Adopted Levels, Gammas

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	K. Auranen and E. A. Mccutchan	NDS 168, 117 (2020)	1-Aug-2020

Q(β^-)=−1741.3 *21*; S(n)=6008.2 *5*; S(p)=5799 *5*; Q(α)=8954.20 *11* 2017Wa10
S(2n)=10558.98 *17*, S(2p)=10218.9 *9* (2017Wa10).
α: Additional information 1.

^{212}Po Levels

Cross Reference (XREF) Flags

A	^{212}Bi β^- decay (60.55 min)	E	^{208}Pb(^{7}Li,tγ)	I	^{210}Pb(α,2nγ)
B	^{212}Bi β^- decay (25.0 min)	F	^{208}Pb(^{9}Be,αnγ)	J	^{208}Pb(^{16}O,^{12}C)
C	^{212}Bi β^- decay (7.0 min)	G	^{208}Pb(^{18}O,^{14}Cγ)	K	^{208}Pb(^{12}C,^{8}Beγ)
D	^{216}Rn α decay	H	^{209}Bi(α,pγ)	L	^{209}Bi(α,p)

E(level)†	J$^\pi$‡	T$_{1/2}$‡	XREF	Comments
0.0	0$^+$@	294.3 ns *8*	AB DEFGHIJKL	%α=100 T$_{1/2}$: weighted average of 293.9 ns *10* (stat) *6* (syst) (2017Ap03) and 294.7 ns 16 (stat) *8* (syst) (2013Be31), with systematic and statistical uncertainties combined in quadrature prior to taking the weighted average. A third recent study reports a half life of 298.8 ns *8* (stat) *14* (syst) (2014Be39), if this value is included, the weighted average becomes 295.2 ns *13*. Others: 350 ns *60* (2018Sa45), 302 ns *27* (2018So16), 260 ns *30* (2012Be14), 290 ns *+40−30* (2003Da24), 309 ns *11* (1981Bo29), 296 ns *2* (1975Sa06), 304 ns *8* (1972Mc29), 305 ns *5* (1963As02), 304 ns *4* (1949Bu09). See also 1962Fl03, 1957Ec08, 1953Ha09, 1949Va01, and 1948Hi21.
727.330 *9*	2$^+$@	14.2 ps *18*	AB EFGHIJK	%IT=99.967; %α=0.033 J$^\pi$: E2 727.3γ to 0$^+$. %α: from Iα(from 727 level)/Iα(from g.s.)=34×10^{-6} (1979Ry03, based on 1970GrYO,1965Le08). T$_{1/2}$: from RDDS in ^{208}Pb(^{12}C,^{8}Beγ) (2017Ko38).
1132.51 *10*	4$^+$@		B EFGHI K	%IT≈95.5; %α≈0.5 J$^\pi$: E2 405.2γ to 2$^+$ level. %α: from ^{208}Pb(^{18}O,^{14}Cγ) (2010As03) Other: %α≈27 from Iα and branching in ^{212}Bi $\beta^-\alpha$ decay (25.0 min) (1978Ba44,1984Es01).
1249# *10*			B	%α=100 %α: from ^{212}Bi β^- decay (25.0 min) (1980Le27).
1355.49 *14*	6$^+$@	0.76 ns *21*	B EFGHI KL	%IT≈97 *1*; %α≈3 *1* J$^\pi$: E2 223.0γ to 4$^+$ level, $\gamma(\theta)$ (^{208}Pb(^{9}Be,αnγ)). T$_{1/2}$: from γ(t) in ^{208}Pb(^{9}Be,αnγ) (1987Po14). %α: from ^{208}Pb(^{18}O,^{14}Cγ) (2010As03). Other: %α≈71 from Iα and branching in ^{212}Bi $\beta^-\alpha$ decay (25.0 min) (1978Ba44,1984Es01).
1476.39 *17*	8$^+$@	14.6 ns *3*	B FGHI KL	%IT≈97 *1*; %α≈3 *1* XREF: H(1423). J$^\pi$: E2 120.9γ to 6$^+$ level. T$_{1/2}$: weighted average of 14 ns *1* (2010As03), 14.7 ns *3* (1981Bo29), 14.2 ns *24* (1978Li14). Others: 17.1 ns *2* ^{208}Pb(^{9}Be,αnγ) (1987Po14). %α: from ^{208}Pb(^{18}O,^{14}Cγ) (2010As03). Others: %α≈42 from 1978Ba44, 1984Es01; see ^{212}Po α-decay (17.1 ns) data set, %α=6 *1* from ^{209}Bi(α,pγ) (1978Li14).
1512.70 *8*	2$^+$	0.49 ps *6*	A K	J$^\pi$: M1+E2 γ to 2$^+$ level, $\gamma\gamma(\theta)$ (^{212}Bi β^- decay (60.55 min)).

