D	
4505.1+x *6*	(35/2)		CD	Jπ: 573.2γ D to (33/2+).
4560.2+x *6*	(37/2+)		CDE	Jπ: 628.4γ E2 to (33/2+), 728.0 D to (35/2−).
4614.1+y[n] *9*			D	
4640.0+x[l] *6*	(41/2+)	46 ns *3*	CDE	μ=−3.7 *8* (1988Ro08,2020StZV)

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Adopted Levels, Gammas (continued)

^{201}Pb Levels (continued)

E(level)[†]	Jπ	XREF	Comments
			XREF: C(4638.0+X).
			Jπ: 80γ E2 to (37/2+).
			T1/2: Unweighted average of 52 ns *2* from γγ(Δt) in 2019Ro12, using 902γ-(728γ,827γ) and 447γ-(728γ,827γ) in ^{197}Au(^{207}Pb,Xγ), 43 ns *3* from 80.1γ(t) in 1989Su12 (^{192}Os(^{14}C,5nγ)), and 43 ns *3* from (727.7γ,287.0γ,825.6γ)(t) in 1988Ro08 (^{200}Hg(α,3nγ)).
			μ: Using time dependent perturbed angular distribution technique.
4640.0+u[p] *7*		D	Additional information 3.
4640.0+v[q] *7*		D	Additional information 4.
4640.0+z[o] *7*		D	Additional information 5.
4640.1+x *5*	(35/2)	C	Jπ: 708.1γ to (33/2+).
4647.6+x *6*	(35/2)	D	Jπ: 142.5γ (D) to (35/2+), 715.7γ D to (33/2+).
4780.5+z[o] *5*		D	
4793.8+v[q] *5*		D	
4817.4+u[p] *5*		D	
4830.2+x *6*	(39/2)	D	Jπ: 190.4γ D to (41/2+), 269.9γ D to (37/2+).
4954.9+y[n] *10*		D	
4956.3+z[o] *7*		D	
4992.4+v[q] *7*		D	
5000.1+x *7*		C	
5043.1+u[p] *7*		D	
5087.1+x *6*	(43/2)	CDE	Jπ: 447.3γ D to (41/2+).
5172.4+x *7*		C	
5178.6+z[o] *9*		D	
5242.4+v[q] *9*		D	
5321.3+u[p] *9*		D	
5358.7+y[n] *10*		D	
5389.1+x *7*	(45/2)	D	Jπ: 302.0γ D to (43/2).
5425.5+x *7*		C	
5455.0+z[o] *10*		D	
5554.4+v[q] *10*		D	
5581.9+x *7*	(39/2−)	D	Jπ: 1749.5γ E2 to (35/2−).
5648.0+u[p] *10*		D	
5787.3+z[o] *12*		D	
5817.7+y[n] *10*		D	
5830.0+x *7*	(45/2+)	D	Jπ: 1190.1γ E2 to (41/2+).
5835.7+x *6*	(41/2)	D	Jπ: 253.7γ (D) to (39/2−), 1005.5γ D to (39/2−).
5891.3+x *7*	(43/2)	D	Jπ: 1251.3γ D to (41/2+).
5928.8+v[q] *12*		D	
5989.4+x *6*	(45/2)	DE	Jπ: 98.2γ D to (43/2), 153.7γ E2 to (41/2), 159.4γ (D) to (45/2+).
6028.4+u[p] *12*		D	
6145.1+x[m] *7*	(35/2)	D	Jπ: 1640.0γ ΔJ=0, (D) to (35/2).
6175.4+z[o] *12*		D	
6246.8+x[m] *8*	(37/2)	D	Jπ: 101.7γ (M1) to (35/2); band structure.
6323.4+y[n] *11*		D	
6323.9+x *7*	(45/2+)	D	Jπ: 1683.8γ E2 to (41/2+).
6336.1+y *11*		D	
6364.8+v[q] *13*		D	
6376.4+x[m] *9*	(39/2)	D	Jπ: 129.7γ (M1) to (37/2); band structure.
6458.1+u[p] *13*		D	
6460.1+x *7*	(47/2)	D	Jπ: 136.2γ D to (45/2+), 470.7γ D to (45/2).
6548.0+x[m] *9*	(41/2)	D	Jπ: 171.6γ (M1) to (39/2); band structure.
6616.7+z[o] *12*		D	

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Adopted Levels, Gammas (continued)

^{201}Pb Levels (continued)

E(level)[†]	J^π	XREF	Comments
6706.7+x *7*	(49/2)	D	J^π: 717.3γ E2 to (45/2).
6768.5+x[m] *8*	(43/2)	D	J^π: 220.5γ (M1) to (41/2); band structure.
6858.2+v[q] *14*		D	
6881.9+y[n] *12*		D	
6910.1+x *8*	(47/2)	D	J^π: 586.1γ D to (45/2$^+$).
6941.2+u[p] *14*		D	
7008.4+x *8*	(49/2)	D	J^π: 548.3γ D to (47/2).
7044.3+x[m] *7*	(45/2)	D	J^π: 275.9γ (M1) to (43/2); band structure.
7108.4+z[o] *13*		D	
7142.3+x *7*	(49/2$^+$)	D	J^π: 232.2γ D to (47/2), 682.3γ D to (47/2), 1312.3γ E2 to (45/2$^+$).
7339.5+x *8*	(51/2)	D	J^π: 197.2γ D to (49/2$^+$), 331.1γ D to (49/2).
7377.5+x *7*	(47/2)	D	J^π: 333.1γ (M1) to (45/2,47/2), 1388.1γ D to (45/2).
7378.9+x[m] *7*	(47/2)	D	J^π: 334.6γ (M1) to (45/2,47/2), 1389.4γ D to (45/2).
7471.4+u[p] *15*		D	
7648.2+z[o] *13*		D	
7759.5+x *7*	(49/2)	D	J^π: 380.6γ D to (47/2), 382.0γ D to (47/2).
7772.2+x[m] *8*	(49/2)	D	J^π: 393.3γ (M1) to (47/2), 394.8γ (M1) to (47/2).
8003.4+x *10*	(53/2)	D	J^π: 663.9γ D to (51/2).
8018.7+x *8*	(51/2)	D	J^π: 259.2γ D to (49/2), 1312.0γ D to (49/2).
8198.0+x *9*	(53/2)	D	J^π: 179.3γ D to (51/2).
8214.7+x *9*	(51/2)	D	J^π: 442.5γ (M1) to (49/2).
8226.1+x[m] *9*	(51/2)	D	J^π: 453.9γ (M1) to (49/2).
8653.8+x *11*	(55/2)	D	J^π: 455.8γ (M1) to (53/2).

[†] From a least squares fit to Eγ.
[‡] Configuration=ν $f_{5/2}^{-1}$.
[#] Configuration=ν $p_{3/2}^{-1}$.
[@] Configuration=ν $p_{1/2}^{-1}$. The assignment is tentative.
[&] Configuration=ν $i_{13/2}^{-1}$.
[a] Configuration=ν $f_{7/2}^{-1}$. The assignment is tentative.
[b] Configuration=ν $(f_{5/2}^{-1})\otimes 2^+$.
[c] Configuration=ν $(p_{3/2}^{-1})\otimes 2^+$.
[d] Configuration=ν $(i_{13/2}^{-1})\otimes 2^+$.
[e] Probably an admixture of configuration=ν $(f_{5/2}^{-1},p_{1/2}^{-1},i_{13/2}^{-1})\otimes 2^+$ and configuration=ν $(i_{13/2}^{-1})\otimes 2^+$.
[f] Probably an admixture of configuration=ν $(f_{5/2}^{-1},p_{1/2}^{-1},i_{13/2}^{-1})\otimes 4^+$ and configuration=ν $(i_{13/2}^{-1})\otimes 4^+$.
[g] Configuration=ν $(f_{5/2}^{-2},i_{13/2}^{-1})$.
[h] Configuration=ν $[p_{3/2}^{-1},(i_{13/2}^{-2})_{12+}]$.
[i] Probably an admixture of configuration=ν $[f_{5/2}^{-1},(i_{13/2}^{-2})_{10+}]$, configuration=$\nu$ $[p_{3/2}^{-1},(i_{13/2}^{-2})_{12+}]$ and configuration=ν $[p_{1/2}^{-1},(i_{13/2}^{-2})_{12+}]$.
[j] Configuration=ν $[f_{5/2}^{-1},(i_{13/2}^{-2})_{12+}]$.
[k] Configuration=ν $(i_{13/2}^{-3})$.
[l] Configuration=ν $(p_{3/2}^{-1},f_{5/2}^{-1},i_{13/2}^{-3})$.
[m] Band(A): configuration=ν $[p_{3/2}^{-1},(i_{13/2})^{-2})_{12+}]\otimes\pi$ $(h_{9/2}^{+1},i_{13/2}^{+1})_{11-}$. Band 2 in 1995Ba70.
[n] Band(B): configuration=ν $(i_{13/2}^{-1})\otimes\pi$ $(h_{9/2}^{+1},i_{13/2}^{+1})_{11-}$. Band 1 in 1995Ba70.
[o] Band(C): Band 3 in 1995Ba70.
[p] Band(D): Band 4 in 1995Ba70.
[q] Band(E): Band 5 in 1995Ba70.

Adopted Levels, Gammas (continued)

γ(^{201}Pb)

E_i(level)	J_i^π	E_γ †	I_γ †	E_f	J_f^π	Mult.&	δ[a]	α[b]	Comments
88.5	3/2⁻	88.6 *10*	100	0	5/2⁻	M1+E2		9.1 *21*	α(L)=4.8 *29*; α(M)=1.2 *8* α(N)=0.31 *20*; α(O)=0.056 *34*; α(P)=0.0029 *5* Mult.: From α(exp) in ^{201}Bi ε decay. α: From intensity balance in ^{201}Bi ε decay.
169.9	(1/2⁻)	(81.4 *7*)	100	88.5	3/2⁻				Eγ: Not observed experimentally; Eγ from E(level) difference.
538.7	(3/2⁻)	368.8 *10*	100 *19*	169.9	(1/2⁻)				
		450.3 *10*	70 *14*	88.5	3/2⁻				
		538.7 *10*	50 *11*	0	5/2⁻				
629.1	13/2⁺	629.1 *5*	100	0	5/2⁻	M4		0.813 *12*	B(M4)(W.u.)=3.08 *+11−10* α(K)=0.552 *8*; α(L)=0.1949 *28*; α(M)=0.0504 *7* α(N)=0.01299 *19*; α(O)=0.00252 *4*; α(P)=0.0002177 *31* Mult.: From α(K)exp=0.6 *2*, K/L=2.3 *3* and L12/L3=4 *1* (1956St05) and α(L)exp=0.21 *1* (1978Ri04) in ^{201}Bi ε decay.
879.6	(5/2)⁻	710.0[c] *10*	7.4 *14*	169.9	(1/2⁻)				
		791.0[c] *10*	27 *6*	88.5	3/2⁻	M1(+E2)	<1.1	0.027 *6*	α(K)=0.022 *5*; α(L)=0.0037 *7*; α(M)=0.00087 *16* α(N)=0.00022 *4*; α(O)=4.4×10^{-5} *9*; α(P)=4.6×10^{-6} *10* Mult.,δ: From α(K)exp=0.028 *11* in ^{201}Bi ε decay.
		879.6 *10*	100 *20*	0	5/2⁻	E2+M1	7.3 *16*	0.00888 *22*	α(K)=0.00700 *18*; α(L)=0.001430 *30*; α(M)=0.000342 *7* α(N)=8.68×10^{-5} *18*; α(O)=1.69×10^{-5} *4*; α(P)=1.60×10^{-6} *4* Eγ: Other: 879.6 keV *5* in ^{200}Hg(α,3nγ). Mult.,δ: From α(K)exp=0.007 *3* in ^{201}Bi ε decay.
910.5?	5/2⁻	372.3[c] *10*	5.4 *11*	538.7	(3/2⁻)				
		822.6[c] *10*	43 *9*	88.5	3/2⁻	M1(+E2)	<1.7	0.022 *7*	α(K)=0.018 *6*; α(L)=0.0031 *9*; α(M)=7.3×10^{-4} *20* α(N)=1.9×10^{-4} *5*; α(O)=3.7×10^{-5} *10*; α(P)=3.9×10^{-6} *12* Mult.,δ: From α(K)exp=0.019 *8* in ^{201}Bi ε decay.
		911.0[c] *10*	100 *20*	0	5/2⁻	M1(+E2)	<0.5	0.0211 *15*	α(K)=0.0174 *13*; α(L)=0.00289 *18*; α(M)=0.00068 *4* α(N)=0.000172 *11*; α(O)=3.42×10^{-5} *22*; α(P)=3.66×10^{-6} *25* Mult.,δ: From α(K)exp=0.028 *7* in ^{201}Bi ε decay.
936.1	7/2⁻	847.7 *10*	16 *3*	88.5	3/2⁻	E2		0.00924 *13*	α(K)=0.00724 *10*; α(L)=0.001524 *22*; α(M)=0.000366 *5* α(N)=9.27×10^{-5} *13*; α(O)=1.801×10^{-5} *26*; α(P)=1.675×10^{-6} *24* Mult.: From α(K)exp=0.009 *5* in ^{201}Bi ε decay.
		936.2 *5*	100 *5*	0	5/2⁻	M1,E2		0.014 *7*	α(K)=0.012 *6*; α(L)=0.0020 *8*; α(M)=4.8×10^{-4} *19* α(N)=1.2×10^{-4} *5*; α(O)=2.4×10^{-5} *10*; α(P)=2.5×10^{-6} *11* Mult.: From α(K)exp=0.004 *3* in ^{201}Bi ε decay.
990.5	7/2⁻	902.0 *5*	100 *5*	88.5	3/2⁻	E2		0.00816 *11*	α(K)=0.00644 *9*; α(L)=0.001313 *18*; α(M)=0.000314 *4* α(N)=7.96×10^{-5} *11*; α(O)=1.550×10^{-5} *22*; α(P)=1.463×10^{-6} *21* Mult.: From α(K)exp=0.006 *2* in ^{201}Bi ε decay.
		990.6 *5*	38.8 *20*	0	5/2⁻	E2+M1	2.2 *6*	0.0087 *13*	α(K)=0.0070 *11*; α(L)=0.00130 *16*; α(M)=0.00031 *4*

