Adopted Levels, Gammas

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	F. G. Kondev	NDS 201,346 (2025)	21-Jan-2025

Q(β^-)=−5749 *14*; S(n)=8739 *11*; S(p)=4412 *6*; Q(α)=5327.0 *13* 2021Wa16
S(2n)=15990 *11*, S(2p)=7657 *4*, Q(ε)=1840 *9* (2021Wa16).

^{206}Po Levels

Cross Reference (XREF) Flags

A	^{206}At ε decay	E	Au(^{10}B,xnγ),Pb(α,xnγ)
B	^{210}Rn α decay	F	^{204}Pb(^{16}O,^{14}Cγ)
C	^{198}Pt(^{12}C,4nγ)	G	^{206}Pb(α,4nγ),^{206}Pb(^{3}He,3nγ)
D	^{198}Pt(^{13}C,5nγ)	H	Coulomb excitation

E(level)†	J$^\pi$	T$_{1/2}$	XREF	Comments
0.0	0$^+$	8.8 d *1*	ABCDEFGH	%α=5.45 *5*; %ε+%β^+=94.55 *5* %α is from 1967Le08. %ε+%β^+ has not been measured directly. Others: %α=10 (1947Te01) and 5 *1* (1955Mo68). T$_{1/2}$: From 1956Jo34. Others: 9 d (1947Te01), 8.83 d (1957Ar61), 9.5 d *8* (1961Be25), 8.75 d (1967Le08). Eα=5223.7 keV *15* is recommended by 1991Ry01. δ<r^2>(^{208}Po,^{206}Po)=−0.104 *1* (1991Ko32). δ<r^2>(^{206}Po,^{210}Po)=−0.250 fm^2 *10*(stat) *3*(syst) (2011Co01).
700.66 *3*	2$^+$	4.3 ps *7*	ABCDEFGH	J$^\pi$: 700.66γ E2 to 0$^+$. B(E2)↑=0.64 *+48−32* from E2 matrix element=+0.8 eb *+3−2* (2016Gr17). Diagonal E2 matrix element=−2.0 eb *+40−29* (2016Gr17). T$_{1/2}$: From τ=6.2 ps *0.5*(stat) *0.9*(syst) in 2024Ko23 using RDDS and by taking into account the feedings from the 2^+_2, 4^+_1 and 4^+_2 states. Others: 4.8 ps *+13−11* in 2023Ka31 using RDDS and by taking into account the feeding from the high-lying 4^+_1 and 4^+_2 states; 2.6 ps *+19−13* from B(E2)↑ in 2016Gr17.
1162.2 *5*	2$^+$		FG	J$^\pi$: 461.5γ M1, ΔJ=0 to 2^+, 1162.2γ E2 to 0$^+$.
1177.80 *4*	4$^+$	63 ps *5*	A CDEFG	J$^\pi$: 477.10γ E2 to 2$^+$. T$_{1/2}$: Weighted average 62 ps *5* (2019St13,$\gamma\gamma$(Δt)), 70 ps *6* (2023St05,$\gamma\gamma$(Δt)) and 58.6 ps *+54−50* (2023Ka31,RDDS).
1434.35 *5*	4$^+$	<3.5 ps	A D FG	J$^\pi$: 256.53γ M1(+E2) to 4$^+$, 733.73γ (E2) to 2$^+$, 138.9γ E2 from 6$^+$. T$_{1/2}$: From 2023Ka31 using the RDDS technique. Value corresponds to the effective level half-life, since the side-feeding components were not taken into account.
1546.3 *7*	4$^+$		G	J$^\pi$: 384.1γ E2 to 2$^+$.
1564.70 *5*	(3)$^+$		A G	J$^\pi$: 386.9γ M1(+E2) to 4$^+$, 864.3γ (M1+E2) to 2$^+$.
1573.38 *6*	6$^+$	184 ps *50*	A CDEFG	J$^\pi$: 395.54γ E2 to 4$^+$. T$_{1/2}$: From $\gamma\gamma$(Δt) in 2023St05. Configuration=dominant $\pi(h^{+2}_{9/2})$.
1585.96 *9*	8$^+$	232 ns *4*	A DEFG	μ=+7.34 *7*; Q=(−)1.02 *4* μ: From 1973Br14,2020StZV (g=0.919 *13*, stroboscopic technique) and 1973Na18 (g=0.915 *13*, stroboscopic and time-difference PAC technique). Q: From 1987Ma65,2021StZZ (time-difference PAC technique). J$^\pi$: μ; systematics of known 8$^+$ isomers in neighboring nuclei. T$_{1/2}$: Weighted average of four independent $\gamma\gamma$(t) measurements using gates on transitions below and above the isomer in 1990Ba31. Others: 210 ns *10* (1986Ra24), 160 ns *40* (1970Ya03) and 212 ns *5* (1970BrZO). Configuration=$\pi(h^{+2}_{9/2})$.
1915.87 *8*	(4)$^+$		A	J$^\pi$: 342.5γ (E2) to 6$^+$, 738.0γ to 4$^+$.
2100.79 *6*	(5)$^+$		A G	J$^\pi$: 527.27γ M1(+E2) to 6$^+$, 923.12γ M1+E2 to 4$^+$.

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Adopted Levels, Gammas (continued)

^{206}Po Levels (continued)

E(level)[†]	Jπ	$T_{1/2}$	XREF	Comments
2138.92 *7*	$(4,5)^+$		A	Jπ: 565.55γ to 6^+, 704.66γ M1+E2 to 4^+.
2200.40 *9*	8^+		A D FG	Jπ: 614.4γ M1 to 8^+, 627.1γ to 6^+; 61.8γ from 9^- favors 8^+ rather than 7^+.
2262.17 *10*	9^-	1.05 μs *6*	A DE G	Jπ: 61.766γ E1 and 676.4γ (E1) to 8^+. $T_{1/2}$: From γγ(t) in 1990Ba31. Others: 1.0 μs *1* in 1986Ra24 and >200 ns in 1976Be12. Configuration=$\nu(f_{5/2}^{-1},i_{13/2}^{-1})$.
2302.62 *6*	$(5)^+$		A G	Jπ: 729.27γ E2+M1 to 6^+, 1124.77γ M1+E2 to 4^+.
2418.94 *13*	10^+		DEFG	Jπ: 833.0γ E2 to 8^+.
2423.23 *20*	9^+		D G	Jπ: 837.2γ M1 to 8^+, 189.8γ M1 from 10^+.
2432.40 *24*			D	
2500.60 *8*	$5^+,6^+$		A	Jπ: 399.98γ M1(+E2) to $(5)^+$, 927.09γ M1+E2 to 6^+.
2581.56 *7*	$(4,5,6)^+$		A	Jπ: 279.88γ M1(+E2) to (5^+).
2613.18 *19*	10^+		D	Jπ: 1027.3γ E2 to 8^+.
2656.53 *14*	11^-	0.5 ns *1*	DE G	Jπ: 237.6γ E1 to 10^+. $T_{1/2}$: From 237.6γ(t) in 1990Ba31. Configuration=dominant $\pi(h_{9/2}^{+1},i_{13/2}^{+1})$.
2781.06 *20*	11^+		D G	Jπ: 167.9γ and 362.1γ M1 to 10^+.
2901.97 *22*	12^+		D	Jπ: 120.8γ M1 to 11^+. Configuration=$\nu(i_{13/2}^{-2})$.
2917.02 *7*	$(4^+,5^+,6^+)$		A	Jπ: 614.40γ M1(+E2) to (5^+).
3068.09 *13*	11^-		D G	Jπ: 805.9γ E2 to 9^-.
3210.50 *22*	12^+		D	Jπ: 429.3γ M1 to 11^+.
3361.96 *7*			A	Jπ: 444.73γ M1(+E2) to $(4^+,5^+,6^+)$.
3396.49 *12*			A	
3463.11 *14*	13^-		DE G	Jπ: 252.5γ E1 to 12^+, 395.0γ E2 to 11^-.
3485.87 *20*	13^-		D G	Jπ: 829.3γ E2 to 11^-.
3549.12 *17*	14^-		D G	Jπ: 86.0γ M1 to 13^-.
3558.3 *4*	12^-		D G	Jπ: 901.8γ M1 to 11^-.
3567.4 *3*	15^-		D	Jπ: 1065.8γ E2 from 17^-.
3595.45 *8*			A	
3704.47 *23*			D	
3872.15 *9*			A	
3951.92 *23*	14^-		D G	Jπ: 466.0γ M1 to 13^-.
4038.84 *8*			A	
4163.2 *3*	16^-		D	Jπ: 595.8γ M1 to 15^-.
4230.6 *3*			D	
4410.04 *9*			A	
4419.63 *11*			A	
4483.71 *24*	(13)		D	Jπ: 1273.1γ D to 12^+, 1702.9γ (Q) to 11^+.
4494.5 *5*	(13)		D	Jπ: 936.2γ D to 12^-.
4569.31 *22*	14^+		D	Jπ: 1358.9γ E2 to 12^+.
4613.25 *21*	15^+		D	Jπ: 44.0γ M1 to 14^+, 1064.1γ E1 to 14^-.
4632.9 *3*	17^-		D	Jπ: 469.6γ M1 to 16^-.
4652.2 *3*	16^+		D	Jπ: 39.0γ M1 to 15^+.
4685.9 *3*	17^+		D	Jπ: 33.7γ M1 to 16^+.
4697.77 *16*			A	
4711.9 *3*	16^+		D	Jπ: 1144.5γ E1 to 15^-.
4744.3 *4*	17^-		D	Jπ: 581.1γ M1 to 16^-.
4832.2 *3*	18^+		D	Jπ: 146.2γ M1 to 17^+.
5168.9 *4*	17^+		D	Jπ: 457.0γ M1 to 16^+.
5212.8 *3*	19^+		D	Jπ: 380.6 M1 to 18^+.
5334.6 *3*	18^+		D	Jπ: 165.6γ M1(+E2) to 17^+, 622.9γ to 16^+.
5377.7 *3*	18^-		D	Jπ: 744.8γ M1 to 17^-, 1214.3γ (E2) to 16^-.
5486.5 *5*			D	

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Adopted Levels, Gammas (continued)

^{206}Po Levels (continued)