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Adopted Levels, Gammas (continued)

^{212}Po Levels (continued)

E(level)†	Jπ‡	$T_{1/2}$‡	XREF	Comments
				$T_{1/2}$: from DSAM in ^{208}Pb(^{12}C,^{8}Beγ) (2016Ko03).
1536.85 *10*	3		FG K	Jπ: D 809.5γ to 2^+ level.
1547# *10*			B	%α=100 %α: from ^{212}Bi $\beta^-\alpha$ decay (25.0 min) (1980Le27).
1578# *10*			B	%α=100 %α: from ^{212}Bi $\beta^-\alpha$ decay (25.0 min) (1980Le27).
1612# *10*			B	%α=100 %α: from ^{212}Bi $\beta^-\alpha$ decay (25.0 min) (1980Le27).
1620.739 *10*	1^+		A	Jπ: M1+E2 γ to 2^+ level, (M1) γ to 0^+ level, $\gamma\gamma(\theta)$.
1657# *10*			B	%α=100 %α: from ^{212}Bi $\beta^-\alpha$ decay (25.0 min) (1980Le27).
1679.452 *14*	2^+	0.54 ps *6*	A K	%IT=99.7; %α=0.3 Jπ: $\gamma\gamma(\theta)$, M1+E2 γ to 2^+ level (^{212}Bi β^- decay (60.55 min)). %α: from Iα(from 1679.3 level)/Iα(from g.s.)=1×10^{-5} (1979Ry03, based on 1970GrYO,1965Le08). $T_{1/2}$: from DSAM in ^{208}Pb(^{12}C,^{8}Beγ).
1744.9 *5*	(4^-)	0.33 ps *10*	G K	Jπ: ΔJ=0 (E1) 612.3γ to 4^+ level.
1752.86 *19*	(8^-)	0.33 ps *14*	B FG I K	XREF: B(1749). Jπ: ΔJ=0 (E1) 276.5γ to 8^+ level.
1788.07 *17*	(6^-)	0.31 ps *6*	FG K	Jπ: ΔJ=0 (E1) 432.6γ to 6^+ level.
1800.91 *19*	0^+		A	%IT≥74; %α≤26 Jπ: E0 transition to 0^+ g.s. %α: from Iα(from 1801 level)/Iα(from g.s.)=1.6×10^{-4} (1979Ry03, based on 1970GrYO,1965Le08). A single α group is measured which likely corresponds to the 1801-keV and 1806-keV levels.
1805.95 *10*	2^+		A	%IT≥98.4; %α≤1.6 Jπ: $\gamma\gamma(\theta)$, M1+E2 γ to 2^+ level (^{212}Bi β^- decay (60.55 min)). %α: from Iα(from 1806 level)/Iα(from g.s.)=1.6×10^{-4} (1979Ry03, based on 1970GrYO,1965Le08). A single α group is measured which likely corresponds to the 1801-keV and 1806-keV levels.
1833.89 *19*	10^+@	0.55 ns *14*	FG I K	Jπ: E2 357.5γ to 8^+ level. $T_{1/2}$: from ^{208}Pb(^{9}Be,αnγ) (1987Po14).
1945.83 *14*	(4)	0.33 ps *10*	FG	Jπ: ΔJ=0 (D) 813.3γ to 4^+ level.
1987.59 *19*	(8)		FG K	Jπ: ΔJ=0 (D) 234.6γ to (8^-).
2002.6 *3*	$4^{(-)}$		G K	Jπ: ΔJ=0 D 465.7γ to 4^- level.
2016.99 *17*	(6)	0.333 ps *28*	FG K	Jπ: ΔJ=0 D 661.5γ to 6^+ level. Jπ: from DSAM in ^{208}Pb(^{12}C,^{8}Beγ). Other: 0.34 ps *11* ^{208}Pb(^{18}O,^{14}Cγ).
2085.6 *5*			G	
2101.4 *5*	5		FG	Jπ: D 968.9γ to 4^+ level.
2103.45 *23*	5		G K	Jπ: D 971.1γ to 4^+ level, stretched Q 566.3γ to 3 level.
2170.1 *5*			G	
2228.69 *17*	7		FG K	Jπ: D 873.2γ to 6^+ level.
2237.3 *4*			G	
2281.7 *4*			G	
2295.3 *5*			G	
2336.7 *4*	9		G	Jπ: D 860.3γ to 8^+ level.
2363.4 *4*	(6)		G	Jπ: ΔJ=0 D 575.6γ to (6^-) level.
2375.6 *3*	7		G K	Jπ: D γ's to 6^+ and (8^+).
2411.26 *22*	(11^-)		FG I	Jπ: $\gamma(\theta)$ rules out ΔJ=2 Q transition to 10^+ level (^{208}Pb(^{9}Be,αnγ)); analogy with ^{214}Rn suggests 11^-.
2421.7 *5*			G	
2433.8 *5*			G	
2467.2 *20*	10	0.42 ps *11*	G	Jπ: ΔJ=0 D 633.3γ to 10^+.

