Adopted Levels, Gammas

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	M. Shamsuzzoha Basunia	NDS 121, 561 (2014)	31-Mar-2014

Q(β^-)=−3981 *8*; S(n)=7658.4 *14*; S(p)=4983.5 *8*; Q(α)=5407.45 *7* 2012Wa38

Other reactions:

^{206}Pb(^{6}He,2n) and ^{208}Pb(^{4}He,2n): 2009Lu02, 2008Pe32, 2007Pe02, 2006Pe10, 2006Pe37.

^{208}Pb(^{9}Be,3nγ): 1999Da26.

^{209}Bi(p,p′) IAR: 1972Co05.

^{209}Bi(p,γ): 1995Li33, 1994KaZQ, 1991Vy02, 1991Cv01.

^{209}Bi(d,n): 1994Go42, 1991Vy02.

^{209}Bi(^{3}He,2p): 1991VyZZ.

^{209}Bi(^{6}Li,X): 2009Pe19, 2011Pe15.

^{209}Bi(^{20}Ne,^{19}F): 1996Lh02.

Bremmstrahlung from ^{210}Po α decay: 1999Tk04, 1999Ta02, 1999Oh02, 1999Dy01, 1998Pa15, 1997Ka59, 1997Ka36, 2000So20, 2001Ku27, 2001Gi12.

^{210}Bi β^- decay: β^- spectrum shape factor (1996Gr01).

^{210}Po Levels

Cross Reference (XREF) Flags

A	^{210}Bi β^- decay (5.012 d)	F	^{204}Hg(^{13}C,α3nγ)	K	^{209}Bi(α,t) E=40 MeV
B	^{210}At ε decay (8.1 h)	G	^{208}Pb(α,2nγ)	L	^{209}Bi(^{7}Li,^{6}He) E=210 MeV
C	^{214}Rn α decay (0.27 μs)	H	^{209}Bi(t,2nγ)	M	^{210}Po(d,d′) E=17 MeV
D	^{214}Rn α decay (0.69 ns)	I	^{209}Bi(^{3}He,d) E=30 MeV		
E	^{214}Rn α decay (6.5 ns)	J	^{209}Bi(^{3}He,dγ)		

E(level)[d]	J$^\pi$[e]	T$_{1/2}$	XREF	Comments
0.0[†]	0$^+$	138.376 d *2*	ABCDE GHIJKLM	%α=100 T$_{1/2}$: from 1964EiZZ, calorimeter. Other values: 138.37 d *3* (1953Cu46), 138.401 d *6* (1954Ei20). Others: 1931Cu01, 1949Be54, 1953Gi10. 2012Do08 measured 138.6 d *15*, 105.2 d *44*, and 138.4 d *23* for room temperature, 293 K, and 4.2 K, respectively, from ^{210}Po α decay. 2014Po01 measured 140.2 d *29*, 139.2 d *29* at 4.2 K and 139.6 d 29, 143.3 d *30* at 293 K. Isotope shift (1991Ko32).
1181.398[†] *10*	2$^+$	5.9 ps *12*	B GHIJK M	J$^\pi$: 1181γ E2 to 0$^+$. T$_{1/2}$: from B(E2)=0.021 *4* in ^{210}Po(d,d′) (1973El06,1981Ha54).
1426.701[†] *14*	4$^+$	1.56 ns *6*	B GHIJKLM	XREF: L(1390). J$^\pi$: 245γ E2 to 2$^+$; (245γ)(1181γ)(θ). T$_{1/2}$: Weighted average of 1.53 ns *7* (1976Ha56 – (α,2nγ), 1.53 ns *8* (1973Be30), and 1.60 ns *6* (1973Na21). Uncertainty – lowest expt. value. Other: 1.8 ns *2* (1963Fu02). Later values via ^{210}At ε decay.
1473.357[†] *21*	6$^+$	42.6 ns *10*	B GHIJK	μ=5.48 *5* J$^\pi$: 46.9γ E2 to 4$^+$. μ: Differential perturbed angular distribution of γ rays (1976Ha56,2014StZZ). T$_{1/2}$: from $\gamma\gamma$(t) in ^{208}Pb(α,2nγ) (1976Ha56).
1556.97[†] *3*	8$^+$	98.9 ns *25*	B E GHIJK	μ=+7.13 *5*; Q=−0.552 *20* J$^\pi$: 83.5γ E2 to 6$^+$. μ systematics in ^{202}Po to ^{208}Po supports a configuration=(π 1h$_{9/2}$)^{2}8$^+$ (1976Ha56,1973Br14). μ: Differential perturbed angular distribution of γ rays

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Adopted Levels, Gammas (continued)

^{210}Po Levels (continued)

E(level)[d]	Jπ[e]	$T_{1/2}$	XREF	Comments
				(1976Ha56,2014StZZ). Other: 1973Ya06. Q: Differential perturbed angular distribution of γ rays (1991Be03,2014StZZ). Other values: Q=0.57, differential perturbed angular distribution of γ rays (1987Ma65,1983Da01,1989Ra17). Q=0.568 *30*, level mixing spectroscopy (1997Ne06). $T_{1/2}$: weighted average of 101.0 ns *12*, ce(t) in ^{209}Bi(t,2nγ) (1988Ma32), and 96.0 ns *14*, γ(t) in ^{208}Pb(α,2nγ) (1976Ha56). See ^{208}Pb(α,2nγ) for other values.
2187.96‡ *4*	8+		B GHIJKL	XREF: L(2120). Jπ: 631γ M1+E2 to 8+, 661γ E3 from 11−.
2290.14‡ *4*	2+		B HIJK M	Jπ: 2290γ E2 to 0+.
2326.018‡ *23*	6+		B GHIJK	Jπ: 853γ M1+E2 to 6+, 769γ to 8+, 899γ to 4+.
2382.543‡ *17*	4+		B GHIJK	Jπ: 1201.5γ E2 to 2+, 909γ to 6+.
2386.784 *19*	3−	≈0.3 ps	B H J M	Jπ: 960γ E1 to 4+, 1205γ E1 to 2+. $T_{1/2}$: from B(E3)=0.63 *7* in ^{210}Po(d,d′) (1973El06) and adopted Iγ(2386γ)-branching.
2393.78‡ *6*	1+		HIJK	Jπ: 2394γ M1 to 0+.
2403.282‡ *21*	5+		B GHIJK	Jπ: 77.2γ M1 to 6+, 976γ M1+E2 to 4+.
2413.834‡ *25*	3+		HIJK	Jπ: 987γ M1 to 4+, 1232γ M1+E2 to 2+.
2438.36‡ *3*	7+		B GHIJK	Jπ: 881γ M1+E2 to 8+, 965γ M1+E2 to 6+.
2608.58@ *6*	0+		H	Jπ: 2608γ E0 to 0+.
2658 *10*			M	
2845.97# *7*	(3)−		H	Jπ: 459γ M1 to 3−, 1664γ E1+M2 to 2+.
2849.17# *4*	11−	19.6 ns *4*	GH K	μ=+12.20 *9*; Q=−0.86 *11* Jπ: 1292γ E3 to 8+. Analogy with 85-ns ^{202}Po at ≈2.62 MeV with μ=11.9 *4* (1976Ha56), and 8.3-ns ^{208}Po at ≈2.71 MeV with μ=+12.3 *4* (1978LeZA). μ: Differential perturbed angular distribution of γ rays (1976Ha56,1976Re12,2014StZZ). Q: Differential perturbed angular distribution of γ rays (1991Be03,2014StZZ). Other values: Q=0.82 *12*, adjusted by evaluator relative to Q(1557)=−0.552, differential perturbed angular distribution of γ rays (1987Ma65,1989Ra17). Q=(−)0.79 *19*, adjusted by evaluator relative to Q(1557)=−0.552, differential perturbed angular distribution of γ rays (1983Da01,1989Ra17). $T_{1/2}$: from ce(t) in ^{209}Bi(t,2nγ) (1988Ma32). See ^{208}Pb(α,2nγ) for other values.
2872 *1*			K M	
2910.059& *19*	5−		B GH K M	Jπ: 1437γ E1 to 6+, 1483γ E1 to 4+.
2999.48# *4*	(9)−		GH K	Jπ: 811γ E1 to 8+.
3016.49# *3*	(7)−		B GH K	Jπ: 1543γ E1 to 6+, 1460γ to 8+.
3023.74# *5*	(2)−		H K	Jπ: 637γ M1 to 3−.
3026.437# *21*	5−		B GH K M	Jπ: 622γ E1 to 5+, 639γ E2 to 3−, 1553γ to 6+; (1600γ)(245γ) (θ).
3075.08# *3*	(4)−		B H K	Jπ: 1648γ E1 to 4+.
3094.53@ *14*	4+		H	Jπ: 691γ M1+E2 to 5+, 1913γ E2 to 2+.
3111.646& *24*	4−		B H	Jπ: 202γ M1 to 5−, 725γ M1+E2 to 3−.
3125.15# *3*	(6)−		B H K	Jπ: 722γ E1 to 5+, 799γ E1 to 6+.
3137.99# *5*	(8)−		GH K	Jπ: 699γ E1 to 7+, 950γ E1+M2 to 8+.
3182.79# *4*	10−		GH K	Jπ: 183γ M1 to (9)−, 334γ M1 to 11−.
3218.98@ *5*	(6)+		H	Jπ: 781γ M1+E2 to 7+, 1746γ M1+E2 to 6+.

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Adopted Levels, Gammas (continued)

^{210}Po Levels (continued)

E(level)[d]	Jπ[e]	$T_{1/2}$	XREF	Comments
3428.59 *3*	5^-		B H M	Jπ: 1955γ E1 to 6^+, 317γ M1 to 4^-.
3477.26[c] *21*			J	
3525.37 *4*	6^-		B H	Jπ: 615γ M1 to 5^-, 1087γ (E1+M2) to 7^+.
3637.49[c] *20*			J	
3685.41 *5*	7^-		H	Jπ: 1497γ E1 to 8^+, 2212γ E1 to 6^+.
3693.89[c] *20*			J	
3699.61 *6*	5^-		B H	Jπ: 2273γ E1 to 4^+, 2227γ E1+M2 to 6^+.
3711.01 *9*	(5^-)		B H	Jπ: 2238γ (E1) to 6^+, 2284γ to 4^+.
3727.34 *6*	$(6)^-$		B H	Jπ: 817γ M1+E2 to 5^-, 2254γ E1 to 6^+, 1289γ to 7^+.
3779.91 *6*	$(4,5)^-$		B H	Jπ: 870γ M1+E2 to 5^-, 2353γ E1 to 4^+.
3780.20 *5*	7^-		H	Jπ: 1592γ E1+M2 to 8^+, 1454γ E1+M2 to 6^+.
3792[a] *1*	(2^+)		K M	
4025.77 *5*	$(7,8,9^-)$		H m	XREF: m(4040). Jπ: 2469γ (E1+M2) to 8^+.
4029.1[ac] *3*	(4^+)		IJK m	XREF: m(4040).
4043.37[c] *21*			J m	XREF: m(4040).
4105.07[c] *21*			J LM	XREF: L(4100).
4141.08[ac] *13*	(6^+)		IJK	
4145.32 *4*	$(10)^-$		H M	Jπ: 963γ M1 to 10^-, 1146γ (M1) to $(9)^-$.
4237 *10*			M	
4320[a] *1*	(3^+)		K	
4324.12 *4*	(11^-)		GH	Jπ: 1475γ M1 to 11^-, weak 2767γ to 8^+.
4329.5[c] *3*			J	
4346 *10*			M	
4371.96 *4*	13^-	54.4 ns *24*	FGH m	μ=6.4 *2*; Q=−0.90 *7* XREF: m(4376). Jπ: 1523γ E2 to 11^-, RUL. Main configuration=((^{208}Pb 5^-)(π $1h_{9/2})^2_{8+}$)13^-, where 5^-, ^{208}Pb at 3198 keV is configuration=((ν $2g_{9/2}$)(ν $3p_{1/2})^{-1}$). This configuration is consistent with experimental B(E2) values for deexciting transitions, and also with measured μ (1985Be22,1976Ha56). μ: Differential perturbed angular distribution of γ rays (1985Be22,1989Ra17), adjusted by evaluator for adopted $T_{1/2}$. Q: Differential perturbed angular distribution of γ rays (1991Be03). Other values: Q=0.87 *7*, adjusted by evaluator relative to Q(1557)=−0.552, differential perturbed angular distribution of γ rays (1987Ma65,1989Ra17). Q=−0.60 *11*, adjusted by evaluator relative to Q(1557)=−0.552, differential perturbed angular distribution of γ rays (1983Da01,1989Ra17). $T_{1/2}$: weighted average of 56.1 ns *14*, ce(t) in ^{209}Bi(t,2nγ) (1988Ma32), and 51 ns *2*, γ(t) in ^{208}Pb(α,2nγ) (1985Be22). See ^{208}Pb(α,2nγ) for other values.
4382[a] *1*	(5^+)		K m	XREF: m(4376).
4386.9[c] *3*			J	
4469.83[ac] *18*	(6^+)		IJK	
4502.63 *9*	(12^-)		H	Jπ: 1653γ (M1) to 11^-.
4542.41[c] *20*	(4^+)		J	
4554.0[ac] *4*	(7^+)		IJK	
4592.6[bc] *4*			IJ	Jπ: $J^\pi=3^+$ is assigned in 1980Gr09 (d,p). 1999Kl03 notes it is doubtful since 4592γ (M3) has to compete with E1, M1, and E2 γ-ray transitions that were not observed.
4621.59[c] *16*	(3^+)		J	
4624[b] *1*	(5^+)		I	
4637.71[c] *21*			J	

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Adopted Levels, Gammas (continued)

^{210}Po Levels (continued)

E(level)[d]	Jπ[e]	$T_{1/2}$	XREF	Comments
4644.9[bc] 5	(6+)		IJ	
4660.28[c] 24			J	
4776.89 11	14−		FGH	Jπ: 405γ M1+E2 to 13−, 280γ M2 from 16+. Configuration=((^{208}Pb 6−)(π $1h_{9/2})^2_{8+}$)14−, where 6−, ^{208}Pb at 4206 keV is configuration=((ν $1i_{11/2}$)(ν $3p_{1/2})^{-1}$).
4948.1[c] 3			J	
4971.28 15	(11−,12−)		H	Jπ: 599γ to 13−, 825γ to (10)−.
4974.4[c] 5			J	
4991 1			I	
4998.2[c] 5			J	
5041 1			I	
5057.65 5	16+	263 ns 5	FGH	μ=9.84 8; Q=−1.297 20 Jπ: 686γ E3 to 13−. Systematics of B(E3) values in the lead region (1985Be22). Main configuration=((^{208}Pb 5−)(π $1h_{9/2}$)(π $1i_{13/2}$))16+. μ: Differential perturbed angular distribution of γ rays (1985Be22,2014StZZ). Q: Differential perturbed angular distribution of γ rays (1991Be03,2014StZZ). Other value: Q=−1.29 8, adjusted by evaluator relative to Q(1557)=−0.552, differential perturbed angular distribution of γ rays (1986MaZP,1989Ra17). $T_{1/2}$: weighted average of 265 ns 10, γ(t) (1985Be22), and 262 ns 6, ce(t) (1985Ka07) in ^{208}Pb(α,2nγ).
5186 1			I	
5270 1			I	
5614.69 21	(17+)		F	Jπ: 556.9γ D+Q to 16+.
6070.26 25	(17+)		F	Jπ: 1012.6γ D+Q to 16+.
6085.31 21	(18+)		F	Jπ: 1027.7γ Q to 16+.
6342.83 22	(19−)		F	Jπ: Assignment assumes 1285.3γ to be of E3 multipolarity ((19−) to 16+). Absence of lifetime for this level supports the expected multipolarity.
6384.63 25	(18−)		F	Jπ: 769.8γ d to (17+).
6422.08 25	(18)		F	
6713.5 3	(19+)		F	Jπ: 328.9γ d to (18−), 628.2γ D+Q to (18+).
6983.9 4	(20−)		F	Jπ: 270.4γ d to (19+).
6995.0 4	(20−)		F	Jπ: 281.6γ d to (19+).
7719.6 5	(21−)		F	
7989.4 5	(21)		F	Jπ: 1005.5γ (D) to (20−).
8074.3 4	(23+)	9.0 ns 14	F	$T_{1/2}$: from γγ(t) (^{13}C,α3nγ)–2008Dr03). Possible configuration=π($h_{9/2}i_{13/2}$) ⊗ν[($p^{-2}_{1/2}g_{9/2}j_{15/2}$) or ($i^{-1}_{13/2}j_{15/2}$)].
8831.1 5	(24+)		F	Jπ: 756.8γ D+Q to (23+).
8893.6 6	(23)		F	
9199.3 6	(25)		F	
9420.8 6	(25)		F	
9464.8 6	(25)		F	
9535.1 6	(26)		F	
9567.4 7	(26)		F	
9581.8 6	(26)		F	
9590.1 6	(26)		F	
10084.1 7	(27)		F	

† Configuration=(π $1h_{9/2})^2$; L=5 (α,t), (^{3}He,d).

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Adopted Levels, Gammas (continued)

^{210}Po Levels (continued)

‡ Configuration=((π $1h_{9/2}$)(π $2f_{7/2}$)); L=3 (α,t), (^{3}He,d).

Configuration=((π $1h_{9/2}$)(π $1i_{13/2}$)); L=6 (α,t), (^{3}He,d).

@ Configuration=(π $2f_{7/2}$)^2.

& Configuration=((ν $2g_{9/2}$)(ν $3p_{1/2}$)$^{-1}$).

a Configuration=((π $1h_{9/2}$)(π $2f_{5/2}$)); L=3 (α,t).

b Configuration=((π $1h_{9/2}$)(π $3p_{3/2}$)); L=1 (^{3}He,d).

c From ^{209}Bi(^{3}He,dγ).

d From a least-squares fit to γ-ray energies. If $\Delta E\gamma$ not given, ±0.30 keV assumed for least-squares fitting. Uncertainties of 2665.5γ from 4141 and 279.89γ from 5057-keV level, were increased by 2σ and 3σ during the least-squares fit. These γ-rays differ from least-squares fit values by more than 5σ and between 4 to 5σ, respectively.

e Spin and parity assignments are based on γ-ray multipolarities, decay patterns, excitation functions in ^{209}Bi(t,2nγ); on $\gamma(\theta)$ in ^{208}Pb(α,2nγ), and $\gamma\gamma(\theta)$ in ^{210}At ε decay. Assignments for levels populated in ^{209}Bi(^{3}He,d) and ^{209}Bi(α,t) are based on L-transfer values, and spectroscopic factors which are proportional to (2J+1) for multiplet members. Additional arguments are given with individual levels. Two-proton shell model configurations are based on a comparison between experimental and theoretical level energies (1972He03, 1981LoZZ), and on the agreement between experimental and theoretical γ-ray branching ratios in ^{210}Bi(t,2nγ) (1988Ma32). See 1978Ma38 for an energy calculation of high-spin (J≥11) isomeric states. See 1976Kl07 for B(E2), B(E3), μ (experimental vs theoretical) of states up to J^π=11$^-$. Other: 1972As04. Spin and parity assignments for excited levels 5614.7 keV and above are from (^{13}C,α3nγ) dataset, which are based on shell model calculations, γ-ray feeding and multipolarities.

