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^+)					

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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*;

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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$^+$		

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

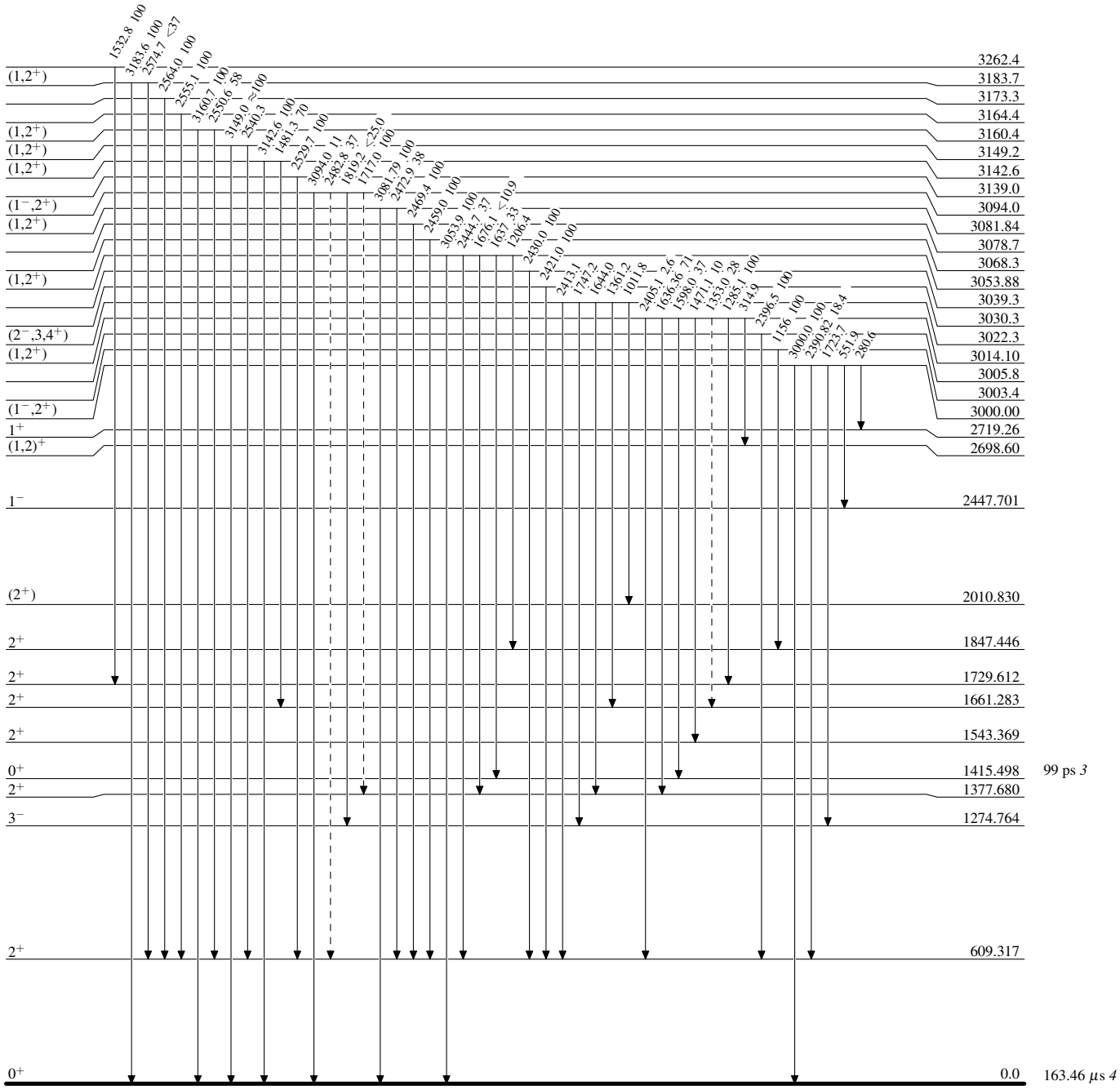
Adopted Levels, Gammas

Legend

Level Scheme

Intensities: Relative photon branching from each level

γ Decay (Uncertain)