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Adopted Levels, Gammas (continued)

^{212}Po Levels (continued)

E(level)†	Jπ‡	$T_{1/2}$‡	XREF	Comments
2471.44 *21*	(9^-)		FG	Jπ: D 718.7γ to (8^-) level.
2526.9 *10*			G	
2583.26 *24*			FG	
2604.5 *6*	5		G	Jπ: D 601.9γ to $4^{(-)}$.
2605.8 *4*			G	
2667.3 *20*	5	≤0.97 ps	G	Jπ: ΔJ=0 D 563.8γ to $5^{(-)}$ level.
2702.23 *22*	(12^+)		FG I	Jπ: (E2) 868.3γ to 10^+ level.
2771.72 *23*	(13^-)		FG I	Jπ: E1 69.2γ to (12^+), E1 133.3γ from (14^+).
2782.2 *4*			G	
2838.9 *10*		≤0.97 ps	G	
2860.7 *20*		≤0.97 ps	G	
2863.5 *5*			G	
2865.8 *20*	7	≤0.38 ps	G	Jπ: ΔJ=0 D 490.2γ to $7^{(-)}$ level.
2869.1 *20*		≤0.97 ps	G	
2877.6 *6*			G	
2881.8 *6*			G	
2882.9 *20*		≤0.38 ps	G	
2885.4 *3*	(14^+)		FG I	Jπ: E2 182.6γ to (12^+).
2930 *10*	(18^+)	45.1 s *6*	C L	%IT=0.07 *2*; %α=99.93 *2* Configuration=((π $h_{9/2}$)$^{+2}$(ν $g_{9/2}$)(ν $h_{11/2}$)) E(level): from Q(α)(^{212}Po 45.1 s level)-Q(α)(^{212}Po g.s.), taking Eα to g.s. from 1976FrZO. Jπ: shell model suggest 16^+ or 18^+ for this isomer. From RUL the unobserved isomeric transition to (14^+) level is not of E2 multipolarity. Therefore, $J^\pi \neq 16^+$. For further discussion see 1989Ku08, 1987Po14. $T_{1/2}$: from the decay of 8.53-, 9.08- and 11.65-MeV α's (1962Pe15). Other: 47 s *10* (1962Ka15). %α,%IT: from Iα(8.784 MeV)/Iα(11.65 MeV) (1989Ku08) (see α decay data set). Production: ^{209}Bi(α,p) (1989Ku08); daughter ^{212}Bi β$^-$ decay (7.0 min).
2942.1 *21*			G	
2975.5 *20*		≤0.97 ps	G	
3006.6 *5*			G	
3012.4 *20*		≤0.97 ps	G	
3024.5 *20*		≤0.97 ps	G	
3037.4 *6*			G	
3112.9 *5*			G	
3156.0 *20*	7	0.08 ps *4*	G	Jπ: ΔJ=0 D 780.4γ to $7^{(-)}$ level.
3176.8 *6*			G	
3195.0 *5*			G	
3204.9 *20*		≤0.97 ps	G	
3211.6 *20*		≤0.97 ps	G	

† From a least squares fit to Eγ, by evaluators, except where noted.
‡ From the ^{208}Pb(^{18}O,^{14}Cγ) dataset, except where noted.
# From ΔQ(α), weak β delayed α observed in 25.0 min ^{212}Bi β-α decay (1980Le27).
@ Configuration=((π $h_{9/2}$)$^{+2}$(ν $g_{9/2}$)$^{+2}$) with leading component configuration=((π $h_{9/2}$)$^{+2}_{0+}$(ν $g_{9/2}$)$^{+2}_{J+}$) (1987Po14).

Adopted Levels, Gammas (continued)

γ(^{212}Po)