Adopted Levels, Gammas (continued)

γ(^{210}Po)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[†]	δ[†a]	α[&]	Comments
1181.398	2+	1181.39 *1*	100	0.0	0+	E2		0.00535	B(E2)(W.u.)=0.56 *12* α(K)=0.00428 *6*; α(L)=0.000812 *12*; α(M)=0.000193 *3* α(N)=4.97×10^{-5} *7*; α(O)=1.025×10^{-5} *15*; α(P)=1.270×10^{-6} *18*; α(IPF)=2.37×10^{-6} *4*
1426.701	4+	245.31 *1*	100	1181.398	2+	E2		0.236	α(K)=0.1057 *15*; α(L)=0.0971 *14*; α(M)=0.0255 *4* α(N)=0.00653 *10*; α(O)=0.001265 *18*; α(P)=0.0001225 *18* B(E2)(W.u.)=4.46 *18*
1473.357	6+	46.85 *5*	100	1426.701	4+	E2		259	α(L)=192 *3*; α(M)=51.1 *8* α(N)=13.05 *20*; α(O)=2.47 *4*; α(P)=0.217 *4* B(E2)(W.u.)=3.05 *9*
1556.97	8+	83.54 *8*	100	1473.357	6+	E2		15.97	α(L)=11.83 *18*; α(M)=3.16 *5* α(N)=0.809 *12*; α(O)=0.1535 *23*; α(P)=0.01364 *20* B(E2)(W.u.)=1.12 *4*
2187.96	8+	630.97 *1*	100	1556.97	8+	M1+E2	0.52 *5*	0.0583 *19*	α(K)=0.0473 *16*; α(L)=0.00839 *23*; α(M)=0.00198 *6* α(N)=0.000510 *14*; α(O)=0.000106 *3*; α(P)=1.36×10^{-5} *4*
2290.14	2+	1108.55 *7*	11.2 *11*	1181.398	2+	M1+E2	0.61 *31*	0.0133 *19*	α(K)=0.0108 *16*; α(L)=0.00186 *24*; α(M)=0.00044 *6* α(N)=0.000112 *15*; α(O)=2.3×10^{-5} *3*; α(P)=3.0×10^{-6} *4*; α(IPF)=3.3×10^{-7} *4*
		2290.22 *5*	100 *2*	0.0	0+	E2		0.00198	α(K)=0.001303 *19*; α(L)=0.000213 *3*; α(M)=4.97×10^{-5} *7* α(N)=1.276×10^{-5} *18*; α(O)=2.66×10^{-6} *4*; α(P)=3.42×10^{-7} *5*; α(IPF)=0.000395 *6*
2326.018	6+	769.20 *6*	3.7 *3*	1556.97	8+				
		852.66 *1*	100 *1*	1473.357	6+	M1+E2	0.59 *15*	0.0259 *21*	α(K)=0.0211 *18*; α(L)=0.0037 *3*; α(M)=0.00087 *6* α(N)=0.000223 *16*; α(O)=4.7×10^{-5} *4*; α(P)=6.0×10^{-6} *5*
		899.23 *14*	1.9 *3*	1426.701	4+				
2382.543	4+	92.1 *2*	0.05 *2*	2290.14	2+	(E2)		10.07 *18*	α(L)=7.46 *13*; α(M)=1.99 *4* α(N)=0.510 *9*; α(O)=0.0969 *17*; α(P)=0.00865 *15* E_γ,I_γ,Mult.: from ^{210}At ε decay.
		909.00 *8*	5.9 *4*	1473.357	6+				
		955.84 *1*	100.0 *14*	1426.701	4+	M1+E2	0.47 *17*	0.0206 *17*	α(K)=0.0168 *15*; α(L)=0.00289 *22*; α(M)=0.00068 *5* α(N)=0.000175 *13*; α(O)=3.7×10^{-5} *3*; α(P)=4.7×10^{-6} *4*
		1201.46 *13*	6.8 *9*	1181.398	2+	E2		0.00518	α(K)=0.00415 *6*; α(L)=0.000782 *11*; α(M)=0.000186 *3* α(N)=4.78×10^{-5} *7*; α(O)=9.88×10^{-6} *14*; α(P)=1.225×10^{-6} *18*; α(IPF)=3.80×10^{-6} *6*
2386.784	3−	960.01 *5*	11.3 *6*	1426.701	4+	E1		0.00292	α(K)=0.00243 *4*; α(L)=0.000378 *6*; α(M)=8.78×10^{-5} *13* α(N)=2.25×10^{-5} *4*; α(O)=4.68×10^{-6} *7*; α(P)=5.97×10^{-7} *9*
		1205.38 *2*	100.0 *15*	1181.398	2+	E1		0.00197	α(K)=0.001627 *23*; α(L)=0.000250 *4*; α(M)=5.79×10^{-5} *9* α(N)=1.485×10^{-5} *21*; α(O)=3.10×10^{-6} *5*; α(P)=3.97×10^{-7} *6*; α(IPF)=1.619×10^{-5} *23*
		2386.8 *3*	1.0 *3*	0.0	0+	[E3]		0.00309	α(K)=0.00227 *4*; α(L)=0.000409 *6*; α(M)=9.68×10^{-5} *14* α(N)=2.49×10^{-5} *4*; α(O)=5.18×10^{-6} *8*; α(P)=6.57×10^{-7} *10*;

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Adopted Levels, Gammas (continued)

γ(^{210}Po) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[†]	δ[†a]	α[&]	Comments
									α(IPF)=0.000286 *4* E_γ,I_γ: from ^{210}At ε decay.
2393.78	1+	1212.18 *16*	37 *6*	1181.398	2+				
		2393.79 *7*	100 *5*	0.0	0+	M1		0.00295	α(K)=0.00181 *3*; α(L)=0.000300 *5*; α(M)=7.03×10^{-5} *10* α(N)=1.81×10^{-5} *3*; α(O)=3.79×10^{-6} *6*; α(P)=4.93×10^{-7} *7*; α(IPF)=0.000740 *11*
2403.282	5+	20.72	0.10 *6*	2382.543	4+	[M1]		214	α(L)=163.2 *23*; α(M)=38.8 *6* α(N)=10.00 *14*; α(O)=2.09 *3*; α(P)=0.270 *4* I_γ: from I(γ+ce) and α(M1)=227.
		77.2 *2*	6.7 *18*	2326.018	6+	M1		4.47 *8*	α(L)=3.41 *6*; α(M)=0.805 *13* α(N)=0.207 *4*; α(O)=0.0434 *7*; α(P)=0.00560 *9* I_γ: from I(γ+ce) and α(M1)=4.68. Mult.: from ^{210}At ε decay.
		929.93 *2*	99.6 *20*	1473.357	6+	M1+E2	0.72 *11*	0.0194 *12*	α(K)=0.0158 *10*; α(L)=0.00277 *16*; α(M)=0.00065 *4* α(N)=0.000168 *9*; α(O)=3.50×10^{-5} *20*; α(P)=4.5×10^{-6} *3*
		976.55 *2*	100 *2*	1426.701	4+	M1+E2	0.61 *20*	0.0182 *19*	α(K)=0.0148 *16*; α(L)=0.00257 *24*; α(M)=0.00061 *6* α(N)=0.000156 *14*; α(O)=3.3×10^{-5} *3*; α(P)=4.2×10^{-6} *4*
2413.834	3+	123.77 *10*	8.4 *13*	2290.14	2+	M1,E2		4.5 *16*	α(K)=2.6 *23*; α(L)=1.4 *6*; α(M)=0.35 *15* α(N)=0.09 *4*; α(O)=0.018 *7*; α(P)=0.0018 *4*
		987.12 *10*	15.8 *22*	1426.701	4+	M1		0.0215	α(K)=0.01761 *25*; α(L)=0.00298 *5*; α(M)=0.000699 *10* α(N)=0.000180 *3*; α(O)=3.77×10^{-5} *6*; α(P)=4.89×10^{-6} *7*
		1232.36 *3*	100 *4*	1181.398	2+	M1+E2	1.15 *16*	0.0081 *6*	α(K)=0.0065 *5*; α(L)=0.00114 *8*; α(M)=0.000269 *17* α(N)=6.9×10^{-5} *5*; α(O)=1.44×10^{-5} *9*; α(P)=1.84×10^{-6} *12*; α(IPF)=9.3×10^{-6} *5*
2438.36	7+	112.29 *10*	6.5 *11*	2326.018	6+	(M1)		7.98	α(K)=6.47 *10*; α(L)=1.151 *17*; α(M)=0.272 *4* α(N)=0.0700 *10*; α(O)=0.01465 *21*; α(P)=0.00189 *3* Mult.: from ^{210}At ε decay.
		250.35 *3*	76 *5*	2187.96	8+	M1		0.832	α(K)=0.676 *10*; α(L)=0.1186 *17*; α(M)=0.0280 *4* α(N)=0.00720 *10*; α(O)=0.001506 *21*; α(P)=0.000195 *3* Mult.: A_2=−0.32 *6* in ^{208}Pb(α,2nγ) and ce data in ^{209}Bi(t,2nγ).
		881.39 *2*	100 *2*	1556.97	8+	M1+E2	0.56 *17*	0.0242 *22*	α(K)=0.0197 *18*; α(L)=0.0034 *3*; α(M)=0.00081 *7* α(N)=0.000208 *16*; α(O)=4.3×10^{-5} *4*; α(P)=5.6×10^{-6} *5*
		965.01 *3*	66.5 *2*	1473.357	6+	M1+E2	1.0 *2*	0.0153 *17*	α(K)=0.0124 *14*; α(L)=0.00222 *21*; α(M)=0.00052 *5* α(N)=0.000135 *13*; α(O)=2.8×10^{-5} *3*; α(P)=3.6×10^{-6} *4*
2608.58	0+	214.80 *8*	<42	2393.78	1+				
		1427.2 *1*	100 *49*	1181.398	2+	E2		0.00380	α(K)=0.00304 *5*; α(L)=0.000544 *8*; α(M)=0.0001286 *18* α(N)=3.30×10^{-5} *5*; α(O)=6.85×10^{-6} *10*; α(P)=8.60×10^{-7} *12*; α(IPF)=4.19×10^{-5} *6*
		2608.56 *10*		0.0	0+	E0			
2845.97	(3)−	459.0 *3*	38 *17*	2386.784	3−	M1		0.1600	α(K)=0.1305 *19*; α(L)=0.0226 *4*; α(M)=0.00531 *8* α(N)=0.001367 *20*; α(O)=0.000286 *4*; α(P)=3.70×10^{-5} *6*
		1664.57 *7*	100 *9*	1181.398	2+	E1+M2	0.25 *5*	0.0021 *3*	α(K)=0.00152 *24*; α(L)=0.00025 *5*; α(M)=5.8×10^{-5} *10*

$^{210}_{84}Po_{126}$-7

Adopted Levels, Gammas (continued)

γ(^{210}Po) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[†]	δ[†a]	α[&]	Comments
									α(N)=1.5×10^{-5} *3*; α(O)=3.1×10^{-6} *6*; α(P)=4.0×10^{-7} *7*; α(IPF)=0.000270 *6*
2849.17	11$^-$	661.17 *3*	4.88 *24*	2187.96	8$^+$	E3		0.0484	B(E3)(W.u.)=19.7 *11* α(K)=0.0299 *5*; α(L)=0.01378 *20*; α(M)=0.00355 *5* α(N)=0.000915 *13*; α(O)=0.000183 *3*; α(P)=1.99×10^{-5} *3*
		1292.20 *1*	100 *1*	1556.97	8$^+$	E3		0.00981	B(E3)(W.u.)=3.71 *10* α(K)=0.00749 *11*; α(L)=0.001751 *25*; α(M)=0.000427 *6* α(N)=0.0001101 *16*; α(O)=2.26×10^{-5} *4*; α(P)=2.73×10^{-6} *4*; α(IPF)=5.15×10^{-6} *8*
2910.059	5$^-$	506.8 *2*	1.50 *4*	2403.282	5$^+$	E1		0.00998	α(K)=0.00822 *12*; α(L)=0.001349 *19*; α(M)=0.000315 *5* α(N)=8.06×10^{-5} *12*; α(O)=1.664×10^{-5} *24*; α(P)=2.07×10^{-6} *3* E_γ,I_γ,Mult.: from ^{210}At ε decay.
		527.4 *2*	1.5 *3*	2382.543	4$^+$	E1		0.00920	α(K)=0.00758 *11*; α(L)=0.001239 *18*; α(M)=0.000290 *4* α(N)=7.41×10^{-5} *11*; α(O)=1.530×10^{-5} *22*; α(P)=1.91×10^{-6} *3* Mult.: from ^{210}At ε decay.
		1436.70 *2*	61.0 *16*	1473.357	6$^+$	E1		1.57×10^{-3}	α(K)=0.001205 *17*; α(L)=0.000184 *3*; α(M)=4.25×10^{-5} *6* α(N)=1.089×10^{-5} *16*; α(O)=2.27×10^{-6} *4*; α(P)=2.93×10^{-7} *4*; α(IPF)=0.0001258 *18*
		1483.39 *2*	100 *2*	1426.701	4$^+$	E1		1.52×10^{-3}	α(K)=0.001142 *16*; α(L)=0.0001737 *25*; α(M)=4.02×10^{-5} *6* α(N)=1.030×10^{-5} *15*; α(O)=2.15×10^{-6} *3*; α(P)=2.77×10^{-7} *4*; α(IPF)=0.0001558 *22*
2999.48	(9)$^-$	811.51 *1*	100 *2*	2187.96	8$^+$	E1		0.00398	α(K)=0.00330 *5*; α(L)=0.000520 *8*; α(M)=0.0001208 *17* α(N)=3.09×10^{-5} *5*; α(O)=6.43×10^{-6} *9*; α(P)=8.15×10^{-7} *12*
		1442.60 *3*	32.4 *16*	1556.97	8$^+$	E1+M2	0.18 *3*	0.00211 *20*	α(K)=0.00164 *16*; α(L)=0.00026 *3*; α(M)=6.2×10^{-5} *7* α(N)=1.58×10^{-5} *18*; α(O)=3.3×10^{-6} *4*; α(P)=4.3×10^{-7} *5*; α(IPF)=0.0001263 *21*
3016.49	(7)$^-$	578.01 *5*	19.7 *17*	2438.36	7$^+$	E1+M2	0.25 *5*	0.021 *6*	α(K)=0.017 *5*; α(L)=0.0033 *9*; α(M)=0.00079 *22* α(N)=0.00020 *6*; α(O)=4.2×10^{-5} *12*; α(P)=5.3×10^{-6} *16*
		690.6 *2*	35 *7*	2326.018	6$^+$				
		1460 *1*	<55	1556.97	8$^+$				
		1543.14 *2*	100.0 *24*	1473.357	6$^+$	E1		1.48×10^{-3}	α(K)=0.001069 *15*; α(L)=0.0001624 *23*; α(M)=3.76×10^{-5} *6* α(N)=9.63×10^{-6} *14*; α(O)=2.01×10^{-6} *3*; α(P)=2.59×10^{-7} *4*; α(IPF)=0.000196 *3*
3023.74	(2)$^-$	609.94 *10*	30 *6*	2413.834	3$^+$				
		636.95 *5*	100 *5*	2386.784	3$^-$	M1		0.0672	α(K)=0.0549 *8*; α(L)=0.00941 *14*; α(M)=0.00221 *3* α(N)=0.000569 *8*; α(O)=0.0001192 *17*; α(P)=1.543×10^{-5} *22*
3026.437	5$^-$	116.47 *3*	9.8 *13*	2910.059	5$^-$	M1		7.19	α(K)=5.83 *9*; α(L)=1.037 *15*; α(M)=0.245 *4* α(N)=0.0630 *9*; α(O)=0.01318 *19*; α(P)=0.001703 *24*
		622.83 *23*	3.9 *13*	2403.282	5$^+$	E1		0.00659	α(K)=0.00545 *8*; α(L)=0.000877 *13*; α(M)=0.000205 *3* α(N)=5.23×10^{-5} *8*; α(O)=1.084×10^{-5} *16*; α(P)=1.360×10^{-6} *19* Mult.: from ^{210}At ε decay.
		639.56 *16*	8 *3*	2386.784	3$^-$	E2		0.0183	α(K)=0.01352 *19*; α(L)=0.00363 *5*; α(M)=0.000896 *13* α(N)=0.000230 *4*; α(O)=4.65×10^{-5} *7*; α(P)=5.33×10^{-6} *8*

$^{210}_{84}Po_{126}$-8

Adopted Levels, Gammas (continued)

$\gamma(^{210}Po)$ (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[†]	δ[†a]	α[&]	Comments
		643.8 *2*	3.40 *15*	2382.543	4^+	E1		0.00618	Mult.: from ^{210}At ε decay. α(K)=0.00511 *8*; α(L)=0.000820 *12*; α(M)=0.000191 *3*

$^{210}_{84}Po_{126}$-9

Adopted Levels, Gammas (continued)

γ(^{210}Po) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[†]	δ[†a]	α[&]	Comments
									α(N)=4.89×10^{-5} *7*; α(O)=1.013×10^{-5} *15*; α(P)=1.274×10^{-6} *18*
									E_γ,I_γ,Mult.: from ^{210}At ε decay.
3026.437	5$^-$	1553.0 *5*	≤0.8	1473.357	6$^+$				
		1599.70 *2*	100 *3*	1426.701	4$^+$	E1		1.44×10^{-3}	α(K)=0.001007 *14*; α(L)=0.0001527 *22*; α(M)=3.53×10^{-5} *5* α(N)=9.05×10^{-6} *13*; α(O)=1.89×10^{-6} *3*; α(P)=2.44×10^{-7} *4*; α(IPF)=0.000235 *4*
3075.08	(4)$^-$	661.17 *3*	9 *3*	2413.834	3$^+$				
		688.2 *1*	53 *8*	2386.784	3$^-$				
		692.4 *2*	15 *8*	2382.543	4$^+$				
		1648.45 *3*	100 *3*	1426.701	4$^+$	E1		1.42×10^{-3}	α(K)=0.000958 *14*; α(L)=0.0001451 *21*; α(M)=3.36×10^{-5} *5* α(N)=8.60×10^{-6} *12*; α(O)=1.80×10^{-6} *3*; α(P)=2.32×10^{-7} *4*; α(IPF)=0.000270 *4*
3094.53	4$^+$	691.2 *2*	100 *14*	2403.282	5$^+$	M1+E2	0.67 *31*	0.042 *8*	α(K)=0.034 *7*; α(L)=0.0061 *9*; α(M)=0.00145 *21* α(N)=0.00037 *6*; α(O)=7.8×10^{-5} *12*; α(P)=9.9×10^{-6} *16*
		768.9 *5*	11 *5*	2326.018	6$^+$				
		1667.9 *5*	9 *4*	1426.701	4$^+$				
		1913.10 *21*	10.0 *18*	1181.398	2$^+$	E2		0.00242	α(K)=0.00180 *3*; α(L)=0.000302 *5*; α(M)=7.08×10^{-5} *10* α(N)=1.82×10^{-5} *3*; α(O)=3.79×10^{-6} *6*; α(P)=4.83×10^{-7} *7*; α(IPF)=0.000222 *4*
3111.646	4$^-$	201.60 *3*	29 *4*	2910.059	5$^-$	M1		1.520	α(K)=1.235 *18*; α(L)=0.217 *3*; α(M)=0.0513 *8* α(N)=0.01320 *19*; α(O)=0.00276 *4*; α(P)=0.000357 *5*
		724.86 *2*	100 *11*	2386.784	3$^-$	M1+E2	1.02 *27*	0.031 *5*	α(K)=0.025 *5*; α(L)=0.0046 *7*; α(M)=0.00109 *15* α(N)=0.00028 *4*; α(O)=5.8×10^{-5} *8*; α(P)=7.3×10^{-6} *11*
		728.4 *4*	8 *3*	2382.543	4$^+$				
		1684.6 *4*	13 *4*	1426.701	4$^+$	E1		1.40×10^{-3}	α(K)=0.000924 *13*; α(L)=0.0001398 *20*; α(M)=3.23×10^{-5} *5* α(N)=8.29×10^{-6} *12*; α(O)=1.732×10^{-6} *25*; α(P)=2.24×10^{-7} *4*; α(IPF)=0.000296 *5*
3125.15	(6)$^-$	721.84 *3*	100 *9*	2403.282	5$^+$	E1		0.00496	α(K)=0.00410 *6*; α(L)=0.000653 *10*; α(M)=0.0001520 *22* α(N)=3.89×10^{-5} *6*; α(O)=8.07×10^{-6} *12*; α(P)=1.019×10^{-6} *15*
		799.19 *4*	55 *4*	2326.018	6$^+$	E1		0.00409	α(K)=0.00339 *5*; α(L)=0.000535 *8*; α(M)=0.0001245 *18* α(N)=3.19×10^{-5} *5*; α(O)=6.62×10^{-6} *10*; α(P)=8.39×10^{-7} *12*
3137.99	(8)$^-$	699.51 *25*	83 *14*	2438.36	7$^+$	E1		0.00526	α(K)=0.00436 *7*; α(L)=0.000694 *10*; α(M)=0.0001617 *23* α(N)=4.14×10^{-5} *6*; α(O)=8.58×10^{-6} *12*; α(P)=1.083×10^{-6} *16*
		949.97 *4*	100 *8*	2187.96	8$^+$	E1+M2	0.14 *4*	0.0040 *7*	α(K)=0.0033 *6*; α(L)=0.00055 *11*; α(M)=0.000129 *25* α(N)=3.3×10^{-5} *7*; α(O)=6.9×10^{-6} *14*; α(P)=8.8×10^{-7} *18*
		1581.09 *4*	100 *6*	1556.97	8$^+$	E1+M2	0.25 *5*	0.0023 *4*	α(K)=0.0017 *3*; α(L)=0.00028 *5*; α(M)=6.4×10^{-5} *12* α(N)=1.7×10^{-5} *3*; α(O)=3.5×10^{-6} *7*; α(P)=4.5×10^{-7} *8*; α(IPF)=0.000213 *5*
3182.79	10$^-$	183.31 *3*	19.8 *25*	2999.48	(9)$^-$	M1		1.98	α(K)=1.612 *23*; α(L)=0.284 *4*; α(M)=0.0671 *10* α(N)=0.01726 *25*; α(O)=0.00361 *5*; α(P)=0.000467 *7*
		333.61 *2*	100 *2*	2849.17	11$^-$	M1		0.378	α(K)=0.308 *5*; α(L)=0.0537 *8*; α(M)=0.01265 *18* α(N)=0.00326 *5*; α(O)=0.000681 *10*; α(P)=8.81×10^{-5} *13*
		1625.91 *6*	14.9 *14*	1556.97	8$^+$	M2+E3	0.44 *32*	0.0128 *17*	α(K)=0.0103 *14*; α(L)=0.00186 *22*; α(M)=0.00044 *5*

$^{210}_{84}Po_{126}$-10

Adopted Levels, Gammas (continued)

$\gamma(^{210}Po)$ (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[†]	δ[†a]	α[&]	Comments
									α(N)=0.000114 *13*; α(O)=2.4×10^{-5} *3*; α(P)=3.1×10^{-6} *4*; α(IPF)=6.8×10^{-5} *4*

$^{210}_{84}Po_{126}$-11

Adopted Levels, Gammas (continued)

γ(^{210}Po) (continued)