$^{201}_{82}Pb_{119}$-5

Adopted Levels, Gammas (continued)

γ(^{201}Pb) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[&]	δ[a]	α[b]	Comments
									α(N)=7.8×10^{-5} *9*; α(O)=1.53×10^{-5} *19*; α(P)=1.53×10^{-6} *21* Mult.,δ: From α(K)exp=0.007 *2* in ^{201}Bi ε decay.
1014.2	9/2$^-$	1014.1 *5*	100	0	5/2$^-$	E2		0.00648 *9*	α(K)=0.00517 *7*; α(L)=0.001000 *14*; α(M)=0.0002379 *33* α(N)=6.03×10^{-5} *8*; α(O)=1.179×10^{-5} *17*; α(P)=1.140×10^{-6} *16* Mult.: From α(K)exp=0.005 *2* in ^{201}Bi ε decay.
1185.8	(7/2)$^-$	171.7 *5*	100 *5*	1014.2	9/2$^-$	M1(+E2)	<0.5	1.88 *13*	α(K)=1.50 *14*; α(L)=0.292 *10*; α(M)=0.0694 *34* α(N)=0.0176 *8*; α(O)=0.00347 *12*; α(P)=0.000344 *16* Mult.,δ: From α(L)exp=0.27 *3*, L12/L3>66 in ^{201}Bi ε decay.
		305.7[c] *10*	4.1 *9*	879.6	(5/2)$^-$				
		1186.5 *10*	8.4 *16*	0	5/2$^-$				
1325.4	7/2$^-$	1325.2 *5*	100	0	5/2$^-$	M1+E2	0.6 *4*	0.0074 *11*	α(K)=0.0061 *9*; α(L)=0.00101 *14*; α(M)=0.000235 *33* α(N)=6.0×10^{-5} *8*; α(O)=1.19×10^{-5} *17*; α(P)=1.27×10^{-6} *19*; α(IPF)=3.08×10^{-5} *35* Mult.,δ: From α(K)exp=0.006 *1* in ^{201}Bi ε decay.
1415.4	9/2$^+$	424.5 *10*	9.3 *18*	990.5	7/2$^-$	(E1)		0.01354 *20*	α(K)=0.01117 *17*; α(L)=0.001823 *27*; α(M)=0.000424 *6* α(N)=0.0001070 *16*; α(O)=2.095×10^{-5} *31*; α(P)=2.021×10^{-6} *30* Mult.: From α(K)exp=0.050 *20* in ^{201}Bi ε decay.
		786.4 *5*	100 *5*	629.1	13/2$^+$	E2		0.01077 *15*	α(K)=0.00836 *12*; α(L)=0.001835 *26*; α(M)=0.000443 *6* α(N)=0.0001121 *16*; α(O)=2.170×10^{-5} *31*; α(P)=1.981×10^{-6} *28* Mult.: From α(K)exp=0.0095 *8* in ^{201}Bi ε decay.
1447.9	(11/2)$^+$	818.9 *5*	100	629.1	13/2$^+$	E2+M1	7.8 *10*	0.01023 *17*	α(K)=0.00800 *14*; α(L)=0.001698 *27*; α(M)=0.000408 *6* α(N)=0.0001034 *16*; α(O)=2.007×10^{-5} *32*; α(P)=1.863×10^{-6} *31* Mult.,δ: From α(K)exp=0.0080 *20* in ^{201}Bi ε decay; A_2=−0.21 *5*, A_4=0.01 *7* using γ(θ) in ^{200}Hg(α,3nγ) are consistent with Mult=D.
1490.3	7/2$^-$,9/2$^-$	499.9 *10*	100 *20*	990.5	7/2$^-$	M1(+E2)	<1.2	0.085 *23*	α(K)=0.069 *20*; α(L)=0.0124 *25*; α(M)=0.0029 *6* α(N)=0.00075 *14*; α(O)=0.000147 *29*; α(P)=1.5×10^{-5} *4* Mult.: From α(K)exp=0.08 *3* in ^{201}Bi ε decay.
		610.4[c] *10*	30 *6*	879.6	(5/2)$^-$				
		1490.1 *10*	39 *7*	0	5/2$^-$				
1541.8	17/2$^+$	912.7[#] *2*	100[#]	629.1	13/2$^+$	E2		0.00797 *11*	α(K)=0.00629 *9*; α(L)=0.001277 *18*; α(M)=0.000305 *4* α(N)=7.74×10^{-5} *11*; α(O)=1.507×10^{-5} *21*; α(P)=1.426×10^{-6} *20* Mult.: From A_2=0.32 *5*, A_4=−0.01 *6* (1988Ro08) and A_2=0.21 *3*, A_4=−0.05 *4* (1981He07) using γ(θ) in ^{200}Hg(α,3nγ); R(DCO)=1.08 *8* in ^{192}Os(^{14}C,5nγ).

$^{201}_{82}Pb_{119}$-6

Adopted Levels, Gammas (continued)

γ(^{201}Pb) (continued)

E_i(level)	J_i^π	E_γ †	I_γ †	E_f	J_f^π	Mult.&	δ[a]	α[b]	Comments
1545.8	15/2$^+$	916.7# *2*	100#	629.1	13/2$^+$	M1+E2		0.015 *7*	α(K)=0.012 *6*; α(L)=0.0021 *9*; α(M)=5.0×10^{-4} *20* α(N)=1.3×10^{-4} *5*; α(O)=2.5×10^{-5} *10*; α(P)=2.6×10^{-6} *12* Mult.: From A_2=−0.51 *4*, A_4=0.15 *6* (1988Ro08) and A_2=−0.28 *3*, A_4=0.04 *4* (1981He07) using γ(θ) in ^{200}Hg(α,3nγ); R(DCO)=0.81 *11* in ^{192}Os(^{14}C,5nγ).
1651.0	7/2$^+$	325.7[c] *10*	2.9 *6*	1325.4	7/2$^-$				
		740.7[c] *10*	9.1 *16*	910.5?	5/2$^-$	E1		0.00436 *6*	α(K)=0.00363 *5*; α(L)=0.000565 *8*; α(M)=0.0001306 *19* α(N)=3.30×10^{-5} *5*; α(O)=6.52×10^{-6} *9*; α(P)=6.61×10^{-7} *9* Mult.: From α(K)exp=0.0030 *20* in ^{201}Bi ε decay.
		1650.9 *5*	100 *5*	0	5/2$^-$	E1		1.33×10^{-3} *2*	α(K)=0.000881 *12*; α(L)=0.0001310 *18*; α(M)=3.01×10^{-5} *4* α(N)=7.62×10^{-6} *11*; α(O)=1.517×10^{-6} *21*; α(P)=1.601×10^{-7} *22*; α(IPF)=0.000276 *4* Mult.: From α(K)exp=0.0006 *4* in ^{201}Bi ε decay.
1737.3	9/2$^+$	288.6 *10*	7.4 *15*	1447.9	(11/2)$^+$	M1(+E2)	<0.24	0.465 *12*	α(K)=0.379 *11*; α(L)=0.0656 *13*; α(M)=0.01539 *29* α(N)=0.00391 *7*; α(O)=0.000779 *15*; α(P)=8.26×10^{-5} *20* Mult.,δ: From α(K)exp=0.45 *5* in ^{201}Bi ε decay.
		411.6 *10*	13.4 *24*	1325.4	7/2$^-$				
		723.5 *10*	6.3 *13*	1014.2	9/2$^-$				
		746.8 *10*	29 *6*	990.5	7/2$^-$	E1		0.00430 *6*	α(K)=0.00357 *5*; α(L)=0.000556 *8*; α(M)=0.0001285 *18* α(N)=3.25×10^{-5} *5*; α(O)=6.42×10^{-6} *9*; α(P)=6.51×10^{-7} *9* Mult.: From α(K)exp=0.0050 *10* in ^{201}Bi ε decay.
		1108.1 *5*	100 *5*	629.1	13/2$^+$	E2		0.00546 *8*	α(K)=0.00439 *6*; α(L)=0.000820 *12*; α(M)=0.0001942 *27* α(N)=4.92×10^{-5} *7*; α(O)=9.65×10^{-6} *14*; α(P)=9.48×10^{-7} *13*; α(IPF)=2.05×10^{-7} *5* Mult.: From α(K)exp=0.005 *1* in ^{201}Bi ε decay.
		1737.6 *10*	3.3 *7*	0	5/2$^-$				
1843.8	11/2$^+$	396.1 *10*	11.1 *22*	1447.9	(11/2)$^+$				
		1214.5 *5*	100 *5*	629.1	13/2$^+$	M1(+E2)	<2.3	0.0082 *26*	α(K)=0.0067 *22*; α(L)=0.00113 *33*; α(M)=2.6×10^{-4} *8* α(N)=6.7×10^{-5} *19*; α(O)=1.3×10^{-5} *4*; α(P)=1.4×10^{-6} *5*; α(IPF)=7.5×10^{-6} *17* Mult.,δ: From α(K)exp=0.006 *3* in ^{201}Bi ε decay.
1875.6	9/2$^+$	224.5 *10*	55 *10*	1651.0	7/2$^+$	M1(+E2)	<0.44	0.90 *6*	α(K)=0.72 *5*; α(L)=0.1319 *27*; α(M)=0.0312 *6* α(N)=0.00791 *15*; α(O)=0.001566 *32*; α(P)=0.000161 *8* Mult.,δ: From α(K)exp=0.75 *8* in ^{201}Bi ε decay.
		384.4 *10*	18 *4*	1490.3	7/2$^-$,9/2$^-$				
		428.0 *10*	100 *17*	1447.9	(11/2)$^+$	M1(+E2)	<0.9	0.136 *27*	α(K)=0.110 *23*; α(L)=0.0200 *27*; α(M)=0.0047 *6* α(N)=0.00120 *15*; α(O)=0.000237 *32*; α(P)=2.4×10^{-5} *4* Mult.,δ: From α(K)exp=0.12 *3* in ^{201}Bi ε decay.
		460.1 *10*	55 *10*	1415.4	9/2$^+$	M1(+E2)	<0.7	0.118 *16*	α(K)=0.096 *14*; α(L)=0.0170 *17*; α(M)=0.0040 *4*

$^{201}_{82}Pb_{119}$-7

Adopted Levels, Gammas (continued)

γ(^{201}Pb) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[&]	δ[a]	α[b]	Comments
									α(N)=0.00101 *10*; α(O)=0.000201 *20*; α(P)=2.10×10^{-5} *27* Mult.,δ: From α(K)exp=0.16 *6* in ^{201}Bi ε decay.
1875.6	9/2$^+$	885.0 *10*	48 *10*	990.5	7/2$^-$				
1896.1	19/2$^+$	350.3 *2*	54.4 *22*	1545.8	15/2$^+$	E2		0.0739 *10*	B(E2)(W.u.)=0.136 *+15−12* α(K)=0.0454 *6*; α(L)=0.02135 *30*; α(M)=0.00543 *8* α(N)=0.001374 *19*; α(O)=0.000255 *4*; α(P)=1.684×10^{-5} *24* E_γ: From ^{200}Hg(α,3nγ). I_γ: From ^{192}Os(^{14}C,5nγ); Iγ=68 *6* in ^{200}Hg(α,3nγ). Mult.: From A_2=0.25 *5*, A_4=−0.05 *6* (1988Ro08) using γ(θ) in ^{200}Hg(α,3nγ). Note, that A_2=0.09 *2*, A_4=−0.07 *4* in 1981He07 (^{200}Hg(α,3nγ)) would imply Mult=M1+E2; R(DCO)=0.95 *13* in ^{192}Os(^{14}C,5nγ).
		354.3 *2*	100 *3*	1541.8	17/2$^+$	M1		0.271 *4*	B(M1)(W.u.)=8.3×10^{-5} *+19−13* α(K)=0.2220 *31*; α(L)=0.0378 *5*; α(M)=0.00884 *12* α(N)=0.002245 *32*; α(O)=0.000448 *6*; α(P)=4.79×10^{-5} *7* E_γ: From ^{200}Hg(α,3nγ). I_γ: From ^{192}Os(^{14}C,5nγ). Mult.: From A_2=0.70 *5*, A_4=0.04 *6* (1988Ro08) and A_2=0.19 *3*, A_4=0.01 *4* (1981He07) using γ(θ) in ^{200}Hg(α,3nγ).
1902.2	21/2$^+$	360.4[#] *3*	100[#]	1541.8	17/2$^+$	E2		0.0683 *10*	α(K)=0.0426 *6*; α(L)=0.01929 *28*; α(M)=0.00490 *7* α(N)=0.001239 *18*; α(O)=0.0002300 *33*; α(P)=1.543×10^{-5} *22* Mult.: From A_2=0.25 *3*, A_4=−0.08 *4* (1981He07) using γ(θ) in ^{200}Hg(α,3nγ); R(DCO)=0.96 *9* in ^{192}Os(^{14}C,5nγ).
1977.6	7/2$^+$,9/2$^+$	529.8 *10*	100 *20*	1447.9	(11/2)$^+$				
		562.5 *10*	43 *9*	1415.4	9/2$^+$				
		651.8 *10*	20 *4*	1325.4	7/2$^-$				
		986.5 *10*	100 *20*	990.5	7/2$^-$	E1		0.00256 *4*	α(K)=0.002140 *30*; α(L)=0.000326 *5*; α(M)=7.53×10^{-5} *11* α(N)=1.904×10^{-5} *27*; α(O)=3.77×10^{-6} *5*; α(P)=3.90×10^{-7} *5* Mult.: From α(K)exp=0.005 *3* in ^{201}Bi ε decay.
		1042.8 *10*	27 *5*	936.1	7/2$^-$				
2068.5	21/2	166.2[#] *2*	100[#]	1902.2	21/2$^+$	D,E2			α(K)=1.0 *8*; α(L)=0.37 *6*; α(M)=0.093 *20* α(N)=0.023 *5*; α(O)=0.0044 *7*; α(P)=0.00032 *8* Mult.: From A_2=0.36 *5*, A_4=0.01 *5* (1988Ro08) using γ(θ) in ^{200}Hg(α,3nγ); R(DCO)=1.08 *9* in ^{192}Os(^{14}C,5nγ); consistent with ΔJ=0 transition.
2119.5	9/2$^+$	142.6 *10*	5.2 *12*	1977.6	7/2$^+$,9/2$^+$				
		243.1 *10*	10.3 *21*	1875.6	9/2$^+$				
		275.5 *10*	67 *15*	1843.8	11/2$^+$	M1(+E2)	<0.25	0.527 *15*	α(K)=0.430 *13*; α(L)=0.0746 *15*; α(M)=0.01751 *33*