E(level)†	J^π	$T_{1/2}$	XREF	Comments
5514.2 *4*	19^+		D	J^π: 179.5γ M1 to 18^+.
5874.6 *5*	20		D	J^π: 661.8γ D to 19^+.
5935.4 *3*	19^-		D	J^π: 1103.3γ E1 to 18^+, 1191.2γ E2 to 17^-.
6009.9 *4*	20		D	J^π: 495.8γ D to 19^+.
6019.9 *4*			D	
6050.9 *4*			D	
6118.6 *4*	20^-		D	J^π: 183.2γ M1 to 19^-.
6288.5 *4*	21^-		D	J^π: 169.8γ M1 to 20^-.
6343.7 *5*			D	
6477.9 *5*			D	
6522.1 *5*	21		D	J^π: 647.4γ D to 20^-.
6699.6 *4*	21		D	J^π: 581.0γ D to 20^-.
6756.2 *4*	22^-		D	J^π: 467.7γ M1 to 21^-.
6873.0 *5*	21		D	J^π: 754.5γ D to 20^-.
6958.5 *5*	22		D	J^π: 670.0γ D to 21^-.
6982.8 *6*			D	
7121.4 *5*			D	
7137.3 *5*			D	
7158.7 *5*	23		D	J^π: 200.3γ D to 22.
7196.9 *5*	23		D	J^π: 440.6γ D to 22^-.
7267.7 *5*			D	
7282.0 *6*	22		D	J^π: 759.9γ D to 21.
7412.7 *5*			D	
7473.8 *5*			D	
7502.5 *5*	(24)		D	J^π: 343.8γ D to (23).
7593.8 *5*			D	
7823.3 *5*			D	
8044.2 *6*			D	
8201.3 *6*			D	
8218.5 *6*			D	
8259.2 *6*			D	
8265.1 *6*			D	
8348.9 *6*			D	
8381.9 *6*			D	
8431.1 *5*			D	
8627.7 *7*			D	
8643.5 *6*		1.0 ns *3*	D	$T_{1/2}$: From 212.4γ(t) in 1990Ba31.
8898.3 *7*			D	
8994.3 *6*			D	
9724.8 *7*			D	

† From a least-squares fit to Eγ.

Adopted Levels, Gammas (continued)

γ(^{206}Po)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.	δ[@]	α[&]	Comments
700.66	2+	700.66 *3*	100	0.0	0+	E2		0.01507 *21*	α(K)=0.01132 *16*; α(L)=0.00283 *4*; α(M)=0.000695 *10* α(N)=0.0001785 *25*; α(O)=3.62×10^{-5} *5*; α(P)=4.21×10^{-6} *6* B(E2)(W.u.)=10.6 *18* Mult.: α(K)exp=0.0114, α(L)exp=0.0029 and α(M)exp=0.0012 (1977Li16); α(K)exp=0.0122 *5*, α(L)exp=0.0027 *1*, and α(M)exp=0.0008 *1* (1990Ba31); A_2=0.11 *1*, A_4=0.00 *2* (1986Ra24).
1162.2	2+	461.5[#] *7*	100[#] *20*	700.66	2+	M1		0.1577 *23*	α(K)=0.1286 *19*; α(L)=0.02224 *32*; α(M)=0.00523 *8* α(N)=0.001347 *20*; α(O)=0.000282 *4*; α(P)=3.65×10^{-5} *5* Mult.: A_2=0.24 *2*, A_4=−0.12 *2*, consistent with ΔJ=0 transition, and α(K)exp=0.13 *1* (1986Ra24).
		1162.2[#] *7*	100[#] *20*	0.0	0+	E2		0.00552 *8*	α(K)=0.00441 *6*; α(L)=0.000841 *12*; α(M)=0.0002005 *28* α(N)=5.15×10^{-5} *7*; α(O)=1.063×10^{-5} *15*; α(P)=1.314×10^{-6} *18*; α(IPF)=1.390×10^{-6} *35* Mult.: A_2=0.20 *7*, A_4=−0.13 *10* (1986Ra24).
1177.80	4+	477.10 *3*	100	700.66	2+	E2		0.0360 *5*	α(K)=0.02441 *34*; α(L)=0.00867 *12*; α(M)=0.002186 *31* α(N)=0.000561 *8*; α(O)=0.0001118 *16*; α(P)=1.216×10^{-5} *17* B(E2)(W.u.)=4.9 *4* Mult.: α(K)exp=0.025 *3*, α(L)exp=0.0090 *12* and α(M)exp=0.0023 *12* (1977Li16) and α(K)exp=0.026 *8* (1982Br07); α(K)exp=0.032 *2*, α(L)exp=0.0101 *6*, and α(M)exp=0.0027 *2* (1990Ba31); A_2=0.10 *2*, A_4=0.00 *2* and A_2=0.18 *2*, A_4=0.02 *2* (1986Ra24).
1434.35	4+	256.53 *8*	43 *4*	1177.80	4+	M1(+E2)	≤0.6	0.70 *8*	α(K)=0.56 *7*; α(L)=0.107 *4*; α(M)=0.0255 *7* α(N)=0.00656 *19*; α(O)=0.00136 *5*; α(P)=0.000171 *11* I_γ: Other: 100 *12* (1990Ba31). Mult.: α(K)exp=0.67 *9*, α(L)exp=0.11 *2* and α(M)exp=0.022 *11* (1977Li16) and α(K)exp=0.60 *6* and α(L)exp=0.107 *22* (1982Br07); A_2=0.27 *2*, A_4=0.02 *3* and α(K)exp=0.10 *3* (1986Ra24); A_2=−0.17 *5*, A_4=−0.04 *7* (1990Ba31).
		733.73 *5*	100 *7*	700.66	2+	(E2)		0.01368 *19*	α(K)=0.01037 *15*; α(L)=0.002508 *35*; α(M)=0.000614 *9* α(N)=0.0001576 *22*; α(O)=3.20×10^{-5} *4*; α(P)=3.75×10^{-6} *5* I_γ: Other: 59 *6* (1990Ba31). Mult.: α(K)exp=0.0145 *23* (1982Br07), but this value suggests E2+M1 assignment; A_2=0.09 *1*, A_4=0.03 *1* (1986Ra24) and A_2=0.03 *10*, A_4=−0.13 *17* (1990Ba31). The A_2 value is inconsistent with E2 assignment from the level scheme.
1546.3	4+	384.1[#] *5*	100[#]	1162.2	2+	E2		0.0626 *9*	α(K)=0.0387 *6*; α(L)=0.01786 *26*; α(M)=0.00457 *7* α(N)=0.001173 *17*; α(O)=0.0002313 *34*; α(P)=2.415×10^{-5} *35* Mult.: A_2=0.21 *8*, A_4=0.05 *10* (1986Ra24).

$^{206}_{84}Po_{122}$-4

Adopted Levels, Gammas (continued)

γ(^{206}Po) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.	δ[@]	α[&]	Comments
1564.70	(3)$^+$	386.894[a] *19*	100[a] *14*	1177.80	4$^+$	M1(+E2)	≤0.3	0.245 *9*	α(K)=0.199 *7*; α(L)=0.0351 *9*; α(M)=0.00827 *20* α(N)=0.00213 *5*; α(O)=0.000445 *11*; α(P)=5.73×10^{-5} *17* Mult.: α(K)exp=0.037 *19*, α(L)exp=0.015 *7* in 1977Li16 requires E2, but α(K)exp=0.29 *5* in 1982Br07 and α(K)exp=0.20 *4* in 1986Ra24 suggest dominant M1; A_2=0.15 *4*, A_4=0.11 *6* in (1986Ra24).
		864.30 *11*	61 *4*	700.66	2$^+$	(M1+E2)		0.020 *10*	α(K)=0.016 *9*; α(L)=0.0029 *13*; α(M)=7.0×10^{-4} *29* α(N)=1.8×10^{-4} *8*; α(O)=3.7×10^{-5} *16*; α(P)=4.7×10^{-6} *22* Mult.: α(K)exp≈0.011 (1982Br07).
1573.38	6$^+$	138.9[‡] *3*	1.06[‡] *11*	1434.35	4$^+$	E2		1.850 *30*	α(K)=0.340 *5*; α(L)=1.119 *19*; α(M)=0.298 *5* α(N)=0.0764 *13*; α(O)=0.01459 *25*; α(P)=0.001330 *23* B(E2)(W.u.)=8.0 *+32−19* Mult.: α(exp)=2.4 *6* (1990Ba31).
		395.54 *4*	100	1177.80	4$^+$	E2		0.0579 *8*	α(K)=0.0363 *5*; α(L)=0.01613 *23*; α(M)=0.00412 *6* α(N)=0.001058 *15*; α(O)=0.0002088 *29*; α(P)=2.193×10^{-5} *31* B(E2)(W.u.)=4.0 *+16−9* Mult.: α(K)exp=0.037 *5*, α(L)exp=0.016 *2* and α(M)exp=0.004 *2* (1977Li16) and α(K)exp=0.038 *4* (1982Br07); α(K)exp=0.0381 *14*, α(L)exp=0.0165 *10*, and α(M)exp=0.0076 *4* (1990Ba31); A_2=0.17 *1*, A_4=−0.03 *2* and A_2=0.21 *1*, A_4=0.01 *20* (1986Ra24).
1585.96	8$^+$	(12.5[‡] *1*)	100[‡]	1573.38	6$^+$	[E2]		4.52×10^4 *19*	α(M)=3.46×10^4 *15* α(N)=8.8×10^3 *4*; α(O)=1.66×10^3 *7*; α(P)=144 *6* B(E2)(W.u.)=2.45 *15* E_γ: From 627.1γ − 614.6γ γ-ray energy difference in 1990Ba31.
1915.87	(4)$^+$	342.51 *19*	100 *13*	1573.38	6$^+$	(E2)		0.0857 *12*	α(K)=0.0498 *7*; α(L)=0.0269 *4*; α(M)=0.00693 *10* α(N)=0.001778 *25*; α(O)=0.000349 *5*; α(P)=3.57×10^{-5} *5* Mult.: From 1977Li16, but no arguments were presented.
		738.03 *12*	80 *7*	1177.80	4$^+$	[M1]		0.0457 *6*	α(K)=0.0374 *5*; α(L)=0.00638 *9*; α(M)=0.001498 *21* α(N)=0.000386 *5*; α(O)=8.07×10^{-5} *11*; α(P)=1.046×10^{-5} *15*
2100.79	(5)$^+$	527.27 *7*	53 *5*	1573.38	6$^+$	M1(+E2)	≤0.43	0.104 *7*	α(K)=0.085 *6*; α(L)=0.0148 *7*; α(M)=0.00350 *17* α(N)=0.00090 *4*; α(O)=0.000188 *9*; α(P)=2.42×10^{-5} *13* Mult.: α(K)exp=0.07 *3* (1977Li16), 0.091 *11* (1982Br07), α(K)exp=0.09 *1* (1986Ra24).
		923.12 *6*	100 *11*	1177.80	4$^+$	M1+E2	≈1.1	≈0.01628	α(K)≈0.01316; α(L)≈0.002382; α(M)≈0.000564 α(N)≈0.0001451; α(O)≈3.02×10^{-5}; α(P)≈3.82×10^{-6}