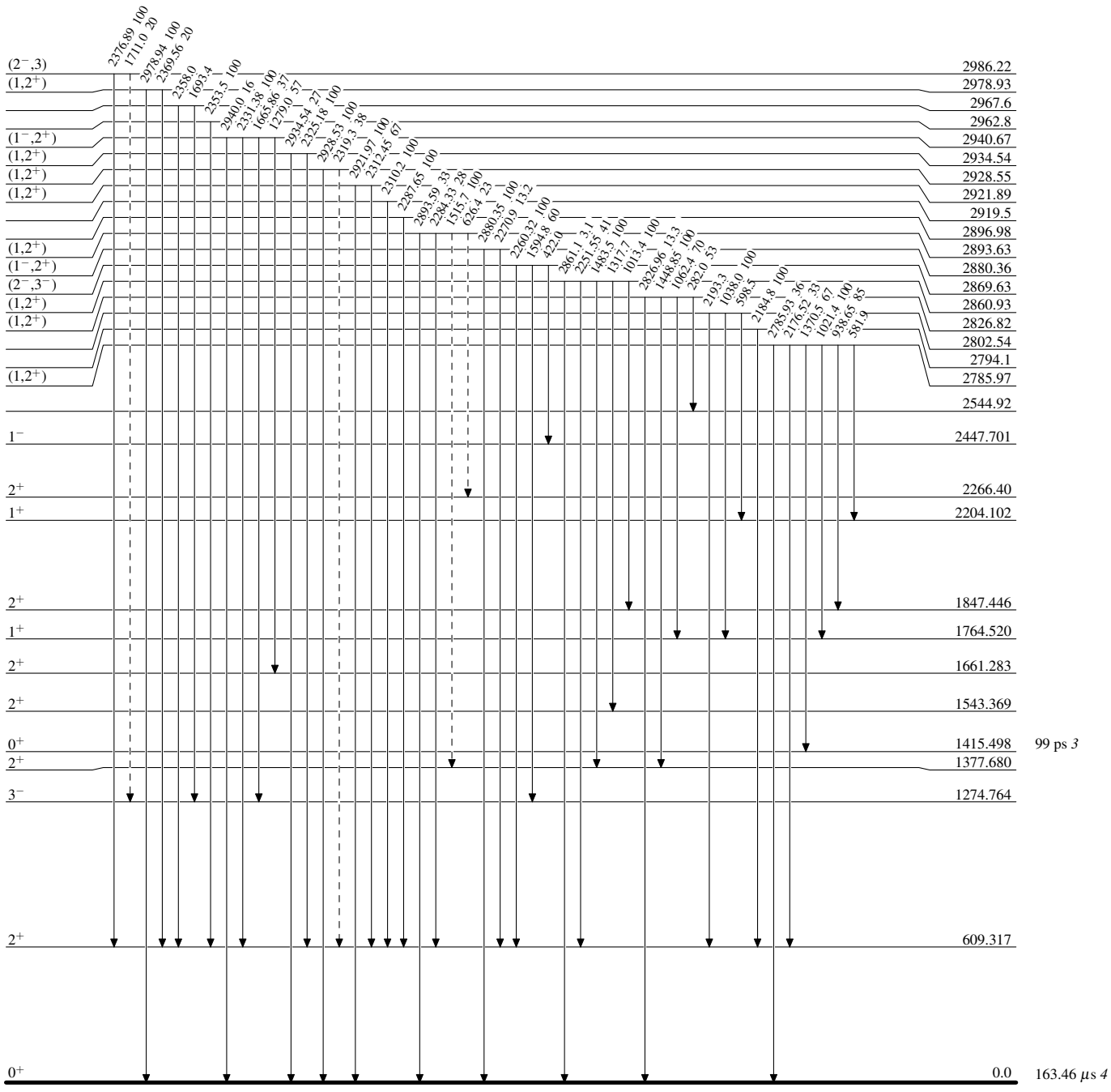
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

– – – – – – ► γ Decay (Uncertain)