$^{201}_{82}Pb_{119}$-8

Adopted Levels, Gammas (continued)

γ(^{201}Pb) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[&]	δ[a]	α[b]	Comments
									α(N)=0.00445 *8*; α(O)=0.000885 *17*; α(P)=9.38×10^{-5} *24* Mult.,δ: From α(K)exp=0.52 *9* in ^{201}Bi ε decay.
2119.5	9/2$^+$	671.9 *10*	13 *3*	1447.9	(11/2)$^+$				
		703.9 *10*	100 *21*	1415.4	9/2$^+$				
		1183.7 *10*	31 *6*	936.1	7/2$^-$				
2151.9	7/2$^+$	414.6 *10*	92 *18*	1737.3	9/2$^+$	M1(+E2)	<0.6	0.160 *17*	α(K)=0.130 *15*; α(L)=0.0230 *17*; α(M)=0.0054 *4* α(N)=0.00137 *10*; α(O)=0.000272 *20*; α(P)=2.85×10^{-5} *28* Mult.,δ: From α(K)exp=0.14 *3* in ^{201}Bi ε decay.
		661.5[c] *10*	63 *13*	1490.3	7/2$^-$,9/2$^-$				
		736.4 *10*	88 *18*	1415.4	9/2$^+$	M1		0.0391 *6*	α(K)=0.0322 *5*; α(L)=0.00535 *8*; α(M)=0.001250 *18* α(N)=0.000317 *5*; α(O)=6.33×10^{-5} *9*; α(P)=6.80×10^{-6} *10* Mult.: From α(K)exp=0.048 *10* in ^{201}Bi ε decay.
		1137.7[c] *10*	11.2 *22*	1014.2	9/2$^-$				
		1161.2 *10*	22 *4*	990.5	7/2$^-$				
		1241.4[c] *10*	100 *20*	910.5?	5/2$^-$	(E1)		1.74×10^{-3} *2*	α(K)=0.001427 *20*; α(L)=0.0002149 *30*; α(M)=4.95×10^{-5} *7* α(N)=1.252×10^{-5} *18*; α(O)=2.488×10^{-6} *35*; α(P)=2.60×10^{-7} *4*; α(IPF)=2.94×10^{-5} *6* Mult.: From α(K)exp=0.004 *3* in ^{201}Bi ε decay.
2208.9	(9/2$^+$)	557.7 *10*	100 *22*	1651.0	7/2$^+$				
		1298.4 *10*	78 *17*	910.5?	5/2$^-$				
		1579.8 *10*	19 *4*	629.1	13/2$^+$				
2279.8	(9/2)$^+$	832.0 *10*	82 *18*	1447.9	(11/2)$^+$	M1(+E2)	<1.3	0.023 *6*	α(K)=0.018 *5*; α(L)=0.0032 *7*; α(M)=0.00074 *17* α(N)=0.00019 *4*; α(O)=3.7×10^{-5} *9*; α(P)=3.9×10^{-6} *10* Mult.: From α(K)exp=0.028 *14* in ^{201}Bi ε decay.
		1265.6 *10*	47 *10*	1014.2	9/2$^-$				
		1400.3[c] *10*	100 *18*	879.6	(5/2)$^-$				
2439.4	7/2$^+$,9/2$^+$	1024.0 *10*	42 *9*	1415.4	9/2$^+$	M1+E2	2.9 *11*	0.0075 *13*	α(K)=0.0060 *11*; α(L)=0.00112 *17*; α(M)=0.00026 *4* α(N)=6.7×10^{-5} *10*; α(O)=1.32×10^{-5} *20*; α(P)=1.30×10^{-6} *23* Mult.,δ: From α(K)exp=0.006 *3* in ^{201}Bi ε decay.
		1253.8 *10*	72 *14*	1185.8	(7/2)$^-$				
		1503.0 *10*	100 *21*	936.1	7/2$^-$				
2459.9	7/2$^+$,9/2$^+$	250.9 *10*	13 *3*	2208.9	(9/2$^+$)	M1+E2	0.6 *4*	0.57 *12*	α(K)=0.44 *11*; α(L)=0.092 *5*; α(M)=0.0220 *8* α(N)=0.00559 *22*; α(O)=0.00109 *6*; α(P)=0.000104

$^{201}_{82}Pb_{119}$-9

Adopted Levels, Gammas (continued)

γ(^{201}Pb) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[&]	δ[a]	α[b]	Comments
									17 Mult.: From α(K)exp=0.46 *12* in ^{201}Bi ε decay.
2459.9	7/2$^+$,9/2$^+$	584.3 *10*	10.9 *21*	1875.6	9/2$^+$				
		969.9 *10*	19 *4*	1490.3	7/2$^-$,9/2$^-$				
		1469.5 *10*	26 *6*	990.5	7/2$^-$				
		1523.3 *10*	100 *20*	936.1	7/2$^-$				
		1547.6[c] *10*	22 *4*	910.5?	5/2$^-$				
2474.6	(7/2$^+$,9/2$^+$)	322.3 *10*	6.8 *14*	2151.9	7/2$^+$				
		1059.7 *10*	18 *4*	1415.4	9/2$^+$				
		1288.9 *10*	69 *14*	1185.8	(7/2)$^-$	(E1)		1.65×10^{-3} *2*	α(K)=0.001338 *19*; α(L)=0.0002010 *28*; α(M)=4.63×10^{-5} *7* α(N)=1.171×10^{-5} *16*; α(O)=2.328×10^{-6} *33*; α(P)=2.434×10^{-7} *34*; α(IPF)=4.78×10^{-5} *8* Mult.: From α(K)exp=0.003 *1* in ^{201}Bi ε decay.
		1538.4 *5*	100 *5*	936.1	7/2$^-$				
2496.3	21/2$^-$	594.1 *3*	4.2 *4*	1902.2	21/2$^+$	(E1)		0.00672 *9*	α(K)=0.00557 *8*; α(L)=0.000882 *12*; α(M)=0.0002045 *29* α(N)=5.17×10^{-5} *7*; α(O)=1.017×10^{-5} *14*; α(P)=1.013×10^{-6} *14* E_γ: From ^{200}Hg(α,3nγ). I_γ: From ^{192}Os(^{14}C,5nγ). Mult.: From A_2=−0.06 *5*, A_4=0.08 *6* (1988Ro08) using γ(θ) in ^{200}Hg(α,3nγ); R(DCO)=0.73 *21* in ^{192}Os(^{14}C,5nγ); the adopted spin and parity changes for 594.1γ.
		600.2 *1*	100.0 *20*	1896.1	19/2$^+$	(E1)		0.00658 *9*	α(K)=0.00546 *8*; α(L)=0.000864 *12*; α(M)=0.0002002 *28* α(N)=5.06×10^{-5} *7*; α(O)=9.96×10^{-6} *14*; α(P)=9.93×10^{-7} *14* E_γ: From ^{200}Hg(α,3nγ). I_γ: From ^{192}Os(^{14}C,5nγ). Mult.: From A_2=−0.21 *4*, A_4=−0.02 *6* (1988Ro08) and A_2=−0.10 *3*, A_4=−0.03 *4* (1981He07) using γ(θ) in ^{200}Hg(α,3nγ); R(DCO)=0.80 *8* in ^{192}Os(^{14}C,5nγ); the adopted spin and parity changes for 600.2γ.
2506.8	9/2$^+$	387.3 *10*	3.4 *7*	2119.5	9/2$^+$				
		855.8 *10*	57 *12*	1651.0	7/2$^+$	M1(+E2)	<2.0	0.020 *7*	α(K)=0.016 *6*; α(L)=0.0028 *9*; α(M)=6.5×10^{-4} *19* α(N)=1.6×10^{-4} *5*; α(O)=3.3×10^{-5} *10*; α(P)=3.4×10^{-6} *12* Mult.: From α(K)exp=0.020 *10* in ^{201}Bi ε decay.

$^{201}_{82}Pb_{119}$-10

Adopted Levels, Gammas (continued)

γ(^{201}Pb) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[&]	δ[a]	α[b]	Comments
2506.8	9/2$^+$	1091.5 *10*	26 *6*	1415.4	9/2$^+$				
		1320.9 *10*	31 *6*	1185.8	(7/2)$^-$				
		1516.4 *10*	38 *8*	990.5	7/2$^-$				
		1570.8 *5*	100 *5*	936.1	7/2$^-$	E1		1.36×10^{-3} *2*	α(K)=0.000957 *13*; α(L)=0.0001426 *20*; α(M)=3.28×10^{-5} *5* α(N)=8.30×10^{-6} *12*; α(O)=1.652×10^{-6} *23*; α(P)=1.740×10^{-7} *24*; α(IPF)=0.0002190 *31* Mult.: From α(K)exp=0.0009 *5* in ^{201}Bi ε decay.
		1877.4 *10*	6.0 *12*	629.1	13/2$^+$				
2548.9	(11/2$^-$)	339.7 *10*	10.7 *21*	2208.9	(9/2$^+$)				
		1558.6 *10*	100 *20*	990.5	7/2$^-$	(E2)		0.00296 *4*	α(K)=0.002359 *33*; α(L)=0.000400 *6*; α(M)=9.36×10^{-5} *13* α(N)=2.372×10^{-5} *33*; α(O)=4.69×10^{-6} *7*; α(P)=4.82×10^{-7} *7*; α(IPF)=8.27×10^{-5} *12* Mult.: From α(K)exp=0.0020 *10* in ^{201}Bi ε decay.
		1638.7[c] *10*	13.4 *21*	910.5?	5/2$^-$				E$_\gamma$: Very tentative, since the expected lifetime of the 2548.9-keV level would be very long.
		1919.4 *10*	12.5 *25*	629.1	13/2$^+$				
2604.0	(21/2)	707.9[#] *5*	100[#]	1896.1	19/2$^+$	D			Mult.: From A$_2$=−0.10 *4*, A$_4$=−0.02 *6* (1988Ro08) using γ(θ) in ^{200}Hg(α,3nγ).
2718.5	25/2$^-$	222.2[#] *1*	100[#]	2496.3	21/2$^-$	E2		0.299 *4*	B(E2)(W.u.)=0.181 *9* α(K)=0.1318 *19*; α(L)=0.1247 *18*; α(M)=0.0325 *5* α(N)=0.00820 *12*; α(O)=0.001488 *21*; α(P)=7.85×10^{-5} *11* Mult.: From A$_2$=0.22 *5*, A$_4$=0.02 *6* (1988Ro08) using γ(θ) and α(exp)=0.34 *3* (1981He07) in ^{200}Hg(α,3nγ); R(DCO)=0.93 *10* in ^{192}Os(^{14}C,5nγ).
2732.8		664.1[‡] *5*	48[‡] *4*	2068.5	21/2	D,E2			Mult.: From R(DCO)=1.08 *25* in ^{192}Os(^{14}C,5nγ).
		830.7[‡] *5*	100[‡] *11*	1902.2	21/2$^+$	D,E2			Mult.: From R(DCO)=1.13 *16* in ^{192}Os(^{14}C,5nγ).
2736.2		667.6[‡] *5*	74[‡] *5*	2068.5	21/2	D,E2			Mult.: From R(DCO)= 1.03 *16* in ^{192}Os(^{14}C,5nγ).
		834.0[‡] *5*	100[‡] *8*	1902.2	21/2$^+$	D,E2			Mult.: From R(DCO)= 0.94 *11* in ^{192}Os(^{14}C,5nγ).
2788.8	11/2$^-$	239.7 *10*	14 *3*	2548.9	(11/2$^-$)	M1+E2	0.47 *7*	0.690 *28*	α(K)=0.549 *26*; α(L)=0.1073 *22*; α(M)=0.0255 *5* α(N)=0.00649 *13*; α(O)=0.001274 *26*; α(P)=0.000126 *4* Mult.,δ: From α(K)exp=0.55 *2* in ^{201}Bi ε decay.
		1051.6 *10*	47 *10*	1737.3	9/2$^+$	E1		2.29×10^{-3} *3*	α(K)=0.001909 *27*; α(L)=0.000290 *4*; α(M)=6.69×10^{-5} *9* α(N)=1.692×10^{-5} *24*; α(O)=3.36×10^{-6} *5*; α(P)=3.47×10^{-7} *5* Mult.: From α(K)exp=0.0011 *10* in ^{201}Bi ε decay.
		1603.8 *10*	100 *18*	1185.8	(7/2)$^-$	(E2)		0.00283 *4*	α(K)=0.002241 *31*; α(L)=0.000377 *5*; α(M)=8.83×10^{-5} *12* α(N)=2.238×10^{-5} *31*; α(O)=4.43×10^{-6} *6*; α(P)=4.56×10^{-7} *6*; α(IPF)=9.86×10^{-5} *14* Mult.: From α(K)exp=0.0040 *10* in ^{201}Bi ε decay.