E_i(level)	J_i^π	E_γ †	I_γ †	E_f	J_f^π	Mult. †	δ †	α	Comments
727.330	2^+	727.330 *9*	100	0.0	0^+	E2		0.01393	α(K)=0.01054 *15*; α(L)=0.00257 *4*; α(M)=0.000628 *9*; α(N)=0.0001613 *23*; α(O)=3.28×10^{-5} *5* α(P)=3.83×10^{-6} *6* B(E2)(W.u.)=2.57 *+38−29* Mult.: also from ^{208}Pb(^{9}Be,αnγ) data.
1132.51	4^+	405.2# *1*	100#	727.330	2^+	E2#		0.0543	α(K)=0.0345 *5*; α(L)=0.01485 *21*; α(M)=0.00379 *6*; α(N)=0.000972 *14*; α(O)=0.000192 *3* α(P)=2.03×10^{-5} *3*
1355.49	6^+	223.0# *1*	100#	1132.51	4^+	E2#		0.324	α(K)=0.1310 *19*; α(L)=0.1435 *21*; α(M)=0.0378 *6*; α(N)=0.00969 *14*; α(O)=0.00187 *3* α(P)=0.000179 *3* B(E2)(W.u.)=13.2 *+49−29*
1476.39	8^+	120.9# *1*	100#	1355.49	6^+	E2#		3.25	α(K)=0.408 *6*; α(L)=2.10 *3*; α(M)=0.561 *9*; α(N)=0.1439 *21*; α(O)=0.0274 *4*; α(P)=0.00248 *4* B(E2)(W.u.)=4.56 *12*
1512.70	2^+	785.37 *8*	100 *1*	727.330	2^+	M1+E2	+0.09 *3*	0.0387	α(K)=0.0316 *5*; α(L)=0.00539 *8*; α(M)=0.001266 *19*; α(N)=0.000326 *5*; α(O)=6.82×10^{-5} *10* α(P)=8.84×10^{-6} *13* B(M1)(W.u.)=0.071 *+10−8*; B(E2)(W.u.)=0.32 *+26−18*
		1512.7 *3*	26 *3*	0.0	0^+	[E2]		0.00344	α(K)=0.00274 *4*; α(L)=0.000483 *7*; α(M)=0.0001139 *16*; α(N)=2.93×10^{-5} *4*; α(O)=6.07×10^{-6} *9* α(P)=7.66×10^{-7} *11* B(E2)(W.u.)=0.39 *6*
1536.85	3	405‡ *1*	8‡ *4*	1132.51	4^+				
		809.5# *1*	100‡ *13*	727.330	2^+	D‡			
1620.739	1^+	893.408 *5*	25.8 *13*	727.330	2^+	M1+E2	−0.031 *34*	0.0278	α(K)=0.0228 *4*; α(L)=0.00386 *6*; α(M)=0.000907 *13*; α(N)=0.000233 *4*; α(O)=4.89×10^{-5} *7* α(P)=6.33×10^{-6} *9*
		1620.50 *10*	100.0 *22*	0.0	0^+	(M1)		0.00620	α(K)=0.00494 *7*; α(L)=0.000824 *12*; α(M)=0.000193 *3*; α(N)=4.97×10^{-5} *7*; α(O)=1.041×10^{-5} *15* α(P)=1.353×10^{-6} *19*
1679.452	2^+	952.120 *11*	100 *19*	727.330	2^+	M1+E2	+0.65 *50*	0.019 *5*	α(K)=0.015 *4*; α(L)=0.0027 *6*; α(M)=0.00063 *13*; α(N)=0.00016 *4*; α(O)=3.4×10^{-5} *7* α(P)=4.4×10^{-6} *10* B(M1)(W.u.)=0.024 *+8−10*; B(E2)(W.u.)=3.9 *+37−29*
		1679.7 *5*	35 *8*	0.0	0^+	[E2]		0.00291	α(K)=0.00227 *4*; α(L)=0.000391 *6*; α(M)=9.19×10^{-5} *13*; α(N)=2.36×10^{-5} *4*; α(O)=4.91×10^{-6} *7* α(P)=6.23×10^{-7} *9* B(E2)(W.u.)=0.27 *7*
1744.9	(4^-)	612.3‡ *20*	100‡	1132.51	4^+	(E1)‡		0.00682 *11*	α(K)=0.00563 *9*; α(L)=0.000908 *15*; α(M)=0.000212 *4*;

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$^{212}_{84}Po_{128}$-4

Adopted Levels, Gammas (continued)

