Adopted Levels, Gammas

History			
Type	Author	Citation	Literature Cutoff Date
Full Evaluation	J. C. Batchelder and A. M. Hurst, M. S. Basunia	NDS 183, 1 (2022)	1-Mar-2022

Q(β^-)=−6.15×10^3 *3*; S(n)=9.25×10^3 *3*; S(p)=4.82×10^3 *4*; Q(α)=4320 *18* 2021Wa16
Isotope shift and/or hfs data: 1988Le22, 1992Hi07, 1999Le52.

^{186}Pt Levels

Cross Reference (XREF) Flags

- A ^{186}Au ε decay (10.7 min)
- B ^{154}Sm(^{36}S,4nγ)
- C ^{186}Os(α,4nγ), ^{174}Yb(^{16}O,4nγ)
- D ^{188}Os(α,6nγ)

E(level)[†]	J$^\pi$[‡]	T$_{1/2}$	XREF	Comments
0.0[@]	0$^+$	2.10 h *5*	ABCD	%ε+%β^+=100; %α≈0.00014 Δ<r^2>(^{194}Pt,^{186}Pt)=−0.200 fm^2 *6* (1999Le52). %α: From 1963Gr08; observed α peak tentatively assigned to the decay of ^{186}Pt based on T$_{1/2}$. Authors state that ^{187}Pt is another possibility for the origin of this peak. Intensity was estimated to be accurate within a factor of 2. T$_{1/2}$: From 1991Be25. Weighted average of data 2.10 h *5* (1991Be25), 2.0 h *1* (1972Fi12), 2.2 h *2* (1963Gr08), and 2.5 h *5* (1955Sm42 -labeled ^{187}Pt) yields 2.09 h *4*. Other values: 2.9 h (1960Al20), 2.8 h (1965Qa01), 3.03 h (1963Gr22).
191.54[@] *4*	2$^+$	240 ps *20*	ABCD	μ=+0.54 *6* μ: From g-factor=0.27 *3* (2020StZV, 1996St12, transient field), assuming g[^{192}Pt, 2$^+$]=0.30 *1* (1995An15). J$^\pi$: E2 γ to 0$^+$. T$_{1/2}$: Unweighted average of 220 ps *17* (^{36}S,4nγ) and 260 ps *10* (^{186}Au ε Decay).
471.50[&] *18*	0$^+$		A D	J$^\pi$: E0 472 transition to 0$^+$.
490.35[@] *9*	4$^+$	18.9 ps *13*	ABCD	J$^\pi$: stretched E2 intraband 298γ to 2$^+$. T$_{1/2}$: from (^{36}S,4nγ).
607.17[a] *11*	2$^+$		A D	J$^\pi$: M1+E2 416γ to 2$^+$; γ to 0$^+$; M1+E2 349γ from 3$^+$ 956.
798.48[&] *12*	2$^+$		A D	J$^\pi$: E2 327γ to 0$^+$.
877.51[@] *18*	6$^+$	3.54 ps *28*	ABCD	J$^\pi$: stretched E2 intraband 387γ to 4$^+$. T$_{1/2}$: from ^{154}Sm(^{36}S,4nγ).
956.48[a] *15*	3$^+$		A D	J$^\pi$: M1+E2 765γ to 2$^+$; E1+M2 677γ from (4$^-$) 1633.
991.44[a] *15*	4$^+$		A D	J$^\pi$: M1+E2 501γ to 4$^+$; E2 (not ΔJ=1) 384γ to 2$^+$ 607.
1175.95 *20*	2$^+$		A	J$^\pi$: 704γ to 0$^+$; J=2 from 985γ(θ,H,T).
1222.46[&] *14*	4$^+$		A D	J$^\pi$: E0+M1+E2 732γ to 4$^+$; 1031γ(θ,H,T).
1342.9[@] *3*	8$^+$	1.39 ps *14*	BCD	J$^\pi$: stretched Q 465γ to 6$^+$; member of g.s. band. T$_{1/2}$: from ^{154}Sm(^{36}S,4nγ).
1363.09[a] *24*	(5$^+$)		A D	J$^\pi$: Band assignment; 872γ to 4$^+$ 490; 406γ to 3$^+$ 956.
1407.60[d] *14*	3$^-$		A D	J$^\pi$: E1 1216γ to 2$^+$; M1+E2 225γ from 4$^-$ 1633.
1417.89 *18*	(3)$^+$		A	J$^\pi$: M1(+E2+E0) 462γ to 3$^+$ 956; J=2$^+$,3$^+$ proposed in 1985Va07 (^{186}Au ε decay).
1470.21[a] *19*	(6$^+$)		D	
1600.26[&] *22*	(6$^+$)		D	J$^\pi$: gammas to 4$^+$ and 6$^+$; band assignment.
1612.3 *4*			A	
1632.78[e] *17*	(4$^-$)		A D	J$^\pi$: E1 1143γ to 4$^+$ 490.