$^{201}_{82}Pb_{119}$-11

Adopted Levels, Gammas (continued)

γ(^{201}Pb) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[&]	δ[a]	α[b]	Comments
2788.8	11/2$^-$	1851.9 *10*	5.3 *10*	936.1	7/2$^-$				
		2159.7 *10*	67 *14*	629.1	13/2$^+$				
2794.2	(19/2,21/2,23/2)$^-$	297.9[#] *3*	100[#]	2496.3	21/2$^-$	M1+E2		0.28 *16*	α(K)=0.21 *14*; α(L)=0.050 *11*; α(M)=0.0121 *21* α(N)=0.0031 *5*; α(O)=0.00059 *13*; α(P)=5.3×10^{-5} *24* Mult.: From A_2=−0.99 *13*, A_4=0.13 *5* (1981He07) using γ(θ) in ^{200}Hg(α,3nγ).
2961.8	(7/2,9/2$^-$)	1472.1 *10*	71 *14*	1490.3	7/2$^-$,9/2$^-$				
		1775.7 *10*	100 *19*	1185.8	(7/2)$^-$				
		1971.0 *10*	31 *6*	990.5	7/2$^-$				
		2025.6 *10*	50 *10*	936.1	7/2$^-$				
		2082.0[c] *10*	14 *3*	879.6	(5/2)$^-$				
3050.7	(7/2)$^+$	931.6 *10*	44 *9*	2119.5	9/2$^+$	M1(+E2)	<0.6	0.0195 *18*	α(K)=0.0160 *15*; α(L)=0.00268 *23*; α(M)=0.00063 *5* α(N)=0.000159 *13*; α(O)=3.17×10^{-5} *27*; α(P)=3.38×10^{-6} *31* Mult.,δ: From α(K)exp=0.020 *5* in ^{201}Bi ε decay.
		1313.2 *10*	28 *5*	1737.3	9/2$^+$				
		1634.9 *10*	100 *20*	1415.4	9/2$^+$	M1(+E2)	<1.2	0.0045 *7*	α(K)=0.0036 *6*; α(L)=0.00059 *9*; α(M)=0.000137 *22* α(N)=3.5×10^{-5} *6*; α(O)=6.9×10^{-6} *11*; α(P)=7.4×10^{-7} *13*; α(IPF)=0.000164 *23* Mult.,δ: From α(K)exp=0.0040 *10* in ^{201}Bi ε decay.
		2035.8 *10*	4.3 *9*	1014.2	9/2$^-$				
		2060.9 *10*	9.4 *19*	990.5	7/2$^-$				
		2114.7 *10*	5.6 *11*	936.1	7/2$^-$				
		2170.4[c] *10*	8.9 *18*	879.6	(5/2)$^-$				
3509.5+x	(31/2$^-$)	791.0[‡] *5*	100[‡]	2718.5+x	(29/2$^-$)	M1+E2		0.022 *11*	α(K)=0.017 *9*; α(L)=0.0031 *13*; α(M)=7.4×10^{-4} *30* α(N)=1.9×10^{-4} *8*; α(O)=3.7×10^{-5} *16*; α(P)=3.8×10^{-6} *18* Mult.: From A_2=−1.06 *3*, A_4=−0.01 *5* (1988Ro08) using γ(θ) in ^{200}Hg(α,3nγ) and R(DCO)=0.61 *4* in ^{192}Os(^{14}C,5nγ).
3545.0+x	(33/2$^-$)	826.6[‡] *5*	100[‡]	2718.5+x	(29/2$^-$)	E2		0.00973 *14*	α(K)=0.00759 *11*; α(L)=0.001621 *23*; α(M)=0.000390 *5* α(N)=9.88×10^{-5} *14*; α(O)=1.916×10^{-5} *27*; α(P)=1.771×10^{-6} *25*

$^{201}_{82}Pb_{119}$-12

Adopted Levels, Gammas (continued)

γ(^{201}Pb) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[&]	α[b]	Comments
								α(K)=0.00759 *11*; α(L)=0.001621 *23*; α(M)=0.000390 *5* α(N)=9.88×10^{-5} *14*; α(O)=1.916×10^{-5} *27*; α(P)=1.771×10^{-6} *25* Mult.: From A_2=0.28 *5*, A_4=−0.03 *6* (1988Ro08) using γ(θ) in ^{200}Hg(α,3nγ) and R(DCO)=1.00 *14* in ^{192}Os(^{14}C,5nγ).
3638.0+x	(31/2)	919.4[‡] *5*	100[‡]	2718.5+x	(29/2$^-$)	(D)		α(K)=0.012 *6*; α(L)=0.0021 *9*; α(M)=5.0×10^{-4} *20* α(N)=1.3×10^{-4} *5*; α(O)=2.5×10^{-5} *10*; α(P)=2.6×10^{-6} *12* Mult.: From A_2=−0.48 *4*, A_4=0.31 *7* (1988Ro08) using γ(θ) in ^{200}Hg(α,3nγ) and R(DCO)=0.87 *12* in ^{192}Os(^{14}C,5nγ).
3832.3+x	(35/2$^-$)	287.2[‡] *5*	100[‡]	3545.0+x	(33/2$^-$)	M1+E2	0.31 *17*	α(K)=0.23 *16*; α(L)=0.056 *11*; α(M)=0.0136 *21* α(N)=0.0035 *5*; α(O)=0.00067 *13*; α(P)=5.9×10^{-5} *27* Mult.: From A_2=−0.51 *5*, A_4=0.02 *8* (1988Ro08) using γ(θ) in ^{200}Hg(α,3nγ); R(DCO)=0.76 *5* and K/L (1989Su12) in ^{192}Os(^{14}C,5nγ).
3932.0+x	(33/2$^+$)	293.9[‡] *5*	39.4[‡] *25*	3638.0+x	(31/2)	D		α(K)=0.0255 *8*; α(L)=0.00432 *13*; α(M)=0.00101 *3*; α(N+..)=0.00032 *1* I_γ: Note, that Iγ=76 *8* in ^{200}Hg(α,3nγ). Mult.: From A_2=−0.28 *4*, A_4=0.07 *6* (1988Ro08) using γ(θ) in ^{200}Hg(α,3nγ) and R(DCO)=0.78 *7* in ^{192}Os(^{14}C,5nγ).
		387.0[‡] *5*	10.2[‡] *3*	3545.0+x	(33/2$^-$)	(D)		α(K)=0.0137 *5*; α(L)=0.00226 *7*; α(M)=0.00053 *2*; α(N+..)=0.00017 *1* Mult.: From R(DCO)=0.90 *15* in ^{192}Os(^{14}C,5nγ).
		422.5[‡] *5*	100[‡] *5*	3509.5+x	(31/2$^-$)	(D)		α(K)=0.0113 *4*; α(L)=0.00185 *6*; α(M)=0.00043 *1*; α(N+..)=0.00014 *1* Mult.: From R(DCO)=0.83 *14* in ^{192}Os(^{14}C,5nγ).
4059.5		1341.0[‡] *5*	100[‡]	2718.5	25/2$^-$			Mult.: R(DCO)=0.89 *16*.
4168.7+y		109.2[‡] *5*	100[‡]	4059.5+y		(M1)	7.27 *14*	α(K)=5.93 *11*; α(L)=1.031 *20*; α(M)=0.242 *5* α(N)=0.0615 *12*; α(O)=0.01225 *24*; α(P)=0.001308 *25* Mult.: From R(DCO)=0.71 *15* in ^{192}Os(^{14}C,5nγ).
4350.3+y		181.6[‡] *5*	100[‡]	4168.7+y		(M1)	1.716 *27*	α(K)=1.401 *22*; α(L)=0.241 *4*; α(M)=0.0566 *9* α(N)=0.01438 *23*; α(O)=0.00287 *5*; α(P)=0.000306 *5* Mult.: From R(DCO)=0.66 *6* in ^{192}Os(^{14}C,5nγ).
4505.1+x	(35/2)	573.2[‡] *5*	100[‡]	3932.0+x	(33/2$^+$)	D		Mult.: From A_2=−0.87 *5*, A_4=0.14 *8* (1988Ro08) using γ(θ) in ^{200}Hg(α,3nγ) and R(DCO)=0.63 *11* in ^{192}Os(^{14}C,5nγ).
4560.2+x	(37/2$^+$)	628.4[‡] *5*	43.9[‡] *23*	3932.0+x	(33/2$^+$)	E2	0.01736 *24*	α(K)=0.01298 *18*; α(L)=0.00332 *5*; α(M)=0.000812 *12* α(N)=0.0002057 *29*; α(O)=3.94×10^{-5} *6*; α(P)=3.36×10^{-6} *5* I_γ: Note, that Iγ≈10 in ^{200}Hg(α,3nγ). Mult.: From R(DCO)=1.00 *9* in ^{192}Os(^{14}C,5nγ).
		728.0[‡] *5*	100[‡] *3*	3832.3+x	(35/2$^-$)	D		Mult.: From A_2=−0.13 *5*, A_4=−0.02 *7* (1988Ro08) using γ(θ) in ^{200}Hg(α,3nγ) and R(DCO)=0.89 *4* in ^{192}Os(^{14}C,5nγ).

$^{201}_{82}Pb_{119}$-13

Adopted Levels, Gammas (continued)

$\gamma(^{201}Pb)$ (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[&]	α[b]	Comments
4614.1+y		263.8[‡] *5*	100[‡]	4350.3+y		(M1)	0.607 *9*	α(K)=0.496 *7*; α(L)=0.0849 *13*; α(M)=0.01988 *30* α(N)=0.00505 *8*; α(O)=0.001007 *15*; α(P)=0.0001077 *16* Mult.: From R(DCO)=0.71 *6* in ^{192}Os(^{14}C,5nγ).
4640.0+x	(41/2$^+$)	80[@] *1*	100[@]	4560.2+x	(37/2$^+$)	E2	16.5 *6*	B(E2)(W.u.)=3.1 *3* α(L)=12.3 *4*; α(M)=3.25 *11* α(N)=0.819 *27*; α(O)=0.146 *5*; α(P)=0.00543 *17* Mult.: From R(DCO)=1.1 *4* and K/L in ^{192}Os(^{14}C,5nγ).
4640.0+u		u		4640.0+x	(41/2$^+$)			
4640.0+v		v		4640.0+x	(41/2$^+$)			
4640.0+z		z		4640.0+x	(41/2$^+$)			
4640.1+x	(35/2)	708.1[#] *2*	100[#]	3932.0+x	(33/2$^+$)			
4647.6+x	(35/2)	142.5[‡] *5*	20.0[‡] *18*	4505.1+x	(35/2)	(D)		Mult.: From R(DCO)=1.00 *35* in ^{192}Os(^{14}C,5nγ), consistent with ΔJ=0 transition.
		715.7[‡] *5*	100[‡] *15*	3932.0+x	(33/2$^+$)	D		Mult.: From R(DCO)=0.66 *12* in ^{192}Os(^{14}C,5nγ).
4780.5+z		139.6[‡] *5*	100[‡]	4640.0+z		(M1)	3.61 *6*	α(K)=2.95 *5*; α(L)=0.510 *9*; α(M)=0.1195 *21* α(N)=0.0304 *5*; α(O)=0.00605 *11*; α(P)=0.000647 *11* Mult.: From R(DCO)=0.69 *17* in ^{192}Os(^{14}C,5nγ).
4793.8+v		152.9[‡] *5*	100[‡]	4640.0+v		(M1)	2.79 *5*	α(K)=2.28 *4*; α(L)=0.393 *7*; α(M)=0.0921 *16* α(N)=0.0234 *4*; α(O)=0.00467 *8*; α(P)=0.000499 *8* Mult.: From R(DCO)=0.55 *23* in ^{192}Os(^{14}C,5nγ).
4817.4+u		176.5[‡] *5*	100[‡]	4640.0+u		(M1)	1.860 *30*	α(K)=1.518 *24*; α(L)=0.262 *4*; α(M)=0.0613 *10* α(N)=0.01558 *25*; α(O)=0.00311 *5*; α(P)=0.000332 *5* Mult.: From R(DCO)=0.83 *19* in ^{192}Os(^{14}C,5nγ).
4830.2+x	(39/2)	190.4[‡] *5*	<25[‡]	4640.0+x	(41/2$^+$)	D		Mult.: From R(DCO)=0.81 *18* in ^{192}Os(^{14}C,5nγ).
		269.9[‡] *5*	100[‡] *18*	4560.2+x	(37/2$^+$)	D		Mult.: From R(DCO)=0.64 *12* in ^{192}Os(^{14}C,5nγ).
4954.9+y		340.8[‡] *5*	100[‡]	4614.1+y		(M1)	0.301 *4*	α(K)=0.247 *4*; α(L)=0.0420 *6*; α(M)=0.00982 *14* α(N)=0.00250 *4*; α(O)=0.000498 *7*; α(P)=5.33×10^{-5} *8* Mult.: From R(DCO)=0.69 *5* in ^{192}Os(^{14}C,5nγ).
4956.3+z		175.8[‡] *5*	100[‡]	4780.5+z		(M1)	1.881 *30*	α(K)=1.535 *25*; α(L)=0.265 *4*; α(M)=0.0620 *10* α(N)=0.01576 *25*; α(O)=0.00314 *5*; α(P)=0.000336 *5* Mult.: From R(DCO)=0.68 *19* in ^{192}Os(^{14}C,5nγ).
4992.4+v		198.6[‡] *5*	100[‡]	4793.8+v		(M1)	1.335 *21*	α(K)=1.090 *17*; α(L)=0.1875 *29*; α(M)=0.0439 *7* α(N)=0.01117 *18*; α(O)=0.002227 *35*; α(P)=0.000238 *4* Mult.: From R(DCO)=0.63 *11* in ^{192}Os(^{14}C,5nγ).
5000.1+x		360.0[#] *5*	100[#]	4640.1+x	(35/2)			
5043.1+u		225.7[‡] *5*	100[‡]	4817.4+u		(M1)	0.935 *14*	α(K)=0.763 *12*; α(L)=0.1310 *20*; α(M)=0.0307 *5* α(N)=0.00780 *12*; α(O)=0.001555 *24*; α(P)=0.0001663 *25* Mult.: From R(DCO)=0.88 *17* in ^{192}Os(^{14}C,5nγ).