E_i(level)	J_i^π	E_γ †	I_γ †	E_f	J_f^π	Mult.†	δ†[a]	α[&]	Comments
3218.98	(6)$^+$	780.62 *3*	100 *3*	2438.36	7$^+$	M1+E2	0.59 *18*	0.032 *4*	α(K)=0.026 *3*; α(L)=0.0046 *4*; α(M)=0.00109 *9* α(N)=0.000281 *23*; α(O)=5.9×10^{-5} *5*; α(P)=7.5×10^{-6} *7*
		1030.6 *5*	8 *3*	2187.96	8$^+$				
		1745.98 *29*	69 *32*	1473.357	6$^+$	M1+E2	3	0.00299	α(K)=0.00232 *4*; α(L)=0.000393 *6*; α(M)=9.24×10^{-5} *13* α(N)=2.37×10^{-5} *4*; α(O)=4.95×10^{-6} *7*; α(P)=6.31×10^{-7} *9*; α(IPF)=0.0001630 *23*
3428.59	5$^-$	316.99 *9*	20.6 *15*	3111.646	4$^-$	M1		0.435	α(K)=0.354 *5*; α(L)=0.0618 *9*; α(M)=0.01455 *21* α(N)=0.00375 *6*; α(O)=0.000784 *11*; α(P)=0.0001013 *15* Mult.: from ^{210}At ε decay.
		402.15 *2*	100.0 *25*	3026.437	5$^-$	M1		0.228	α(K)=0.186 *3*; α(L)=0.0323 *5*; α(M)=0.00760 *11* α(N)=0.00195 *3*; α(O)=0.000409 *6*; α(P)=5.29×10^{-5} *8*
		518.3 *2*	20 *10*	2910.059	5$^-$	M1		0.1158	α(K)=0.0945 *14*; α(L)=0.01628 *23*; α(M)=0.00383 *6* α(N)=0.000986 *14*; α(O)=0.000206 *3*; α(P)=2.67×10^{-5} *4* Mult.: from ^{210}At ε decay.
		1041.7 *3*	35 *10*	2386.784	3$^-$	(E2)		0.00680	α(K)=0.00539 *8*; α(L)=0.001073 *15*; α(M)=0.000257 *4* α(N)=6.60×10^{-5} *10*; α(O)=1.359×10^{-5} *19*; α(P)=1.663×10^{-6} *24*
		1046.3 *3*	16.1 *20*	2382.543	4$^+$				
		1955.14 *6*	45 *3*	1473.357	6$^+$	E1		1.36×10^{-3}	α(K)=0.000723 *11*; α(L)=0.0001088 *16*; α(M)=2.51×10^{-5} *4* α(N)=6.45×10^{-6} *9*; α(O)=1.348×10^{-6} *19*; α(P)=1.746×10^{-7} *25*; α(IPF)=0.000492 *7*
		2001.7 *2*	14 *1*	1426.701	4$^+$				E$_\gamma$,I$_\gamma$: from ^{210}At ε decay.
3477.26		1289.3‡ *2*	100‡	2187.96	8$^+$				
3525.37	6$^-$	499.06 *7*	28 *5*	3026.437	5$^-$	M1		0.1281	α(K)=0.1044 *15*; α(L)=0.0180 *3*; α(M)=0.00424 *6* α(N)=0.001091 *16*; α(O)=0.000228 *4*; α(P)=2.96×10^{-5} *5*
		615.26 *4*	100 *6*	2910.059	5$^-$	M1+E2	1.1 *2*	0.044 *6*	α(K)=0.035 *5*; α(L)=0.0069 *7*; α(M)=0.00165 *15* α(N)=0.00042 *4*; α(O)=8.7×10^{-5} *8*; α(P)=1.09×10^{-5} *12*
		1087.02 *6*	60 *7*	2438.36	7$^+$	(E1+M2)	0.29 *6*	0.0053 *12*	α(K)=0.0043 *10*; α(L)=0.00075 *19*; α(M)=0.00018 *5* α(N)=4.5×10^{-5} *12*; α(O)=9.5×10^{-6} *24*; α(P)=1.2×10^{-6} *3*
		1122.0 *2*	86 *20*	2403.282	5$^+$	(E1+M2)	0.39 *15*	0.007 *4*	α(K)=0.006 *3*; α(L)=0.0010 *5*; α(M)=0.00023 *12* α(N)=6.E−5 *3*; α(O)=1.2×10^{-5} *7*; α(P)=1.6×10^{-6} *9*; α(IPF)=1.42×10^{-6} *15*
		2052.1 *3*	17 *4*	1473.357	6$^+$	(E1)		1.36×10^{-3}	α(K)=0.000668 *10*; α(L)=0.0001004 *14*; α(M)=2.32×10^{-5} *4* α(N)=5.95×10^{-6} *9*; α(O)=1.244×10^{-6} *18*; α(P)=1.612×10^{-7} *23*; α(IPF)=0.000561 *8*
3637.49		1250.7‡ *2*	100‡	2386.784	3$^-$				
3685.41	7$^-$	1359.55 *7*	46 *5*	2326.018	6$^+$				
		1497.41 *5*	100 *5*	2187.96	8$^+$	E1		1.51×10^{-3}	α(K)=0.001124 *16*; α(L)=0.0001710 *24*; α(M)=3.96×10^{-5} *6* α(N)=1.014×10^{-5} *15*; α(O)=2.12×10^{-6} *3*; α(P)=2.73×10^{-7} *4*; α(IPF)=0.0001650 *24*
		2128.08 *15*	43 *4*	1556.97	8$^+$	E1		1.37×10^{-3}	α(K)=0.000630 *9*; α(L)=9.45×10^{-5} *14*; α(M)=2.18×10^{-5} *3*

$^{210}_{84}Po_{126}$-12

Adopted Levels, Gammas (continued)

γ(^{210}Po) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[†]	δ[†a]	α[&]	Comments
									α(N)=5.60×10^{-6} *8*; α(O)=1.171×10^{-6} *17*; α(P)=1.519×10^{-7} *22*; α(IPF)=0.000614 *9*
3685.41	7$^-$	2211.81 *22*	45 *6*	1473.357	6$^+$	E1		1.38×10^{-3}	α(K)=0.000592 *9*; α(L)=8.87×10^{-5} *13*; α(M)=2.05×10^{-5} *3* α(N)=5.25×10^{-6} *8*; α(O)=1.099×10^{-6} *16*; α(P)=1.426×10^{-7} *20*; α(IPF)=0.000670 *10*
3693.89		1307.1[‡] *2*	100[‡]	2386.784	3$^-$				
3699.61	5$^-$	1312.39 *20*	19 *4*	2386.784	3$^-$	E2		0.00441	α(K)=0.00354 *5*; α(L)=0.000648 *9*; α(M)=0.0001537 *22* α(N)=3.95×10^{-5} *6*; α(O)=8.17×10^{-6} *12*; α(P)=1.020×10^{-6} *15*; α(IPF)=1.708×10^{-5} *25*
		1373.58 *22*	25 *6*	2326.018	6$^+$				
		1409.4 *2*	<18	2290.14	2$^+$	(E3)		0.00817	α(K)=0.00631 *9*; α(L)=0.001399 *20*; α(M)=0.000340 *5* α(N)=8.75×10^{-5} *13*; α(O)=1.80×10^{-5} *3*; α(P)=2.19×10^{-6} *3*; α(IPF)=1.579×10^{-5} *23*
		2226.61 *14*	32 *5*	1473.357	6$^+$	E1+M2	0.61 *19*	0.0028 *7*	α(K)=0.0018 *6*; α(L)=0.00031 *10*; α(M)=7.2×10^{-5} *24* α(N)=1.9×10^{-5} *6*; α(O)=3.9×10^{-6} *13*; α(P)=5.1×10^{-7} *17*; α(IPF)=0.00058 *5*
		2272.86 *7*	100 *6*	1426.701	4$^+$	E1		1.39×10^{-3}	α(K)=0.000566 *8*; α(L)=8.48×10^{-5} *12*; α(M)=1.96×10^{-5} *3* α(N)=5.02×10^{-6} *7*; α(O)=1.051×10^{-6} *15*; α(P)=1.364×10^{-7} *19*; α(IPF)=0.000711 *10*
3711.01	(5$^-$)	1307.26 *15*	59 *13*	2403.282	5$^+$				
		2238.17 *23*	95 *13*	1473.357	6$^+$	(E1)		1.38×10^{-3}	α(K)=0.000580 *9*; α(L)=8.70×10^{-5} *13*; α(M)=2.01×10^{-5} *3* α(N)=5.15×10^{-6} *8*; α(O)=1.078×10^{-6} *15*; α(P)=1.399×10^{-7} *20*; α(IPF)=0.000688 *10*
		2284.42 *11*	100 *16*	1426.701	4$^+$				
3727.34	(6)$^-$	201.8 *2*	9.0 *18*	3525.37	6$^-$	M1		1.516	α(K)=1.231 *18*; α(L)=0.217 *3*; α(M)=0.0511 *8* α(N)=0.01316 *19*; α(O)=0.00275 *4*; α(P)=0.000356 *5* Mult.: from ^{210}At ε decay.
		298.38 *10*	19 *3*	3428.59	5$^-$	M1		0.513	α(K)=0.417 *6*; α(L)=0.0729 *11*; α(M)=0.01719 *25* α(N)=0.00443 *7*; α(O)=0.000926 *13*; α(P)=0.0001197 *17* Mult.: from ^{210}At decay.
		602.5 *2*	7.0 *11*	3125.15	(6)$^-$	M1		0.0778	α(K)=0.0635 *9*; α(L)=0.01090 *16*; α(M)=0.00256 *4* α(N)=0.000660 *10*; α(O)=0.0001381 *20*; α(P)=1.79×10^{-5} *3* E_γ,I_γ,Mult.: from ^{210}At ε decay.
		701.0 *2*	27 *1*	3026.437	5$^-$	M1		0.0523	α(K)=0.0427 *6*; α(L)=0.00730 *11*; α(M)=0.001716 *24* α(N)=0.000442 *7*; α(O)=9.25×10^{-5} *13*; α(P)=1.198×10^{-5} *17* E_γ,I_γ,Mult.: from ^{210}At ε decay.
		817.23 *10*	100 *10*	2910.059	5$^-$	M1+E2	0.53 *23*	0.030 *4*	α(K)=0.024 *3*; α(L)=0.0042 *5*; α(M)=0.00100 *11* α(N)=0.00026 *3*; α(O)=5.4×10^{-5} *6*; α(P)=6.9×10^{-6} *8*
		1289.29 *16*	88 *12*	2438.36	7$^+$				
		1324.1 *2*	27 *1*	2403.282	5$^+$				E_γ,I_γ: from ^{210}At ε decay.
		2254.28 *12*	70 *10*	1473.357	6$^+$	E1		1.38×10^{-3}	α(K)=0.000574 *8*; α(L)=8.60×10^{-5} *12*; α(M)=1.99×10^{-5} *3*

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Adopted Levels, Gammas (continued)

γ(^{210}Po) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[†]	δ[†a]	α[&]	Comments
									α(N)=5.09×10^{-6} *8*; α(O)=1.065×10^{-6} *15*; α(P)=1.382×10^{-7} *20*; α(IPF)=0.000699 *10*
3779.91	(4,5)$^-$	870.01 *8*	100 *13*	2910.059	5$^-$	M1+E2	≤2	0.022 *8*	α(K)=0.018 *7*; α(L)=0.0031 *10*; α(M)=0.00074 *23* α(N)=0.00019 *6*; α(O)=4.0×10^{-5} *13*; α(P)=5.1×10^{-6} *18*
		2306.2 *3*	28 *2*	1473.357	6$^+$				E_γ,I_γ: from ^{210}At ε decay.
		2353.02 *9*	94 *8*	1426.701	4$^+$	E1		1.40×10^{-3}	α(K)=0.000536 *8*; α(L)=8.02×10^{-5} *12*; α(M)=1.85×10^{-5} *3* α(N)=4.74×10^{-6} *7*; α(O)=9.93×10^{-7} *14*; α(P)=1.289×10^{-7} *18*; α(IPF)=0.000763 *11*
3780.20	7$^-$	1453.7 *2*	14 *4*	2326.018	6$^+$	E1+M2	>0.17	0.010 *9*	α(K)=0.008 *7*; α(L)=0.0015 *13*; α(M)=0.0004 *3* α(N)=9.E−5 *8*; α(O)=1.9×10^{-5} *16*; α(P)=2.5×10^{-6} *21*; α(IPF)=8.E−5 *6*
		1592.25 *3*	100 *4*	2187.96	8$^+$	E1+M2	0.20 *5*	0.0020 *3*	α(K)=0.00144 *23*; α(L)=0.00023 *4*; α(M)=5.4×10^{-5} *10* α(N)=1.38×10^{-5} *25*; α(O)=2.9×10^{-6} *6*; α(P)=3.7×10^{-7} *7*; α(IPF)=0.000224 *5*
4025.77	(7,8,9$^-$)	1837.79 *3*	100 *4*	2187.96	8$^+$				
		2469.11 *14*	26 *4*	1556.97	8$^+$	(E1+M2)	>0.23	0.0035 *19*	α(K)=0.0024 *17*; α(L)=0.0004 *3*; α(M)=9.E−5 *7* α(N)=2.4×10^{-5} *18*; α(O)=5.E−6 *4*; α(P)=7.E−7 *5*; α(IPF)=0.00062 *20*
4029.1	(4$^+$)	2602.4[‡] *3*	100[‡]	1426.701	4$^+$				
4043.37		1855.4[‡] *2*	100[‡]	2187.96	8$^+$				
4105.07		1917.1[‡] *2*	100[‡]	2187.96	8$^+$				
4141.08	(6$^+$)	1702.5[‡] *2*	15[‡] *10*	2438.36	7$^+$				
		1953.6[‡] *2*	30[‡] *10*	2187.96	8$^+$				
		2583.8[‡] *3*	100[‡] *20*	1556.97	8$^+$				
		2665.5[‡] *4*	30[‡] *10*	1473.357	6$^+$				
4145.32	(10)$^-$	962.61 *7*	100 *7*	3182.79	10$^-$	M1		0.0230	α(K)=0.0188 *3*; α(L)=0.00318 *5*; α(M)=0.000746 *11* α(N)=0.000192 *3*; α(O)=4.02×10^{-5} *6*; α(P)=5.22×10^{-6} *8*
		1146.47 *20*	11 *5*	2999.48	(9)$^-$	(M1)		0.01463	α(K)=0.01198 *17*; α(L)=0.00202 *3*; α(M)=0.000473 *7* α(N)=0.0001218 *17*; α(O)=2.55×10^{-5} *4*; α(P)=3.31×10^{-6} *5*; α(IPF)=1.66×10^{-6} *3*
4324.12	(11$^-$)	178.81 *1*	7.7 *20*	4145.32	(10)$^-$				
		1474.94 *1*	100.0 *25*	2849.17	11$^-$	M1		0.00776	α(K)=0.00628 *9*; α(L)=0.001051 *15*; α(M)=0.000246 *4* α(N)=6.33×10^{-5} *9*; α(O)=1.328×10^{-5} *19*; α(P)=1.725×10^{-6} *25*; α(IPF)=0.0001005 *14*
		2767.1 *4*	3.6 *5*	1556.97	8$^+$				
4329.5		2003.5[‡] *3*	100[‡]	2326.018	6$^+$				
4371.96	13$^-$	47.8	0.70 *5*	4324.12	(11$^-$)	[E2]		235	α(L)=174.4 *25*; α(M)=46.3 *7* α(N)=11.84 *17*; α(O)=2.24 *4*; α(P)=0.197 *3* I_γ: from I(γ+ce) and α(E2)=238.

Adopted Levels, Gammas (continued)

γ(^{210}Po) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[†]	δ[†a]	α[&]	Comments
4371.96	13⁻	1522.79 *2*	100	2849.17	11⁻	E2		0.00340	α(K)=0.00271 *4*; α(L)=0.000476 *7*; α(M)=0.0001124 *16* α(N)=2.89×10^{-5} *4*; α(O)=5.99×10^{-6} *9*; α(P)=7.56×10^{-7} *11*; α(IPF)=6.94×10^{-5} *10*
4386.9		2059.9[‡] *5*	40[‡] *15*	2326.018	6⁺				
		2199.3[‡] *3*	100[‡] *10*	2187.96	8⁺				
4469.83	(6⁺)	2143.5[‡] *3*	10[‡] *8*	2326.018	6⁺				
		2281.9[‡] *3*	20[‡] *10*	2187.96	8⁺				
		2913.1[‡] *3*	100[‡] *15*	1556.97	8⁺				
4502.63	(12⁻)	178.8 *2*	74 *26*	4324.12	(11⁻)				
		357.13 *10*	21 *7*	4145.32	(10)⁻				
		1653.43 *15*	100 *12*	2849.17	11⁻	(M1)		0.00592	α(K)=0.00469 *7*; α(L)=0.000782 *11*; α(M)=0.000183 *3* α(N)=4.72×10^{-5} *7*; α(O)=9.88×10^{-6} *14*; α(P)=1.284×10^{-6} *18*; α(IPF)=0.000206 *3*
4542.41	(4⁺)	2139.2[‡] *3*	60[‡] *20*	2403.282	5⁺				
		2159.8[‡] *3*	40[‡] *10*	2382.543	4⁺				
		3115.6[‡] *6*	100[‡] *30*	1426.701	4⁺				
4554.0	(7⁺)	2365.6[‡] *4*	80[‡] *20*	2187.96	8⁺				
		2997.9[‡] *6*	100[‡] *20*	1556.97	8⁺				
4592.6		4592.5[‡] *4*	100[‡]	0.0	0⁺	[M3]		0.00278	α(K)=0.001462 *21*; α(L)=0.000247 *4*; α(M)=5.80×10^{-5} *9* α(N)=1.492×10^{-5} *21*; α(O)=3.13×10^{-6} *5*; α(P)=4.07×10^{-7} *6*; α(IPF)=0.001000 *14*
4621.59	(3⁺)	2207.9[‡] *3*	100[‡] *30*	2413.834	3⁺				
		2227.7[‡] *3*	30[‡] *10*	2393.78	1⁺				
		2238.8[‡] *4*	45[‡] *15*	2382.543	4⁺				
		2331.5[‡] *3*	50[‡] *25*	2290.14	2⁺				
4637.71		2234.7[‡] *4*	60[‡] *30*	2403.282	5⁺				
		2255.1[‡] *3*	100[‡] *15*	2382.543	4⁺				
		2311.5[‡] *4*	25[‡] *10*	2326.018	6⁺				
4644.9	(6⁺)	2456.9[‡] *5*	100[‡]	2187.96	8⁺				
4660.28		2277.8[‡] *3*	75[‡] *25*	2382.543	4⁺				
		2334.1[‡] *4*	100[‡] *40*	2326.018	6⁺				
4776.89	14⁻	274.20 *7*	7.5 *10*	4502.63	(12⁻)				
		405.5 *5*	100 *10*	4371.96	13⁻	M1+E2[@]	1.1 *3*	0.13 *3*	α(K)=0.101 *24*; α(L)=0.022 *3*; α(M)=0.0054 *6* α(N)=0.00140 *15*; α(O)=0.00029 *4*; α(P)=3.4×10^{-5} *5* δ: from ce data in ^{208}Pb(α,2nγ).
4948.1		2544.8[‡] *3*	50[‡] *25*	2403.282	5⁺				
		3474.9[‡] *5*	100[‡] *50*	1473.357	6⁺				

Adopted Levels, Gammas (continued)

γ(^{210}Po) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[†]	α[&]	$I_{(\gamma+ce)}$	Comments
4971.28	(11$^-$,12$^-$)	599.51 *16*	100 *31*	4371.96	13$^-$				
		825.44 *27*	6.9 *18*	4145.32	(10)$^-$				
4974.4		2786.4[‡] *5*	100[‡]	2187.96	8$^+$				
4998.2		2810.2[‡] *5*	100[‡]	2187.96	8$^+$				
5057.65	16$^+$	279.89 *10*	9.0 *8*	4776.89	14$^-$	M2[@]	2.33		α(K)=1.727 *25*; α(L)=0.453 *7*; α(M)=0.1128 *16* α(N)=0.0293 *5*; α(O)=0.00609 *9*; α(P)=0.000762 *11* B(M2)(W.u.)=0.130 *13*
		685.69 *2*	100 *3*	4371.96	13$^-$	E3[@]	0.0438		α(K)=0.0277 *4*; α(L)=0.01210 *17*; α(M)=0.00311 *5* α(N)=0.000801 *12*; α(O)=0.0001601 *23*; α(P)=1.755×10^{-5} *25* B(E3)(W.u.)=18.4 *9*
5614.69	(17$^+$)	556.9[#]	100	5057.65	16$^+$	D+Q[#]			
6070.26	(17$^+$)	1012.6[#]	100	5057.65	16$^+$	D+Q[#]			
6085.31	(18$^+$)	470.7[#]	100[#] *10*	5614.69	(17$^+$)				
		1027.7[#]	74[#] *10*	5057.65	16$^+$	Q[#]			
6342.83	(19$^-$)	257.6[#]	100[#] *14*	6085.31	(18$^+$)				
		1285.3[#]	76[#] *19*	5057.65	16$^+$				
6384.63	(18$^-$)	(42.0)		6342.83	(19$^-$)			48 *5*	
		769.8[#]	100	5614.69	(17$^+$)	D[#]			
6422.08	(18)	351.8[#]	100[#] *15*	6070.26	(17$^+$)				
		807.3[#]	20[#] *10*	5614.69	(17$^+$)				
6713.5	(19$^+$)	291.3[#]	54[#] *5*	6422.08	(18)				
		328.9[#]	100[#] *9*	6384.63	(18$^-$)	D[#]			
		628.2[#]	77[#] *9*	6085.31	(18$^+$)	D+Q[#]			
6983.9	(20$^-$)	270.4[#]	100	6713.5	(19$^+$)	D[#]			
6995.0	(20$^-$)	281.6[#]	100	6713.5	(19$^+$)	D[#]			
7719.6	(21$^-$)	724.6[#]	100	6995.0	(20$^-$)				
7989.4	(21)	1005.5[#]	100	6983.9	(20$^-$)	(D)[#]			
8074.3	(23$^+$)	1079.3[#]	100[#] *12*	6995.0	(20$^-$)	[E3]			B(E3)(W.u.)=26 *6*
		1090.3[#]	17[#] *5*	6983.9	(20$^-$)	[E3]			B(E3)(W.u.)=4.1 *15*
8831.1	(24$^+$)	756.8[#]	100	8074.3	(23$^+$)	D+Q[#]			
8893.6	(23)	904.3[#b]	100	7989.4	(21)	[#]			
9199.3	(25)	305.7[#b]	100[#] *22*	8893.6	(23)				
		368.0[#b]	33[#] *11*	8831.1	(24$^+$)				I_γ: value is uncertain.
9420.8	(25)	589.7[#]	100	8831.1	(24$^+$)				
9464.8	(25)	633.7[#]	100	8831.1	(24$^+$)				
9535.1	(26)	704[#]	100	8831.1	(24$^+$)				

Adopted Levels, Gammas (continued)

$\gamma(^{210}Po)$ (continued)

E_i(level)	J_i^π	E_γ †	I_γ †	E_f	J_f^π
9567.4	(26)	368.1#b	100	9199.3	(25)
9581.8	(26)	750.7#	100	8831.1	(24^+)
9590.1	(26)	759#	100	8831.1	(24^+)
10084.1	(27)	502.3#	100	9581.8	(26)

† From ^{209}Bi(t,2nγ), unless otherwise specified.
‡ From ^{209}Bi(^{3}He,dγ).
# From (^{13}C,α3nγ).
@ From ce data and $\gamma(\theta)$ in ^{208}Pb(α,2nγ).
& Additional information 1.
[a] If no value given it was assumed δ=1.00 for E2/M1, δ=1.00 for E3/M2 and δ=0.10 for the other multipolarities.
[b] Placement of transition in the level scheme is uncertain.