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Adopted Levels, Gammas (continued)

^{186}Pt Levels (continued)

E(level)[†]	Jπ[‡]	$T_{1/2}$	XREF	Comments
1671.9 *5*	3+,4		A	Jπ: 1182γ(θ,H,T) to 4+ 490.
1692.68[d] *16*	(5−)		CD	Jπ: ΔJ≤1 1203γ to 4+ 490; band assignment.
1801.4[a] *3*	(7+)		D	Jπ: based on γ decay pattern in (α,6nγ) (however, 6− is not excluded); band assignment.
1814.1 *4*			A	
1837.96 *18*	(4)−		A	Jπ: M1+E2 430γ to 3− 1408; 882γ(θ,H,T) allows J=2 or 4, and J=4 requires the smaller M2 admixture.
1858.0[@] *4*	10+	0.83 ps *7*	BCD	Jπ: stretched Q 515γ to 8+ 1343; g.s. band assignment. $T_{1/2}$: from (^{36}S,4nγ).
1896.5 *3*	2+,3+		A	Jπ: from 1289γ(θ,H,T) in ^{186}Au ε decay (1985Va07).
1952.33[d] *19*	(7−)	85 ps *10*	CD	Jπ: E2 260γ to (5−); D 1075γ to 6+; band assignment. $T_{1/2}$: from ce(t) in (^{16}O,4nγ).
1969.63[e] *19*	(6−)		D	Jπ: 1092 keV γ transition to 6+ level in ground state band, no decay to 4+ and 3− states, rules out 4, 5, 6+.
2004.33[a] *24*	(8+)		D	
2051.4[i] *3*	(7−)		D	Jπ: ΔJ=0,1 1174γ to 6+; 323γ from (9−) 2374.
2108.5[j] *4*	(10+)		D	Jπ: ΔJ=0,1 251γ to 10+; 766γ to 8+; based on similar DCO ratios for all transitions connecting this level's band to other bands, (α,6nγ) favor J=10 over J=9.
2123.05 *25*	(7−,8+)		D	Jπ: 252γ from (9−) 2375; γ to 6+.
2159.5 *3*	4+		A	Jπ: from 1203γ(θ,H,T) in ^{186}Au ε decay; 796γ to (5+) 1363.
2195.0 *3*	(8−)[#]	8.0 ns *13*	CD	Jπ: M1+E2 γ to (7−) 1952; systematics of even-even Pt isotopes. $T_{1/2}$: from 243γ-1074.8γ(t) in (α,6nγ). Other: 4.6 ns in (^{16}O,4nγ).
2216.2 *4*	3+,4+		A	Jπ: gammas to 2+ and 4+; 1726γ(θ,H,T) in (^{186}Au ε decay).
2227.6 *3*	3+,4+		A	Jπ: gammas to 2+ and 4+; 1738γ(θ,H,T) in (^{186}Au ε decay).
2253.95[e] *24*	(8−)		D	Jπ: Q 284 γ to (6−) 1969 level.
2280.1[a] *4*	(9+)		D	Jπ: based on γ decay pattern in (α,6nγ) (however, J=8 is not excluded); band assignment.
2317.0[h] *3*	(8−)		D	Jπ: stretched Q 347γ to (6−) 1970; 316γ from (10−) 2633.
2336.2[@] *4*	12+	1.39 ps *14*	BCD	Jπ: stretched E2 478γ to 10+ 1858. $T_{1/2}$: from (^{36}S,4nγ). Other: <50 ps (1979Ri08 – (^{16}O,4nγ)).
2356.1 *4*	(9−)		D	Jπ: ΔJ=0,1 161γ to (8−); 432γ from (11−) 2788.
2374.92[d] *23*	(9−)		D	Jπ: Q 422 γ to 7− 2123 level. Band structure.
2430.5[i] *3*	(9−)		D	
2544.5[a] *4*	(10+)		D	
2559.4[f] *3*	(10−)		D	Jπ: ΔJ=1 204γ to (9−) 2356; ΔJ=1 233γ from (11−) 2792.
2611.7[j] *4*	(12+)	≤0.5 ns	D	$T_{1/2}$: from centroid shift in (α,6nγ).
2632.90[e] *25*	(10−)		D	Jπ: Q 379 keV γ to 2254 (8−) level.
2696.4[h] *4*	(10−)		D	
2788.0[d] *3*	(11−)		D	Jπ: Q 413 keV γ to (9−) 2375 level.
2792.1[g] *3*	(11−)		D	Jπ: (E2) γ to (9−) 2375 keV level.
2825.0[@] *4*	(14+)	1.46 ps *14*	BCD	$T_{1/2}$: from (^{36}S,4nγ).
2864.4[c] *4*	(12+)	≤0.5 ns	D	Jπ: gammas to 10+ and 12+ but not to 8+; based on similar DCO ratios for all transitions connecting this level's band to other bands, 1987He29 favor J=12 over J=11. $T_{1/2}$: from centroid shift in (α,6nγ).
2887.2[i] *4*	(11−)		D	
3043.0[f] *4*	(12−)		D	
3073.4[e] *4*	(12−)		D	
3171.7[h] *5*	(12−)		D	
3192.1[b] *4*	(13−)		D	Jπ: ΔJ=0,1 856γ to 12+ 2336; 367γ to 14+ 2825; absence of γ to any 10+