$^{206}_{84}Po_{122}$-5

Adopted Levels, Gammas (continued)

γ(^{206}Po) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.	δ[@]	α[&]	Comments
									Mult.: α(K)exp≈0.013 (1982Br07); A_2=0.25 *6*, A_4=−0.12 *9* (1986Ra24).
2138.92	(4,5)$^+$	565.55 *12*	54 *5*	1573.38	6$^+$				
		704.66 *9*	100 *10*	1434.35	4$^+$	M1+E2	≈0.9	≈0.0352	α(K)≈0.0283; α(L)≈0.00523; α(M)≈0.001241 α(N)≈0.000319; α(O)≈6.63×10^{-5}; α(P)≈8.38×10^{-6}
									Mult.: α(K)exp≈0.029 (1982Br07).
		960.92 *12*	23.0 *16*	1177.80	4$^+$				
2200.40	8$^+$	614.40 *5*	100 *10*	1585.96	8$^+$	M1(+E2)	≤0.32	0.0714 *27*	α(K)=0.0582 *23*; α(L)=0.01006 *32*; α(M)=0.00237 *7* α(N)=0.000609 *19*; α(O)=0.000127 *4*; α(P)=1.65×10^{-5} *6* Mult.: α(K)exp=0.063 *17* (1977Li16), 0.060 *4* (1982Br07,1986Ra24); α(K)exp=0.058 *2*, α(L)exp=0.0105 *4*, and α(M)exp=0.0021 *1* (1990Ba31); A_2=0.08 *1*, A_4=0.02 *2*, A_2=0.19 *2*, A_4=0.02 *3* (1986Ra24).
		627.1[‡] *1*	3.3[‡] *9*	1573.38	6$^+$				
2262.17	9$^-$	61.766[‡] *19*	100[‡] *4*	2200.40	8$^+$	E1		0.355 *5*	α(L)=0.271 *4*; α(M)=0.0649 *9* α(N)=0.01632 *23*; α(O)=0.00316 *4*; α(P)=0.000329 *5* B(E1)(W.u.)=5.1×10^{-7} *3* Mult.: (α(L1)exp+α(L2)exp)≈0.22, α(L3)exp≈0.15 (1982Br07); α(exp)=0.066 *26* in 1990Ba31, consistent only with Mult.=E1.
		676.4[‡] *2*	17.6[‡] *11*	1585.96	8$^+$	(E1)		0.00561 *8*	α(K)=0.00464 *7*; α(L)=0.000743 *10*; α(M)=0.0001730 *24* α(N)=4.43×10^{-5} *6*; α(O)=9.18×10^{-6} *13*; α(P)=1.156×10^{-6} *16* B(E1)(W.u.)=6.9×10^{-11} *6* Mult.: α(K)exp=0.015 *1* and α(L)exp=0.0018 *5* (1990Ba31), but the value is somewhat larger for Mult.=E1, presumably due to penetration.
2302.62	(5)$^+$	201.84 *12*	71 *8*	2100.79	(5)$^+$				Mult.: Note Mult.=E1 suggested in 1977Li16, but arguments were not presented. The level scheme requires M1.
		386.894[a] *19*	37[a] *5*	1915.87	(4)$^+$				
		729.27 *15*	12.8 *13*	1573.38	6$^+$	E2+M1	2.3 *12*	0.019 *10*	α(K)=0.015 *8*; α(L)=0.0032 *12*; α(M)=7.7×10^{-4} *27* α(N)=2.0×10^{-4} *7*; α(O)=4.1×10^{-5} *15*; α(P)=4.9×10^{-6} *21* Mult.: α(K)exp=0.015 *9* (1982Br07).
		868.27 *5*	100 *10*	1434.35	4$^+$	(E2)		0.00971 *14*	α(K)=0.00754 *11*; α(L)=0.001643 *23*; α(M)=0.000398 *6* α(N)=0.0001022 *14*; α(O)=2.089×10^{-5} *29*; α(P)=2.504×10^{-6} *35* Mult.: α(K)exp≈0.0074 (1982Br07).
		1124.77 *10*	24 *3*	1177.80	4$^+$	M1+E2	≈0.5	≈0.01347	α(K)≈0.01101; α(L)≈0.001877; α(M)≈0.000441 α(N)≈0.0001135; α(O)≈2.374×10^{-5}; α(P)≈3.07×10^{-6};

$^{206}_{84}Po_{122}$-6

Adopted Levels, Gammas (continued)

γ(^{206}Po) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.	δ[@]	α[&]	Comments
									α(IPF)≈6.79×10^{-7} Mult.: α(K)exp≈0.011 (1982Br07).
2418.94	10$^+$	157[b]		2262.17	9$^-$				E_γ: From 1976Be12.
		833.0[‡] *1*	100[‡]	1585.96	8$^+$	E2		0.01055 *15*	α(K)=0.00815 *11*; α(L)=0.001818 *25*; α(M)=0.000441 *6* α(N)=0.0001133 *16*; α(O)=2.314×10^{-5} *32*; α(P)=2.76×10^{-6} *4* Mult.: A_2=0.31 *3*, A_4=−0.07 *4*, A_2=0.54 *12*, A_4=−0.05 *15* (1986Ra24); α(K)exp=0.011 *4* (1986Ra24); α(K)exp=0.015 *1*, α(L)exp=0.0018 *5* (1990Ba31).
2423.23	9$^+$	837.2[‡] *2*	100[‡]	1585.96	8$^+$	M1		0.0329 *5*	α(K)=0.0269 *4*; α(L)=0.00458 *6*; α(M)=0.001076 *15* α(N)=0.000277 *4*; α(O)=5.80×10^{-5} *8*; α(P)=7.51×10^{-6} *11* Mult.: α(K)exp=0.023 *2* (1990Ba31) and 0.023 *5* (1986Ra24); A_2=−0.33 *5*, A_4=0.50 *7* (1986Ra24).
2432.40		170.2[‡] *3*	100[‡]	2262.17	9$^-$				
2500.60	5$^+$,6$^+$	197.98 *12*	100 *13*	2302.62	(5)$^+$	M1(+E2)	≤0.34	1.54 *6*	α(K)=1.24 *6*; α(L)=0.2291 *33*; α(M)=0.0544 *9* α(N)=0.01400 *23*; α(O)=0.00292 *4*; α(P)=0.000371 *7* Mult.: α(K)exp=1.43 *22*, α(L)exp=0.25 *7* and α(M)exp≈0.06 (1977Li16) and α(K)exp=1.43 *20* (1982Br07).
		399.98 *16*	44 *6*	2100.79	(5)$^+$	M1(+E2)	≤0.8	0.197 *34*	α(K)=0.159 *30*; α(L)=0.0294 *34*; α(M)=0.0070 *7* α(N)=0.00180 *19*; α(O)=0.00037 *4*; α(P)=4.7×10^{-5} *6* Mult.: α(K)exp=0.20 *7* (1982Br07).
		927.09 *14*	63 *6*	1573.38	6$^+$	M1+E2	≈0.2	≈0.02465	α(K)≈0.02016; α(L)≈0.00343; α(M)≈0.000805 α(N)≈0.0002071; α(O)≈4.34×10^{-5}; α(P)≈5.61×10^{-6} Mult.: α(K)exp≈0.02 (1982Br07).
2581.56	(4,5,6)$^+$	278.88 *5*	100 *11*	2302.62	(5)$^+$	M1+E2	1.52 *+19−15*	0.296 *22*	α(K)=0.207 *20*; α(L)=0.0673 *17*; α(M)=0.01688 *35* α(N)=0.00434 *9*; α(O)=0.000867 *21*; α(P)=9.59×10^{-5} *35* Mult.: α(K)exp=0.52 *7* (1977Li16) and α(K)exp=0.18 *2* (1982Br07).
		1008.64 *28*	67 *7*	1573.38	6$^+$				
2613.18	10$^+$	189.8[‡] *3*	47[‡] *6*	2423.23	9$^+$	M1		1.800 *26*	α(K)=1.462 *21*; α(L)=0.258 *4*; α(M)=0.0608 *9* α(N)=0.01565 *23*; α(O)=0.00327 *5*; α(P)=0.000423 *6* Mult.: α(exp)=2.9 *10*.
		1027.3[‡] *2*	100[‡] *8*	1585.96	8$^+$	E2		0.00698 *10*	α(K)=0.00553 *8*; α(L)=0.001107 *16*; α(M)=0.000266 *4* α(N)=6.82×10^{-5} *10*; α(O)=1.403×10^{-5} *20*; α(P)=1.714×10^{-6} *24* Mult.: α(K)exp=0.004 *2*.

$^{206}_{84}Po_{122}$-7

Adopted Levels, Gammas (continued)