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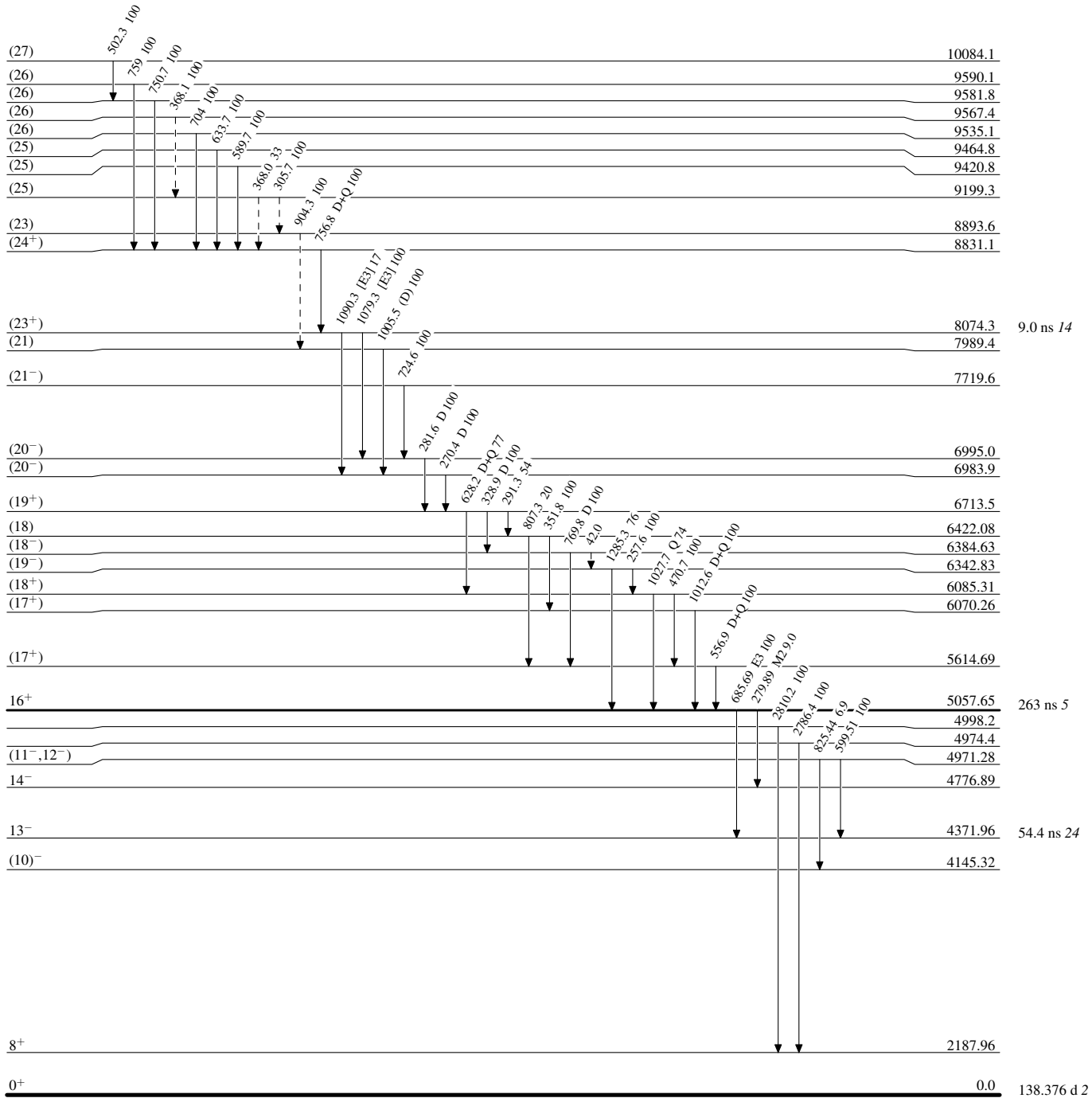
Adopted Levels, Gammas

Legend

Level Scheme

Intensities: Relative photon branching from each level

γ Decay (Uncertain)



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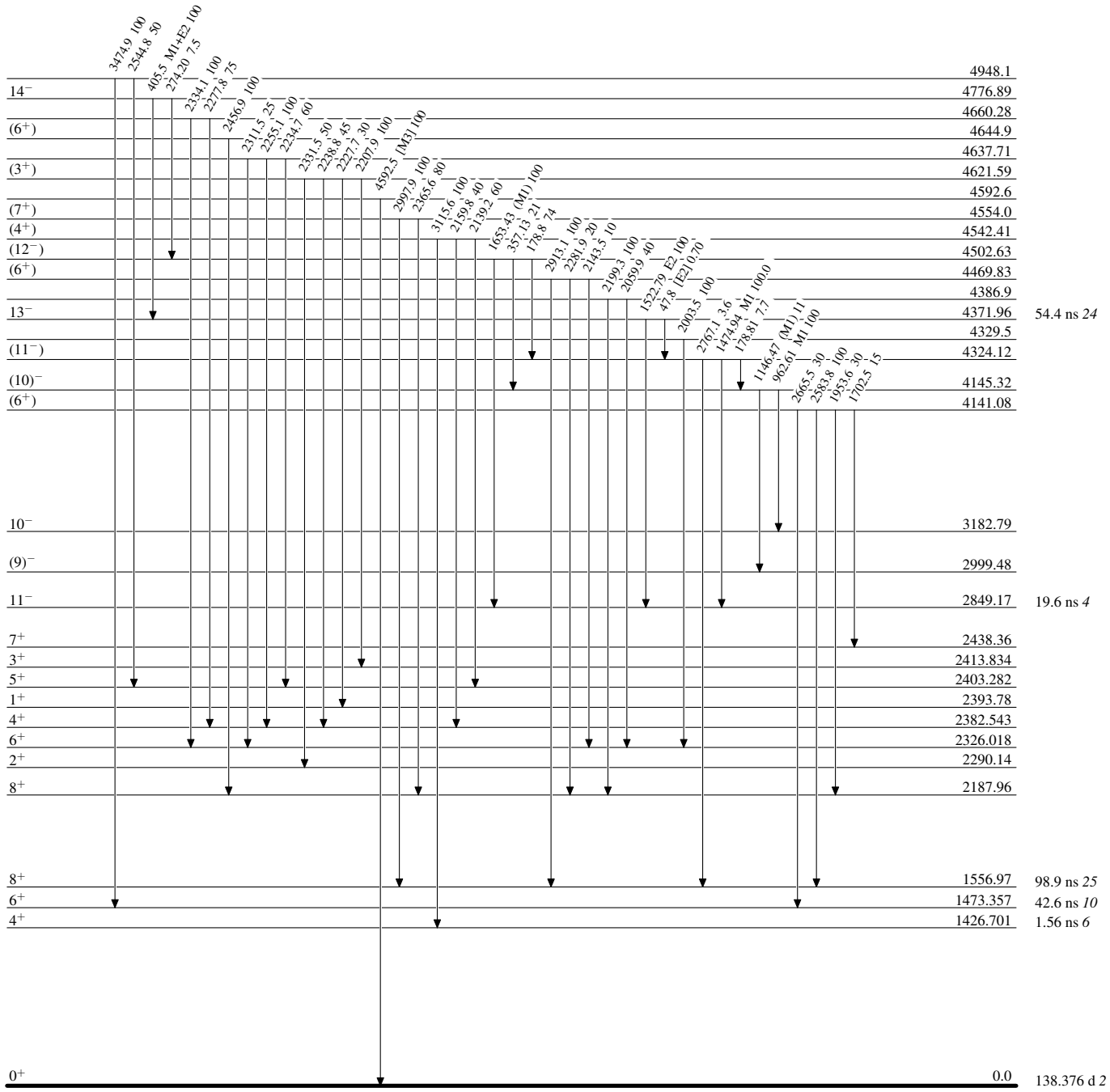
Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

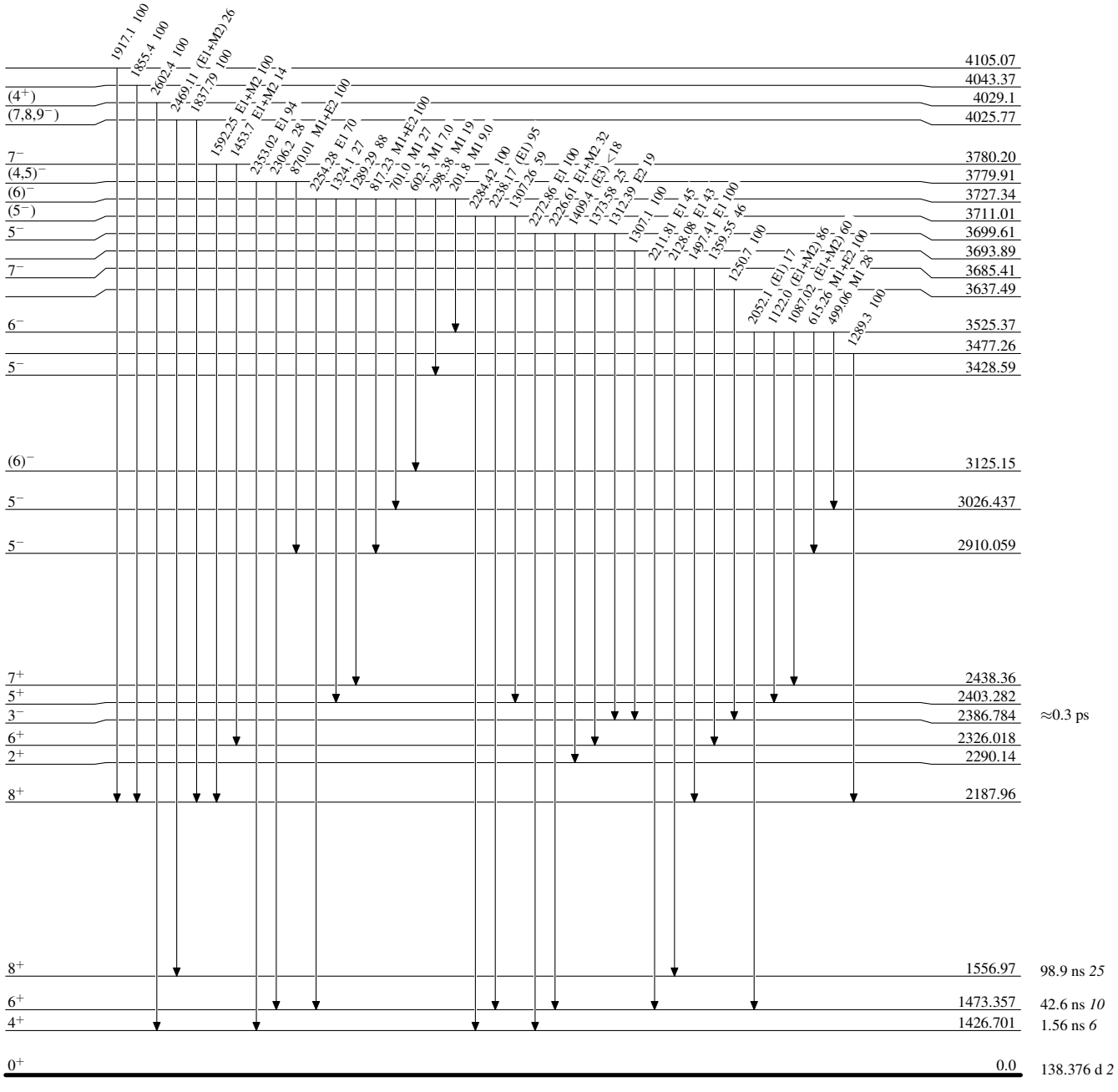


$^{210}_{84}Po_{126}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level



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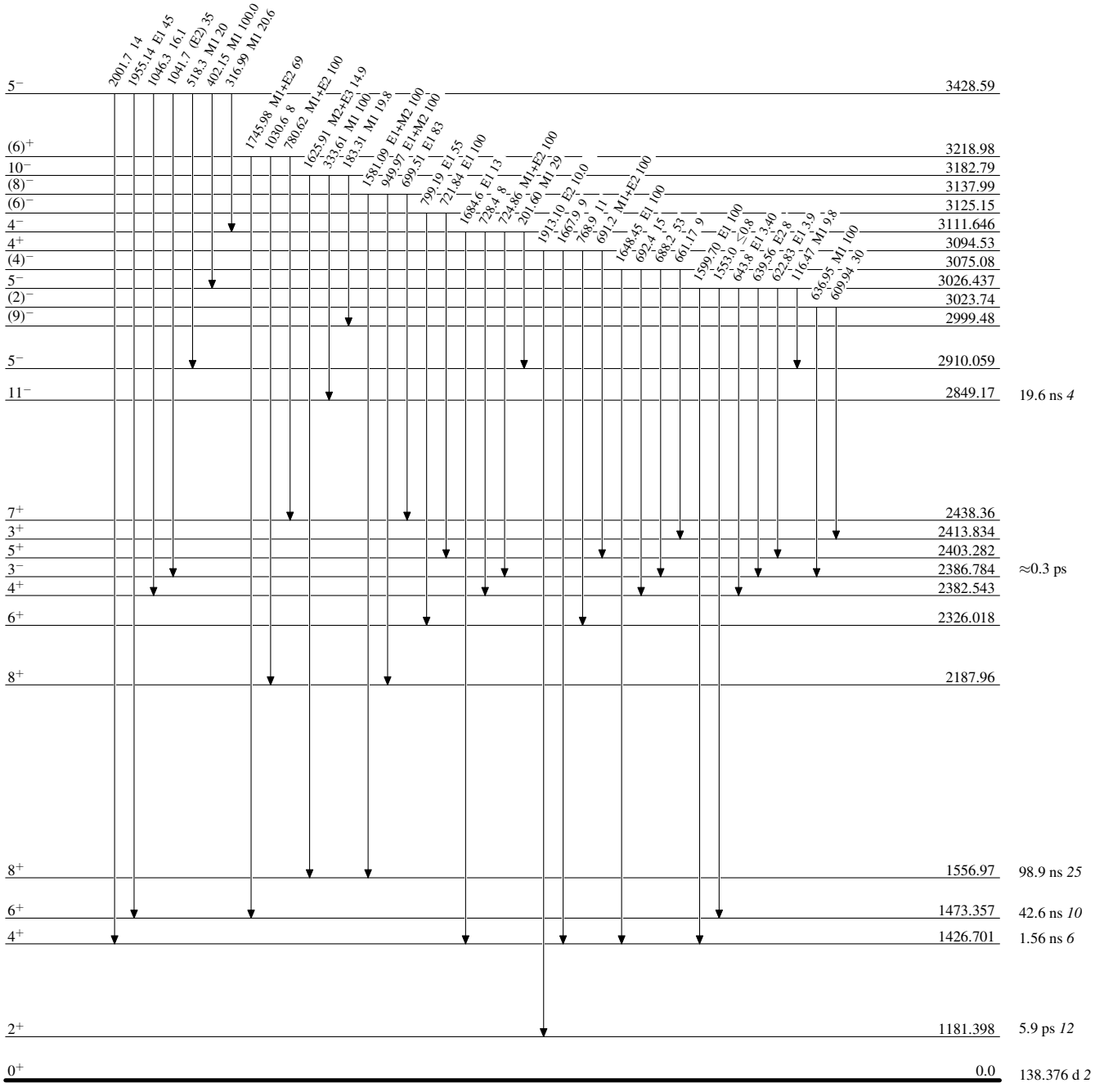
Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

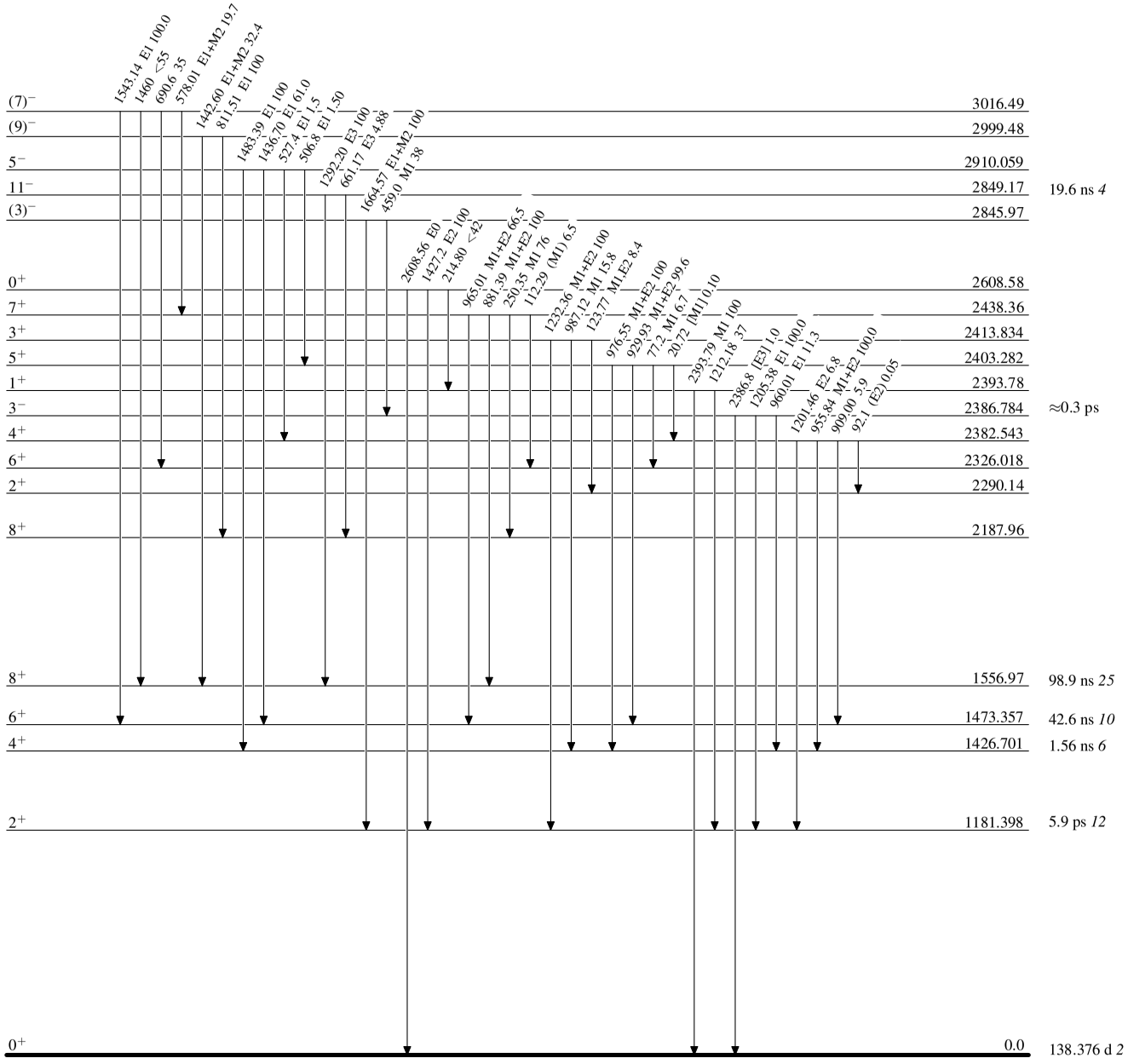


$^{210}_{84}Po_{126}$

Adopted Levels, Gammas

Level Scheme (continued)

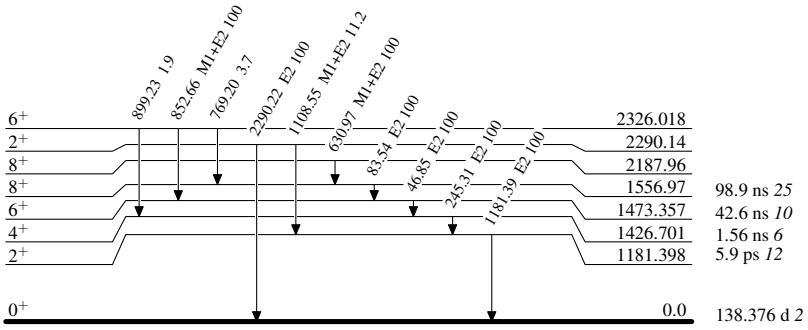
Intensities: Relative photon branching from each level



Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level



$^{210}_{84}Po_{126}$

Adopted Levels, Gammas

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Shaofei Zhu and E. A. Mccutchan	NDS 175, 1 (2021)	1-May-2021

Q(β^-)=−1091 *4*; S(n)=5888 *3*; S(p)=6527 *5*; Q(α)=7833.54 *6* 2021Wa16
S(2n)=10243.2 *9*; S(2p)=11499.0 *21* (2021Wa16).
^{214}Po (RaC′) was first identified as a descendent of ^{226}Ra decay chain, by K. Fanjans (Phys. Z. 13 (1912) 699) in a study of α radiations from ^{214}Bi, as reviewed in article 2013Fr04.
α: Additional information 1.