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Adopted Levels, Gammas (continued)

^{186}Pt Levels (continued)

E(level)†	Jπ‡	$T_{1/2}$	XREF	Comments
				levels; 1990He19 (α,6nγ) favor π=− due to D transitions from the next two members of this band (3531, 3984) to the g.s. band.
3192.4[c] *4*	(14+)	≤0.5 ns	D	$T_{1/2}$: from centroid shift in (α,6nγ).
3269.6[j] *4*	(14+)		D	
3299.8[d] *4*	(13−)		D	
3310.7[g] *4*	(13−)		D	
3394.8[@] *5*	(16+)	0.76 ps *14*	B D	$T_{1/2}$: from (^{36}S,4nγ).
3421.4[i] *5*	(13−)		D	
3530.8[b] *5*	(15−)		D	
3566.9[e] *5*	(14−)		D	
3599.8[f] *4*	(14−)		D	
3664.6[c] *5*	(16+)		D	
3701.0[h] *6*	(14−)		D	
3873.8[d] *5*	(15−)		D	
3893.0[g] *4*	(15−)		D	
3963.3[j] *5*	(16+)		D	
3983.9[b] *5*	(17−)		D	
4051.3[@] *6*	(18+)	<1.25 ps	B D	$T_{1/2}$: from (^{36}S,4nγ).
4110.6[e] *6*	(16−)		D	
4172.6[h] *7*	(16−)		D	
4208.5[f] *5*	(16−)		D	
4258.5[c] *6*	(18+)		D	
4393.2 *6*			D	
4483.0[d] *6*	(17−)		D	
4518.0[g] *5*	(17−)		D	
4539.9[b] *6*	(19−)		D	
4661.1?[j] *6*	(18+)		D	
4699.0[e] *7*	(18−)		D	
4788.3[@] *7*	(20+)		D	
4836.0[f] *6*	(18−)		D	
4938.4 *7*			D	
4956.2[c] *7*	(20+)		D	
5188.6[b] *7*	(21−)		D	
5321.2[e] *8*	(20−)		D	
5597.1[@] *7*	(22+)		D	
5738.1[c] *7*	(22+)		D	
5921.8[b] *7*	(23−)		D	
6463.8[@] *8*	(24+)		D	
6582.5[c] *8*	(24+)		D	
6729.8[b] *13*	(25−)		D	
7407.8?[@] *13*	(26+)		D	