$^{201}_{82}Pb_{119}$-14

Adopted Levels, Gammas (continued)

$\gamma(^{201}Pb)$ (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[&]	α[b]	Comments
5087.1+x	(43/2)	446.9[#] *5*	100[#]	4640.0+x	(41/2$^+$)	D		Mult.: From R(DCO)=0.76 *5* in ^{192}Os(^{14}C,5nγ).
5172.4+x		667.3[#] *3*	100[#]	4505.1+x	(35/2)	D		Mult.: From A_2=−0.38 *6*, A_4=−0.16 *9* (1981He07) using $\gamma(\theta)$ in ^{200}Hg(α,3nγ).
5178.6+z		222.3[‡] *5*	100[‡]	4956.3+z		(M1)	0.975 *15*	α(K)=0.796 *12*; α(L)=0.1367 *21*; α(M)=0.0320 *5* α(N)=0.00814 *13*; α(O)=0.001623 *25*; α(P)=0.0001735 *27* Mult.: From DCO in ^{192}Os(^{14}C,5nγ).
5242.4+v		250.0[‡] *5*	100[‡]	4992.4+v		(M1)	0.704 *11*	α(K)=0.575 *9*; α(L)=0.0985 *15*; α(M)=0.02308 *35* α(N)=0.00587 *9*; α(O)=0.001170 *18*; α(P)=0.0001250 *19* Mult.: From DCO in ^{192}Os(^{14}C,5nγ).
5321.3+u		278.2[‡] *5*	100[‡]	5043.1+u		(M1)	0.524 *8*	α(K)=0.429 *6*; α(L)=0.0733 *11*; α(M)=0.01716 *26* α(N)=0.00436 *6*; α(O)=0.000870 *13*; α(P)=9.30×10^{-5} *14* Mult.: From DCO in ^{192}Os(^{14}C,5nγ).
5358.7+y		404.0[‡] *5*	100[‡] *10*	4954.9+y		(M1)	0.1905 *27*	α(K)=0.1560 *22*; α(L)=0.0264 *4*; α(M)=0.00618 *9* α(N)=0.001572 *23*; α(O)=0.000313 *5*; α(P)=3.35×10^{-5} *5* Mult.: From DCO in ^{192}Os(^{14}C,5nγ).
		744.6[‡] *5*	18[‡] *6*	4614.1+y		E2	0.01206 *17*	α(K)=0.00929 *13*; α(L)=0.002109 *30*; α(M)=0.000510 *7* α(N)=0.0001293 *18*; α(O)=2.496×10^{-5} *35*; α(P)=2.244×10^{-6} *32* Mult.: From DCO in ^{192}Os(^{14}C,5nγ).
5389.1+x	(45/2)	302.0[‡] *5*	100[‡]	5087.1+x	(43/2)	D		Mult.: From DCO in ^{192}Os(^{14}C,5nγ).
5425.5+x		785.4[#] *5*	100[#]	4640.1+x	(35/2)			
5455.0+z		276.4[‡] *5*	100[‡]	5178.6+z		(M1)	0.534 *8*	α(K)=0.436 *6*; α(L)=0.0746 *11*; α(M)=0.01747 *26* α(N)=0.00444 *7*; α(O)=0.000885 *13*; α(P)=9.47×10^{-5} *14* Mult.: From R(DCO)=0.66 *9* in ^{192}Os(^{14}C,5nγ).
5554.4+v		312.0[‡] *5*	100[‡]	5242.4+v		(M1)	0.383 *6*	α(K)=0.313 *5*; α(L)=0.0534 *8*; α(M)=0.01251 *18* α(N)=0.00318 *5*; α(O)=0.000634 *9*; α(P)=6.78×10^{-5} *10* Mult.: From R(DCO)=0.58 *11* in ^{192}Os(^{14}C,5nγ).
5581.9+x	(39/2$^-$)	1749.5[‡] *5*	100[‡]	3832.3+x	(35/2$^-$)	E2	2.48×10^{-3} *4*	α(K)=0.001916 *27*; α(L)=0.000317 *4*; α(M)=7.40×10^{-5} *10* α(N)=1.877×10^{-5} *26*; α(O)=3.72×10^{-6} *5*; α(P)=3.86×10^{-7} *5*; α(IPF)=0.0001548 *22* Mult.: From R(DCO)=0.93 *19* in ^{192}Os(^{14}C,5nγ).
5648.0+u		326.7[‡] *5*	100[‡]	5321.3+u		(M1)	0.338 *5*	α(K)=0.276 *4*; α(L)=0.0471 *7*; α(M)=0.01103 *16* α(N)=0.00280 *4*; α(O)=0.000559 *8*; α(P)=5.98×10^{-5} *9* Mult.: From R(DCO)=0.79 *16* in ^{192}Os(^{14}C,5nγ).
5787.3+z		332.3[‡] *5*	100[‡]	5455.0+z		(M1)	0.323 *5*	α(K)=0.264 *4*; α(L)=0.0450 *7*; α(M)=0.01053 *15* α(N)=0.00267 *4*; α(O)=0.000533 *8*; α(P)=5.71×10^{-5} *8* Mult.: From R(DCO)=0.69 *13* in ^{192}Os(^{14}C,5nγ).

$^{201}_{82}Pb_{119}$-15

Adopted Levels, Gammas (continued)

γ(^{201}Pb) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[&]	α[b]	Comments
5817.7+y		459.0[‡] *5*	100[‡] *11*	5358.7+y		(M1)	0.1355 *19*	α(K)=0.1110 *16*; α(L)=0.01875 *27*; α(M)=0.00438 *6* α(N)=0.001114 *16*; α(O)=0.0002221 *32*; α(P)=2.379×10^{-5} *34* Mult.: From R(DCO)=0.70 *6* in ^{192}Os(^{14}C,5nγ).
		862.8[‡] *5*	22[‡] *9*	4954.9+y		E2	0.00892 *13*	α(K)=0.00700 *10*; α(L)=0.001460 *21*; α(M)=0.000350 *5* α(N)=8.88×10^{-5} *12*; α(O)=1.725×10^{-5} *24*; α(P)=1.611×10^{-6} *23* Mult.: From R(DCO)=0.92 *34* in ^{192}Os(^{14}C,5nγ).
5830.0+x	(45/2$^+$)	1190.1[‡] *5*	100[‡]	4640.0+x	(41/2$^+$)	E2	0.00477 *7*	α(K)=0.00385 *5*; α(L)=0.000701 *10*; α(M)=0.0001657 *23* α(N)=4.20×10^{-5} *6*; α(O)=8.25×10^{-6} *12*; α(P)=8.20×10^{-7} *11*; α(IPF)=3.08×10^{-6} *6* Mult.: From R(DCO)=1.07 *13* in ^{192}Os(^{14}C,5nγ).
5835.7+x	(41/2)	253.7[‡] *5*	47[‡] *5*	5581.9+x	(39/2$^-$)	(D)		Mult.: From R(DCO)=0.78 *28* in ^{192}Os(^{14}C,5nγ).
		1005.5[‡] *5*	100[‡] *5*	4830.2+x	(39/2)	(D)		Mult.: From R(DCO)=0.76 *20* in ^{192}Os(^{14}C,5nγ).
5891.3+x	(43/2)	1251.3[‡] *5*	100[‡]	4640.0+x	(41/2$^+$)	D		Mult.: From R(DCO)=0.74 *17* in ^{192}Os(^{14}C,5nγ).
5928.8+v		374.4[‡] *5*	100[‡]	5554.4+v		(M1)	0.2338 *34*	α(K)=0.1913 *28*; α(L)=0.0325 *5*; α(M)=0.00760 *11* α(N)=0.001932 *28*; α(O)=0.000385 *6*; α(P)=4.12×10^{-5} *6* Mult.: From R(DCO)=0.68 *14* in ^{192}Os(^{14}C,5nγ).
5989.4+x	(45/2)	98.2[‡] *5*	3.4[‡] *4*	5891.3+x	(43/2)	D		Mult.: From R(DCO)=0.74 *21* in ^{192}Os(^{14}C,5nγ).
		153.7[‡] *5*	8.4[‡] *4*	5835.7+x	(41/2)	E2	1.114 *21*	α(K)=0.300 *5*; α(L)=0.607 *12*; α(M)=0.1597 *32* α(N)=0.0403 *8*; α(O)=0.00723 *15*; α(P)=0.000325 *6* Mult.: From R(DCO)=1.02 *15* in ^{192}Os(^{14}C,5nγ).
		159.4[‡] *5*	9.6[‡] *4*	5830.0+x	(45/2$^+$)	(D)		Mult.: From R(DCO)=1.06 *13* in ^{192}Os(^{14}C,5nγ).
		600.2[‡] *5*	12.1[‡] *17*	5389.1+x	(45/2)	(D)		Mult.: From R(DCO)=0.98 *16* in ^{192}Os(^{14}C,5nγ).
		902.2[‡] *5*	100.0[‡] *8*	5087.1+x	(43/2)	D		Mult.: From R(DCO)=0.55 *5* in ^{192}Os(^{14}C,5nγ).
6028.4+u		380.4[‡] *5*	100[‡]	5648.0+u		(M1)	0.2240 *32*	α(K)=0.1833 *26*; α(L)=0.0311 *4*; α(M)=0.00728 *11* α(N)=0.001850 *27*; α(O)=0.000369 *5*; α(P)=3.95×10^{-5} *6* Mult.: From R(DCO)=0.89 *11* in ^{192}Os(^{14}C,5nγ).
6145.1+x	(35/2)	1640.0[‡] *5*	100[‡]	4505.1+x	(35/2)	(D)		Mult.: From R(DCO)=1.13 *26* in ^{192}Os(^{14}C,5nγ).
6175.4+z		388.1[‡] *5*	100[‡]	5787.3+z		(M1)	0.2122 *31*	α(K)=0.1737 *25*; α(L)=0.0295 *4*; α(M)=0.00690 *10* α(N)=0.001752 *25*; α(O)=0.000349 *5*; α(P)=3.74×10^{-5} *5* Mult.: From R(DCO)=0.59 *14* in ^{192}Os(^{14}C,5nγ).
6246.8+x	(37/2)	101.7[‡] *5*	100[‡]	6145.1+x	(35/2)	(M1)	8.91 *18*	α(K)=7.26 *14*; α(L)=1.266 *25*; α(M)=0.297 *6* α(N)=0.0755 *15*; α(O)=0.01505 *30*; α(P)=0.001607 *32* Mult.: From R(DCO)=0.55 *14* in ^{192}Os(^{14}C,5nγ).
6323.4+y		505.7[‡] *5*	100[‡] *33*	5817.7+y		(M1)	0.1048 *15*	α(K)=0.0859 *12*; α(L)=0.01446 *21*; α(M)=0.00338 *5* α(N)=0.000859 *12*; α(O)=0.0001713 *24*; α(P)=1.836×10^{-5} *26* Mult.: From R(DCO)=0.67 *11* in ^{192}Os(^{14}C,5nγ).

$^{201}_{82}Pb_{119}$-16

Adopted Levels, Gammas (continued)