^{214}Po Levels

Cross Reference (XREF) Flags

A ^{218}Rn α decay
B ^{214}Bi β^- decay
C ^{208}Pb(^{16}O,Xγ)

E(level)†	J$^\pi$	T$_{1/2}$	XREF	Comments
0.0‡	0$^+$	163.46 μs *4*	ABC	%α=100 T$_{1/2}$: from 2015Al10 and 2016Al28 with 580-day continuous measurements; others: 150 μs *20* (1939Du01), 140 μs *15* (1939Ro03), 145 μs *5* (1941Ro01), 155 μs *5* (1943Ja01), 163.7 μs *2* (1950Vo02), 158 μs *2* (1953Ba60), 164.3 μs *18* (1961Do02), 165 μs *3* (1971Er02), 160 μs *12* (1993Zh30), 164.2 μs *6* (2012Su11), 163.6 μs *3* (2013Be13), 163.5 μs *8* (2013Al11) and 163.8 μs *30* (2013Be20).
609.317‡ *5*	2$^+$		ABC	%IT=100; %α=0.00026 J$^\pi$: E2 to 0$^+$. %α: from 1965Le08 with I(8287α)/I(7688α)=1.2x10^{-6} and I(γ+ce).
1015.040‡ *20*	(4$^+$)		BC	J$^\pi$: E2 to 2$^+$; yrast state from ^{208}Pb(^{16}O,Xγ).
1274.764 *9*	3$^-$		AB	%IT=100; %α=0.0012 J$^\pi$: E1 to 2$^+$; no γ to 0$^+$; α to 0$^+$ in ^{210}Pb; α from 0$^+$ in ^{218}Rn. %α: from 1965Le08 with I(8950α)/I(7688α)=2x10^{-7} and I(γ+ce).
1339.4‡ *5*	(6$^+$)		C	J$^\pi$: (E2) to (4$^+$); yrast state from ^{208}Pb(^{16}O,Xγ).
1377.680 *7*	2$^+$		B	J$^\pi$: E2 to 0$^+$; M1+E2 to 2$^+$.
1415.498 *8*	0$^+$	99 ps *3*	B	%IT=99.88; %α=0.12 T$_{1/2}$: from ^{214}Bi β- decay. J$^\pi$: E0 to 0$^+$; E2 to 2$^+$. %α: from 1965Le08 with I(9080α)/I(7688α)=2.2x10^{-5} and I(γ+ce).
1543.369 *9*	2$^+$		B	%IT=100; %α=0.0017 J$^\pi$: M1+E2 to 2$^+$; γ to 0$^+$ and 3$^-$. %α: from 1965Le08 with I(8430α)/I(7688α)=6x10^{-7} and I(γ+ce).
1583.5‡ *7*	(8$^+$)	13 ns *1*	C	J$^\pi$: E2 to (6$^+$); yrast state from ^{208}Pb(^{16}O,Xγ). T$_{1/2}$: from ^{208}Pb(^{16}O,Xγ).
1589.6 *7*			C	
1661.283 *14*	2$^+$		B	%IT=100; %α=0.0037 J$^\pi$: E2 to 0$^+$; γ to 2$^+$. %α: from 1965Le08 with I(9320α)/I(7688α)=5x10^{-7} and I(γ+ce).
1685.5? *5*			C	
1712.92 *8*	(3$^+$)		B	J$^\pi$: γ to 2$^+$; γ to 4$^+$, no γ to 0$^+$ and β^- from 1$^-$ ^{214}Bi with log *ft*=9.57 *5*.
1729.612 *7*	2$^+$		B	%IT=100; %α=0.00011 J$^\pi$: E2 to 0$^+$; M1+E2 to 2$^+$. %α: from 1965Le08 with I(9378α)/I(7688α)=2x10^{-7} and I(γ+ce).
1737.4 *7*			C	

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Adopted Levels, Gammas (continued)

^{214}Po Levels (continued)

E(level)[†]	Jπ	XREF	Comments
1742.99 *3*	$0^{(+)}$	B	Jπ: (E2) to 2^+; γ from 1^+; no γ to 0^+; γ from 1^-.
1764.520 *8*	1^+	B	Jπ: M1 to 0^+.
1823.1 *9*	(8^+)	C	Jπ: M1+E2 to 8^+; non-yrast state from ^{208}Pb(^{16}O,Xγ).
1842.9 *7*		C	
1847.446 *9*	2^+	B	%IT=100; %α=0.0012 Jπ: M1 to 2^+; α to ^{210}Pb 0^+ and β$^-$ from 1^- ^{214}Bi with log *ft*=6.859 *13*. %α: from 1965Le08 with I(9500α)/I(7688α)=1x10^{-6} and I(γ+ce).
1890.306 *13*	$(2)^+$	B	Jπ: M1 to 2^+; γ to 0^+ and γ to 3^-.
1982.3 *7*	(7)	C	Jπ: D to 6^+; no γ to 4^+.
1994.639 *13*	1^-	B	Jπ: E2 to 3^-; D to 2^+, γ to 0^+.
2010.830 *13*	(2^+)	B	Jπ: (M1+E2) to 2^+; γ to 0^+, γ to $(3)^+$ and β$^-$ from 1^- ^{214}Bi with log *ft*=7.422 *15*.
2017.314 *9*	0^+	B	%IT=100; %α=0.0016 Jπ: E0 to 0^+. %α: from 1965Le08 with I(9670α)/I(7688α)=4x10^{-7} and I(γ+ce).
2088.44 *5*	$(1,2^+)$	B	Jπ: γ to 2^+ and β$^-$ from 1^- ^{214}Bi with log *ft*=8.57 *5*.
2118.535 *10*	1^+	B	Jπ: M1 to 0^+.
2147.86 *5*	$(1^-,2^+)$	B	%IT=99.98; %α=0.023 Jπ: D(+Q) to 2^+; γ to 0^+; γ to 3^-. %α: from 1965Le08 with I(9802α)/I(7688α)=1.2x10^{-6} and I(γ+ce).
2157.9 *9*	(9)	C	Jπ: D to (8^+).
2179.3[‡] *9*	(10^+)	C	Jπ: (E2) to (8^+); yrast state from ^{218}Pb(^{16}O,Xγ).
2192.536 *16*	$(2)^+$	B	Jπ: M1 to 2^+; γ to 0^+ and and β$^-$ from 1^- ^{214}Bi with log *ft*=7.397 *17*.
2204.102 *23*	1^+	B	Jπ: M1 to 0^+.
2208.69 *4*	$(2^-,3)$	B	Jπ: D+Q to 2^+; γ to 3^-; no γ to 0^+ and β$^-$ from 1^- ^{214}Bi with log *ft*=7.97 *7*.
2266.40 *4*	2^+	B	%IT=99.97; %α=0.034 Jπ: γ to 0^+; E2 to 2^+; γ to 3^-; α to 0^+ in ^{210}Pb and β$^-$ from 1^- ^{214}Bi with log *ft*=7.94 *4*. %α: from 1965Le08 with I(9907α)/I(7688α)=7x10^{-7} and I(γ+ce).
2272.1 *10*	(9)	C	Jπ: D to (8^+) from ^{208}Pb(^{16}O,Xγ).
2293.362 *19*	$(1^+,2^+)$	B	Jπ: (M1+E2) to 2^+; γ to 0^+ and β$^-$ from 1^- ^{214}Bi with log *ft*=7.433 *22*.
2348.3 *7*	$(1,2^+)$	B	Jπ: γ to 0^+ and γ to 2^+.
2360.97 *17*	$(1,2^+)$	B	Jπ: γ to 0^+ and γ to 2^+.
2377.6 *10*	(10^+)	C	Jπ: Q to (8^+) from ^{208}Pb(^{16}O,Xγ).
2423.24 *6*	$(1,2^+)$	B	Jπ: γ to 0^+; γ to 2^+; γ to 1^+.
2447.701 *19*	1^-	B	%IT=100; %α=0.0049 Jπ: E1 to 0^+. %α: from 1965Le08 with I(10082α)/I(7688α)=1.4x10^{-6} and I(γ+ce).
2482.459 *17*	$(1^-,2^+)$	B	Jπ: γ to 2^+; γ to 0^+; γ to 1^- and γ to 3^-.
2505.34 *9*	$(1^-,2^+)$	B	Jπ: γ to 0^+; γ to 2^+ and γ to 3^-.
2508.12 *4*	(0^+)	B	%IT=99.98; %α=0.017 Jπ: γ to 1^+; γ to 2^+; no γ to 0^+, 1^- and 3; α to 0^+ in ^{210}Pb and β$^-$ from 1^- ^{214}Bi with log *ft*= 7.69 *5*. %α from 1965Le08 with I(10150α)/I(7688α)=2x10^{-7} and I(γ+ce).
2544.92 *11*		B	
2553.0 *5*		B	
2562.4 *5*		B	
2604.68 *6*	(2^+)	B	Jπ: γ to 0^+; γ to 2^+; γ to 3^- and γ to $(3)^+$.
2605.1 *12*		C	
2612.5[‡] *10*	(12^+)	C	Jπ: Q to (10^+); yrast state from ^{208}Pb(^{16}O,Xγ).
2630.84 *9*	$(1,2^+)$	B	Jπ: γ to 0^+ and γ to 2^+.
2662.33 *9*	(2^+)	B	Jπ: γ to 0^+; γ to 2^+; γ to $(3)^+$ and γ to 3^-.
2670.0 *12*		C	
2694.62 *5*	$(1^-,2^+)$	B	%IT=99.97; %α=0.032 Jπ: γ to 0^+; γ to 2^+ and γ to 3^-. %α: from 1965Le08 with I(10332α)/I(7688α)=8x10^{-7} and I(γ+ce).
2698.60 *7*	$(1,2)^+$	B	Jπ: γ to 0^+ and M1 to 2^+.

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Adopted Levels, Gammas (continued)

^{214}Po Levels (continued)

E(level)†	Jπ	XREF	Comments
2719.26 *5*	1^+	B	Jπ: M1 to 0^+.
2728.616 *23*	$(0^+,1,2)$	B	Jπ: γ to 1^+, γ to 1^- and γ to 2^+.
2734.4 *12*	(12^+)	C	Jπ: Q to $(10)^+$ from ^{208}Pb(^{16}O,Xγ).
2769.91 *13*	$(1,2^+)$	B	Jπ: γ to 0^+; γ to 2^+ and β^- from 1^- ^{214}Bi with log *ft*= 7.39 *7*.
2785.97 *9*	$(1,2^+)$	B	Jπ: γ to 0^+; γ to 2^+ and β^- from 1^- ^{214}Bi with log *ft*= 7.46 *7*.
2794.1 *6*		B	
2802.54 *19*		B	
2826.82 *14*	$(1,2^+)$	B	Jπ: γ to 0^+; γ to 2^+ and β^- from 1^- ^{214}Bi with log *ft*= 7.38 *14*.
2860.93 *13*	$(1,2^+)$	B	Jπ: γ to 0^+; γ to 2^+ and β^- from 1^- ^{214}Bi with log *ft*= 7.40 *9*.
2869.63 *17*	$(2^-,3^-)$	B	Jπ: γ to 2^+; γ to 1^-; γ to 3^-; no γ to 0^+; no γ to 1^+ and β^- from 1^- ^{214}Bi with log *ft*= 7.73 *11*.
2880.36 *14*	$(1^-,2^+)$	B	%IT=99.83; %α=0.17 Jπ: γ to 0^+; γ to 2^+; α to 0^+ in ^{210}Pb and β^- from 1^- ^{214}Bi with log *ft*= 7.78 *7*. %α from 1965Le08 with I(10505α)/I(7688α)=2x10^{-7} and I(γ+ce).
2893.63 *11*	$(1,2^+)$	B	Jπ: γ to 0^+; γ to 2^+ and β^- from 1^- ^{214}Bi with log *ft*= 7.27 *8*.
2896.98 *23*		B	
2919.5 *3*		B	
2921.89 *11*	$(1,2^+)$	B	Jπ: γ to 0^+; γ to 2^+ and β^- from 1^- ^{214}Bi with log *ft*= 7.32 *6*.
2928.55 *22*	$(1,2^+)$	B	Jπ: γ to 0^+; γ to 2^+ and β^- from 1^- ^{214}Bi with log *ft*= 8.61 *6*.
2934.54 *18*	$(1,2^+)$	B	Jπ: γ to 0^+; γ to 2^+ and β^- from 1^- ^{214}Bi with log *ft*= 8.29 *7*.
2940.67 *10*	$(1^-,2^+)$	B	Jπ: γ to 0^+; γ to 2^+; γ to 3^- and β^- from 1^- ^{214}Bi with log *ft*= 6.91 *7*.
2962.8 *7*		B	
2967.6 *5*		B	
2978.93 *12*	$(1,2^+)$	B	Jπ: γ to 0^+; γ to 2^+ and β^- from 1^- ^{214}Bi with log *ft*= 7.21 *6*.
2986.22 *13*	$(2^-,3)$	B	Jπ: γ to 2^+; γ to 3^-; no γ to 0^+ and β^- from 1^- ^{214}Bi with log *ft*= 7.43 *7*.
3000.00 *14*	$(1^-,2^+)$	B	Jπ: γ to 0^+; γ to 2^+; γ to 3^- and β^- from 1^- ^{214}Bi with log *ft*= 7.31 *8*.
3003.4 *10*		B	
3005.8 *6*		B	
3014.10 *15*	$(1,2^+)$	B	Jπ: γ to 0^+; γ to 2^+ and β^- from 1^- ^{214}Bi with log *ft*= 6.64 *9*.
3022.3 *3*	$(2^-,3,4^+)$	B	Jπ: γ to 2^+; γ to 3^-; no γ to 0^+ and no γ to 1±.
3030.3 *6*		B	
3039.3 *6*		B	
3053.88 *18*	$(1,2^+)$	B	Jπ: γ to 0^+; γ to 2^+ and β^- from 1^- ^{214}Bi with log *ft*= 6.44 *10*.
3068.3 *8*		B	
3078.7 *6*		B	
3081.84 *25*	$(1,2^+)$	B	Jπ: γ to 0^+; γ to 2^+ and β^- from 1^- ^{214}Bi with log *ft*= 6.91 *14*.
3094.0 *3*	$(1^-,2^+)$	B	Jπ: γ to 0^+; γ to 2^+; γ to 3^- and β^- from 1^- ^{214}Bi with log *ft*= 6.79 *13*.
3139.0 *8*		B	
3142.6 *3*	$(1,2^+)$	B	Jπ: γ to 0^+; γ to 2^+ and β^- from 1^- ^{214}Bi with log *ft*= 6.97 *15*.
3149.2 *5*	$(1,2^+)$	B	Jπ: γ to 0^+; γ to 2^+ and β^- from 1^- ^{214}Bi with log *ft* = 8.29 *13*.
3160.4 *5*	$(1,2^+)$	B	Jπ: γ to 0^+; γ to 2^+ and β^- from 1^- ^{214}Bi with log *ft*= 7.16 *17*.
3164.4 *8*		B	
3173.3 *6*		B	
3183.7 *4*	$(1,2^+)$	B	Jπ: γ to 0^+; γ to 2^+ and β^- from 1^- ^{214}Bi with log *ft*= 6.57 *20*.
3262.4 *8*		B	

† From least square fit to Eγ's by evaluator. 1.0-keV uncertainty assumed when not reported.
‡ Band(A): Yrast cascade.

Adopted Levels, Gammas (continued)

$\gamma(^{214}Po)$

E_i(level)	J_i^π	E_γ †	I_γ †	E_f	J_f^π	Mult.†	δ†	α	$I_{(\gamma+ce)}$	Comments
609.317	2^+	609.321 *7*	100	0.0	0^+	E2		0.02038 *29*		α(K)=0.01487 *21*; α(L)=0.00416 *6*; α(M)=0.001030 *14*; α(N)=0.000265 *4*; α(O)=5.33×10^{-5} *7* α(P)=6.06×10^{-6} *8*
1015.040	(4^+)	405.72 *2*	100	609.317	2^+	(E2)		0.0541 *8*		α(K)=0.0344 *5*; α(L)=0.01478 *21*; α(M)=0.00377 *5*; α(N)=0.000968 *14*; α(O)=0.0001913 *27* α(P)=2.018×10^{-5} *28*
1274.764	3^-	665.446 *9*	100	609.317	2^+	E1		0.00579 *8*		α(K)=0.00479 *7*; α(L)=0.000767 *11*; α(M)=0.0001788 *25*; α(N)=4.58×10^{-5} *6* α(O)=9.48×10^{-6} *13*; α(P)=1.193×10^{-6} *17*
1339.4	(6^+)	324.4 *5*	100	1015.040	(4^+)	(E2)		0.1001 *15*		α(K)=0.0562 *8*; α(L)=0.0328 *5*; α(M)=0.00848 *13*; α(N)=0.002178 *33*; α(O)=0.000426 *6* α(P)=4.31×10^{-5} *6* Mult.: from R_{ADO} and yrast sequence in ^{208}Pb(^{16}O,Xγ).
1377.680	2^+	768.360 *7*	100.0 *3*	609.317	2^+	M1+E2	3.81 *13*	0.01429 *24*		α(K)=0.01105 *19*; α(L)=0.00245 *4*; α(M)=0.000595 *9*; α(N)=0.0001529 *23*; α(O)=3.12×10^{-5} *5* α(P)=3.74×10^{-6} *6*
		1377.669 *12*	81.5 *3*	0.0	0^+	E2		0.00404 *6*		α(K)=0.00324 *5*; α(L)=0.000585 *8*; α(M)=0.0001385 *19*; α(N)=3.56×10^{-5} *5*; α(O)=7.37×10^{-6} *10* α(P)=9.24×10^{-7} *13*
1415.498	0^+	806.179 *10*	100.0 *5*	609.317	2^+	E2		0.01127 *16*		α(K)=0.00867 *12*; α(L)=0.001972 *28*; α(M)=0.000480 *7*; α(N)=0.0001232 *17* α(O)=2.512×10^{-5} *35*; α(P)=2.98×10^{-6} *4* B(E2)(W.u.)=0.156 *5*
		1415.495 *10*		0.0	0^+	E0			40.0 *11*	
1543.369	2^+	268.60 *6*	0.51 *6*	1274.764	3^-	[E1]		0.0405 *6*		α(K)=0.0330 *5*; α(L)=0.00578 *8*; α(M)=0.001362 *19*; α(N)=0.000347 *5*; α(O)=7.08×10^{-5} *10* α(P)=8.50×10^{-6} *12*
		528.30 *8*	0.23 *9*	1015.040	(4^+)					
		934.056 *8*	100.0 *4*	609.317	2^+	M1+E2	0.37 *24*	0.0228 *25*		α(K)=0.0187 *21*; α(L)=0.00319 *31*; α(M)=0.00075 *7*; α(N)=0.000193 *19*; α(O)=4.0×10^{-5} *4* α(P)=5.2×10^{-6} *5*
		1543.33 *6*	10.0 *4*	0.0	0^+	[E2]		0.00333 *5*		α(K)=0.00265 *4*; α(L)=0.000463 *6*; α(M)=0.0001093 *15*; α(N)=2.81×10^{-5} *4*; α(O)=5.83×10^{-6} *8* α(P)=7.36×10^{-7} *10*
1583.5	(8^+)	244.1 *5*	100	1339.4	(6^+)	E2		0.240 *4*		α(K)=0.1068 *16*; α(L)=0.0991 *16*; α(M)=0.0260 *4*; α(N)=0.00667 *11*; α(O)=0.001290 *21* α(P)=0.0001249 *20* B(E2)(W.u.)=0.53 *5* Mult.: from ^{208}Pb(^{16}O,Xγ).
1589.6		250.2 *5*	100	1339.4	(6^+)					

$^{214}_{84}Po_{130}$-4

Adopted Levels, Gammas (continued)

γ(^{214}Po) (continued)

E_i(level)	J_i^π	E_γ †	I_γ †	E_f	J_f^π	Mult.†	δ†	α	Comments
1661.283	2^+	1051.96 *3*	29.9 *10*	609.317	2^+	[M1,E2]		0.012 *6*	α(K)=0.010 *5*; α(L)=0.0018 *7*; α(M)=4.2×10^{-4} *17*; α(N)=1.1×10^{-4} *4*; α(O)=2.3×10^{-5} *9* α(P)=2.9×10^{-6} *13*
		1661.274 *17*	100.0 *6*	0.0	0^+	E2		0.00296 *4*	α(K)=0.002319 *32*; α(L)=0.000399 *6*; α(M)=9.40×10^{-5} *13*; α(N)=2.414×10^{-5} *34* α(O)=5.02×10^{-6} *7*; α(P)=6.36×10^{-7} *9*
1685.5?		670.5# *5*	100	1015.040	(4^+)				
1712.92	(3^+)	697.89 *10*	63 *8*	1015.040	(4^+)				
		1103.70 *19*	100 *14*	609.317	2^+				
1729.612	2^+	351.9 *5*	0.21 *3*	1377.680	2^+	[M1+E2]		0.20 *12*	α(K)=0.16 *11*; α(L)=0.035 *11*; α(M)=0.0086 *23*; α(N)=0.0022 *6*; α(O)=4.5×10^{-4} *14* α(P)=5.4×10^{-5} *22*
		454.80 *3*	1.95 *9*	1274.764	3^-	[E1]		0.01251 *18*	α(K)=0.01028 *14*; α(L)=0.001705 *24*; α(M)=0.000399 *6*; α(N)=0.0001020 *14* α(O)=2.103×10^{-5} *29*; α(P)=2.60×10^{-6} *4*
		1120.294 *6*	100.00 *21*	609.317	2^+	M1+E2	0.37 *20*	0.0144 *12*	α(K)=0.0118 *10*; α(L)=0.00199 *16*; α(M)=0.00047 *4*; α(N)=0.000120 *9*; α(O)=2.52×10^{-5} *20* α(P)=3.26×10^{-6} *27*
		1729.595 *11*	19.30 *21*	0.0	0^+	E2		0.00278 *4*	α(K)=0.002157 *30*; α(L)=0.000368 *5*; α(M)=8.66×10^{-5} *12*; α(N)=2.225×10^{-5} *31* α(O)=4.63×10^{-6} *6*; α(P)=5.88×10^{-7} *8*
1737.4		398.0 *5*	100	1339.4	(6^+)				
1742.99	$0^{(+)}$	1133.66 *3*	100	609.317	2^+	(E2)		0.00578 *8*	α(K)=0.00462 *6*; α(L)=0.000888 *12*; α(M)=0.0002120 *30*; α(N)=5.45×10^{-5} *8* α(O)=1.123×10^{-5} *16*; α(P)=1.385×10^{-6} *19*
1764.520	1^+	221.5 *2*	0.018 *6*	1543.369	2^+	[M1,E2]		0.7 *4*	α(K)=0.5 *4*; α(L)=0.157 *10*; α(M)=0.0391 *6*; α(N)=0.01005 *17*; α(O)=0.00202 *10* α(P)=0.00023 *5*
		348.92 *6*	0.68 *15*	1415.498	0^+	[M1]		0.335 *5*	α(K)=0.273 *4*; α(L)=0.0475 *7*; α(M)=0.01118 *16*; α(N)=0.00288 *4*; α(O)=0.000603 *8* α(P)=7.79×10^{-5} *11*
		386.77 *5*	1.93 *12*	1377.680	2^+	[M1,E2]		0.16 *10*	α(K)=0.12 *8*; α(L)=0.027 *9*; α(M)=0.0065 *20*; α(N)=0.0017 *5*; α(O)=3.4×10^{-4} *11* α(P)=4.1×10^{-5} *18*
		1155.210 *8*	10.69 *5*	609.317	2^+	M1+E2	+0.48 *18*	0.0127 *10*	α(K)=0.0104 *9*; α(L)=0.00177 *13*; α(M)=0.000415 *31*; α(N)=0.000107 *8*; α(O)=2.23×10^{-5} *17* α(P)=2.89×10^{-6} *23*
		1764.491 *14*	100.0 *3*	0.0	0^+	M1		0.00512 *7*	α(K)=0.00397 *6*; α(L)=0.000661 *9*; α(M)=0.0001549 *22*; α(N)=3.98×10^{-5} *6*; α(O)=8.35×10^{-6} *12* α(P)=1.086×10^{-6} *15*
1823.1	(8^+)	239.6 *5*	100	1583.5	(8^+)	M1+E2	0.73 *+26−23*	0.70 *10*	α(K)=0.54 *10*; α(L)=0.125 *4*; α(M)=0.0304 *7*;

$^{214}_{84}Po_{130}$-5

Adopted Levels, Gammas (continued)