† From least-squares adjustment of Eγ.

‡ Based on DCO ratios and band structure in (α,6nγ), unless noted otherwise.

By analogy to ^{184}Pt (1840 keV level) and ^{182}Os (1831 keV level) high-K isomers with probable prolate configuration= (ν 9/2[624])(ν 7/2[514]). However, deexcitation of states differs, possibly due to availability in ^{186}Pt of decay path to 7−

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Adopted Levels, Gammas (continued)

^{186}Pt Levels (continued)

(1952 keV) level with similar configuration.

[@] Band(A): Prolate g.s. band.

[&] Band(B): β band.

[a] Band(C): γ band.

[b] Band(D): π=(−), α=1 prolate band. π assignment tentative; supported by absence of interaction with g.s. band which it intersects near $J^{\pi}=21^{(-)}$. Possible configuration=((π $h_{9/2}$)(π $i_{13/2}$)).

[c] Band(E): π=+, α=0 oblate band. Probable configuration=(ν $i_{13/2}$)(ν $i_{13/2}$). Decay to γ band from 12^+ member suggests some similarity between these two bands.

[d] Band(F): π=−, α=1 band. Signature partner of band that includes the 4^- 1633 level. Possible configuration=(high j)(low j), one quasiparticle being (π $h_{11/2}$) or (ν $i_{13/2}$), the other an N=4 shell quasiproton or an N=5 shell quasineutron (analogous to configuration for bands starting at $J^{\pi}=5^-$ in many even nuclei in the Pt-Hg transitional region).

[e] Band(G): π=−, α=0 band. Signature partner of band including 3^- 1408 level.

[f] Band(H): π=−,α=0 band. Possible configuration=(ν 11/2[615])(ν 9/2[505])10^-.

[g] Band(I): $K^{\pi}=(10^-)$,α=1 band. Possible configuration=(ν 11/2[615])(ν 9/2[505])10^-.

[h] Band(J): π=−,α=0 band.

[i] Band(K): π=−,α=1 band.

[j] Band(L): π=+,α=0 band.

Adopted Levels, Gammas (continued)