γ(^{212}Po) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[†]	δ[†]	α	$I_{(\gamma+ce)}$	Comments
										α(N)=5.42×10^{-5} *9*; α(O)=1.122×10^{-5} *18* α(P)=1.407×10^{-6} *22* B(E1)(W.u.)=0.0025 *+11−6*
1752.86	(8$^-$)	276.5[#] *1*	100[#]	1476.39	8$^+$	(E1)[‡]		0.0379		α(K)=0.0308 *5*; α(L)=0.00539 *8*; α(M)=0.001268 *18*; α(N)=0.000324 *5*; α(O)=6.60×10^{-5} *10* α(P)=7.94×10^{-6} *12* B(E1)(W.u.)=0.026 *+18−8*
1788.07	(6$^-$)	432.6[#] *1*	100[#]	1355.49	6$^+$	(E1)[‡]		0.01392		α(K)=0.01143 *16*; α(L)=0.00190 *3*; α(M)=0.000446 *7*; α(N)=0.0001140 *16*; α(O)=2.35×10^{-5} *4* α(P)=2.90×10^{-6} *4* B(E1)(W.u.)=0.0075 *+17−12*
1800.91	0$^+$	180.2	20 *8*	1620.739	1$^+$	[M1]		2.08		α(K)=1.692 *24*; α(L)=0.298 *5*; α(M)=0.0704 *10*; α(N)=0.0181 *3*; α(O)=0.00379 *6* α(P)=0.000490 *7*
		1073.6 *2*	100 *12*	727.330	2$^+$	[E2]		0.00642		α(K)=0.00510 *8*; α(L)=0.001002 *14*; α(M)=0.000240 *4*; α(N)=6.16×10^{-5} *9*; α(O)=1.269×10^{-5} *18* α(P)=1.557×10^{-6} *22*
		1800.2		0.0	0$^+$	E0			26 *3*	
1805.95	2$^+$	1078.62 *10*	100 *3*	727.330	2$^+$	M1+E2	−0.135 *35*	0.0169 *3*		α(K)=0.01386 *22*; α(L)=0.00234 *4*; α(M)=0.000549 *9*; α(N)=0.0001413 *22*; α(O)=2.96×10^{-5} *5* α(P)=3.84×10^{-6} *6*
		1806.0 *5*	16 *4*	0.0	0$^+$	[E2]		0.00261		α(K)=0.00200 *3*; α(L)=0.000338 *5*; α(M)=7.94×10^{-5} *12*; α(N)=2.04×10^{-5} *3*; α(O)=4.24×10^{-6} *6* α(P)=5.40×10^{-7} *8*
1833.89	10$^+$	357.5[#] *1*	100[#]	1476.39	8$^+$	E2		0.0761		α(K)=0.0453 *7*; α(L)=0.0230 *4*; α(M)=0.00592 *9*; α(N)=0.001519 *22*; α(O)=0.000298 *5* α(P)=3.08×10^{-5} *5* B(E2)(W.u.)=2.2 *+8−4* Mult.: Q from γ(θ) in ^{208}Pb(^{9}Be,αnγ), M2 excluded by comparison to RUL.
1945.83	(4)	813.3[#] *1*	100[#]	1132.51	4$^+$	(D)[‡]				
1987.59	(8)	234.6[‡] *5*	15[‡] *8*	1752.86	(8$^-$)	(D)[‡]				
		511.2[#] *1*	100[#] *19*	1476.39	8$^+$	(D)[‡]				
2002.6	4$^{(-)}$	465.7[‡] *3*	100[‡]	1536.85	3	D[‡]				
2016.99	(6)	661.5[#] *1*	100[#]	1355.49	6$^+$	(D)[‡]				
2085.6		953.1[‡] *5*	100[‡]	1132.51	4$^+$					
2101.4	5	968.9[#] *5*	100[#]	1132.51	4$^+$	D[‡]				
2103.45	5	157.2[‡] *5*	15[‡] *8*	1945.83	(4)					
		315.5[‡] *5*	12[‡] *8*	1788.07	(6$^-$)					

From ENSDF

$^{212}_{84}Po_{128}$-5

Adopted Levels, Gammas (continued)

γ(^{212}Po) (continued)

E_i(level)	J_i^π	E_γ †	I_γ †	E_f	J_f^π	Mult. †
2103.45	5	358.5‡ *5*	42‡ *12*	1744.9	(4$^-$)	
		566.3‡ *5*	54‡ *12*	1536.85	3	Q‡
		748.1‡ *5*	23‡ *12*	1355.49	6$^+$	
		971.1‡ *5*	100‡ *19*	1132.51	4$^+$	D‡
2170.1		633.2‡ *5*	100‡	1536.85	3	
2228.69	7	873.2# *1*	100	1355.49	6$^+$	D‡
2237.3		249.7‡ *5*	43‡ *14*	1987.59	(8)	
		484.5‡ *5*	100‡ *40*	1752.86	(8$^-$)	
2281.7		264.7‡ *5*	100‡ *30*	2016.99	(6)	
		926.2‡ *5*	90‡ *40*	1355.49	6$^+$	D‡
2295.3		758.4‡ *5*	100‡	1536.85	3	
2336.7	9	502.9‡ *5*	60‡ *20*	1833.89	10$^+$	
		860.3‡ *5*	100‡ *40*	1476.39	8$^+$	D‡
2363.4	(6)	259.6‡ *5*	50‡ *20*	2103.45	5	
		575.6‡ *5*	100‡ *30*	1788.07	(6$^-$)	D‡
2375.6	7	358.6‡ *5*	38‡ *10*	2016.99	(6)	D‡
		587.5‡ *5*	100‡ *17*	1788.07	(6$^-$)	D‡
		622.6‡ *5*	10‡ *3*	1752.86	(8$^-$)	D‡
		899.0‡ *5*	14‡ *7*	1476.39	8$^+$	
		1020‡ *1*	28‡ *7*	1355.49	6$^+$	D‡
2411.26	(11$^-$)	577.4# *1*	100#	1833.89	10$^+$	D‡
2421.7		633.6‡ *5*	100‡	1788.07	(6$^-$)	
2433.8		205.1‡ *5*	100‡	2228.69	7	
2467.2	10	633.3‡ *20*	100‡	1833.89	10$^+$	D‡
2471.44	(9$^-$)	483.7‡ *5*	20‡ *10*	1987.59	(8)	
		637.3‡ *5*	10‡ *5*	1833.89	10$^+$	
		718.6# *1*	100‡ *25*	1752.86	(8$^-$)	D‡
		994.9‡ *5*	20‡ *10*	1476.39	8$^+$	
2526.9		774‡ *1*	100‡	1752.86	(8$^-$)	
2583.26		172.0# *1*	100#	2411.26	(11$^-$)	
2604.5	5	601.9‡ *5*	100‡	2002.6	4$^{(-)}$	D‡
2605.8		229.8‡ *5*	43‡ *14*	2375.6	7	
		853.4‡ *5*	100‡ *30*	1752.86	(8$^-$)	
2667.3	5	563.8‡ *20*	100‡	2103.45	5	(D)‡