$\gamma(^{201}Pb)$ (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[&]	α[b]	Comments
6323.4+y		964.7[‡] *5*	67[‡] *20*	5358.7+y		(E2)	0.00714 *10*	α(K)=0.00567 *8*; α(L)=0.001121 *16*; α(M)=0.000267 *4* α(N)=6.78×10^{-5} *10*; α(O)=1.323×10^{-5} *19*; α(P)=1.266×10^{-6} *18* Mult.: From R(DCO)=0.77 *18* in ^{192}Os(^{14}C,5nγ).
6323.9+x	(45/2$^+$)	1683.8[‡] *5*	100[‡]	4640.0+x	(41/2$^+$)	E2	0.00263 *4*	α(K)=0.002053 *29*; α(L)=0.000342 *5*; α(M)=8.00×10^{-5} *11* α(N)=2.027×10^{-5} *28*; α(O)=4.01×10^{-6} *6*; α(P)=4.15×10^{-7} *6*; α(IPF)=0.0001288 *18* Mult.: From R(DCO)=1.01 *17* in ^{192}Os(^{14}C,5nγ).
6336.1+y		518.4[‡] *5*	100[‡]	5817.7+y		D		Mult.: R(DCO)=0.69 *10* in ^{192}Os(^{14}C,5nγ).
6364.8+v		436.0[‡] *5*	100[‡]	5928.8+v		(M1)	0.1554 *22*	α(K)=0.1273 *18*; α(L)=0.02152 *31*; α(M)=0.00503 *7* α(N)=0.001279 *18*; α(O)=0.000255 *4*; α(P)=2.73×10^{-5} *4* Mult.: From R(DCO)=0.77 *21* in ^{192}Os(^{14}C,5nγ).
6376.4+x	(39/2)	129.7[‡] *5*	100[‡]	6246.8+x	(37/2)	(M1)	4.45 *8*	α(K)=3.63 *6*; α(L)=0.629 *11*; α(M)=0.1475 *26* α(N)=0.0375 *7*; α(O)=0.00747 *13*; α(P)=0.000798 *14* Mult.: From R(DCO)=0.57 *8* in ^{192}Os(^{14}C,5nγ).
6458.1+u		429.7[‡] *5*	100[‡]	6028.4+u		(M1)	0.1615 *23*	α(K)=0.1323 *19*; α(L)=0.02238 *32*; α(M)=0.00523 *8* α(N)=0.001330 *19*; α(O)=0.000265 *4*; α(P)=2.84×10^{-5} *4* Mult.: From R(DCO)=0.79 *30* in ^{192}Os(^{14}C,5nγ).
6460.1+x	(47/2)	136.2[‡] *5*	8.5[‡] *14*	6323.9+x	(45/2$^+$)	D		Mult.: From R(DCO)=0.89 *28* in ^{192}Os(^{14}C,5nγ).
		470.7[‡] *5*	100[‡] *6*	5989.4+x	(45/2)	(D)		Mult.: From R(DCO)=0.94 *12* in ^{192}Os(^{14}C,5nγ).
6548.0+x	(41/2)	171.6[‡] *5*	100[‡]	6376.4+x	(39/2)	(M1)	2.013 *33*	α(K)=1.643 *27*; α(L)=0.283 *5*; α(M)=0.0664 *11* α(N)=0.01688 *27*; α(O)=0.00336 *5*; α(P)=0.000359 *6* Mult.: From R(DCO)=0.58 *6* in ^{192}Os(^{14}C,5nγ).
6616.7+z		441.3[‡] *5*	100[‡] *27*	6175.4+z		(M1)	0.1505 *22*	α(K)=0.1232 *18*; α(L)=0.02084 *30*; α(M)=0.00487 *7* α(N)=0.001238 *18*; α(O)=0.0002469 *35*; α(P)=2.64×10^{-5} *4* Mult.: From R(DCO)=0.64 *16* in ^{192}Os(^{14}C,5nγ).
		829.4[‡] *5*	35[‡] *15*	5787.3+z		E2	0.00966 *14*	α(K)=0.00755 *11*; α(L)=0.001608 *23*; α(M)=0.000387 *5* α(N)=9.80×10^{-5} *14*; α(O)=1.900×10^{-5} *27*; α(P)=1.758×10^{-6} *25* Mult.: From R(DCO)=1.2 *7* in ^{192}Os(^{14}C,5nγ).
6706.7+x	(49/2)	717.3[‡] *5*	100[‡]	5989.4+x	(45/2)	E2	0.01305 *18*	α(K)=0.00999 *14*; α(L)=0.002324 *33*; α(M)=0.000564 *8* α(N)=0.0001428 *20*; α(O)=2.75×10^{-5} *4*; α(P)=2.446×10^{-6} *34* Mult.: From R(DCO)=1.05 *6* in ^{192}Os(^{14}C,5nγ).
6768.5+x	(43/2)	220.5[‡] *5*	100[‡]	6548.0+x	(41/2)	(M1)	0.997 *15*	α(K)=0.814 *13*; α(L)=0.1399 *22*; α(M)=0.0328 *5* α(N)=0.00833 *13*; α(O)=0.001660 *26*; α(P)=0.0001775 *27* Mult.: From R(DCO)=0.58 *5* in ^{192}Os(^{14}C,5nγ).
6858.2+v		493.4[‡] *5*	100[‡]	6364.8+v		(M1)	0.1118 *16*	α(K)=0.0917 *13*; α(L)=0.01545 *22*; α(M)=0.00361 *5* α(N)=0.000917 *13*; α(O)=0.0001830 *26*; α(P)=1.960×10^{-5} *28* Mult.: From R(DCO)=0.76 *20* in ^{192}Os(^{14}C,5nγ).

$^{201}_{82}Pb_{119}$-17

Adopted Levels, Gammas (continued)

γ(^{201}Pb) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[&]	α[b]	Comments
6881.9+y		558.5[‡] *5*	100[‡]	6323.4+y		(M1)	0.0806 *11*	α(K)=0.0661 *9*; α(L)=0.01110 *16*; α(M)=0.00259 *4* α(N)=0.000659 *9*; α(O)=0.0001315 *19*; α(P)=1.409×10^{-5} *20* Mult.: From R(DCO)=0.65 *18* in ^{192}Os(^{14}C,5nγ).
6910.1+x	(47/2)	586.1[‡] *5*	100[‡]	6323.9+x	(45/2$^+$)	D		Mult.: From R(DCO)=0.76 *13* in ^{192}Os(^{14}C,5nγ).
6941.2+u		483.1[‡] *5*	100[‡]	6458.1+u		(M1)	0.1183 *17*	α(K)=0.0969 *14*; α(L)=0.01634 *23*; α(M)=0.00382 *5* α(N)=0.000971 *14*; α(O)=0.0001936 *28*; α(P)=2.074×10^{-5} *30* Mult.: From R(DCO)=0.73 *26* in ^{192}Os(^{14}C,5nγ).
7008.4+x	(49/2)	548.3[‡] *5*	100[‡]	6460.1+x	(47/2)	D		Mult.: From R(DCO)=0.67 *9* in ^{192}Os(^{14}C,5nγ).
7044.3+x	(45/2)	275.9[‡] *5*	100[‡]	6768.5+x	(43/2)	(M1)	0.536 *8*	α(K)=0.438 *7*; α(L)=0.0750 *11*; α(M)=0.01756 *26* α(N)=0.00446 *7*; α(O)=0.000890 *13*; α(P)=9.51×10^{-5} *14* Mult.: From R(DCO)=0.56 *3* in ^{192}Os(^{14}C,5nγ).
7108.4+z		491.7[‡] *5*	100[‡] *22*	6616.7+z		(M1)	0.1129 *16*	α(K)=0.0925 *13*; α(L)=0.01559 *22*; α(M)=0.00364 *5* α(N)=0.000926 *13*; α(O)=0.0001847 *26*; α(P)=1.979×10^{-5} *28* Mult.: From R(DCO)=0.64 *17* in ^{192}Os(^{14}C,5nγ).
		933.1[‡] *5*	44[‡] *17*	6175.4+z		E2	0.00763 *11*	α(K)=0.00604 *8*; α(L)=0.001212 *17*; α(M)=0.000289 *4* α(N)=7.34×10^{-5} *10*; α(O)=1.430×10^{-5} *20*; α(P)=1.360×10^{-6} *19* Mult.: From R(DCO)=0.8 *3* in ^{192}Os(^{14}C,5nγ).
7142.3+x	(49/2$^+$)	232.2[‡] *5*	10[‡] *5*	6910.1+x	(47/2)	D		Mult.: From R(DCO)=0.81 *25* in ^{192}Os(^{14}C,5nγ).
		682.3[‡] *5*	17.2[‡] *17*	6460.1+x	(47/2)	D		Mult.: From R(DCO)=0.73 *18* in ^{192}Os(^{14}C,5nγ).
		1312.3[‡] *5*	100[‡] *7*	5830.0+x	(45/2$^+$)	E2	0.00398 *6*	α(K)=0.00322 *5*; α(L)=0.000569 *8*; α(M)=0.0001340 *19* α(N)=3.40×10^{-5} *5*; α(O)=6.69×10^{-6} *9*; α(P)=6.74×10^{-7} *9*; α(IPF)=1.758×10^{-5} *26* Mult.: From R(DCO)=0.97 *11* in ^{192}Os(^{14}C,5nγ).
7339.5+x	(51/2)	197.2[‡] *5*	100.0[‡] *24*	7142.3+x	(49/2$^+$)	D		Mult.: From R(DCO)=0.70 *11* in ^{192}Os(^{14}C,5nγ).
		331.1[‡] *5*	42[‡] *5*	7008.4+x	(49/2)	D		Mult.: From R(DCO)=0.77 *18* in ^{192}Os(^{14}C,5nγ).
7377.5+x	(47/2)	333.1[‡] *5*	100[‡] *20*	7044.3+x	(45/2)	(M1)	0.321 *5*	α(K)=0.262 *4*; α(L)=0.0447 *7*; α(M)=0.01046 *15* α(N)=0.00266 *4*; α(O)=0.000530 *8*; α(P)=5.67×10^{-5} *8* Mult.: From R(DCO)=0.57 *5* in ^{192}Os(^{14}C,5nγ).
		1388.1[‡] *5*	5.6[‡] *3*	5989.4+x	(45/2)	D		Mult.: From R(DCO)=0.72 *29* in ^{192}Os(^{14}C,5nγ).
7378.9+x	(47/2)	334.6[‡] *5*	100[‡] *24*	7044.3+x	(45/2)	(M1)	0.317 *5*	α(K)=0.259 *4*; α(L)=0.0441 *6*; α(M)=0.01033 *15* α(N)=0.00262 *4*; α(O)=0.000523 *8*; α(P)=5.60×10^{-5} *8* Mult.: From R(DCO)=0.60 *5* in ^{192}Os(^{14}C,5nγ).
		1389.4[‡] *5*	4.4[‡] *3*	5989.4+x	(45/2)	D		Mult.: From R(DCO)=0.64 *37* in ^{192}Os(^{14}C,5nγ).
7471.4+u		530.2[‡] *5*	100[‡]	6941.2+u		(M1)	0.0925 *13*	α(K)=0.0758 *11*; α(L)=0.01275 *18*; α(M)=0.00298 *4* α(N)=0.000757 *11*; α(O)=0.0001510 *21*; α(P)=1.618×10^{-5} *23* Mult.: From R(DCO)=0.85 *20* in ^{192}Os(^{14}C,5nγ).

$^{201}_{82}Pb_{119}$-18

Adopted Levels, Gammas (continued)

γ(^{201}Pb) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[&]	α[b]	Comments
7648.2+z		539.8[‡] *5*	92[‡] *25*	7108.4+z		(M1)	0.0882 *13*	α(K)=0.0723 *10*; α(L)=0.01215 *17*; α(M)=0.00284 *4* α(N)=0.000722 *10*; α(O)=0.0001439 *20*; α(P)=1.543×10^{-5} *22* Mult.: From R(DCO)=0.66 *26* in ^{192}Os(^{14}C,5nγ).
		1031.4[‡] *5*	100[‡] *33*	6616.7+z		E2	0.00627 *9*	α(K)=0.00501 *7*; α(L)=0.000962 *14*; α(M)=0.0002287 *32* α(N)=5.80×10^{-5} *8*; α(O)=1.134×10^{-5} *16*; α(P)=1.100×10^{-6} *15* Mult.: From R(DCO)=1.2 *5* in ^{192}Os(^{14}C,5nγ).
7759.5+x	(49/2)	380.6[‡] *5*	84[‡] *8*	7378.9+x	(47/2)	D		Mult.: From R(DCO)=0.84 *29* in ^{192}Os(^{14}C,5nγ).
		382.0[‡] *5*	100[‡] *3*	7377.5+x	(47/2)	D		Mult.: From R(DCO)=0.66 *15* in ^{192}Os(^{14}C,5nγ).
7772.2+x	(49/2)	393.3[‡] *5*	89[‡] *12*	7378.9+x	(47/2)	(M1)	0.2048 *30*	α(K)=0.1676 *24*; α(L)=0.0284 *4*; α(M)=0.00665 *10* α(N)=0.001690 *24*; α(O)=0.000337 *5*; α(P)=3.61×10^{-5} *5* Mult.: From R(DCO)=0.64 *10* in ^{192}Os(^{14}C,5nγ).
		394.8[‡] *5*	100[‡] *23*	7377.5+x	(47/2)	(M1)	0.2027 *29*	α(K)=0.1659 *24*; α(L)=0.0281 *4*; α(M)=0.00658 *9* α(N)=0.001673 *24*; α(O)=0.000334 *5*; α(P)=3.57×10^{-5} *5* Mult.: From R(DCO)=0.60 *13* in ^{192}Os(^{14}C,5nγ).
8003.4+x	(53/2)	663.9[‡] *5*	100[‡]	7339.5+x	(51/2)	D		Mult.: From R(DCO)=0.80 *12* in ^{192}Os(^{14}C,5nγ). Note, that the authors give R(DCO)=0.8 *12*, which is probably a typo.
8018.7+x	(51/2)	259.2[‡] *5*	9.2[‡] *5*	7759.5+x	(49/2)	D		Mult.: From R(DCO)=0.63 *13* in ^{192}Os(^{14}C,5nγ).
		1312.0[‡] *5*	100[‡] *6*	6706.7+x	(49/2)	D		Mult.: From R(DCO)=0.73 *13* in ^{192}Os(^{14}C,5nγ).
8198.0+x	(53/2)	179.3[‡] *5*	100[‡]	8018.7+x	(51/2)	D		Mult.: From R(DCO)=0.70 *6* in ^{192}Os(^{14}C,5nγ).
8214.7+x	(51/2)	442.5[‡] *5*	100[‡]	7772.2+x	(49/2)	(M1)	0.1494 *21*	α(K)=0.1224 *18*; α(L)=0.02068 *30*; α(M)=0.00484 *7* α(N)=0.001229 *18*; α(O)=0.0002451 *35*; α(P)=2.62×10^{-5} *4* Mult.: From R(DCO)=0.68 *16* in ^{192}Os(^{14}C,5nγ).
8226.1+x	(51/2)	453.9[‡] *5*	100[‡]	7772.2+x	(49/2)	(M1)	0.1396 *20*	α(K)=0.1143 *16*; α(L)=0.01932 *28*; α(M)=0.00452 *6* α(N)=0.001148 *16*; α(O)=0.0002289 *33*; α(P)=2.452×10^{-5} *35* Mult.: From R(DCO)=0.62 *14* in ^{192}Os(^{14}C,5nγ).
8653.8+x	(55/2)	455.8[‡] *5*	100[‡]	8198.0+x	(53/2)	(M1)	0.1380 *20*	α(K)=0.1131 *16*; α(L)=0.01910 *27*; α(M)=0.00447 *6* α(N)=0.001135 *16*; α(O)=0.0002263 *32*; α(P)=2.424×10^{-5} *35* Mult.: From R(DCO)=0.71 *7* in ^{192}Os(^{14}C,5nγ).