γ(^{206}Po) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.	δ[@]	α[&]	Comments
2656.53	11$^-$	224.1[‡] *3*	7.0[‡] *11*	2432.40					
		237.6[‡] *1*	100.0[‡] *22*	2418.94	10$^+$	E1		0.0541 *8*	B(E1)(W.u.)=2.6×10^{-5} *6* α(K)=0.0439 *6*; α(L)=0.00782 *11*; α(M)=0.001844 *26* α(N)=0.000470 *7*; α(O)=9.56×10^{-5} *13*; α(P)=1.137×10^{-5} *16* Mult.: α(exp)=0.21 *11*, α(L)exp<0.028, α(M)exp<0.014 (1990Ba31); A_2=−0.23 *1*, A_4=0.01 *2*, A_2=−0.25 *8*, A_4=0.08 *13* and α(K)exp=0.05 (1986Ra24).
		395[b]		2262.17	9$^-$				E_γ: From 1976Be12.
2781.06	11$^+$	167.9[‡] *3*	100[‡] *9*	2613.18	10$^+$	M1		2.54 *4*	α(K)=2.064 *31*; α(L)=0.364 *5*; α(M)=0.0860 *13* α(N)=0.02214 *33*; α(O)=0.00463 *7*; α(P)=0.000599 *9* Mult.: α(exp)=2.6 *5* (1990Ba31); A_2=−0.33 *3*, A_4=−0.03 *3* (1986Ra24).
		362.1[‡] *3*	81[‡] *9*	2418.94	10$^+$	M1		0.303 *4*	α(K)=0.2465 *35*; α(L)=0.0429 *6*; α(M)=0.01011 *14* α(N)=0.00260 *4*; α(O)=0.000544 *8*; α(P)=7.04×10^{-5} *10* Mult.: α(K)exp=0.28 *6* (1990Ba31); A_2=−0.59 *5*, A_4=0.09 *7* (1986Ra24).
2901.97	12$^+$	120.8[‡] *3*	100[‡]	2781.06	11$^+$	M1		6.48 *10*	α(K)=5.25 *8*; α(L)=0.933 *15*; α(M)=0.2203 *35* α(N)=0.0567 *9*; α(O)=0.01187 *19*; α(P)=0.001533 *24* Mult.: α(exp)=6.0 *11* (1990Ba31).
2917.02	(4$^+$,5$^+$,6$^+$)	416.41 *12*	20.6 *16*	2500.60	5$^+$,6$^+$				
		614.40 *5*	100 *10*	2302.62	(5)$^+$	M1(+E2)	≤0.31	0.0715 *26*	α(K)=0.0583 *22*; α(L)=0.01008 *31*; α(M)=0.00237 *7* α(N)=0.000610 *18*; α(O)=0.000128 *4*; α(P)=1.65×10^{-5} *5* Mult.: α(K)exp=0.063 *17* (1977Li16).
3068.09	11$^-$	805.9[‡] *1*	100[‡]	2262.17	9$^-$	E2		0.01128 *16*	α(K)=0.00867 *12*; α(L)=0.001974 *28*; α(M)=0.000480 *7* α(N)=0.0001233 *17*; α(O)=2.514×10^{-5} *35*; α(P)=2.98×10^{-6} *4* Mult.: α(K)exp=0.0098 *5*, α(L)exp=0.0028 *2* (1990Ba31); A_2=0.31 *2*, A_4=0.08 *2* (1986Ra24).
3210.50	12$^+$	429.3[‡] *3*	100[‡]	2781.06	11$^+$	M1		0.1914 *27*	α(K)=0.1560 *22*; α(L)=0.0270 *4*; α(M)=0.00636 *9* α(N)=0.001638 *23*; α(O)=0.000343 *5*; α(P)=4.43×10^{-5} *6* Mult.: α(K)exp=0.175 *13*, α(L)exp=0.072 *11* (1990Ba31).
3361.96		444.73 *23*	37 *3*	2917.02	(4$^+$,5$^+$,6$^+$)	M1(+E2)	≤0.9	0.145 *29*	α(K)=0.117 *25*; α(L)=0.0215 *31*; α(M)=0.0051 *7* α(N)=0.00131 *18*; α(O)=0.00027 *4*; α(P)=3.5×10^{-5} *6* Mult.: α(K)exp=0.15 *8* (1977Li16,1982Br07).

$^{206}_{84}Po_{122}$-8

Adopted Levels, Gammas (continued)

γ(^{206}Po) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.	α[&]	Comments
3361.96		1059.38 *5*	100 *11*	2302.62	$(5)^+$			α(K)exp=0.046 *14* (1982Br07) suggests M2 assignment.
		1446.08 *12*	37 *3*	1915.87	$(4)^+$			
3396.49		1257.53 *12*	100 *8*	2138.92	$(4,5)^+$			
		2218.76 *18*	42 *8*	1177.80	4^+			
3463.11	13^-	252.5[‡] *3*	3.1[‡] *4*	3210.50	12^+	E1	0.0469 *7*	α(K)=0.0381 *5*; α(L)=0.00673 *10*; α(M)=0.001585 *23* α(N)=0.000404 *6*; α(O)=8.23×10^{-5} *12*; α(P)=9.84×10^{-6} *14* Mult.: α(exp)<0.3. A_2=−0.53 *6*, A_4=−0.35 *9* (1990Ba31);
		395.0[‡] *1*	100[‡] *4*	3068.09	11^-	E2	0.0581 *8*	α(K)=0.0364 *5*; α(L)=0.01621 *23*; α(M)=0.00414 *6* α(N)=0.001063 *15*; α(O)=0.0002098 *29*; α(P)=2.203×10^{-5} *31* Mult.: α(K)exp=0.0413 *14*, α(L)exp=0.0165 *11* (1990Ba31); α(K)exp=0.039 *3* (1986Ra24).
		561.1[‡] *3*	2.3[‡] *6*	2901.97	12^+	E1	0.00812 *11*	α(K)=0.00669 *9*; α(L)=0.001088 *15*; α(M)=0.000254 *4* α(N)=6.50×10^{-5} *9*; α(O)=1.343×10^{-5} *19*; α(P)=1.678×10^{-6} *24* Mult.: A_2=−0.36 *11*, A_4=−0.26 *20* (1990Ba31).
		806.6[‡] *1*	23[‡] *4*	2656.53	11^-	(E2)	0.01126 *16*	α(K)=0.00866 *12*; α(L)=0.001970 *28*; α(M)=0.000479 *7* α(N)=0.0001230 *17*; α(O)=2.509×10^{-5} *35*; α(P)=2.98×10^{-6} *4* Mult.: A_2=0.21 *1*, A_4=−0.06 *1* (1990Ba31); α(K)exp=0.010 (1986Ra24), but the γ rays is a doublet.
3485.87	13^-	829.3[‡] *2*	100[‡]	2656.53	11^-	E2	0.01065 *15*	α(K)=0.00822 *12*; α(L)=0.001839 *26*; α(M)=0.000446 *6* α(N)=0.0001146 *16*; α(O)=2.340×10^{-5} *33*; α(P)=2.79×10^{-6} *4* Mult.: α(K)exp<0.054; A_2=0.35 *10*, A_4=−0.02 *10* (1990Ba31).
3549.12	14^-	63.3[‡] *3*	4[‡] *3*	3485.87	13^-			
		86.0[‡] *1*	100[‡] *3*	3463.11	13^-	M1	3.27 *5*	α(L)=2.49 *4*; α(M)=0.588 *8* α(N)=0.1515 *22*; α(O)=0.0317 *5*; α(P)=0.00409 *6* Mult.: α(exp)=3.0 *3* (1990Ba31).
3558.3	12^-	901.8[‡] *3*	100[‡]	2656.53	11^-	M1	0.0272 *4*	α(K)=0.02224 *31*; α(L)=0.00377 *5*; α(M)=0.000885 *12* α(N)=0.0002278 *32*; α(O)=4.77×10^{-5} *7*; α(P)=6.18×10^{-6} *9* Mult.: A_2=−0.99 *12*, A_4=0.18 *16* (1990Ba31); A_2=−0.22 *5*, A_4=0.64 *7* and α(K)exp=0.04 (1986Ra24).
3567.4	15^-	(18.2[‡] *4*)	100[‡]	3549.12	14^-			α(L)=238 *4*; α(M)=57.1 *8*; α(N+..)=18.2 *3* α(N)=14.70 *21*; α(O)=3.08 *5*; α(P)=0.397 *6* E_γ: From 1064.1γ − 1045.9γ γ-ray energy difference in 1990Ba31.
3595.45		233.55 *9*	100 *9*	3361.96		(E2)	0.278 *4*	α(K)=0.1181 *17*; α(L)=0.1186 *17*; α(M)=0.0312 *4* α(N)=0.00800 *11*; α(O)=0.001545 *22*; α(P)=0.0001486 *21*
		1013.82 *12*	94 *9*	2581.56	$(4,5,6)^+$			
		1094.89 *12*	22 *3*	2500.60	$5^+,6^+$			
		1292.84 *21*	22 *3*	2302.62	$(5)^+$			
3704.47		1047.9[‡] *3*	100[‡] *10*	2656.53	11^-			

Adopted Levels, Gammas (continued)

γ(^{206}Po) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.	δ[@]	α[&]	Comments
3704.47		1285.6[‡] *3*	37[‡] *10*	2418.94	10^+				
3872.15		955.20 *8*	100 *13*	2917.02	$(4^+,5^+,6^+)$	M1+E2	≈1.0	≈0.01573	α(K)≈0.01274; α(L)≈0.002277; α(M)≈0.000538 α(N)≈0.0001385; α(O)≈2.88×10^{-5}; α(P)≈3.67×10^{-6} Mult.: α(K)exp≈0.013 (1982Br07).
		1290.44 *11*	47 *7*	2581.56	$(4,5,6)^+$				
		2298.75 *24*	53 *7*	1573.38	6^+				
3951.92	14^-	466.0[‡] *2*	100[‡]	3485.87	13^-	M1		0.1537 *22*	α(K)=0.1253 *18*; α(L)=0.02166 *30*; α(M)=0.00510 *7* α(N)=0.001312 *18*; α(O)=0.000275 *4*; α(P)=3.55×10^{-5} *5* Mult.: A_2=−0.26 *3*, A_4=−0.10 *5* (1990Ba31); A_2=−0.43 *4*, A_4=0.11 *5* and α(K)exp=0.15 (1986Ra24).
4038.84		1736.25 *11*	69 *8*	2302.62	$(5)^+$				
		1899.84 *12*	39 *8*	2138.92	$(4,5)^+$				
		1938.07 *11*	100 *8*	2100.79	$(5)^+$				
4163.2	16^-	595.8[‡] *1*	100[‡]	3567.4	15^-	M1		0.0801 *11*	α(K)=0.0654 *9*; α(L)=0.01123 *16*; α(M)=0.00264 *4* α(N)=0.000680 *10*; α(O)=0.0001423 *20*; α(P)=1.842×10^{-5} *26* Mult.: α(K)exp=0.07 *4*, α(L)exp=0.025 *13* (1990Ba31).
4230.6		526.2[‡] *3*	100[‡]	3704.47		D			Mult.: A_2=0.00 *3*, A_4=0.02 *5* (1990Ba31).
4410.04		1048.18 *11*	100 *9*	3361.96		(M1)		0.01842 *26*	α(K)=0.01509 *21*; α(L)=0.00255 *4*; α(M)=0.000598 *8* α(N)=0.0001538 *22*; α(O)=3.22×10^{-5} *5*; α(P)=4.18×10^{-6} *6* Mult.: α(K)exp≈0.021 (1982Br07).
		1492.85 *15*	9 *4*	2917.02	$(4^+,5^+,6^+)$				
		1909.33 *19*	26 *4*	2500.60	$5^+,6^+$				
		2271.14 *12*	13 *4*	2138.92	$(4,5)^+$				
4419.63		380.81 *21*	62 *8*	4038.84		M1(+E2)	≤0.5	0.244 *20*	α(K)=0.198 *18*; α(L)=0.0355 *20*; α(M)=0.0084 *4* α(N)=0.00216 *11*; α(O)=0.000451 *24*; α(P)=5.8×10^{-5} *4* Mult.: α(K)exp=0.23 *7* (1977Li16) and 0.27 *11* (1982Br07).
		824.22 *9*	100 *8*	3595.45					
		2318.58 *21*	38 *8*	2100.79	$(5)^+$				
4483.71	(13)	1273.1[‡] *3*	100[‡] *13*	3210.50	12^+	D			Mult.: A_2=−0.59 *6*, A_4=−0.12 *10* (1990Ba31).
		1581.8[‡] *3*	63[‡] *6*	2901.97	12^+				
		1702.9[‡] *3*	63[‡] *6*	2781.06	11^+	(Q)			Mult.: A_2=0.18 *9*, A_4=−0.14 *14* (1990Ba31).
4494.5	(13)	936.2[‡] *3*	100[‡]	3558.3	12^-	D			Mult.: A_2=−0.43 *5*, A_4=0.01 *7* (1990Ba31).
4569.31	14^+	85.8[‡] *3*	33[‡] *17*	4483.71	(13)				
		617.3[‡] *3*	100[‡] *21*	3951.92	14^-	(D)			α(K)=0.037 *23*; α(L)=0.007 *4*; α(M)=0.0017 *7*; α(N+..)=0.00054 *23* α(N)=0.00044 *19*; α(O)=9; α(P)=1.1×10^{-5} *6* Mult.: A_2=0.13 *8*, A_4=0.05 *13* (1990Ba31), consistent with ΔJ=0.