γ(^{186}Pt)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[&]	δ[&c]	α[b]	Comments
191.54	2+	191.53[‡] *4*	100[‡]	0.0	0+	E2		0.417	α(K)=0.189 *3*; α(L)=0.1713 *24*; α(M)=0.0438 *7* α(N)=0.01070 *15*; α(O)=0.001699 *24*; α(P)=1.80×10^{-5} *3* B(E2)(W.u.)=102 *9* Mult.: from α_K in ^{186}Au ε decay.
471.50	0+	279.7[‡] *3*	100[‡] *5*	191.54	2+	E2		0.1216	α(K)=0.0728 *11*; α(L)=0.0369 *6*; α(M)=0.00928 *14* α(N)=0.00227 *4*; α(O)=0.000369 *6*; α(P)=7.26×10^{-6} *11*
		471.6 *5*		0.0	0+	E0			
490.35	4+	298.84[‡] *10*	100[‡]	191.54	2+	E2		0.0998	α(K)=0.0618 *9*; α(L)=0.0288 *4*; α(M)=0.00721 *11* α(N)=0.00177 *3*; α(O)=0.000288 *4*; α(P)=6.22×10^{-6} *9* B(E2)(W.u.)=181 *13*
607.17	2+	415.56[‡] *16*	100[‡] *8*	191.54	2+	M1+E2	−0.38 *4*	0.116 *3*	α(K)=0.0954 *23*; α(L)=0.0160 *3*; α(M)=0.00370 *7* α(N)=0.000916 *17*; α(O)=0.000164 *3*; α(P)=1.07×10^{-5} *3*
		607.2[‡] *2*	62[‡] *15*	0.0	0+	[E2]		0.01567	α(K)=0.01200 *17*; α(L)=0.00280 *4*; α(M)=0.000671 *10* α(N)=0.0001652 *24*; α(O)=2.83×10^{-5} *4*; α(P)=1.270×10^{-6} *18*
798.48	2+	307.9[‡] *3*	7.7[‡] *6*	490.35	4+	E2		0.0912	α(K)=0.0573 *9*; α(L)=0.0257 *4*; α(M)=0.00642 *10* α(N)=0.001573 *23*; α(O)=0.000257 *4*; α(P)=5.78×10^{-6} *9*
		326.8[‡] *3*	15.1[‡] *12*	471.50	0+	E2		0.0766	α(K)=0.0494 *7*; α(L)=0.0206 *3*; α(M)=0.00513 *8* α(N)=0.001258 *18*; α(O)=0.000206 *3*; α(P)=5.03×10^{-6} *7*
		607.05 *15*		191.54	2+	(E0+M1+E2)			α(K)=0.025 *14*; α(L)=0.0045 *17*; α(M)=0.0011 *4* α(N)=0.00026 *10*; α(O)=4.6×10^{-5} *18*; α(P)=2.8×10^{-6} *16* E_γ: Weighted ave. of data from (α,6nγ) and ^{186}Au ε decay. I(ce)/Iγ(799)=0.099 *20* (1970Jo02 – ^{186}Au ε decay).
		798.7[‡] *4*	100[‡] *12*	0.0	0+	(E2)		0.00864	α(K)=0.00687 *10*; α(L)=0.001362 *19*; α(M)=0.000322 *5* α(N)=7.93×10^{-5} *12*; α(O)=1.380×10^{-5} *20*; α(P)=7.26×10^{-7} *11*
877.51	6+	387.0[‡] *3*	100[‡]	490.35	4+	E2		0.0478	α(K)=0.0329 *5*; α(L)=0.01133 *16*; α(M)=0.00280 *4* α(N)=0.000686 *10*; α(O)=0.0001138 *16*; α(P)=3.40×10^{-6} *5* B(E2)(W.u.)=279 *22* Mult.: stretched Q from DCO ratio in ^{188}Os(α,6nγ); M2 excluded by comparison to RUL. g.s. band intraband γ.
956.48	3+	349.4[‡] *3*	12.4[‡] *10*	607.17	2+	M1+E2	+2.7 *3*	0.080 *4*	α(K)=0.057 *4*; α(L)=0.0175 *4*; α(M)=0.00429 *9* α(N)=0.001054 *22*; α(O)=0.000176 *4*; α(P)=6.1×10^{-6} *4*
		466.3[‡] *3*	12.4[‡] *9*	490.35	4+	(M1+E2)			δ: +0.42 *7* or +3.8 *9* from γ(θ,H,T) (1985Va07 – ^{186}Au ε decay) Δπ=no from level scheme.
		765.1[#] *3*	100 *5*	191.54	2+	M1+E2	+16 *+4−3*	0.00951	α(K)=0.00753 *11*; α(L)=0.001522 *22*; α(M)=0.000360 *6* α(N)=8.87×10^{-5} *13*; α(O)=1.542×10^{-5} *22*; α(P)=7.97×10^{-7} *12*
991.44	4+	384.2[#] *3*	63 *11*	607.17	2+	E2		0.0488	α(K)=0.0335 *5*; α(L)=0.01162 *17*; α(M)=0.00287 *4* α(N)=0.000704 *10*; α(O)=0.0001167 *17*; α(P)=3.46×10^{-6} *5* Mult.: from DCO in (α,6nγ) and α(K)exp in ε decay.