[†] From 1978Ri04 in ^{201}Bi ε decay, unless otherwise specified.
[‡] From ^{192}Os(^{14}C,5nγ).
[#] From ^{200}Hg(α,3nγ).
[@] From ^{197}Au(^{207}Pb,Xγ).
[&] From α(K)exp, α(L)exp and subshell ratios in ^{201}Bi ε decay (1978Ri04), γ(θ) in ^{200}Hg(α,3nγ) and DCO in ^{192}Os(^{14}C,5nγ), coupled together with the observed multiple decay branches and band structures. For rotational band transitions whose multipolarity is determined from γ(θ) or DCO, Mult.=(M1), instead of D, is

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Adopted Levels, Gammas (continued)

$\gamma(^{201}Pb)$ (continued)

assigned in this evaluation.

[a] From α(K)exp, α(L)exp and subshell ratios in ^{201}Bi ε decay (1978Ri04) and the briccmixing program, unless otherwise stated.

[b] Additional information 6.

[c] Placement of transition in the level scheme is uncertain.

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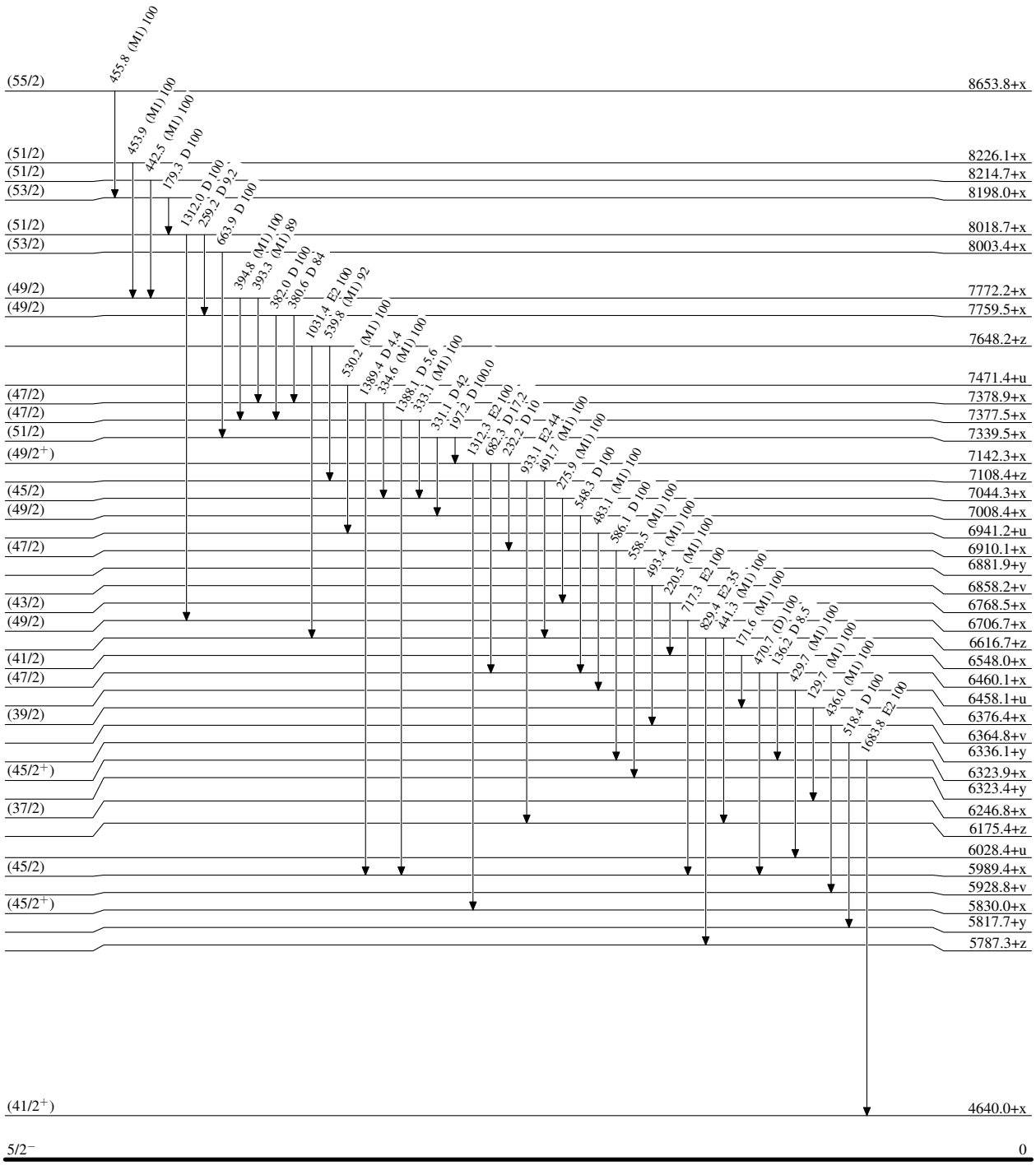
Adopted Levels, Gammas

Level Scheme

Intensities: Relative photon branching from each level



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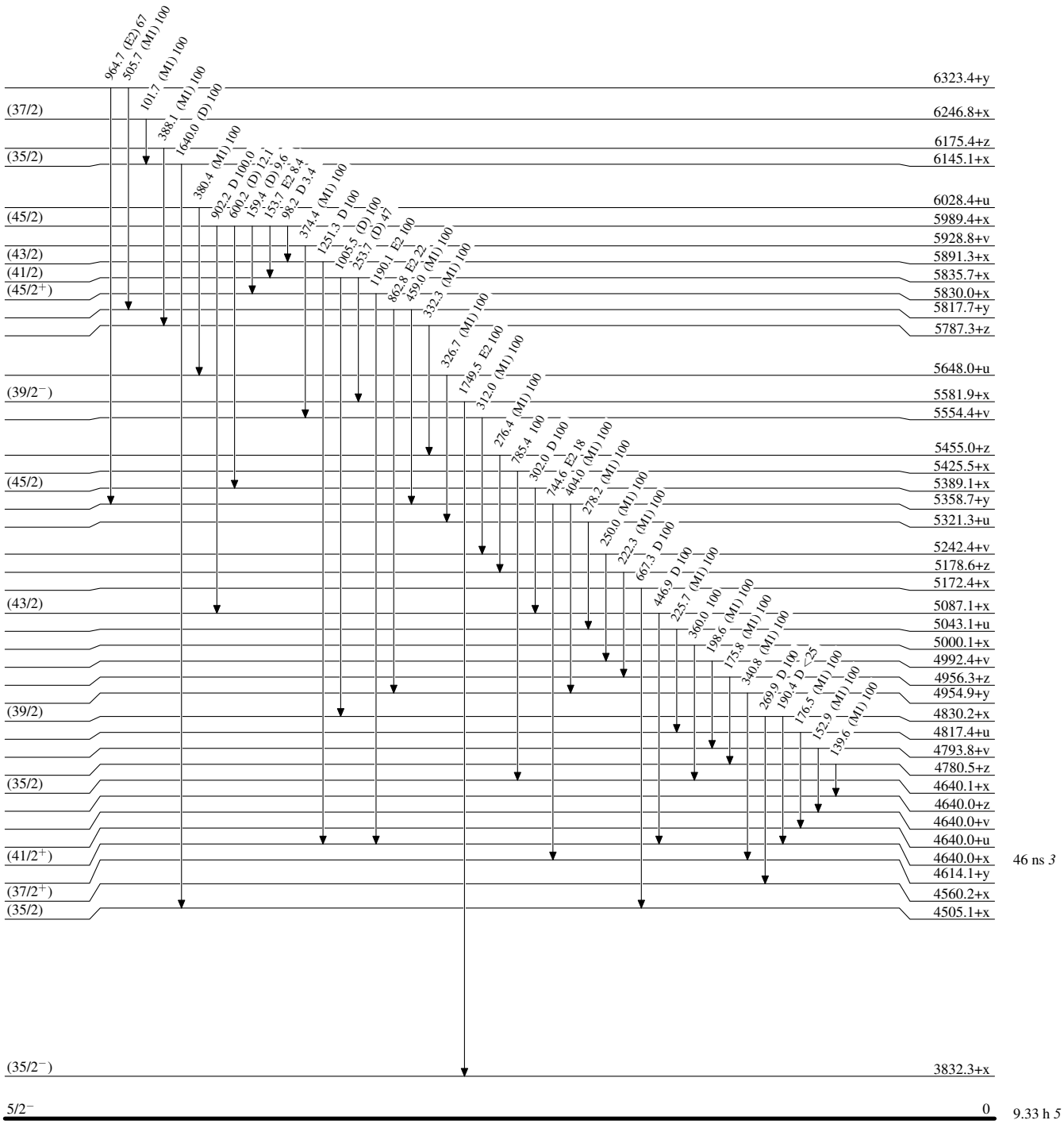
Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level



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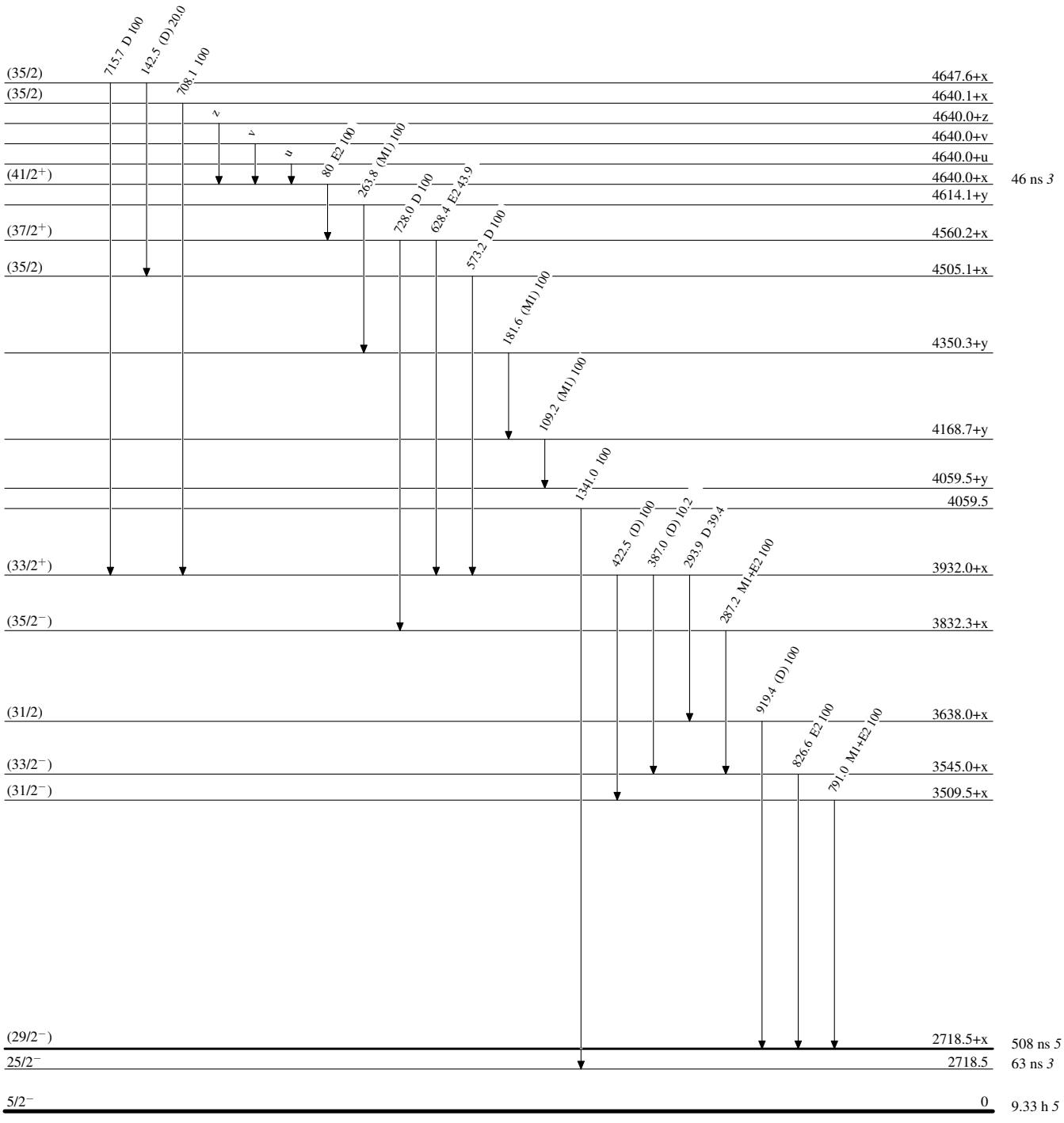
Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level