$^{206}_{84}Po_{122}$-10

Adopted Levels, Gammas (continued)

γ(^{206}Po) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.	α[&]	Comments
4569.31	14$^+$	1358.9[‡] *3*	79[‡] *8*	3210.50	12$^+$	E2	0.00414 *6*	α(K)=0.00332 *5*; α(L)=0.000602 *8*; α(M)=0.0001426 *20* α(N)=3.66×10^{-5} *5*; α(O)=7.59×10^{-6} *11*; α(P)=9.50×10^{-7} *13*; α(IPF)=2.57×10^{-5} *4* Mult.: A_2=0.17 *5*, A_4=0.03 *8* (1990Ba31).
		1667.2[‡] *3*	54[‡] *4*	2901.97	12$^+$	E2	0.00294 *4*	α(K)=0.002304 *32*; α(L)=0.000397 *6*; α(M)=9.33×10^{-5} *13* α(N)=2.397×10^{-5} *34*; α(O)=4.98×10^{-6} *7*; α(P)=6.32×10^{-7} *9*; α(IPF)=0.0001205 *17* Mult.: A_2=0.28 *7*, A_4=0.02 *11* (1990Ba31).
4613.25	15$^+$	44.0[‡] *3*	1.3[‡] *3*	4569.31	14$^+$	M1	23.2 *6*	α(L)=17.7 *4*; α(M)=4.18 *10* α(N)=1.077 *27*; α(O)=0.225 *6*; α(P)=0.0291 *7* Mult.: α(exp)=37 *6* (1990Ba31).
		661.3[‡] *3*	41[‡] *8*	3951.92	14$^-$	E1	0.00587 *8*	α(K)=0.00485 *7*; α(L)=0.000777 *11*; α(M)=0.0001811 *25* α(N)=4.63×10^{-5} *7*; α(O)=9.60×10^{-6} *13*; α(P)=1.208×10^{-6} *17* Mult.: A_2=−0.34 *2*, A_4=0.05 *3* (1990Ba31) implies D, but level π=+ suggest Mult.=E1.
		1045.9[‡] *3*	15[‡] *3*	3567.4	15$^-$			
		1064.1[‡] *2*	100[‡] *8*	3549.12	14$^-$	E1	2.43×10^{-3} *3*	α(K)=0.002023 *28*; α(L)=0.000313 *4*; α(M)=7.26×10^{-5} *10* α(N)=1.860×10^{-5} *26*; α(O)=3.87×10^{-6} *5*; α(P)=4.95×10^{-7} *7* Mult.: α(K)exp=0.0025 *4* (1990Ba31).
4632.9	17$^-$	469.6[‡] *2*	100[‡] *10*	4163.2	16$^-$	M1	0.1506 *21*	α(K)=0.1228 *17*; α(L)=0.02122 *30*; α(M)=0.00499 *7* α(N)=0.001285 *18*; α(O)=0.000269 *4*; α(P)=3.48×10^{-5} *5* Mult.: α(K)exp=0.19 *4*, α(L)exp=0.049 *9* (1990Ba31).
		1065.8[‡] *3*	51[‡] *6*	3567.4	15$^-$	E2	0.00651 *9*	α(K)=0.00517 *7*; α(L)=0.001019 *14*; α(M)=0.0002439 *34* α(N)=6.26×10^{-5} *9*; α(O)=1.290×10^{-5} *18*; α(P)=1.582×10^{-6} *22* Mult.: A_2=0.33 *7*, A_4=0.11 *12* (1990Ba31).
4652.2	16$^+$	39.0[‡] *3*	3.9[‡] *9*	4613.25	15$^+$	M1	33.1 *9*	α(L)=25.3 *7*; α(M)=5.97 *16* α(N)=1.54 *4*; α(O)=0.322 *9*; α(P)=0.0415 *11* Mult.: α(exp)=49 *7* (1990Ba31).
		1084.8[‡] *3*	100[‡] *13*	3567.4	15$^-$			
4685.9	17$^+$	33.7[‡] *3*	11.1[‡] *22*	4652.2	16$^+$	M1	51.0 *15*	α(L)=38.9 *12*; α(M)=9.19 *28* α(N)=2.37 *7*; α(O)=0.495 *15*; α(P)=0.0639 *19* Mult.: α(exp)=50 *8* (1990Ba31).
		522.5[‡] *3*	100[‡] *22*	4163.2	16$^-$			
4697.77		2116.07 *18*	100 *20*	2581.56	(4,5,6)$^+$			
		2559.07 *25*	80 *20*	2138.92	(4,5)$^+$			
4711.9	16$^+$	481.3[‡] *3*	15[‡] *3*	4230.6				
		1144.5[‡] *2*	100[‡] *7*	3567.4	15$^-$	E1	2.14×10^{-3} *3*	α(K)=0.001780 *25*; α(L)=0.000274 *4*; α(M)=6.36×10^{-5} *9*

$^{206}_{84}Po_{122}$-11

Adopted Levels, Gammas (continued)

γ(^{206}Po) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.	α[&]	Comments
								α(N)=1.630×10^{-5} *23*; α(O)=3.40×10^{-6} *5*; α(P)=4.35×10^{-7} *6*; α(IPF)=3.53×10^{-6} *5* Mult.: α(K)exp=0.0015 *2* (1990Ba31).
4744.3	17$^-$	581.1[‡] *3*	100[‡]	4163.2	16$^-$	M1	0.0856 *12*	α(K)=0.0699 *10*; α(L)=0.01200 *17*; α(M)=0.00282 *4* α(N)=0.000726 *10*; α(O)=0.0001521 *21*; α(P)=1.969×10^{-5} *28* Mult.: α(K)exp=0.071 *6*, α(L)exp=0.011 *3* (1990Ba31).
4832.2	18$^+$	146.2[‡] *2*	100[‡]	4685.9	17$^+$	M1	3.76 *5*	α(K)=3.05 *4*; α(L)=0.540 *8*; α(M)=0.1275 *19* α(N)=0.0328 *5*; α(O)=0.00687 *10*; α(P)=0.000887 *13* Mult.: α(exp)=3.5 *3* (1990Ba31).
5168.9	17$^+$	457.0[‡] *2*	100[‡]	4711.9	16$^+$	M1	0.1619 *23*	α(K)=0.1320 *19*; α(L)=0.02283 *32*; α(M)=0.00537 *8* α(N)=0.001383 *19*; α(O)=0.000290 *4*; α(P)=3.75×10^{-5} *5* Mult.: α(K)exp=0.176 *9* (1990Ba31).
5212.8	19$^+$	380.6[‡] *1*	100[‡]	4832.2	18$^+$	M1	0.265 *4*	α(K)=0.2155 *30*; α(L)=0.0375 *5*; α(M)=0.00882 *12* α(N)=0.002271 *32*; α(O)=0.000475 *7*; α(P)=6.15×10^{-5} *9* Mult.: α(K)exp=0.27 *1*, α(L)exp=0.040 *5* (1990Ba31).
5334.6	18$^+$	165.6[‡] *3*	100[‡] *9*	5168.9	17$^+$	M1(+E2)	1.8 *9*	α(K)=1.2 *9*; α(L)=0.45 *7*; α(M)=0.113 *23* α(N)=0.029 *6*; α(O)=0.0057 *9*; α(P)=0.000620 *10* Mult.: α(exp)=2.0 *5* (1990Ba31).
		622.9[‡] *3*	77[‡] *32*	4711.9	16$^+$			
5377.7	18$^-$	633.3[‡] *3*	25[‡] *3*	4744.3	17$^-$	M1+E2	0.043 *25*	α(K)=0.035 *21*; α(L)=0.0066 *29*; α(M)=0.0016 *7* α(N)=4.1×10^{-4} *17*; α(O)=8; α(P)=1.1×10^{-5} *5* Mult.: A_2=−0.04 *7*, A_4=0.20 *12* (1990Ba31).
		744.8[‡] *2*	100[‡] *7*	4632.9	17$^-$	M1	0.0447 *6*	α(K)=0.0365 *5*; α(L)=0.00623 *9*; α(M)=0.001463 *21* α(N)=0.000376 *5*; α(O)=7.88×10^{-5} *11*; α(P)=1.021×10^{-5} *14* Mult.: α(K)exp=0.028 *2*, α(L)exp=0.0091 *6* (1990Ba31).
		1214.3[‡] *3*	8[‡] *3*	4163.2	16$^-$	(E2)	0.00508 *7*	α(K)=0.00407 *6*; α(L)=0.000765 *11*; α(M)=0.0001820 *25* α(N)=4.67×10^{-5} *7*; α(O)=9.65×10^{-6} *14*; α(P)=1.198×10^{-6} *17*; α(IPF)=4.90×10^{-6} *7* Mult.: A_2=0.11 *17*, A_4=0.13 *26* (1990Ba31).
5486.5		317.6[‡] *3*	100[‡]	5168.9	17$^+$			
5514.2	19$^+$	179.5[‡] *3*	48[‡] *5*	5334.6	18$^+$	M1	2.106 *31*	α(K)=1.710 *25*; α(L)=0.302 *4*; α(M)=0.0712 *11* α(N)=0.01832 *27*; α(O)=0.00383 *6*; α(P)=0.000495 *7* Mult.: α(exp)=2.8 *4* (1990Ba31).
		682.0[‡] *3*	100[‡] *25*	4832.2	18$^+$	M1+E2	0.036 *20*	α(K)=0.029 *17*; α(L)=0.0054 *24*; α(M)=0.0013 *5* α(N)=3.3×10^{-4} *14*; α(O)=6.9×10^{-5} *30*; α(P)=9 Mult.: A_2=−0.56 *4*, A_4=0.07 *6* (1990Ba31).