γ(^{214}Po) (continued)

E_i(level)	J_i^π	E_γ †	I_γ †	E_f	J_f^π	Mult.†	α	Comments
								α(N)=0.00781 *18*; α(O)=0.00159 *5* α(P)=0.000190 *13* Mult.,δ: from ^{208}Pb(^{16}O,Xγ).
1842.9		503.5 *5*	100	1339.4	(6$^+$)			
1847.446	2$^+$	304.43 *12*	0.58 *19*	1543.369	2$^+$	[M1,E2]	0.30 *18*	α(K)=0.23 *17*; α(L)=0.055 *14*; α(M)=0.0135 *27*; α(N)=0.0035 *7*; α(O)=0.00071 *17* α(P)=8.4×10^{-5} *30*
		469.76 *4*	2.26 *13*	1377.680	2$^+$	[M1,E2]	0.09 *6*	α(K)=0.07 *5*; α(L)=0.015 *6*; α(M)=0.0036 *13*; α(N)=9.4×10^{-4} *35*; α(O)=1.9×10^{-4} *8* α(P)=2.4×10^{-5} *11*
		572.77 *7*	1.33 *10*	1274.764	3$^-$	[E1]	0.00779 *11*	α(K)=0.00642 *9*; α(L)=0.001042 *15*; α(M)=0.0002433 *34*; α(N)=6.22×10^{-5} *9* α(O)=1.287×10^{-5} *18*; α(P)=1.610×10^{-6} *23*
		832.37 *11*	0.48 *5*	1015.040	(4$^+$)			
		1238.122 *10*	100.0 *3*	609.317	2$^+$	M1	0.01201 *17*	α(K)=0.00984 *14*; α(L)=0.001653 *23*; α(M)=0.000388 *5*; α(N)=9.97×10^{-5} *14* α(O)=2.090×10^{-5} *29*; α(P)=2.71×10^{-6} *4*
		1847.433 *17*	34.76 *23*	0.0	0$^+$	[E2]	2.53×10^{-3} *4*	α(K)=0.001916 *27*; α(L)=0.000323 *5*; α(M)=7.59×10^{-5} *11*; α(N)=1.948×10^{-5} *27* α(O)=4.06×10^{-6} *6*; α(P)=5.17×10^{-7} *7*
1890.306	(2)$^+$	615.76 *6*	3.8 *6*	1274.764	3$^-$			
		1280.976 *12*	100.0 *5*	609.317	2$^+$	M1	0.01102 *15*	α(K)=0.00901 *13*; α(L)=0.001513 *21*; α(M)=0.000355 *5*; α(N)=9.13×10^{-5} *13* α(O)=1.913×10^{-5} *27*; α(P)=2.483×10^{-6} *35*
		1890.30 *14*	5.8 *7*	0.0	0$^+$			
1982.3	(7)	642.9 *5*	100	1339.4	(6$^+$)	D		
1994.639	1$^-$	(104.4 *2*)		1890.306	(2)$^+$			
		230 *1*	0.36 *12*	1764.520	1$^+$	[E1]	0.0581 *8*	α(K)=0.0471 *7*; α(L)=0.00842 *12*; α(M)=0.001986 *28*; α(N)=0.000506 *7* α(O)=0.0001028 *14*; α(P)=1.221×10^{-5} *17*
		333.37 *8*	7.9 *6*	1661.283	2$^+$	[E1]	0.02466 *35*	α(K)=0.02014 *28*; α(L)=0.00345 *5*; α(M)=0.000810 *11*; α(N)=0.0002069 *29* α(O)=4.24×10^{-5} *6*; α(P)=5.16×10^{-6} *7*
		579.14 *16*		1415.498	0$^+$	[E1]	0.00762 *11*	α(K)=0.00629 *9*; α(L)=0.001019 *14*; α(M)=0.0002377 *33*; α(N)=6.08×10^{-5} *9* α(O)=1.258×10^{-5} *18*; α(P)=1.574×10^{-6} *22*
		617.02 *13*	3.3 *3*	1377.680	2$^+$	[E1]	0.00672 *9*	α(K)=0.00555 *8*; α(L)=0.000894 *13*; α(M)=0.0002085 *29*; α(N)=5.33×10^{-5} *7* α(O)=1.104×10^{-5} *15*; α(P)=1.385×10^{-6} *19*
		719.86 *3*	51.1 *17*	1274.764	3$^-$	E2	0.01424 *20*	α(K)=0.01075 *15*; α(L)=0.00264 *4*; α(M)=0.000646 *9*; α(N)=0.0001659 *23*; α(O)=3.37×10^{-5} *5* α(P)=3.93×10^{-6} *6*

$^{214}_{84}Po_{130}$-6

Adopted Levels, Gammas (continued)

γ(^{214}Po) (continued)

E_i(level)	J_i^π	E_γ †	I_γ †	E_f	J_f^π	Mult. †	δ †	α	$I_{(\gamma+ce)}$	Comments
1994.639	1^-	1385.310 *14*	100.0 *9*	609.317	2^+	D				
2010.830	(2^+)	297.81 *24*		1712.92	(3^+)					
		595.24 *7*	1.30 *10*	1415.498	0^+					
		633.09 *5*	4.2 *3*	1377.680	2^+					
		1401.515 *13*	100.0 *4*	609.317	2^+	(M1+E2)	+1.6 *5*	0.0053 *8*		α(K)=0.0043 *7*; α(L)=0.00074 *11*; α(M)=0.000175 *25*; α(N)=4.5×10^{-5} *7*; α(O)=9.4×10^{-6} *14* α(P)=1.19×10^{-6} *19*
		2010.80 *12*	3.31 *17*	0.0	0^+					
2017.314	0^+	252.79 *6*	0.51 *8*	1764.520	1^+	[M1]		0.810 *11*		α(K)=0.658 *9*; α(L)=0.1154 *16*; α(M)=0.0272 *4*; α(N)=0.00701 *10*; α(O)=0.001466 *21* α(P)=0.0001895 *27*
		356.05 *16*	0.29 *8*	1661.283	2^+	[E2]		0.0769 *11*		α(K)=0.0457 *6*; α(L)=0.02335 *33*; α(M)=0.00601 *8*; α(N)=0.001542 *22*; α(O)=0.000303 *4* α(P)=3.12×10^{-5} *4*
		639.61 *5*	1.33 *19*	1377.680	2^+	[E2]		0.01832 *26*		α(K)=0.01352 *19*; α(L)=0.00363 *5*; α(M)=0.000896 *13*; α(N)=0.0002301 *32* α(O)=4.65×10^{-5} *7*; α(P)=5.33×10^{-6} *7*
		1407.988 *12*	100.0 *4*	609.317	2^+	(E2)		0.00389 *5*		α(K)=0.00312 *4*; α(L)=0.000559 *8*; α(M)=0.0001323 *19*; α(N)=3.40×10^{-5} *5*; α(O)=7.04×10^{-6} *10* α(P)=8.84×10^{-7} *12*
		2017.309 *12*		0.0	0^+	E0			0.0023 *4*	
2088.44	$(1,2^+)$	(71.1 *2*)		2017.314	0^+					
		710.69 *10*	100.0 *25*	1377.680	2^+					
		1479.19 *12*	75 *10*	609.317	2^+					
2118.535	1^+	388.89 *5*	18.16 *21*	1729.612	2^+	[M1]		0.2497 *35*		α(K)=0.2034 *28*; α(L)=0.0353 *5*; α(M)=0.00832 *12*; α(N)=0.002141 *30*; α(O)=0.000448 *6* α(P)=5.80×10^{-5} *8*
		703.10 *4*	22.6 *9*	1415.498	0^+	[M1]		0.0519 *7*		α(K)=0.0424 *6*; α(L)=0.00725 *10*; α(M)=0.001703 *24*; α(N)=0.000438 *6*; α(O)=9.17×10^{-5} *13* α(P)=1.188×10^{-5} *17*
		740.77 *13*	2.03 *11*	1377.680	2^+	[M1,E2]		0.029 *16*		α(K)=0.024 *13*; α(L)=0.0044 *19*; α(M)=0.0010 *4*; α(N)=2.7×10^{-4} *11*; α(O)=5.6×10^{-5} *24* α(P)=7.0×10^{-6} *33*
		1509.211 *10*	100.0 *6*	609.317	2^+	(M1+E2)	−0.056 *22*	0.00733 *10*		α(K)=0.00591 *8*; α(L)=0.000989 *14*; α(M)=0.0002317 *33*; α(N)=5.96×10^{-5} *8* α(O)=1.249×10^{-5} *18*; α(P)=1.623×10^{-6} *23*

$^{214}_{84}Po_{130}$-7

Adopted Levels, Gammas (continued)

γ(^{214}Po) (continued)

E_i(level)	J_i^π	E_γ †	I_γ †	E_f	J_f^π	Mult. †	α	Comments
2118.535	1+	2118.514 *25*	54.4 *4*	0.0	0+	M1	0.00356 *5*	α(K)=0.002483 *35*; α(L)=0.000412 *6*; α(M)=9.65×10^{-5} *14*; α(N)=2.481×10^{-5} *35* α(O)=5.20×10^{-6} *7*; α(P)=6.77×10^{-7} *9*
2147.86	(1−,2+)	486.3 *3*	5.1 *21*	1661.283	2+			
		769.7 *5*	6.7 *22*	1377.680	2+			
		872.95 *19*	4.0 *9*	1274.764	3−			
		1538.53 *6*	100 *5*	609.317	2+	D(+Q)		
		2148.00 *12*	3.1 *3*	0.0	0+			
2157.9	(9)	574.4 *5*	100	1583.5	(8+)	D		Mult.: from R_{ADO} in ^{208}Pb(^{16}O,Xγ).
2179.3	(10+)	595.8 *5*	100	1583.5	(8+)	Q		Mult.: from R_{ADO} in ^{208}Pb(^{16}O,Xγ).
2192.536	(2)+	428.07 *8*	1.61 *19*	1764.520	1+			
		649.20 *5*	7.8 *10*	1543.369	2+			
		814.92 *11*	5.5 *5*	1377.680	2+			
		917.7 *3*	0.6 *4*	1274.764	3−			
		1583.203 *17*	100.0 *8*	609.317	2+	M1	0.00655 *9*	α(K)=0.00524 *7*; α(L)=0.000875 *12*; α(M)=0.0002051 *29*; α(N)=5.28×10^{-5} *7* α(O)=1.106×10^{-5} *15*; α(P)=1.437×10^{-6} *20*
		2192.58 *16*	5.5 *6*	0.0	0+			
2204.102	1+	461.06 *11*	0.88 *13*	1742.99	0(+)	[M1]	0.1581 *22*	α(K)=0.1289 *18*; α(L)=0.02229 *31*; α(M)=0.00525 *7*; α(N)=0.001351 *19*; α(O)=0.000283 *4* α(P)=3.66×10^{-5} *5*
		474.43 *5*	1.97 *18*	1729.612	2+	[M1+E2]	0.09 *6*	α(K)=0.07 *5*; α(L)=0.015 *6*; α(M)=0.0035 *13*; α(N)=9.1×10^{-4} *34*; α(O)=1.9×10^{-4} *7* α(P)=2.3×10^{-5} *11*
		542.81 *7*	1.49 *20*	1661.283	2+	[M1+E2]	0.06 *4*	α(K)=0.051 *32*; α(L)=0.010 *4*; α(M)=0.0024 *10*; α(N)=6.2×10^{-4} *25*; α(O)=1.3×10^{-4} *5* α(P)=1.6×10^{-5} *8*
		660.87 *14*	0.96 *10*	1543.369	2+	[M1+E2]	0.039 *22*	α(K)=0.031 *19*; α(L)=0.0059 *26*; α(M)=0.0014 *6*; α(N)=3.6×10^{-4} *15*; α(O)=7.5×10^{-5} *33* α(P)=9.E−6 *5*
		788.2 *3*	0.30 *6*	1415.498	0+	[M1]	0.0385 *5*	α(K)=0.0315 *4*; α(L)=0.00536 *8*; α(M)=0.001260 *18*; α(N)=0.000324 *5*; α(O)=6.79×10^{-5} *10* α(P)=8.80×10^{-6} *12*
		826.41 *11*	2.1 *3*	1377.680	2+	[M1+E2]	0.022 *12*	α(K)=0.018 *10*; α(L)=0.0033 *14*; α(M)=7.8×10^{-4} *33*; α(N)=2.0×10^{-4} *9*; α(O)=4.2×10^{-5} *18* α(P)=5.3×10^{-6} *25*
		1594.75 *8*	5.5 *4*	609.317	2+	[M1+E2]	0.0048 *16*	α(K)=0.0038 *13*; α(L)=6.5×10^{-4} *21*; α(M)=1.5×10^{-4} *5*; α(N)=3.9×10^{-5} *13*; α(O)=8.2×10^{-6} *27* α(P)=1.0×10^{-6} *4*
		2204.10 *4*	100.0 *5*	0.0	0+	M1	0.00333 *5*	α(K)=0.002243 *31*; α(L)=0.000372 *5*; α(M)=8.70×10^{-5} *12*; α(N)=2.239×10^{-5} *31* α(O)=4.69×10^{-6} *7*; α(P)=6.11×10^{-7} *9*

$^{214}_{84}Po_{130}$-8

Adopted Levels, Gammas (continued)

γ(^{214}Po) (continued)

E_i(level)	J_i^π	E_γ †	I_γ †	E_f	J_f^π	Mult.†	α	Comments
2208.69	(2⁻,3)	547.21 *17*	10.4 *10*	1661.283	2⁺			
		934.1 *2*	15 *3*	1274.764	3⁻			
		1599.56 *12*	100 *6*	609.317	2⁺	D+Q		
2266.40	2⁺	(61.0 *8*)		2204.102	1⁺	[M1+E2]	40 *32*	α(L)=30 *23*; α(M)=8 *6*; α(N)=2.0 *16*; α(O)=0.39 *30*; α(P)=0.036 *25*
		501.97 *12*	28 *4*	1764.520	1⁺	[M1+E2]	0.08 *5*	α(K)=0.06 *4*; α(L)=0.013 *5*; α(M)=0.0030 *12*; α(N)=7.8×10⁻⁴ *30*; α(O)=1.6×10⁻⁴ *6*; α(P)=2.0×10⁻⁵ *9*
		536.78 *4*	100 *13*	1729.612	2⁺	[M1+E2]	0.07 *4*	α(K)=0.053 *33*; α(L)=0.010 *4*; α(M)=0.0025 *10*; α(N)=6.4×10⁻⁴ *26*; α(O)=1.3×10⁻⁴ *6* α(P)=1.6×10⁻⁵ *8*
		723.01 *12*	56 *6*	1543.369	2⁺	E2	0.01411 *20*	α(K)=0.01066 *15*; α(L)=0.00261 *4*; α(M)=0.000638 *9*; α(N)=0.0001639 *23*; α(O)=3.33×10⁻⁵ *5* α(P)=3.89×10⁻⁶ *5*
		991.56 *19*	15 *4*	1274.764	3⁻	[E1]	0.00276 *4*	α(K)=0.002293 *32*; α(L)=0.000356 *5*; α(M)=8.27×10⁻⁵ *12*; α(N)=2.119×10⁻⁵ *30* α(O)=4.41×10⁻⁶ *6*; α(P)=5.63×10⁻⁷ *8*
		1657.04 *18*	77 *7*	609.317	2⁺	[M1+E2]	0.0044 *15*	α(K)=0.0035 *12*; α(L)=5.9×10⁻⁴ *19*; α(M)=1.4×10⁻⁴ *4*; α(N)=3.6×10⁻⁵ *11*; α(O)=7.4×10⁻⁶ *24* α(P)=9.6×10⁻⁷ *32*
		2266.52 *13*	26.1 *14*	0.0	0⁺	[E2]	2.00×10⁻³ *3*	α(K)=0.001327 *19*; α(L)=0.0002170 *30*; α(M)=5.07×10⁻⁵ *7*; α(N)=1.302×10⁻⁵ *18* α(O)=2.72×10⁻⁶ *4*; α(P)=3.49×10⁻⁷ *5*
2272.1	(9)	449.0 *5*	100	1823.1	(8⁺)	D		Mult.: from R_{ADO} in ^{208}Pb(^{16}O,Xγ).
2293.362	(1⁺,2⁺)	878.02 *12*	3.5 *9*	1415.498	0⁺			
		915.73 *15*	7.8 *9*	1377.680	2⁺			
		1684.012 *23*	71 *4*	609.317	2⁺	(M1+E2)	0.0043 *14*	α(K)=0.0034 *11*; α(L)=5.7×10⁻⁴ *18*; α(M)=1.3×10⁻⁴ *4*; α(N)=3.4×10⁻⁵ *11*; α(O)=7.2×10⁻⁶ *23* α(P)=9.2×10⁻⁷ *30*
		2293.38 *3*	100.0 *15*	0.0	0⁺			
2348.3	(1,2⁺)	1739.1 *8*		609.317	2⁺			
		2348.0 *13*	100 *70*	0.0	0⁺			
2360.97	(1,2⁺)	631.2 *4*	100 *13*	1729.612	2⁺			
		1751.6 *7*	26 *21*	609.317	2⁺			
		2360.99 *19*	9.2 *13*	0.0	0⁺			
2377.6	(10⁺)	554.5 *5*	100	1823.1	(8⁺)	Q		Mult.: from R_{ADO} in ^{208}Pb(^{16}O,Xγ).
2423.24	(1,2⁺)	230.66 *14*		2192.536	(2)⁺			
		334.80 *8*	100 *11*	2088.44	(1,2⁺)			
		658.76 *21*	44 *8*	1764.520	1⁺			
		693.1# *2*	17 *6*	1729.612	2⁺			
		710.27# *8*		1712.92	(3⁺)			
		1045.73 *16*	66 *8*	1377.680	2⁺			
		1813.73 *14*	34 *3*	609.317	2⁺			

$^{214}_{84}Po_{130}$-9

Adopted Levels, Gammas (continued)

γ(^{214}Po) (continued)

E_i(level)	J_i^π	E_γ †	I_γ †	E_f	J_f^π	Mult.†	α	Comments
2423.24	(1,2$^+$)	2423.32 *13*	15.5 *14*	0.0	0$^+$			
2447.701	1$^-$	255.16 *10*		2192.536	(2)$^+$			
		452.91 *9*	1.97 *24*	1994.639	1$^-$	[M1+E2]	0.10 *6*	α(K)=0.08 *5*; α(L)=0.017 *7*; α(M)=0.0040 *15*; α(N)=0.0010 *4*; α(O)=2.1×10^{-4} *8*; α(P)=2.6×10^{-5} *12*
		683.21 *6*	5.3 *6*	1764.520	1$^+$	[E1]	0.00551 *8*	α(K)=0.00456 *6*; α(L)=0.000728 *10*; α(M)=0.0001696 *24*; α(N)=4.34×10^{-5} *6* α(O)=9.00×10^{-6} *13*; α(P)=1.133×10^{-6} *16*
		704.96 *25*	3.0 *6*	1742.99	0$^{(+)}$	[E1]	0.00519 *7*	α(K)=0.00429 *6*; α(L)=0.000684 *10*; α(M)=0.0001593 *22*; α(N)=4.08×10^{-5} *6* α(O)=8.45×10^{-6} *12*; α(P)=1.066×10^{-6} *15*
		786.35 *16*	21 *3*	1661.283	2$^+$	[E1]	0.00422 *6*	α(K)=0.00350 *5*; α(L)=0.000552 *8*; α(M)=0.0001285 *18*; α(N)=3.29×10^{-5} *5*; α(O)=6.83×10^{-6} *10* α(P)=8.65×10^{-7} *12*
		904.35 *9*	4.7 *6*	1543.369	2$^+$	[E1]	0.00326 *5*	α(K)=0.00270 *4*; α(L)=0.000423 *6*; α(M)=9.83×10^{-5} *14*; α(N)=2.517×10^{-5} *35*; α(O)=5.23×10^{-6} *7* α(P)=6.66×10^{-7} *9*
		1032.39 *8*	4.1 *6*	1415.498	0$^+$	[E1]	0.00257 *4*	α(K)=0.002134 *30*; α(L)=0.000331 *5*; α(M)=7.68×10^{-5} *11*; α(N)=1.966×10^{-5} *28* α(O)=4.09×10^{-6} *6*; α(P)=5.23×10^{-7} *7*
		1069.97 *8*	17.6 *12*	1377.680	2$^+$	[E1]	2.41×10^{-3} *3*	α(K)=0.002003 *28*; α(L)=0.000310 *4*; α(M)=7.19×10^{-5} *10*; α(N)=1.842×10^{-5} *26* α(O)=3.84×10^{-6} *5*; α(P)=4.91×10^{-7} *7*
		1173.01 *10*	3.5 *3*	1274.764	3$^-$	[E2]	0.00542 *8*	α(K)=0.00434 *6*; α(L)=0.000824 *12*; α(M)=0.0001965 *28*; α(N)=5.05×10^{-5} *7* α(O)=1.041×10^{-5} *15*; α(P)=1.289×10^{-6} *18*
		1838.36 *5*	22.6 *9*	609.317	2$^+$	[E1]	1.36×10^{-3} *2*	α(K)=0.000800 *11*; α(L)=0.0001206 *17*; α(M)=2.79×10^{-5} *4*; α(N)=7.15×10^{-6} *10* α(O)=1.495×10^{-6} *21*; α(P)=1.933×10^{-7} *27*
		2447.69 *3*	100.0 *6*	0.0	0$^+$	E1	1.42×10^{-3} *2*	α(K)=0.000503 *7*; α(L)=7.52×10^{-5} *11*; α(M)=1.735×10^{-5} *24*; α(N)=4.45×10^{-6} *6*; α(O)=9.31×10^{-7} *13* α(P)=1.210×10^{-7} *17*
2482.459	(1$^-$,2$^+$)	273.79 *5*	28 *3*	2208.69	(2$^-$,3)			
		334.9 *5*	12.0 *20*	2147.86	(1$^-$,2$^+$)			
		394.04# *8*	2.9 *3*	2088.44	(1,2$^+$)			
		487.6 *3*	6.1 *20*	1994.639	1$^-$			
		634.77 *16*	1.4 *5*	1847.446	2$^+$			
		752.84 *3*	29.0 *20*	1729.612	2$^+$			
		821.18 *3*	36 *3*	1661.283	2$^+$			
		939.6 *5*	4.3 *9*	1543.369	2$^+$			
		1104.68 *19*	16.8 *9*	1377.680	2$^+$			
		1207.68 *3*	100 *4*	1274.764	3$^-$			