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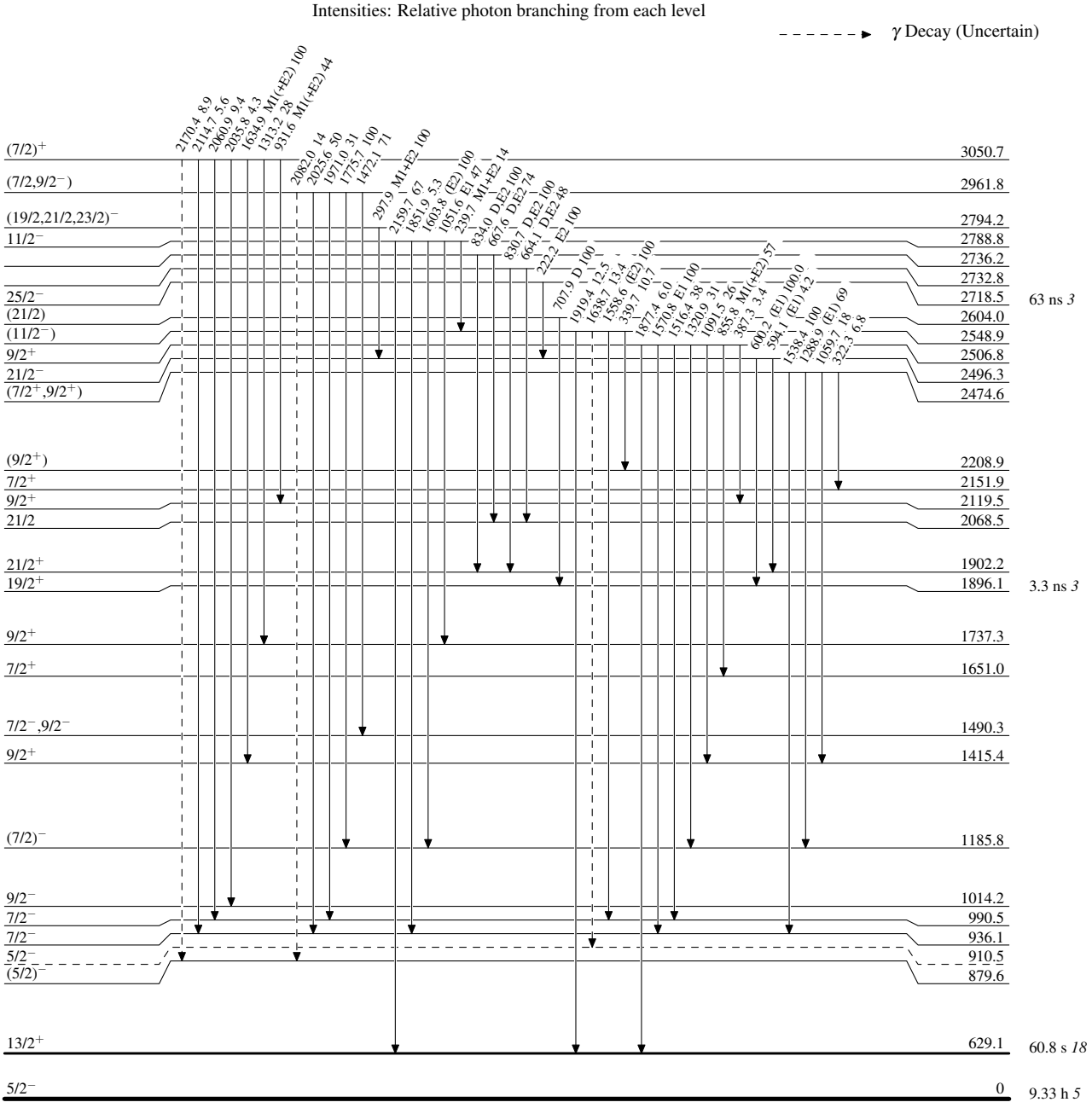
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level



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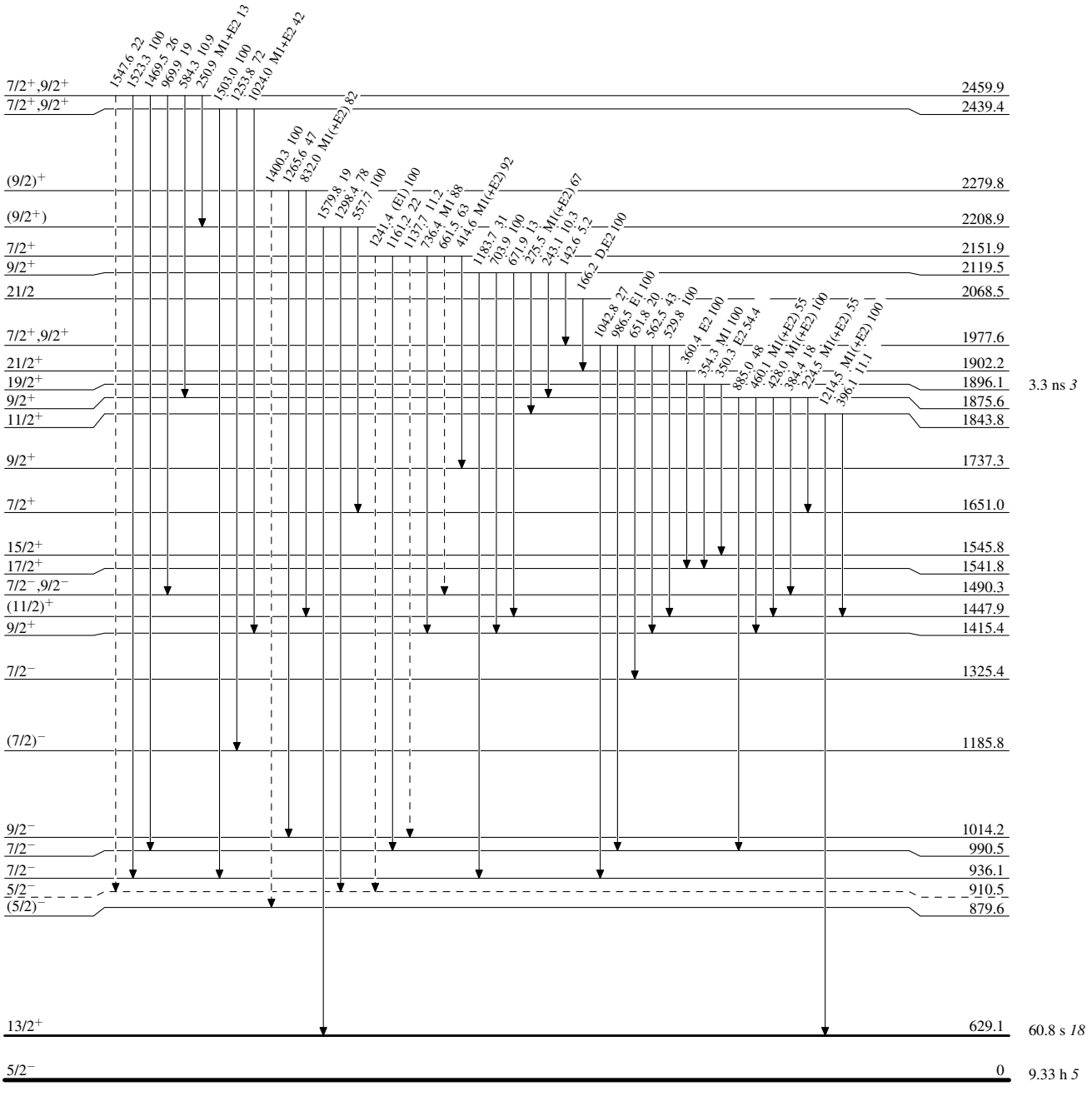
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

γ Decay (Uncertain)



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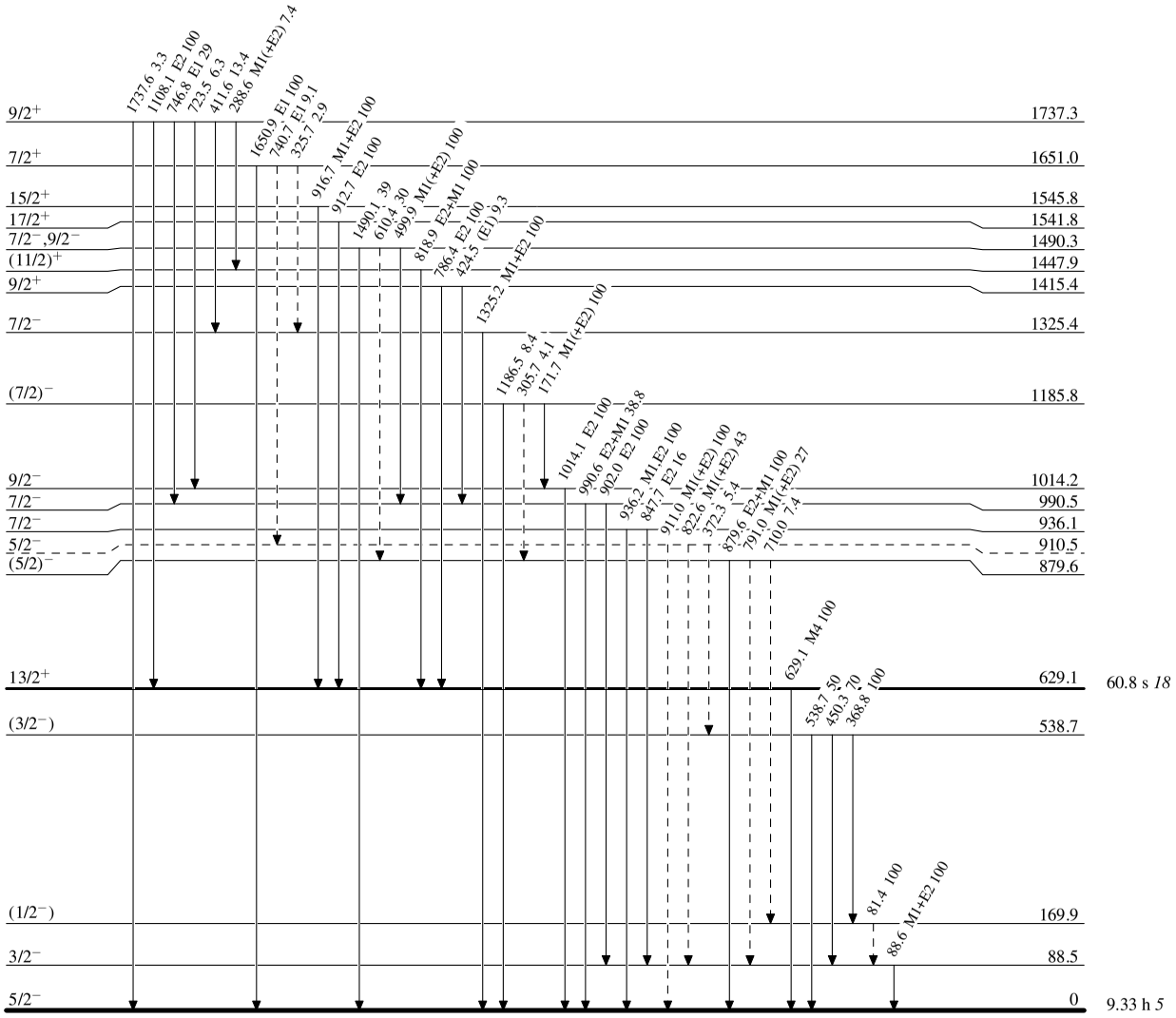
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

γ Decay (Uncertain)



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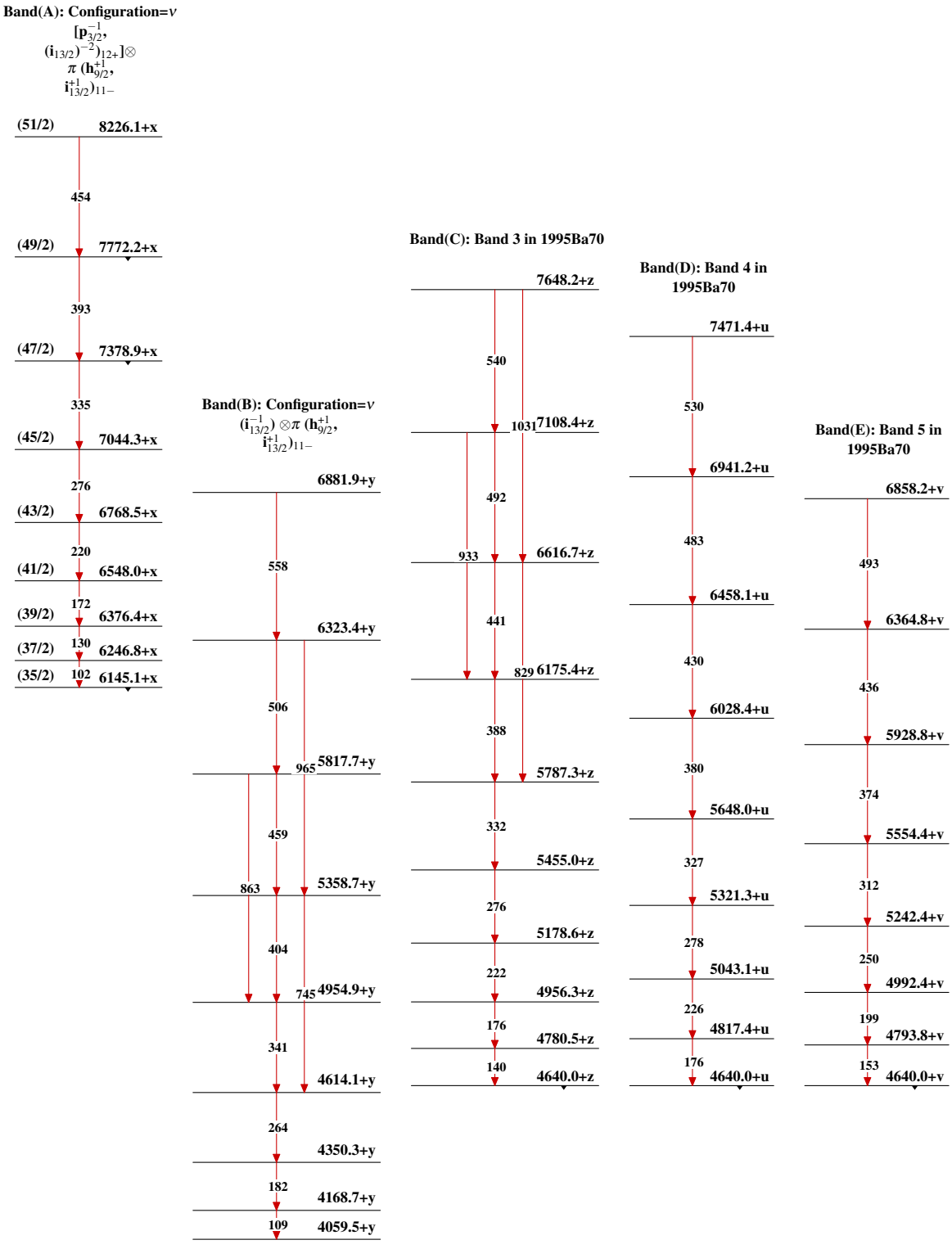
Adopted Levels, Gammas



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