$^{206}_{84}Po_{122}$-12

Adopted Levels, Gammas (continued)

γ(^{206}Po) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.	α[&]	Comments
5874.6	20	661.8[‡] *3*	100[‡]	5212.8	19$^+$	D		Mult.: A_2=−0.34 *2*, A_4=0.05 *3* (1990Ba31).
5935.4	19$^-$	557.7[‡] *1*	100[‡] *5*	5377.7	18$^-$	M1	0.0954 *13*	α(K)=0.0779 *11*; α(L)=0.01339 *19*; α(M)=0.00315 *4* α(N)=0.000811 *11*; α(O)=0.0001697 *24*; α(P)=2.196×10^{-5} *31* Mult.: α(K)exp=0.083 *5*, α(L)exp<0.039 (1990Ba31).
		600.8[‡] *2*	36[‡] *9*	5334.6	18$^+$	E1	0.00708 *10*	α(K)=0.00585 *8*; α(L)=0.000944 *13*; α(M)=0.0002203 *31* α(N)=5.64×10^{-5} *8*; α(O)=1.166×10^{-5} *16*; α(P)=1.462×10^{-6} *20* Mult.: A_2=−0.21 *4*, A_4=−0.15 *6* (1990Ba31).
		722.4[‡] *2*	46[‡] *9*	5212.8	19$^+$	E1	0.00495 *7*	α(K)=0.00410 *6*; α(L)=0.000652 *9*; α(M)=0.0001517 *21* α(N)=3.88×10^{-5} *5*; α(O)=8.06×10^{-6} *11*; α(P)=1.017×10^{-6} *14* Mult.: A_2=0.30 *1*, A_4=−0.04 *2* (1990Ba31), ΔJ=0 transition.
		1103.3[‡] *3*	23[‡] *3*	4832.2	18$^+$	E1	2.28×10^{-3} *3*	α(K)=0.001898 *27*; α(L)=0.000293 *4*; α(M)=6.80×10^{-5} *10* α(N)=1.741×10^{-5} *24*; α(O)=3.63×10^{-6} *5*; α(P)=4.64×10^{-7} *7*; α(IPF)=7.65×10^{-7} *15* Mult.: α(K)exp<0.004, A_2=−0.21 *4*, A_4=0.02 *6* (1990Ba31).
		1191.2[‡] *3*	7.3[‡] *18*	4744.3	17$^-$	E2	0.00527 *7*	α(K)=0.00422 *6*; α(L)=0.000797 *11*; α(M)=0.0001899 *27* α(N)=4.88×10^{-5} *7*; α(O)=1.007×10^{-5} *14*; α(P)=1.248×10^{-6} *17*; α(IPF)=3.02×10^{-6} *5* Mult.: α(K)exp=0.0032 *12* (1990Ba31).
		1302.7[‡] *3*	7.3[‡] *18*	4632.9	17$^-$			
6009.9	20	495.8[‡] *2*	100[‡]	5514.2	19$^+$	D		Mult.: A_2=−0.42 *3*, A_4=0.07 *4* (1990Ba31).
6019.9		807.1[‡] *3*	100[‡]	5212.8	19$^+$			
6050.9		115.5[‡] *3*	100[‡]	5935.4	19$^-$			
6118.6	20$^-$	183.2[‡] *2*	100[‡]	5935.4	19$^-$	M1	1.988 *28*	α(K)=1.615 *23*; α(L)=0.285 *4*; α(M)=0.0672 *10* α(N)=0.01729 *25*; α(O)=0.00362 *5*; α(P)=0.000468 *7* Mult.: α(exp)=2.4 *3* (1990Ba31).
6288.5	21$^-$	169.8[‡] *2*	100[‡]	6118.6	20$^-$	M1	2.463 *35*	α(K)=2.000 *29*; α(L)=0.353 *5*; α(M)=0.0833 *12* α(N)=0.02144 *31*; α(O)=0.00449 *6*; α(P)=0.000580 *8* Mult.: α(exp)=2.9 *5* (1990Ba31).
6343.7		292.9[‡] *3*	100[‡]	6050.9				
6477.9		468.0[‡] *3*	100[‡]	6009.9	20			
6522.1	21	647.4[‡] *3*	100[‡]	5874.6	20	D		Mult.: A_2=−0.52 *6*, A_4=0.33 *9* (1990Ba31).
6699.6	21	581.0[‡] *3*	100[‡] *19*	6118.6	20$^-$	D		Mult.: A_2=−0.19 *1*, A_4=−0.02 *2* (1990Ba31).
		679.7[‡] *3*	23[‡] *4*	6019.9				
6756.2	22$^-$	467.7[‡] *2*	100[‡]	6288.5	21$^-$	M1	0.1522 *21*	α(K)=0.1241 *17*; α(L)=0.02145 *30*; α(M)=0.00505 *7* α(N)=0.001299 *18*; α(O)=0.000272 *4*; α(P)=3.52×10^{-5} *5* Mult.: α(K)exp=0.16 *4*, and α(L)exp=0.041 *7* (1990Ba31).

$^{206}_{84}Po_{122}$-13

Adopted Levels, Gammas (continued)

γ(^{206}Po) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.	Comments
6873.0	21	754.5[‡] *3*	100[‡]	6118.6	20$^-$	D	Mult.: A_2=−0.49 *7*, A_4=0.01 *11* (1990Ba31).
6958.5	22	85.6[‡] *3*	50[‡] *25*	6873.0	21		
		670.0[‡] *3*	100[‡] *25*	6288.5	21$^-$	D	Mult.: A_2=−0.29 *10*, A_4=−0.15 *10* (1990Ba31).
6982.8		504.9[‡] *3*	100[‡]	6477.9		D	Mult.: A_2=−0.59 *9*, A_4=0.31 *14* (1990Ba31).
7121.4		421.8[‡] *3*	100[‡]	6699.6	21	D	Mult.: A_2=−0.35 *6*, A_4=0.07 *9* (1990Ba31).
7137.3		793.6[‡] *3*	100[‡]	6343.7		D	Mult.: A_2=−0.32 *6*, A_4=0.11 *10* (1990Ba31).
7158.7	23	200.3[‡] *3*	100[‡] *8*	6958.5	22	D	Mult.: A_2=−0.34 *4*, A_4=−0.08 *8* (1990Ba31).
		402.4[‡] *3*	52[‡] *20*	6756.2	22$^-$		
7196.9	23	440.6[‡] *3*	100[‡]	6756.2	22$^-$	D	Mult.: A_2=−0.41 *8*, A_4=0.32 *19* (1990Ba31).
7267.7		568.2[‡] *3*	100[‡] *50*	6699.6	21		
		979.2[‡] *3*	40[‡] *5*	6288.5	21$^-$		
7282.0	22	759.9[‡] *3*	100[‡]	6522.1	21	D	Mult.: A_2=−0.05 *6*, A_4=0.19 *7* (1990Ba31).
7412.7		1124.2[‡] *3*	100[‡]	6288.5	21$^-$		
7473.8		336.5[‡] *3*	100[‡]	7137.3		D	Mult.: A_2=−0.28 *5*, A_4=−0.06 *8* (1990Ba31).
7502.5	(24)	343.8[‡] *3*	100[‡]	7158.7	23	D	Mult.: A_2=−0.36 *5*, A_4=0.12 *8* (1990Ba31).
7593.8		396.9[‡] *3*	100[‡]	7196.9	23		
7823.3		626.4[‡] *3*	100[‡]	7196.9	23		
8044.2		541.7[‡] *3*	100[‡]	7502.5	(24)		
8201.3		919.2[‡] *3*	100[‡]	7282.0	22	D	Mult.: A_2=−0.54 *8*, A_4=0.16 *12* (1990Ba31).
8218.5		1235.7[‡] *3*	100[‡]	6982.8		D	Mult.: A_2=−0.11 *13*, A_4=0.00 *22* (1990Ba31).
8259.2		977.2[‡] *3*	100[‡]	7282.0	22		
8265.1		983.2[‡] *3*	100[‡]	7282.0	22	D	Mult.: A_2=−0.77 *14*, A_4=−0.07 *24* (1990Ba31).
8348.9		936.2[‡] *3*	100[‡]	7412.7		D	Mult.: A_2=−0.43 *5*, A_4=0.01 *7* (1990Ba31).
8381.9		116.8[‡] *3*	20[‡] *10*	8265.1			
		163.4[‡] *3*	100[‡] *20*	8218.5		D	Mult.: A_2=−0.13 *7*, A_4=−0.03 *11* (1990Ba31).
		180.5[‡] *3*	70[‡] *20*	8201.3			
8431.1		607.8[‡] *3*	60[‡] *10*	7823.3			
		837.2[‡] *3*	30[‡] *20*	7593.8			
		928.6[‡] *3*	100[‡] *30*	7502.5	(24)		
		957.3[‡] *3*	70[‡] *20*	7473.8		D	Mult.: A_2=−0.54 *15*, A_4=−0.33 *20* (1990Ba31).
8627.7		245.8[‡] *3*	100[‡]	8381.9		D	Mult.: A_2=−0.35 *5*, A_4=0.01 *7* (1990Ba31).
8643.5		212.4[‡] *3*	100[‡]	8431.1		D	Mult.: A_2=−0.10 *4*, A_4=−0.04 *6* (1990Ba31).
8898.3		270.6[‡] *3*	100[‡]	8627.7		D	Mult.: A_2=−0.40 *4*, A_4=−0.11 *7* (1990Ba31).

$^{206}_{84}Po_{122}$-14

Adopted Levels, Gammas (continued)

$\gamma(^{206}Po)$ (continued)

E_i(level)	E_γ †	I_γ †	E_f	Mult.	Comments
8994.3	350.8‡ *2*	100‡	8643.5	D	Mult.: A_2=−0.21 *5*, A_4=0.15 *11* (1990Ba31).
9724.8	730.5‡ *3*	100‡	8994.3	D	Mult.: A_2=−0.09 *9*, A_4=0.03 *14* (1990Ba31).