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

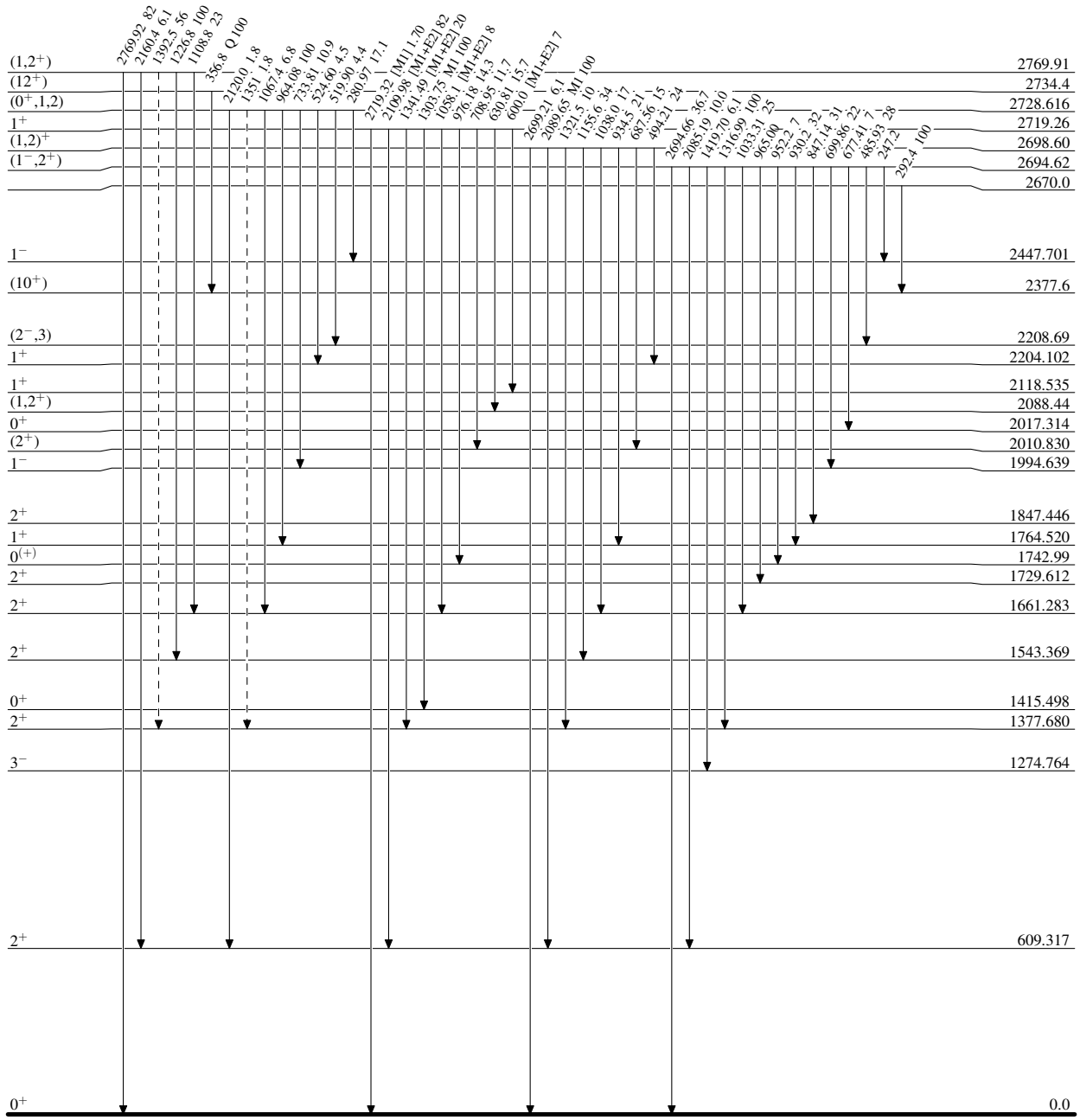
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

γ Decay (Uncertain)