From ENSDF

$^{212}_{84}Po_{128}$-6

Adopted Levels, Gammas (continued)

γ(^{212}Po) (continued)

E_i(level)	J_i^π	E_γ †	I_γ †	E_f	J_f^π	Mult. †	α	Comments
2702.23	(12$^+$)	868.3# *1*	100#	1833.89	10$^+$	Q‡	0.00971	α(K)=0.00754 *11*; α(L)=0.001643 *23*; α(M)=0.000398 *6*; α(N)=0.0001022 *15* α(O)=2.09×10^{-5} *3*; α(P)=2.50×10^{-6} *4*
2771.72	(13$^-$)	69.2‡ *5*	60‡ *30*	2702.23	(12$^+$)	E1‡	0.262 *7*	α(L)=0.199 *5*; α(M)=0.0477 *12*; α(N)=0.0120 *3*; α(O)=0.00234 *6*; α(P)=0.000247 *6*
		360.2‡ *5*	100‡ *30*	2411.26	(11$^-$)	Q‡		
2782.2		310.8‡ *5*	100‡ *70*	2471.44	(9$^-$)			
		371.0‡ *5*	100‡ *30*	2411.26	(11$^-$)			
2838.9		1005‡ *1*	100‡	1833.89	10$^+$			
2860.7		757.2‡ *20*	100‡	2103.45	5			
2863.5		452.2‡ *5*	100‡	2411.26	(11$^-$)			
2865.8	7	490.2‡ *20*	100‡	2375.6	7	D‡		
2869.1		397.7‡ *20*	100‡	2471.44	(9$^-$)	D‡		
2877.6		875.0‡ *5*	100‡	2002.6	4$^{(-)}$			
2881.8		518.4‡ *5*	100‡	2363.4	(6)			
2882.9		1049‡ *2*	100‡	1833.89	10$^+$			
2885.4	(14$^+$)	113.3‡ *5*	60‡ *20*	2771.72	(13$^-$)	E1‡	0.330	α(K)=0.261 *4*; α(L)=0.0527 *8*; α(M)=0.01250 *18*; α(N)=0.00317 *5*; α(O)=0.000631 *9* α(P)=7.06×10^{-5} *10*
		182.6‡ *5*	100‡ *40*	2702.23	(12$^+$)	E2‡	0.653 *12*	α(K)=0.203 *3*; α(L)=0.334 *7*; α(M)=0.0885 *17*; α(N)=0.0227 *5*; α(O)=0.00436 *8* α(P)=0.000407 *8*
2930	(18$^+$)	(45 *10*)	100	2885.4	(14$^+$)	[E4]		E_γ: unobserved γ ray, energy deduced from level scheme.
2942.1		474.9‡ *5*	100	2467.2	10			
2975.5		1620‡ *2*	100‡	1355.49	6$^+$			
3006.6		1172.7‡ *5*	100‡	1833.89	10$^+$			
3012.4		406.6‡ *20*	100‡	2605.8		(D)‡		
3024.5		1669‡ *2*	100‡	1355.49	6$^+$			
3037.4		255.2‡ *5*	100‡	2782.2				
3112.9		410.7‡ *5*	100‡	2702.23	(12$^+$)			
3156.0	7	780.4‡ *20*	100	2375.6	7	D‡		
3176.8		291.4‡ *5*	100‡	2885.4	(14$^+$)			
3195.0		492.8‡ *5*	100‡	2702.23	(12$^+$)			
3204.9		1371‡ *2*	100‡	1833.89	10$^+$			
3211.6		740.2‡ *20*	100‡	2471.44	(9$^-$)			

From ENSDF

$^{212}_{84}Po_{128}$-7

Adopted Levels, Gammas (continued)

$\gamma(^{212}Po)$ (continued)

† From ^{212}Bi β^- decay (60.55 min), except where noted.
‡ From $^{208}Pb(^{18}O,^{14}C\gamma)$.
# From $^{208}Pb(^{9}Be,\alpha n\gamma)$.