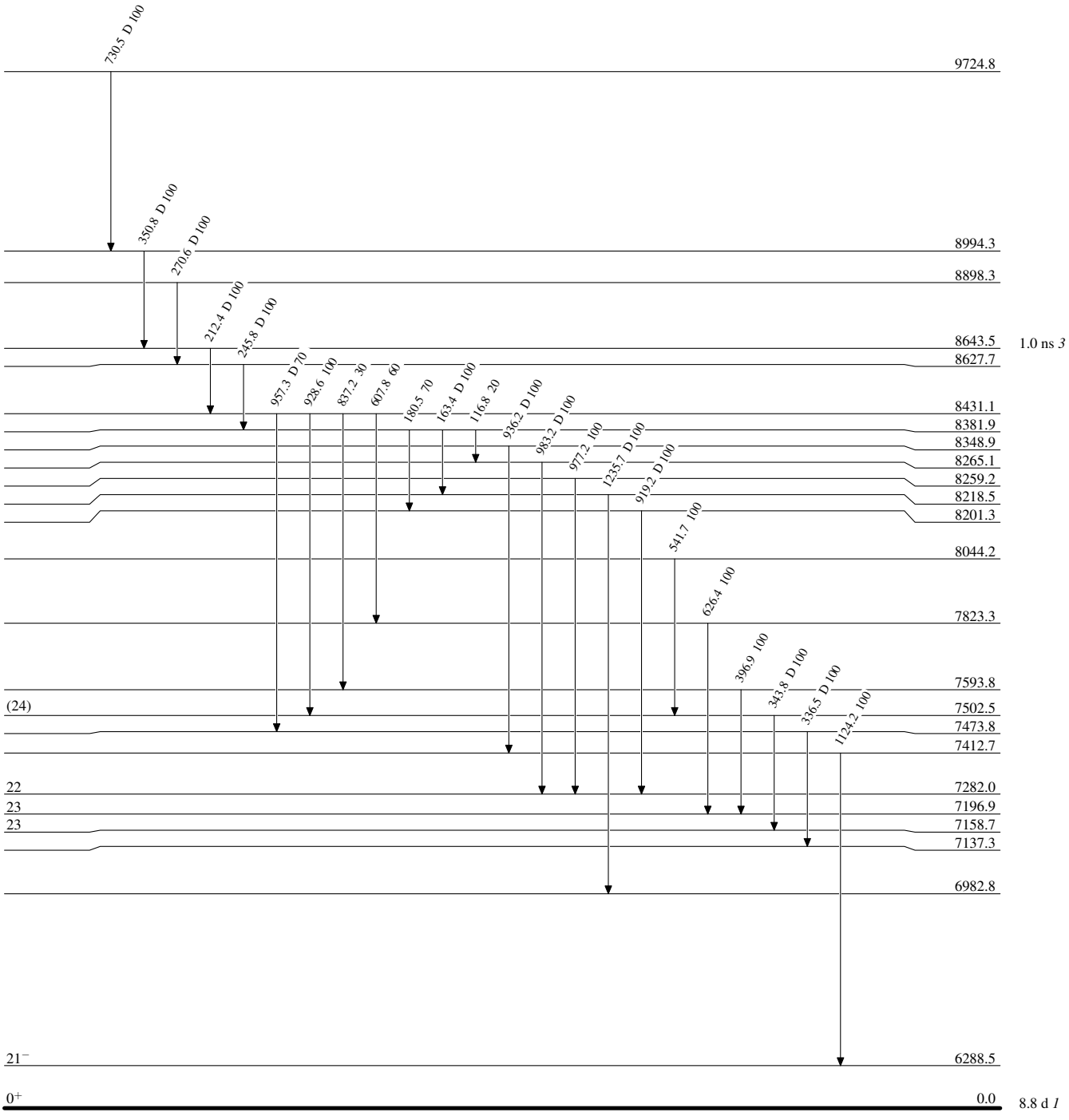
† From ^{206}At $\varepsilon+\beta^+$ decay, unless otherwise stated.
‡ From ^{198}Pt(^{13}C,5nγ).
# From ^{206}Pb(α,4nγ), ^{206}Pb(^{3}He,3nγ).
@ Determined using the briccmixing code and the α(K)exp and α(L)exp data in ^{206}At $\varepsilon+\beta^+$ decay.
& Additional information 1.
a Multiply placed with undivided intensity.
b Placement of transition in the level scheme is uncertain.