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

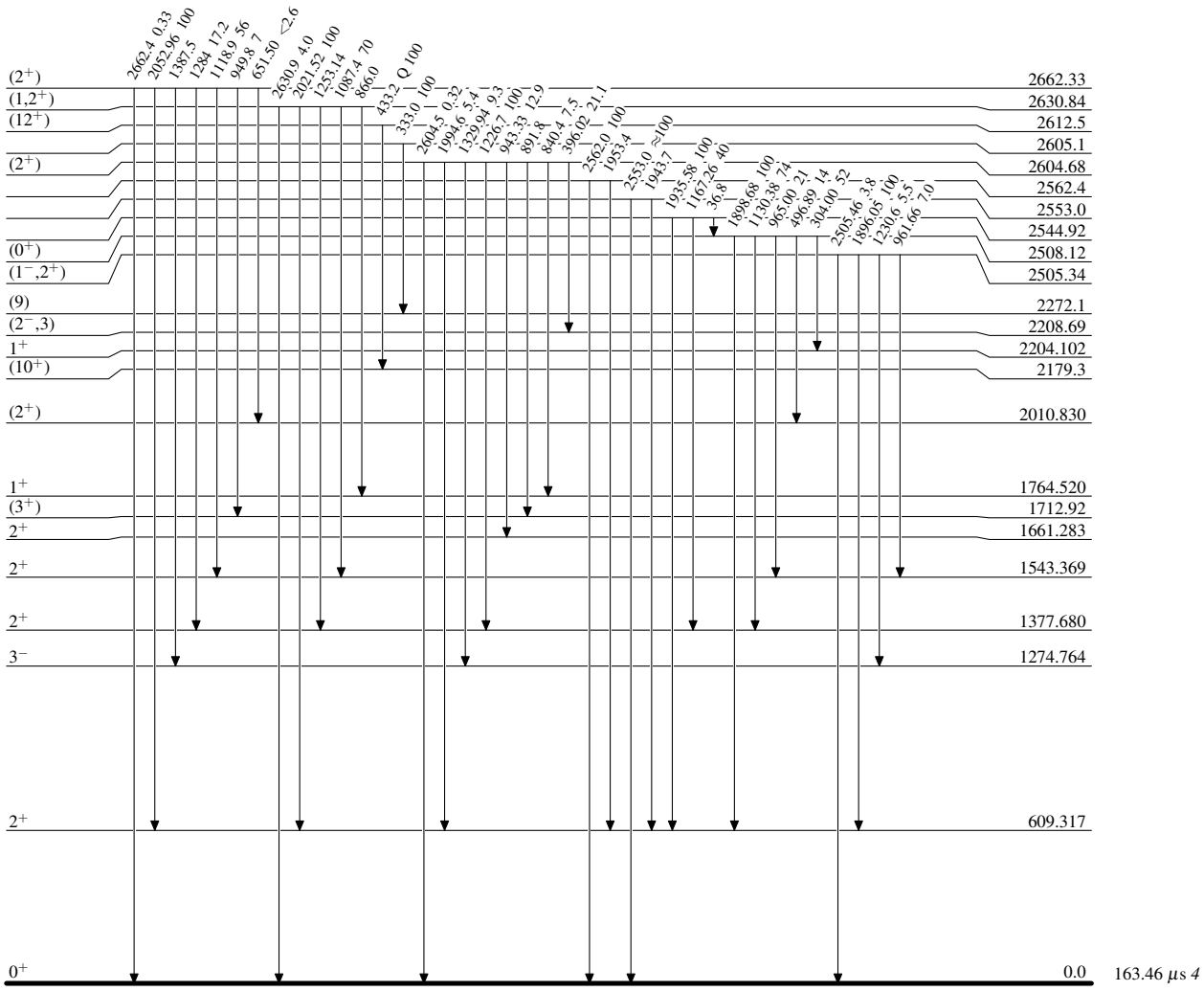
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

γ Decay (Uncertain)