From ENSDF

$^{212}_{84}Po_{128}$-8

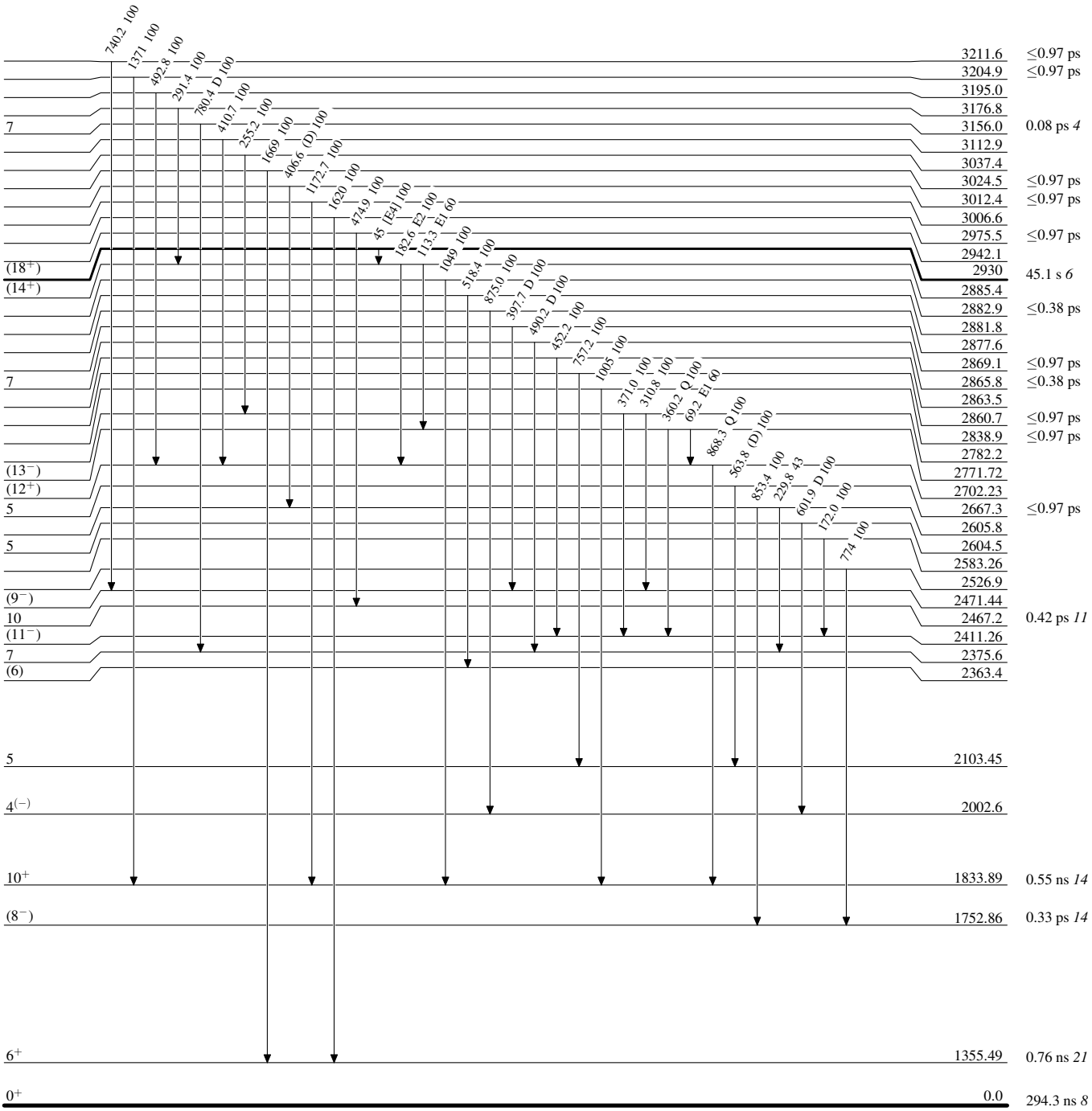
Adopted Levels, Gammas

Legend

Level Scheme

Intensities: Relative photon branching from each level

γ Decay (Uncertain)