$^{214}_{84}Po_{130}$-10

Adopted Levels, Gammas (continued)

γ(^{214}Po) (continued)

E_i(level)	J_i^π	E_γ †	I_γ †	E_f	J_f^π	Mult.†	Comments
2482.459	(1⁻,2⁺)	1873.16 *5*	47.0 *20*	609.317	2⁺		
		2482.8‡ *4*	0.22 *4*	0.0	0⁺		
2505.34	(1⁻,2⁺)	961.66 *17*	7.0 *9*	1543.369	2⁺		
		1230.6 *4*	5.5 *24*	1274.764	3⁻		
		1896.05 *14*	100 *6*	609.317	2⁺		
		2505.46 *13*	3.8 *6*	0.0	0⁺		
2508.12	(0⁺)	304.00 *4*	52 *5*	2204.102	1⁺		
		496.89 *18*	14 *4*	2010.830	(2⁺)		
		965.00‡ *10*	21 *6*	1543.369	2⁺		
		1130.38 *20*	74 *8*	1377.680	2⁺		
		1898.68 *16*	100 *18*	609.317	2⁺		
2544.92		(36.8 *2*)		2508.12	(0⁺)		
		1167.26 *18*	40 *6*	1377.680	2⁺		
		1935.58 *20*	100 *10*	609.317	2⁺		
2553.0		1943.7 *8*		609.317	2⁺		
		2553.0 *6*	≈100	0.0	0⁺		
2562.4		1953.4 *6*		609.317	2⁺		
		2562.0 *6*	100 *50*	0.0	0⁺		
2604.68	(2⁺)	396.02 *6*	21.1 *25*	2208.69	(2⁻,3)		
		840.4 *5*	7.5 *21*	1764.520	1⁺		
		891.8 *3*		1712.92	(3⁺)		
		943.33 *12*	12.9 *21*	1661.283	2⁺		
		1226.7 *3*	100 *40*	1377.680	2⁺		
		1329.94 *17*	9.3 *11*	1274.764	3⁻		
		1994.6 *6*	5.4 *21*	609.317	2⁺		
		2604.5 *5*	0.32 *7*	0.0	0⁺		
2605.1		333.0 *5*	100	2272.1	(9)		
2612.5	(12⁺)	433.2 *5*	100	2179.3	(10⁺)	Q	Mult.: from R_{ADO} in ^{208}Pb(^{16}O,Xγ).
2630.84	(1,2⁺)	866.0 *8*		1764.520	1⁺		
		1087.4	70 *30*	1543.369	2⁺		
		1253.14 *12*		1377.680	2⁺		
		2021.52 *12*	100 *11*	609.317	2⁺		
		2630.9 *3*	4.0 *9*	0.0	0⁺		
2662.33	(2⁺)	651.50 *16*	<2.6	2010.830	(2⁺)		
		949.8 *3*	7 *3*	1712.92	(3⁺)		
		1118.9 *5*	56 *14*	1543.369	2⁺		
		1284 *1*	17.2 *13*	1377.680	2⁺		
		1387.5 *2*		1274.764	3⁻		
		2052.96 *12*	100 *7*	609.317	2⁺		
		2662.4 *7*	0.33 *7*	0.0	0⁺		
2670.0		292.4 *5*	100	2377.6	(10⁺)		
2694.62	(1⁻,2⁺)	247.2 *8*		2447.701	1⁻		
		485.93 *11*	28 *5*	2208.69	(2⁻,3)		

$^{214}_{84}Po_{130}$-11

Adopted Levels, Gammas (continued)

γ(^{214}Po) (continued)

E_i(level)	J_i^π	E_γ †	I_γ †	E_f	J_f^π	Mult. †	α	Comments
2694.62	(1⁻,2⁺)	677.41 *15*	7 *3*	2017.314	0⁺			
		699.86 *18*	22 *5*	1994.639	1⁻			
		847.14 *11*	31 *4*	1847.446	2⁺			
		930.2 *2*	32 *9*	1764.520	1⁺			
		952.2 *8*	7 *3*	1742.99	0⁽⁺⁾			
		965.00‡ *10*		1729.612	2⁺			
		1033.31 *18*	25 *4*	1661.283	2⁺			
		1316.99 *15*	100 *11*	1377.680	2⁺			
		1419.70 *29*	6.1 *11*	1274.764	3⁻			
		2085.19 *15*	10.0 *6*	609.317	2⁺			
		2694.66 *13*	36.7 *17*	0.0	0⁺			
2698.60	(1,2)⁺	494.21 *9*	24 *3*	2204.102	1⁺			
		687.56 *21*	15 *4*	2010.830	(2⁺)			
		934.5 *5*	21 *6*	1764.520	1⁺			
		1038.0‡ *6*	17 *4*	1661.283	2⁺			
		1155.6 *5*	34 *9*	1543.369	2⁺			
		1321.5	10 *5*	1377.680	2⁺			
		2089.65 *15*	100 *6*	609.317	2⁺	M1	0.00365 *5*	α(K)=0.00257 *4*; α(L)=0.000427 *6*; α(M)=9.99×10⁻⁵ *14*; α(N)=2.57×10⁻⁵ *4*; α(O)=5.39×10⁻⁶ *8* α(P)=7.01×10⁻⁷ *10*
		2699.21 *20*	6.1 *5*	0.0	0⁺			
2719.26	1⁺	600.0 *5*	7 *3*	2118.535	1⁺	[M1+E2]	0.050 *29*	α(K)=0.040 *24*; α(L)=0.0077 *33*; α(M)=0.0018 *8*; α(N)=4.7×10⁻⁴ *20*; α(O)=1.0×10⁻⁴ *4* α(P)=1.2×10⁻⁵ *6*
		630.81 *7*	15.7 *17*	2088.44	(1,2⁺)			
		708.95 *23*	11.7 *13*	2010.830	(2⁺)			
		976.18 *12*	14.3 *22*	1742.99	0⁽⁺⁾			
		1058.1	8 *3*	1661.283	2⁺	[M1+E2]	0.012 *6*	α(K)=0.010 *5*; α(L)=0.0018 *7*; α(M)=4.2×10⁻⁴ *17*; α(N)=1.1×10⁻⁴ *4*; α(O)=2.2×10⁻⁵ *9* α(P)=2.8×10⁻⁶ *12*
		1303.75 *8*	100 *9*	1415.498	0⁺	M1	0.01054 *15*	α(K)=0.00861 *12*; α(L)=0.001446 *20*; α(M)=0.000339 *5*; α(N)=8.72×10⁻⁵ *12* α(O)=1.827×10⁻⁵ *26*; α(P)=2.372×10⁻⁶ *33*
		1341.49 *16*	20 *3*	1377.680	2⁺	[M1+E2]	0.0070 *28*	α(K)=0.0057 *23*; α(L)=1.0×10⁻³ *4*; α(M)=2.3×10⁻⁴ *8*; α(N)=5.9×10⁻⁵ *22*; α(O)=1.2×10⁻⁵ *5* α(P)=1.6×10⁻⁶ *6*
		2109.98 *12*	82 *4*	609.317	2⁺	[M1+E2]	0.0029 *7*	α(K)=0.0020 *5*; α(L)=3.3×10⁻⁴ *8*; α(M)=7.8×10⁻⁵ *20*; α(N)=2.0×10⁻⁵ *5*; α(O)=4.2×10⁻⁶ *11* α(P)=5.4×10⁻⁷ *14*
		2719.32 *19*	1.70 *17*	0.0	0⁺	[M1]	0.00256 *4*	α(K)=0.001308 *18*; α(L)=0.0002158 *30*; α(M)=5.05×10⁻⁵ *7*; α(N)=1.299×10⁻⁵ *18* α(O)=2.72×10⁻⁶ *4*; α(P)=3.55×10⁻⁷ *5*

$^{214}_{84}Po_{130}$-12

Adopted Levels, Gammas (continued)

γ(^{214}Po) (continued)

E_i(level)	J_i^π	E_γ †	I_γ †	E_f	J_f^π	Mult.†	Comments
2728.616	(0$^+$,1,2)	280.97 *5*	17.1 *24*	2447.701	1$^-$		
		519.90 *5*	4.4 *5*	2208.69	(2$^-$,3)		
		524.60 *7*	4.5 *5*	2204.102	1$^+$		
		733.81 *10*	10.9 *10*	1994.639	1$^-$		
		964.08 *3*	100 *5*	1764.520	1$^+$		
		1067.4 *3*	6.8 *16*	1661.283	2$^+$		
		1351# *1*	1.8 *5*	1377.680	2$^+$		
		2120.0 *10*	1.8 *5*	609.317	2$^+$		
2734.4	(12$^+$)	356.8 *5*	100	2377.6	(10$^+$)	Q	Mult.: from R_{ADO} in ^{208}Pb(^{16}O,Xγ).
2769.91	(1,2$^+$)	1108.8	23 *8*	1661.283	2$^+$		
		1226.8 *6*	100 *30*	1543.369	2$^+$		
		1392.5# *4*	56 *23*	1377.680	2$^+$		
		2160.4 *3*	6.1 *15*	609.317	2$^+$		
		2769.92 *15*	82 *5*	0.0	0$^+$		
2785.97	(1,2$^+$)	581.9 *8*		2204.102	1$^+$		
		938.65 *16*	85 *24*	1847.446	2$^+$		
		1021.4 *3*	100 *18*	1764.520	1$^+$		
		1370.5	67 *15*	1415.498	0$^+$		
		2176.52 *19*	33 *12*	609.317	2$^+$		
		2785.93 *15*	36 *3*	0.0	0$^+$		
2794.1		2184.8 *6*	100	609.317	2$^+$		
2802.54		598.5 *8*		2204.102	1$^+$		
		1038.0‡ *2*	100 *17*	1764.520	1$^+$		
		2193.3 *6*		609.317	2$^+$		
2826.82	(1,2$^+$)	282.0 *4*	53 *20*	2544.92			
		1062.4	70 *40*	1764.520	1$^+$		
		1448.85 *24*	100 *50*	1377.680	2$^+$		
		2826.96 *19*	13.3 *15*	0.0	0$^+$		
2860.93	(1,2$^+$)	1013.4 *10*	100 *30*	1847.446	2$^+$		
		1317.7 *4*		1543.369	2$^+$		
		1483.5	100 *30*	1377.680	2$^+$		
		2251.55 *15*	41 *3*	609.317	2$^+$		
		2861.1 *4*	3.1 *7*	0.0	0$^+$		
2869.63	(2$^-$,3$^-$)	422.0 *8*		2447.701	1$^-$		
		1594.8 *3*	60 *30*	1274.764	3$^-$		
		2260.32 *20*	100 *5*	609.317	2$^+$		
2880.36	(1$^-$,2$^+$)	2270.9 *4*	13.2 *23*	609.317	2$^+$		
		2880.35 *14*	100 *14*	0.0	0$^+$		
2893.63	(1,2$^+$)	626.4# *6*	23 *8*	2266.40	2$^+$		
		1515.7#	100 *30*	1377.680	2$^+$		
		2284.33 *18*	28 *3*	609.317	2$^+$		
		2893.59 *14*	33 *3*	0.0	0$^+$		

$^{214}_{84}Po_{130}$-13

Adopted Levels, Gammas (continued)

γ(^{214}Po) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π
2896.98		2287.65 *23*	100	609.317	2^+
2919.5		2310.2 *3*	100	609.317	2^+
2921.89	(1,2^+)	2312.45 *15*	67 *7*	609.317	2^+
		2921.97 *15*	100 *7*	0.0	0^+
2928.55	(1,2^+)	2319.3[#] *3*	38 *13*	609.317	2^+
		2928.53 *22*	100 *8*	0.0	0^+
2934.54	(1,2^+)	2325.18 *25*	100 *11*	609.317	2^+
		2934.54 *25*	27 *5*	0.0	0^+
2940.67	(1^-,2^+)	1279.0 *7*	57 *10*	1661.283	2^+
		1665.86 *19*	37 *12*	1274.764	3^-
		2331.38 *12*	100 *14*	609.317	2^+
		2940.0	16 *6*	0.0	0^+
2962.8		2353.5 *7*	100	609.317	2^+
2967.6		1693.4 *8*		1274.764	3^-
		2358.0 *6*		609.317	2^+
2978.93	(1,2^+)	2369.56 *17*	20 *3*	609.317	2^+
		2978.94 *15*	100 *3*	0.0	0^+
2986.22	(2^-,3)	1711.0[#] *8*	20 *10*	1274.764	3^-
		2376.89 *13*	100 *10*	609.317	2^+
3000.00	(1^-,2^+)	280.6 *4*		2719.26	1^+
		551.9 *8*		2447.701	1^-
		1723.7 *8*		1274.764	3^-
		2390.82 *21*	18.4 *16*	609.317	2^+
		3000.0 *2*	100 *11*	0.0	0^+
3003.4		1156 *1*	100	1847.446	2^+
3005.8		2396.5 *6*	100	609.317	2^+
3014.10	(1,2^+)	314.9 *8*		2698.60	$(1,2)^+$
		1285.1 *5*	100 *30*	1729.612	2^+
		1353.0[#] *8*	28 *7*	1661.283	2^+
		1471.1 *6*	10 *4*	1543.369	2^+
		1598.0 *5*	37 *17*	1415.498	0^+
		1636.36 *19*	71 *11*	1377.680	2^+
		2405.1 *5*	2.6 *9*	609.317	2^+
3022.3	(2^-,3,4^+)	1011.8 *8*		2010.830	(2^+)
		1361.2 *8*		1661.283	2^+
		1644.0 *8*		1377.680	2^+
		1747.2 *8*		1274.764	3^-
		2413.1 *4*		609.317	2^+
3030.3		2421.0 *6*	100	609.317	2^+
3039.3		2430.0 *6*	100	609.317	2^+
3053.88	(1,2^+)	1206.4 *8*		1847.446	2^+
		1637 *1*	33 *13*	1415.498	0^+
		1676.1	<10.9	1377.680	2^+
		2444.7 *7*	37 *11*	609.317	2^+
		3053.9 *2*	100 *11*	0.0	0^+
3068.3		2459.0 *8*	100	609.317	2^+
3078.7		2469.4 *6*	100	609.317	2^+
3081.84	(1,2^+)	2472.9	38 *13*	609.317	2^+
		3081.79 *25*	100 *30*	0.0	0^+
3094.0	(1^-,2^+)	1717.0[#] *8*	100 *25*	1377.680	2^+
		1819.2 *4*	<25.0	1274.764	3^-
		2482.8[‡#] *4*	37 *16*	609.317	2^+
		3094.0 *4*	11 *3*	0.0	0^+
3139.0		2529.7 *8*	100	609.317	2^+
3142.6	(1,2^+)	1481.3	70 *30*	1661.283	2^+
		3142.6 *3*	100 *11*	0.0	0^+
3149.2	(1,2^+)	2540.3 *8*		609.317	2^+
		3149.0 *5*	≈100	0.0	0^+
3160.4	(1,2^+)	2550.6 *7*	58 *17*	609.317	2^+
		3160.7 *6*	100 *30*	0.0	0^+
3164.4		2555.1 *8*	100	609.317	2^+
3173.3		2564.0 *6*	100	609.317	2^+
3183.7	(1,2^+)	2574.7	<37	609.317	2^+
		3183.6 *4*	100 *17*	0.0	0^+
3262.4		1532.8 *8*	100	1729.612	2^+

[†] From ^{214}Bi β^- decay except those only observed from ^{208}Pb(^{16}O,Xγ).
[‡] Multiply placed.
[#] Placement of transition in the level scheme is uncertain.

$^{214}_{84}Po_{130}$-14

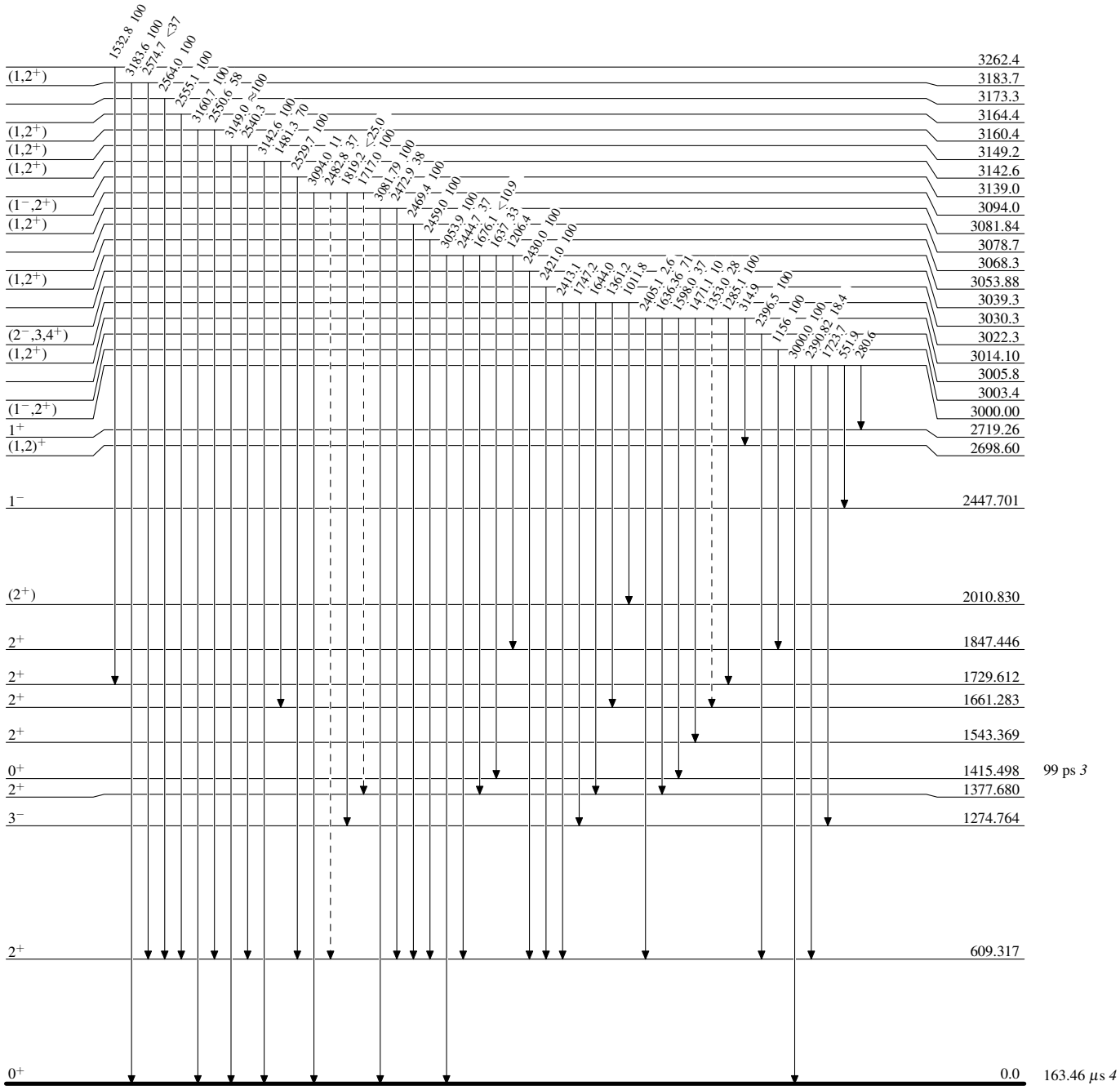
Adopted Levels, Gammas

Legend

Level Scheme

Intensities: Relative photon branching from each level

γ Decay (Uncertain)



$^{214}_{84}Po_{130}$

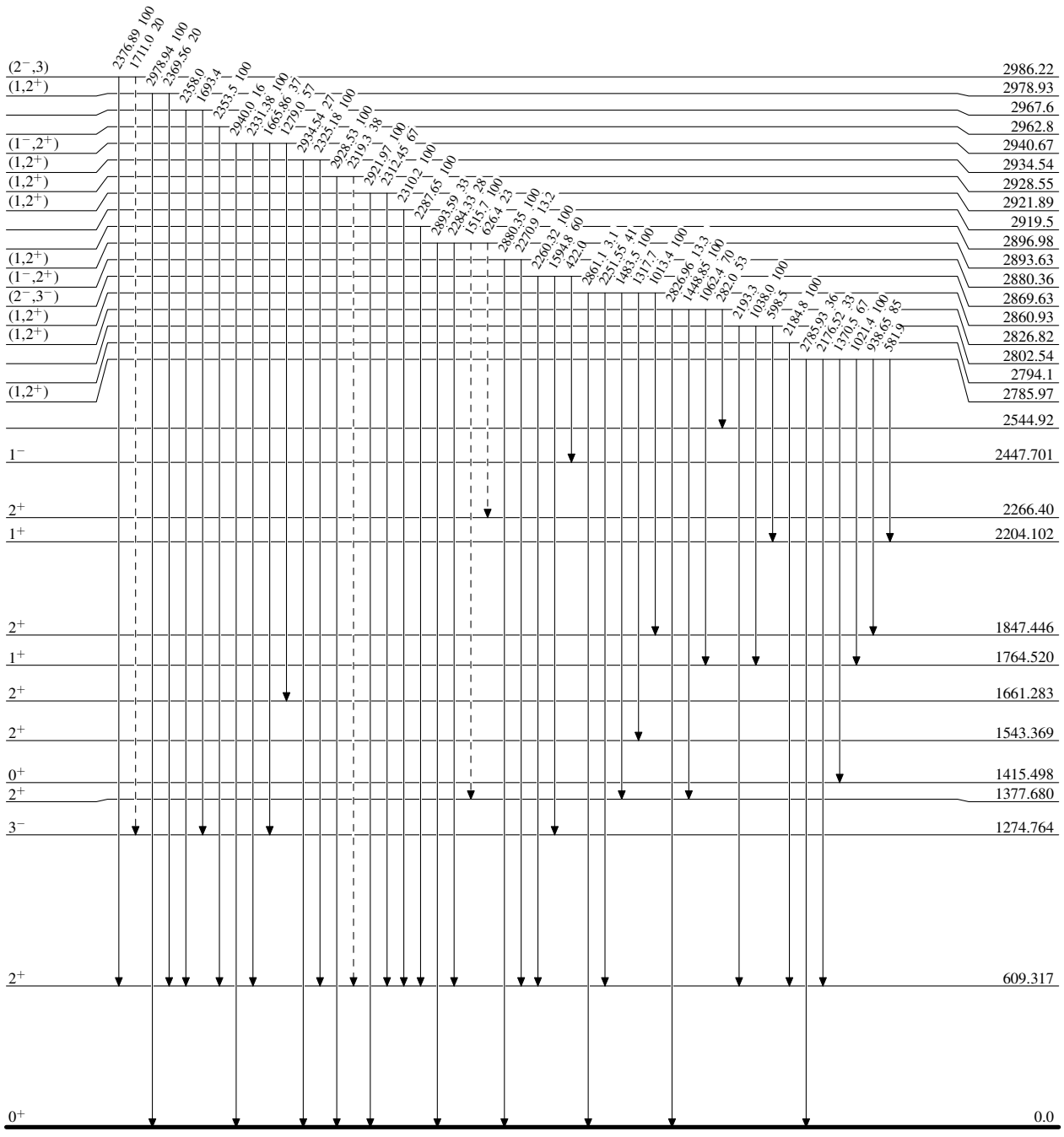
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