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

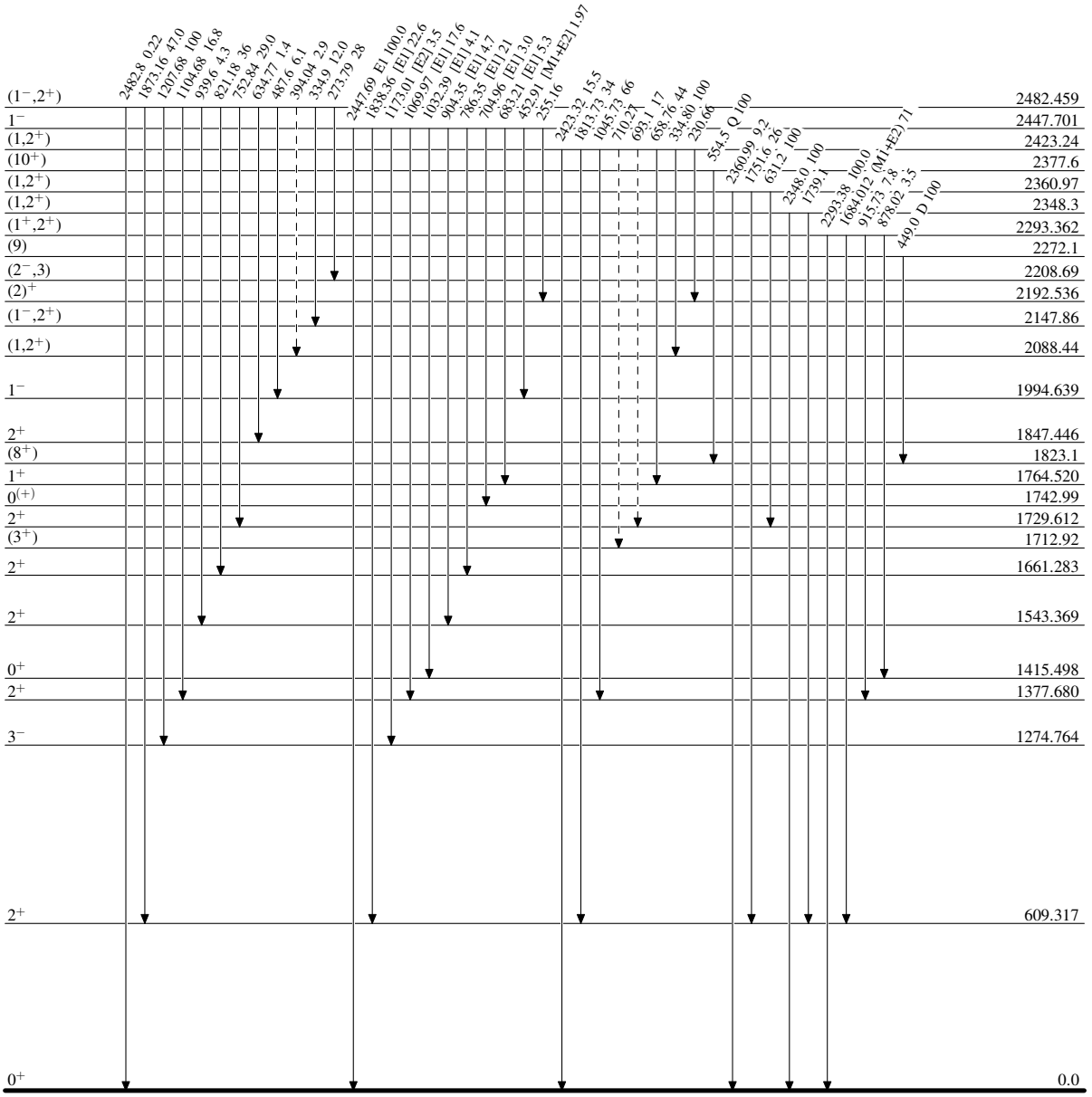
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

γ Decay (Uncertain)