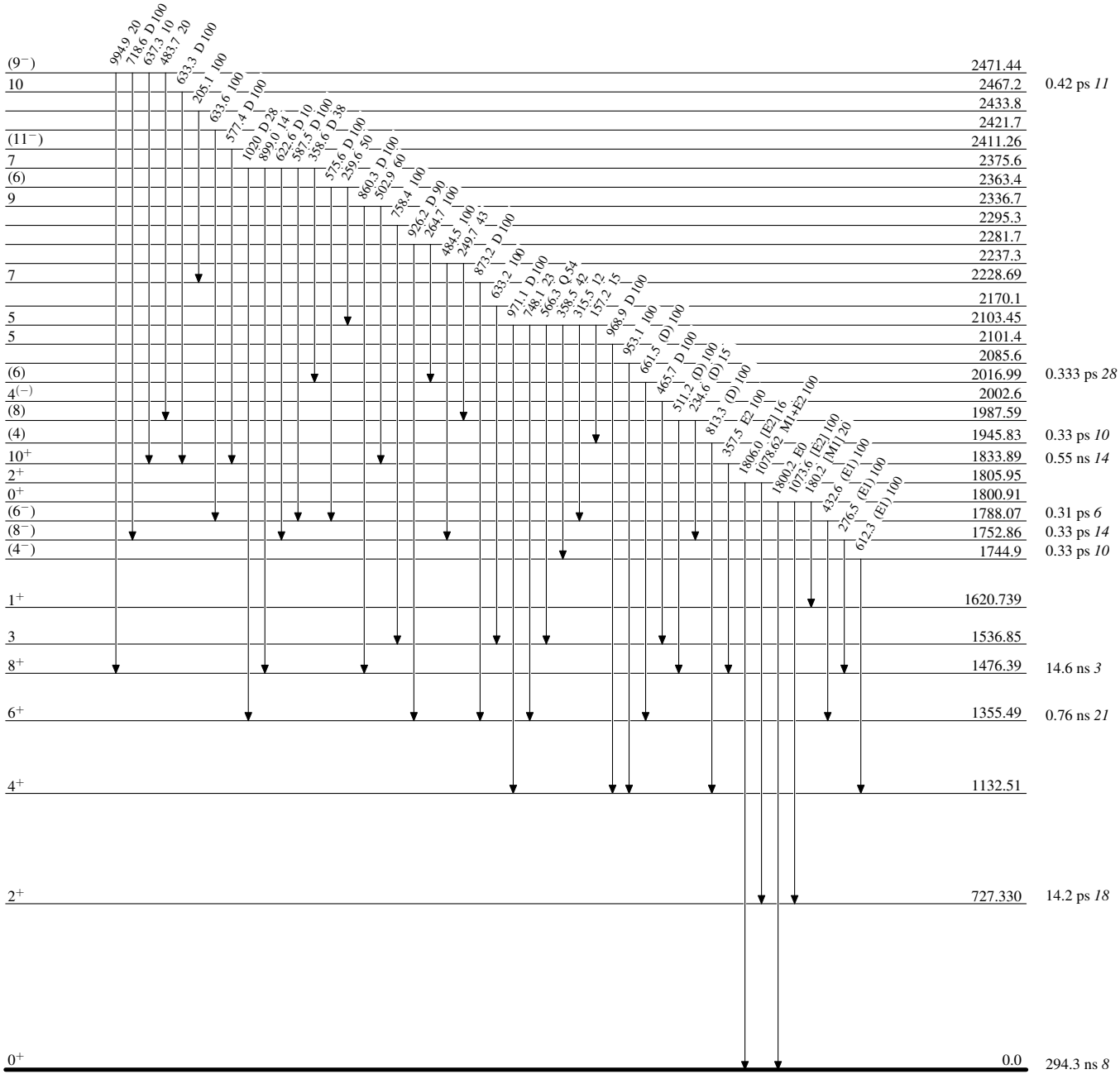


$^{212}_{84}Po_{128}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

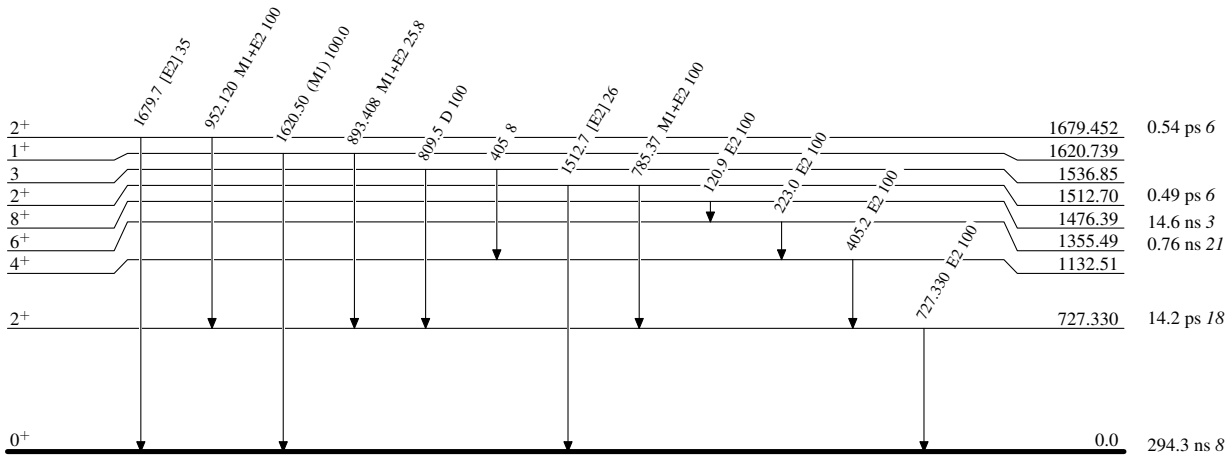


$^{212}_{84}Po_{128}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level



$^{212}_{84}Po_{128}$