– – – – – – ► γ Decay (Uncertain)



$^{214}_{84}Po_{130}$

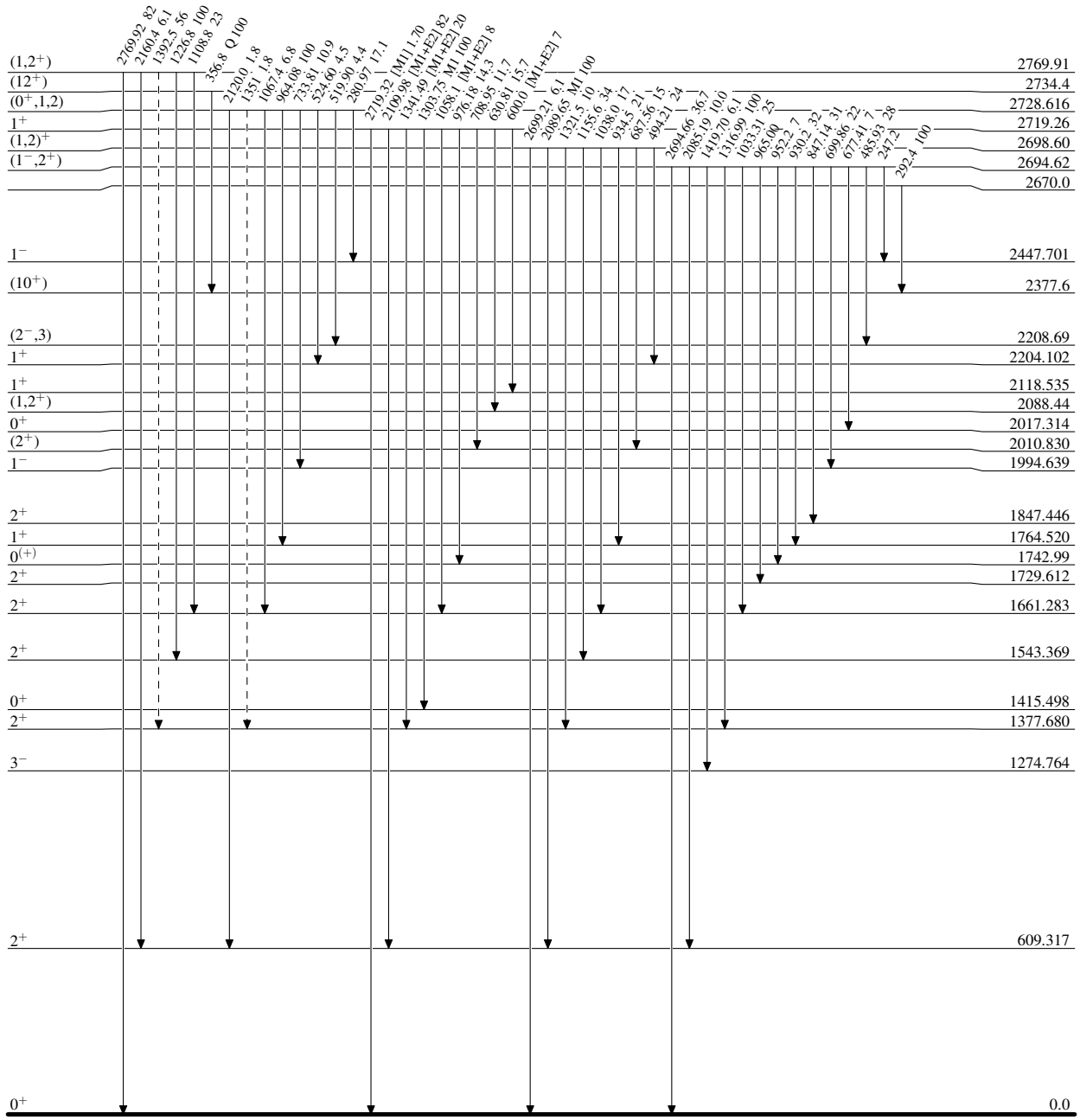
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

γ Decay (Uncertain)



$^{214}_{84}Po_{130}$

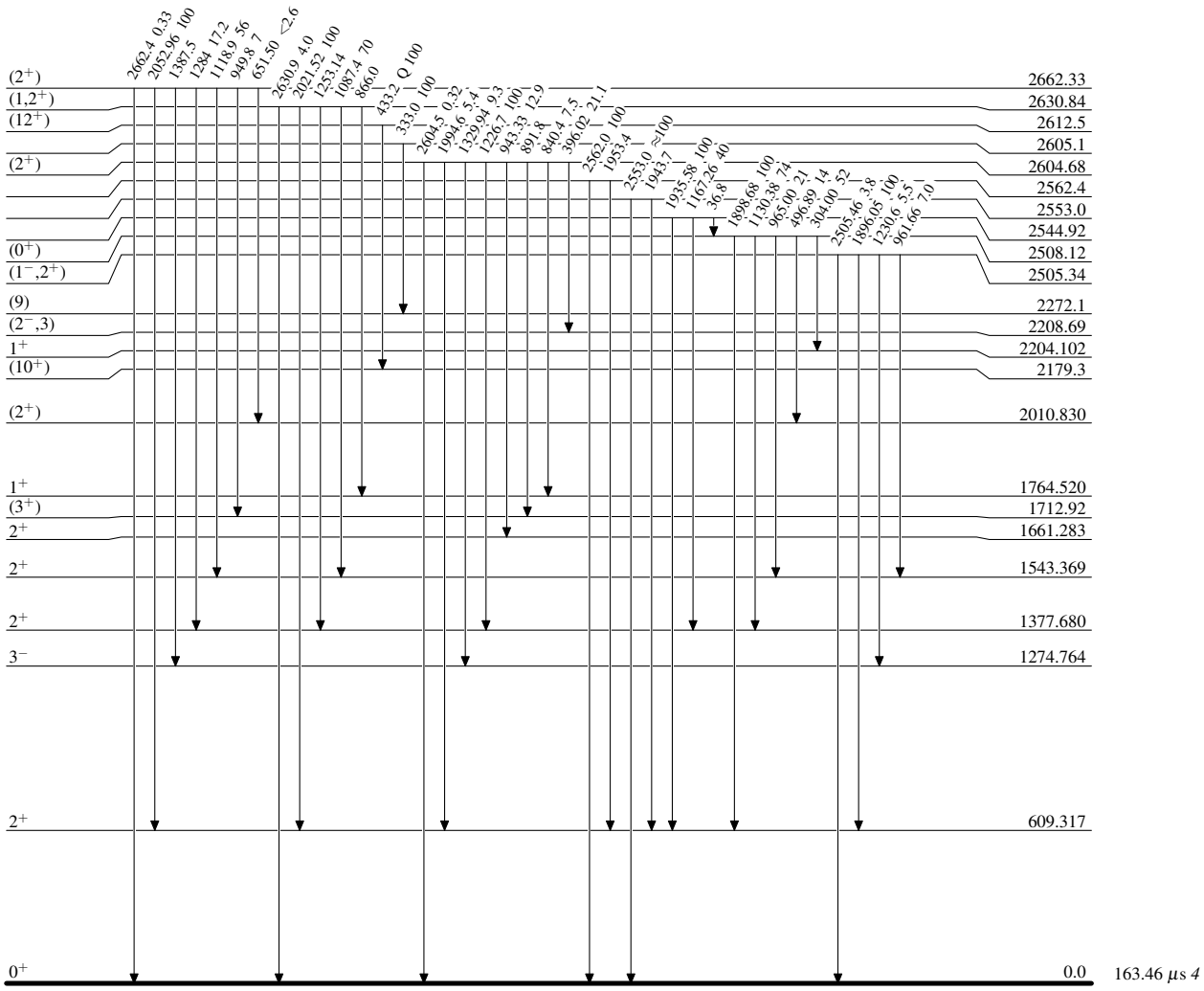
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

γ Decay (Uncertain)



$^{214}_{84}Po_{130}$

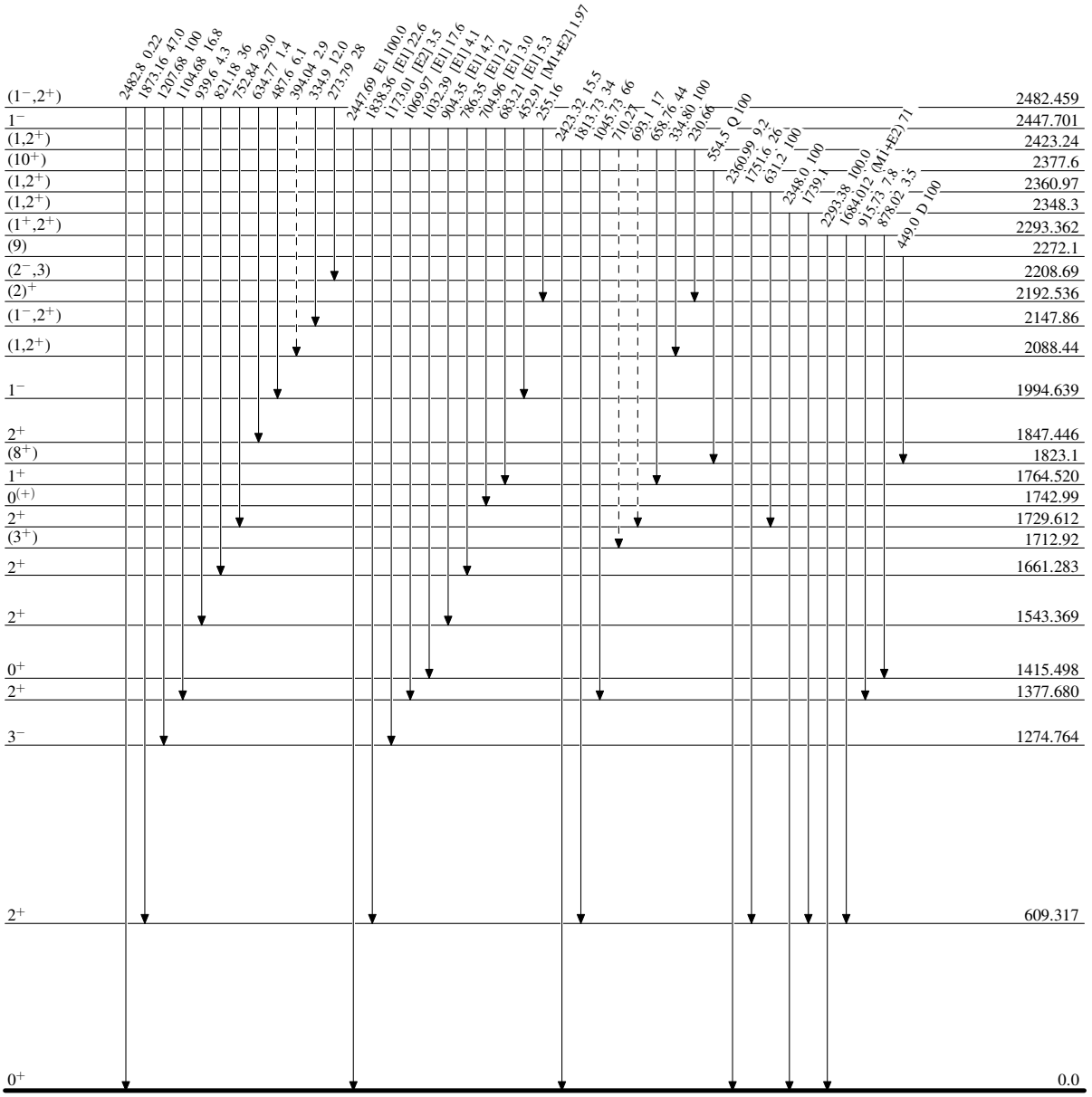
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

γ Decay (Uncertain)



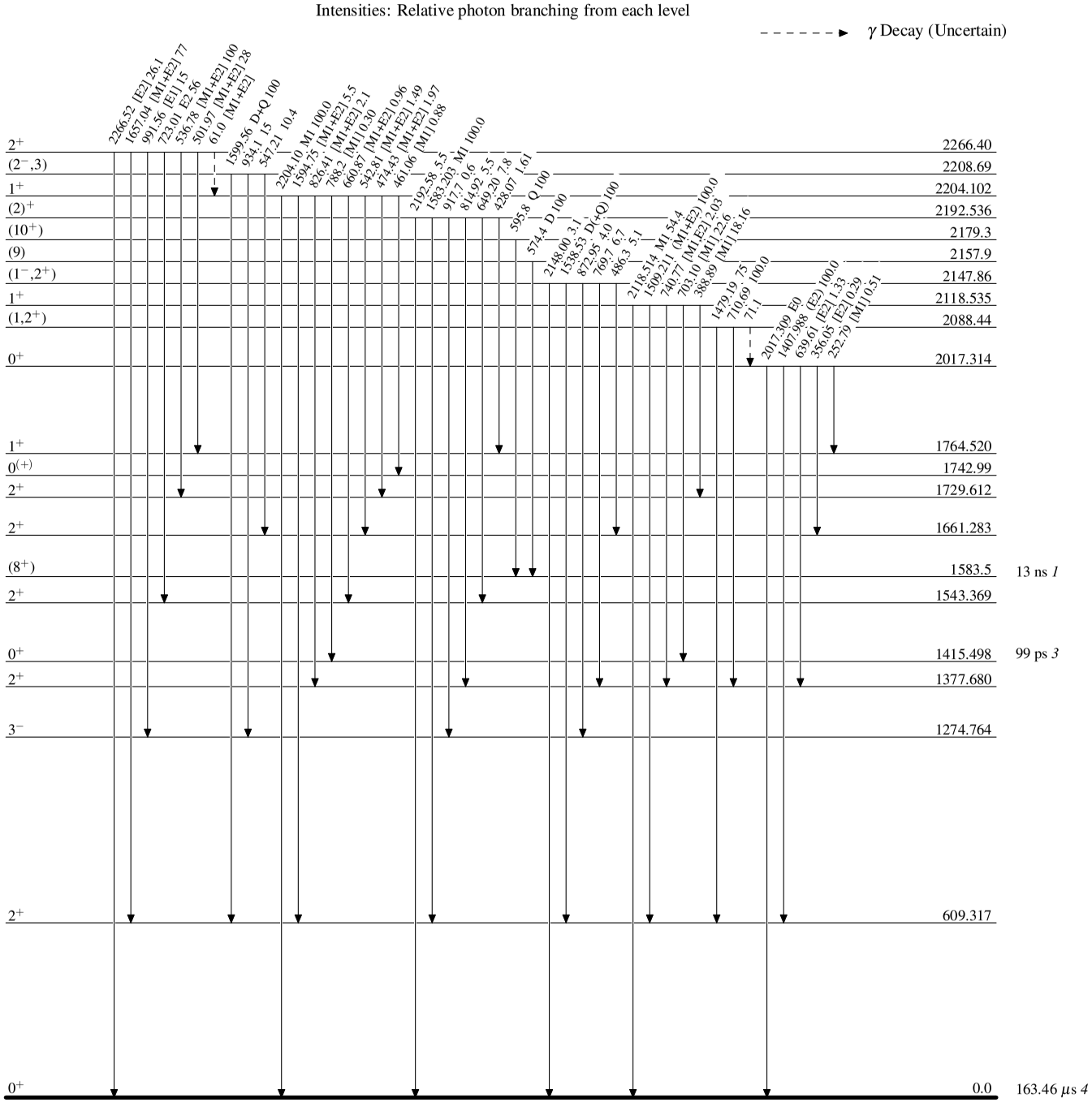
$^{214}_{84}Po_{130}$

Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level



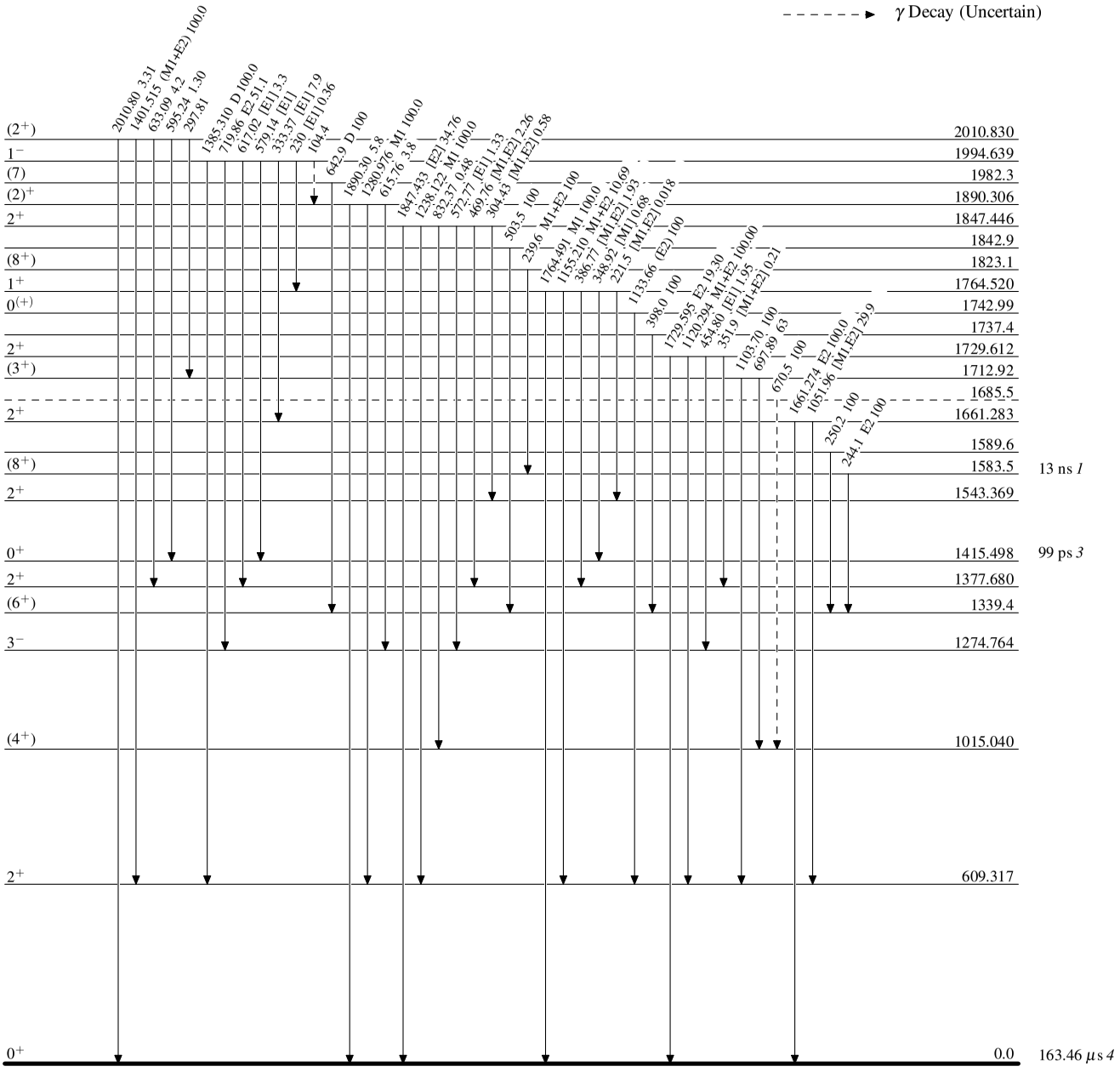
$^{214}_{84}Po_{130}$

Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

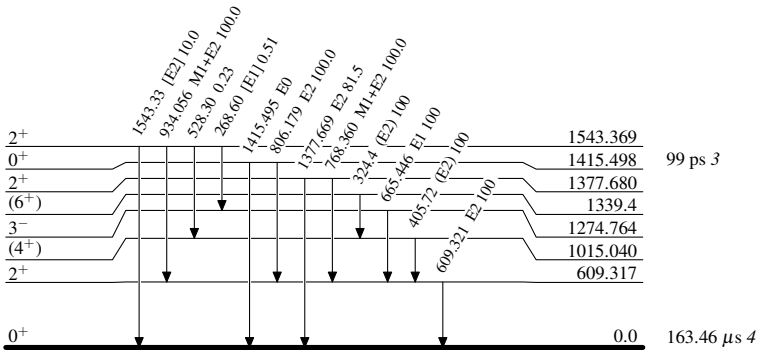


$^{214}_{84}Po_{130}$

Adopted Levels, Gammas

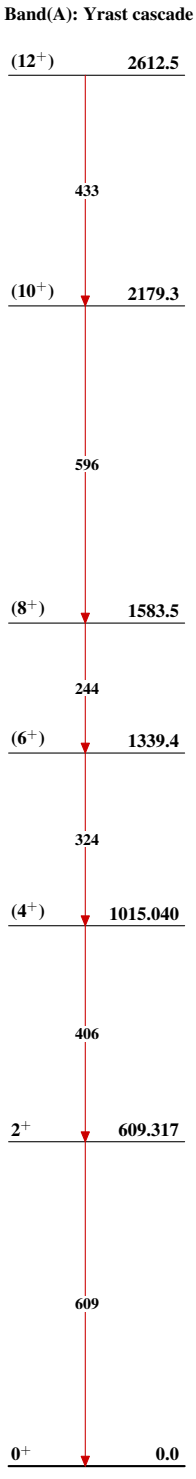
Level Scheme (continued)

Intensities: Relative photon branching from each level



$^{214}_{84}Po_{130}$

Adopted Levels, Gammas



$^{214}_{84}Po_{130}$