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

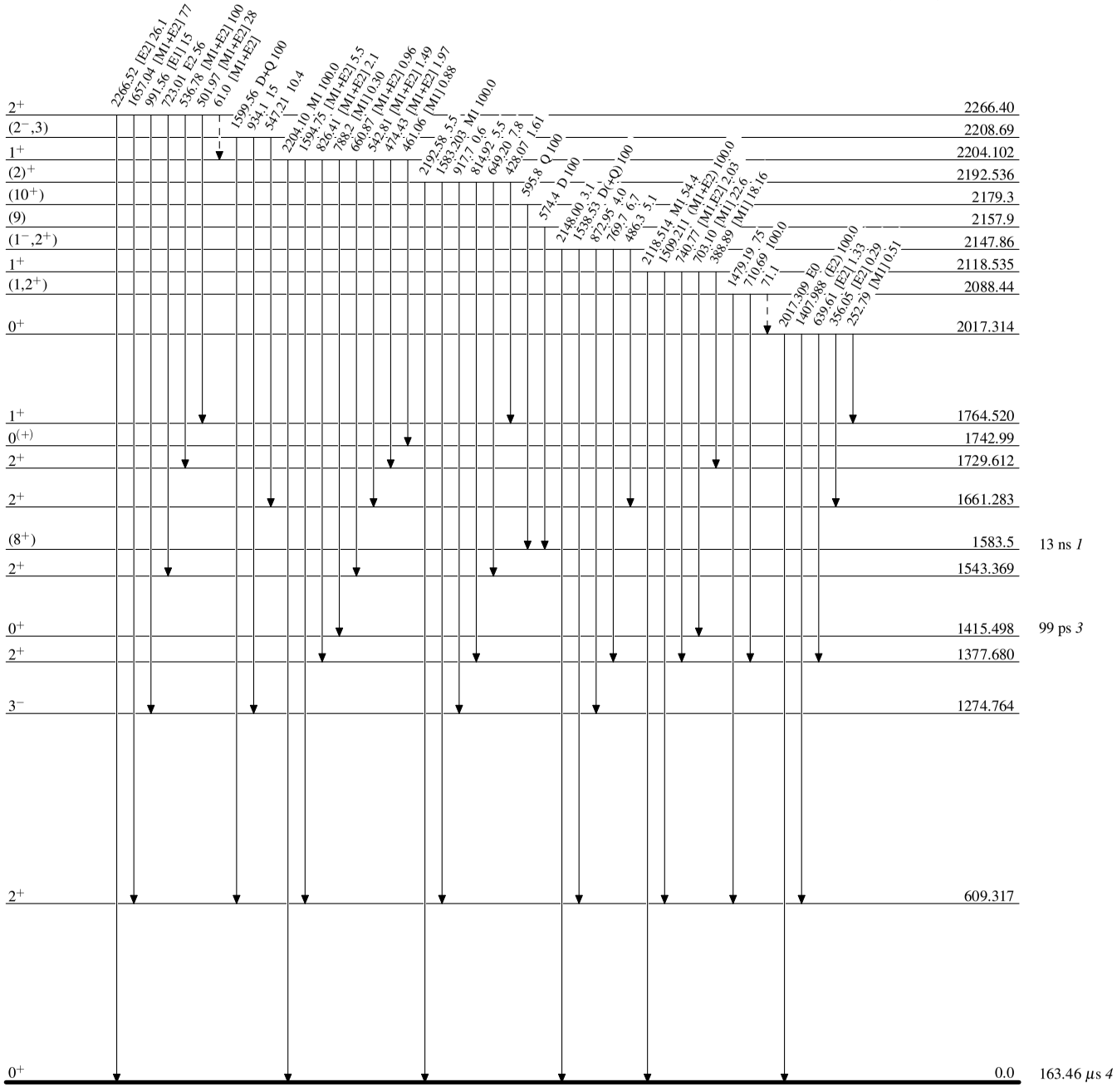
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

- - - - - - ► γ Decay (Uncertain)