$^{206}_{84}Po_{122}$-15

Adopted Levels, Gammas

Level Scheme

Intensities: Relative photon branching from each level

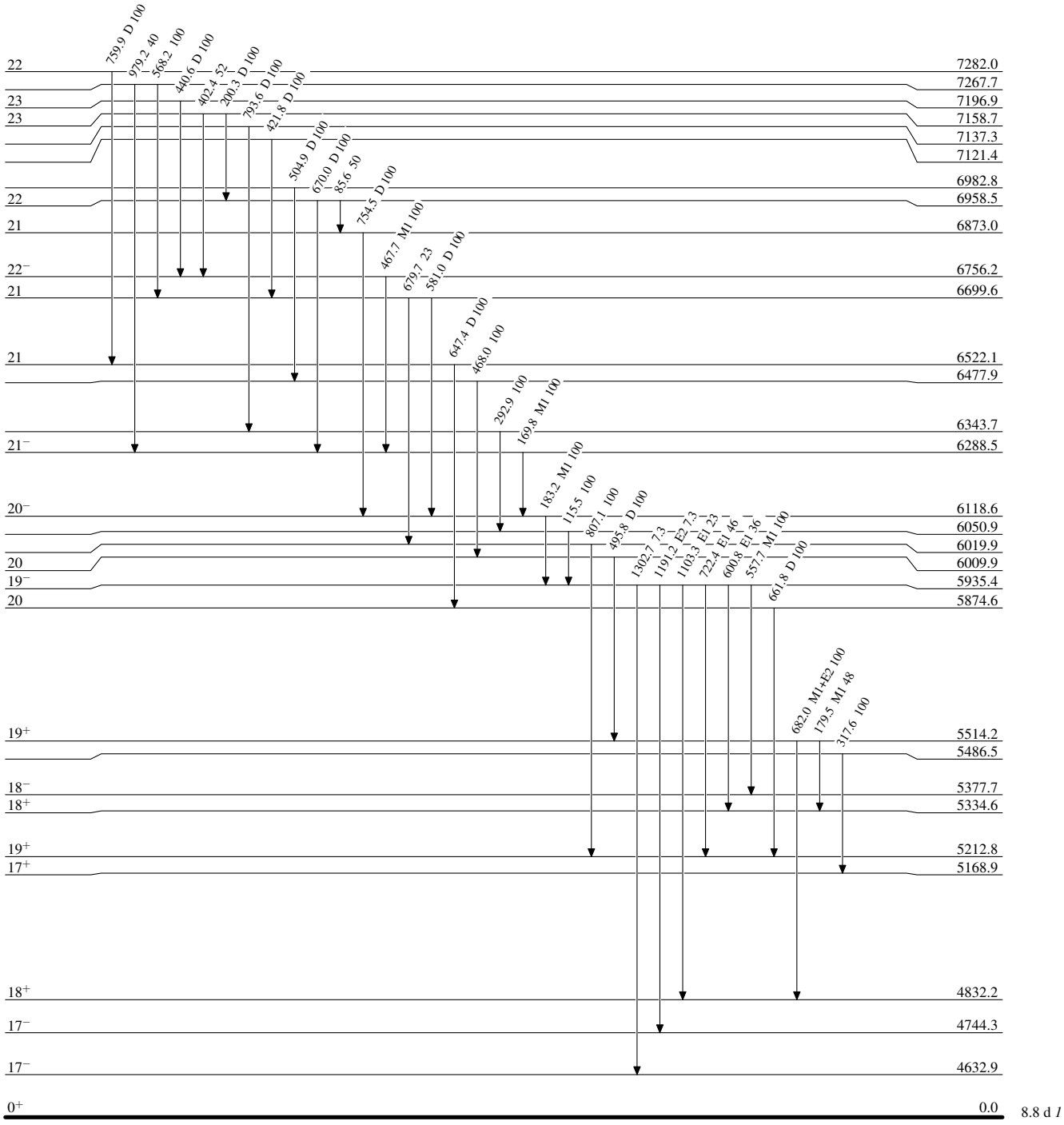


$^{206}_{84}Po_{122}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

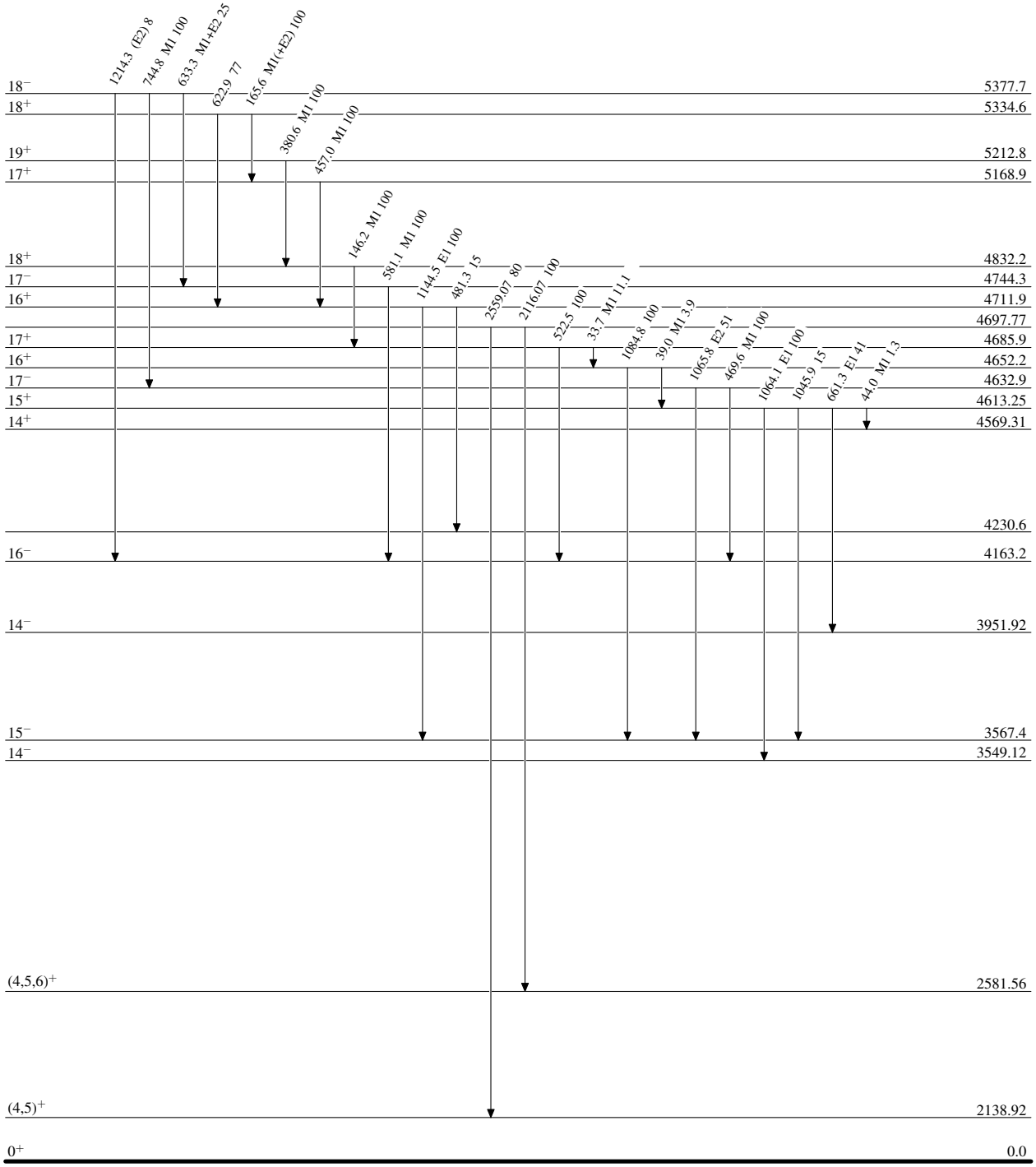


$^{206}_{84}Po_{122}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level



$^{206}_{84}Po_{122}$

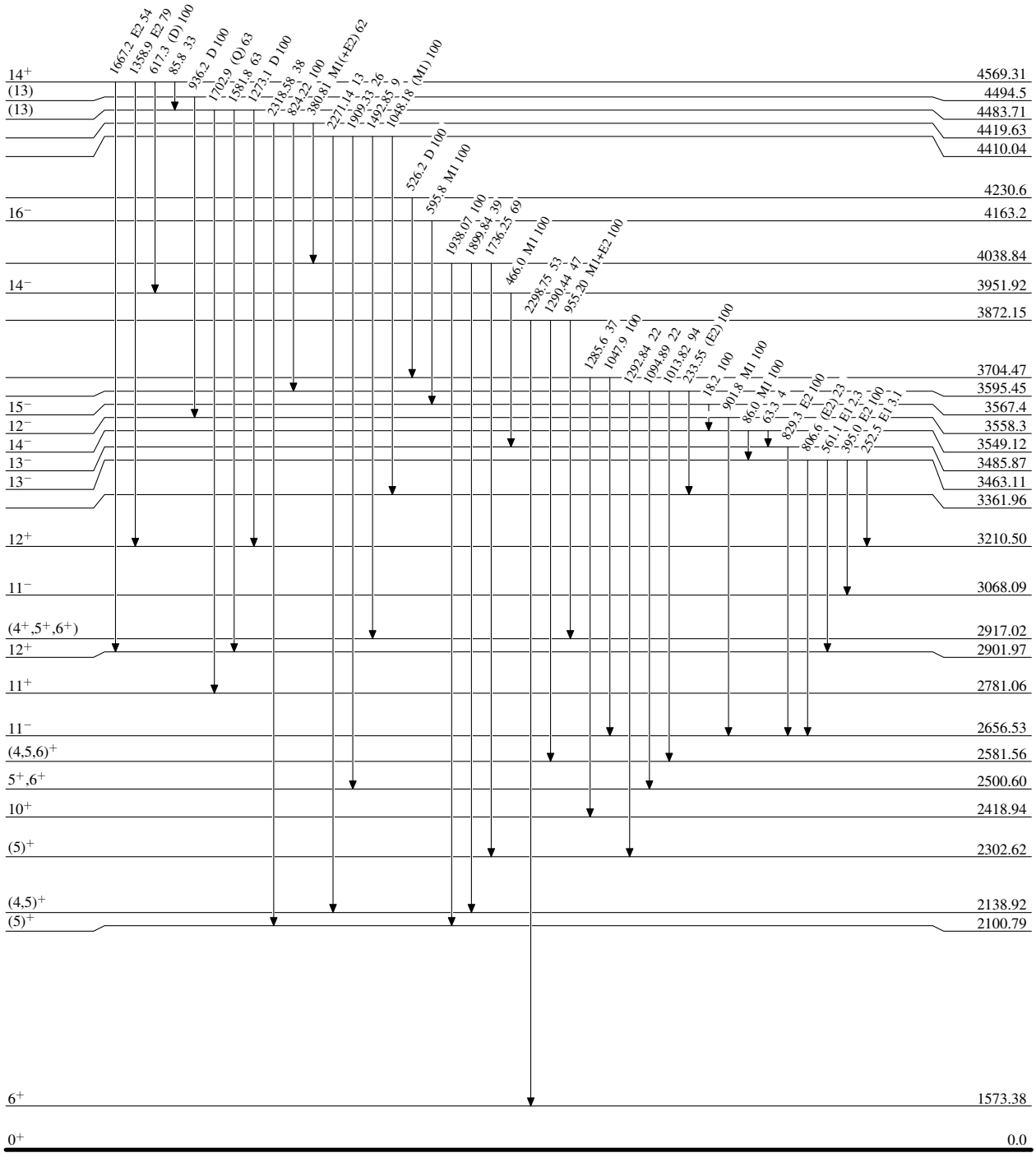
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

γ Decay (Uncertain)



$^{206}_{84}Po_{122}$

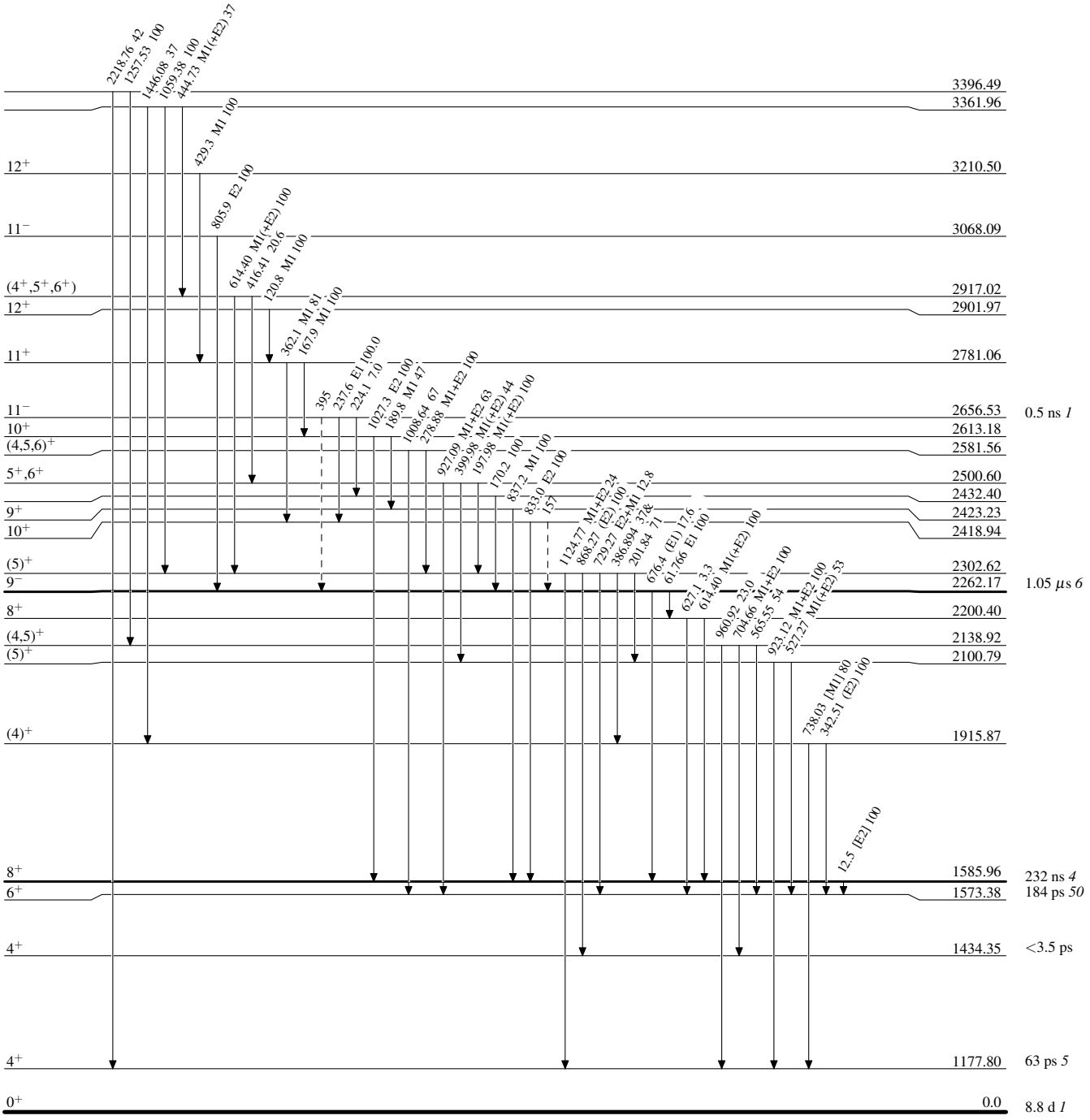
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level
& Multiply placed: undivided intensity given

– – – – – – ► γ Decay (Uncertain)

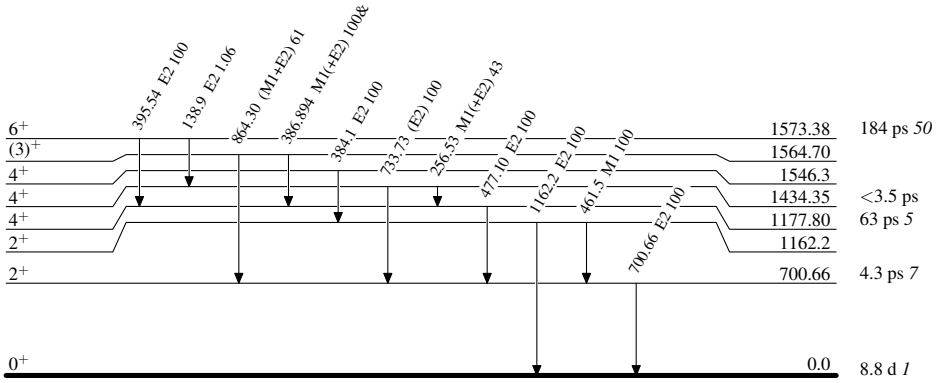


$^{206}_{84}Po_{122}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level
& Multiply placed: undivided intensity given



$^{206}_{84}Po_{122}$