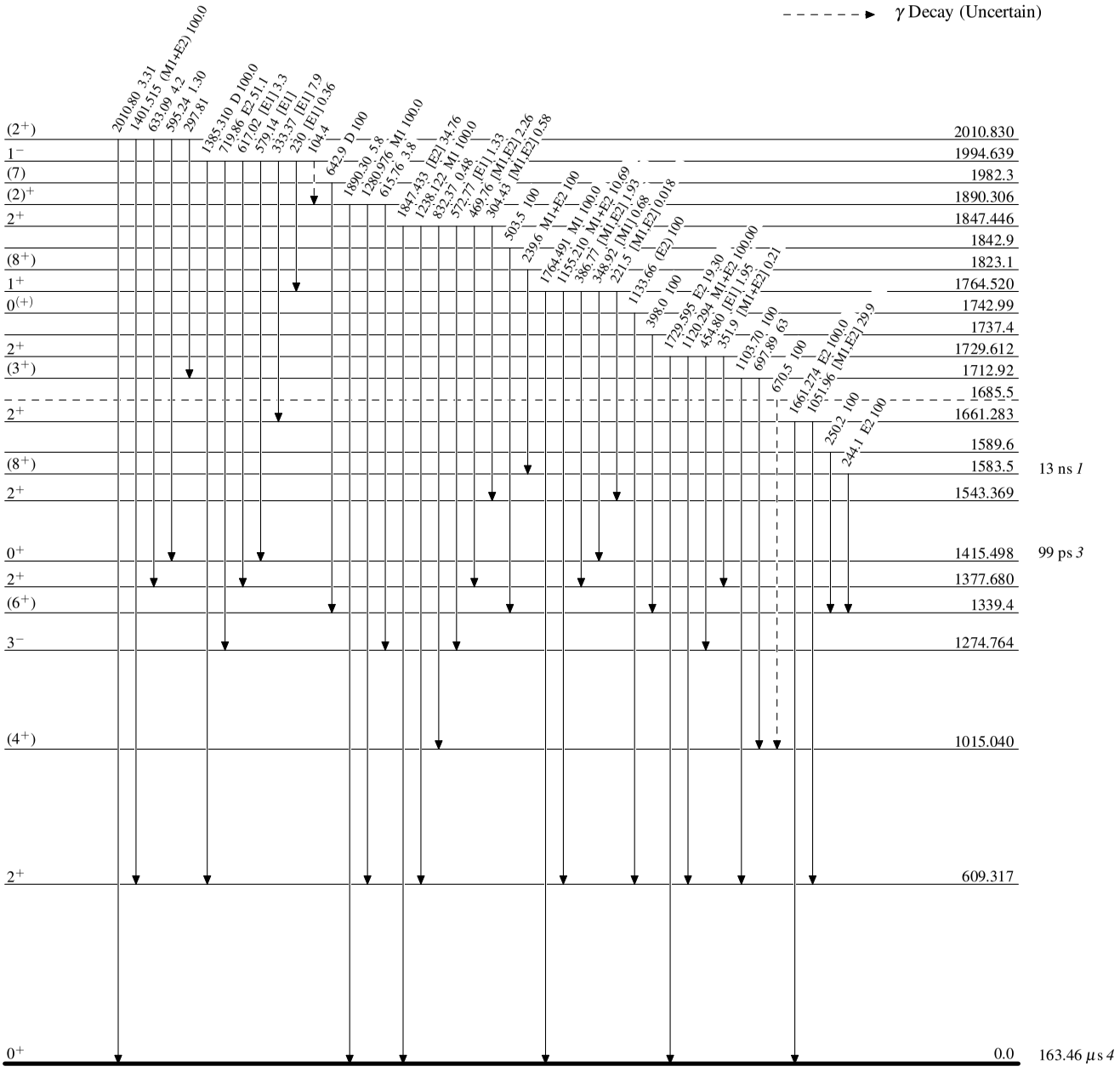
$^{214}_{84}Po_{130}$

Adopted Levels, Gammas

Legend

Level Scheme (continued)

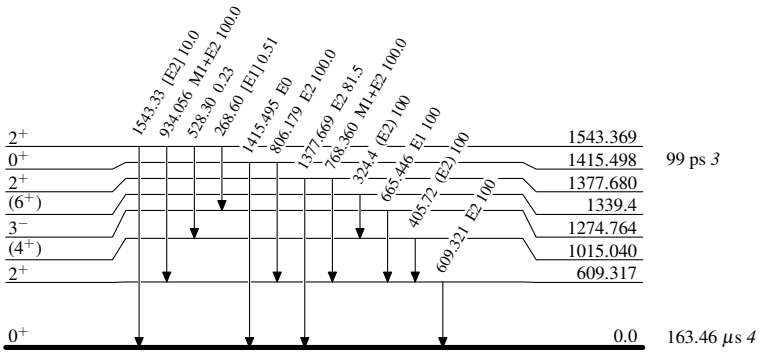
Intensities: Relative photon branching from each level



Adopted Levels, Gammas

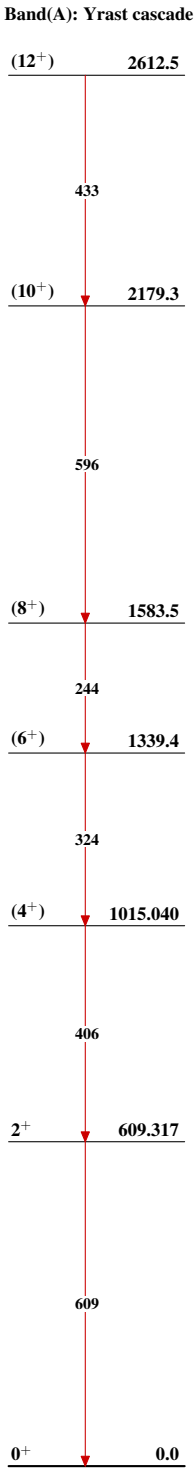
Level Scheme (continued)

Intensities: Relative photon branching from each level



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

Adopted Levels, Gammas



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