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Adopted Levels, Gammas (continued)

γ(^{186}Pt) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[&]	δ[&c]	α[b]	Comments
991.44	4+	501.1[#] *3*	100 *16*	490.35	4+	M1+E2	−0.85 *9*	0.055 *3*	α(K)=0.045 *3*; α(L)=0.0080 *3*; α(M)=0.00188 *7* α(N)=0.000464 *17*; α(O)=8.2×10^{-5} *4*; α(P)=5.0×10^{-6} *3*
		799.6 *3*	79 *16*	191.54	2+				
1175.95	2+	704.4[‡] *3*	43[‡] *6*	471.50	0+				
		984.5[‡] *4*	100[‡] *10*	191.54	2+	M1+E2			Mult.,δ: from γ(θ,H,t) (1985Va07 – ^{186}Au ε decay); δ=−0.12 *6* or +3.2 *8*.
		1176.1[‡] *5*	48[‡] *7*	0.0	0+				
1222.46	4+	266.5[‡d] *4*	19[‡] *2*	956.48	3+				Assignment to ^{186}Au ε decay is not certain.
		423.9[‡] *3*	45[‡] *5*	798.48	2+	E2		0.0375	α(K)=0.0266 *4*; α(L)=0.00835 *12*; α(M)=0.00205 *3* α(N)=0.000503 *7*; α(O)=8.40×10^{-5} *12*; α(P)=2.77×10^{-6} *4* Mult.: from DCO in (α,6nγ) and α(K)exp in ε decay.
		615.6[‡] *4*	23[‡] *3*	607.17	2+				
		732.1[#] *2*	82 *6*	490.35	4+	E0+M1+E2		0.07 *3*	α(K)=0.016 *8*; α(L)=0.0028 *11*; α(M)=0.00064 *24* α(N)=0.00016 *6*; α(O)=2.8×10^{-5} *11*; α(P)=1.8×10^{-6} *9*
		1030.8[#] *3*	100 *5*	191.54	2+	E2		0.00516	α(K)=0.00419 *6*; α(L)=0.000746 *11*; α(M)=0.0001742 *25* α(N)=4.29×10^{-5} *6*; α(O)=7.57×10^{-6} *11*; α(P)=4.41×10^{-7} *7* Mult.: Q from γ(θ,H,T).
1342.9	8+	464.8[@] *4*	100	877.51	6+	(E2)[a]		0.0297 *6*	α(K)=0.0215 *4*; α(L)=0.00620 *14*; α(M)=0.00151 *4* α(N)=0.000372 *9*; α(O)=6.25×10^{-5} *14*; α(P)=2.26×10^{-6} *4* B(E2)(W.u.)=2.9×10^{2} *3*
1363.09	(5+)	406 *1*	22 *8*	956.48	3+				
		872.9[#] *4*	100 *7*	490.35	4+				
1407.60	3−	231.7[‡] *3*	15.5[‡] *14*	1175.95	2+	(E1)		0.0487	α(K)=0.0401 *6*; α(L)=0.00662 *10*; α(M)=0.001527 *22* α(N)=0.000374 *6*; α(O)=6.49×10^{-5} *10*; α(P)=3.56×10^{-6} *5* Mult.: E1, E2 from α(K)exp from ε decay; Δπ=yes from level scheme.
		609.4[‡] *3*	40[‡] *10*	798.48	2+				
		800.1[‡] *3*	<35[‡]	607.17	2+				E_γ,I_γ: Unweighted average of data from ^{186}Au ε decay and (α,6nγ).
		916.7[‡] *3*	11.2[‡] *2*	490.35	4+				E_γ,I_γ: Weighted average of data from ^{186}Au ε decay and (α,6nγ). Iγ Other: 29 *9* in (α,6nγ).
		1216.2[‡] *3*	100[‡] *5*	191.54	2+	E1		1.52×10^{-3}	α(K)=0.001256 *18*; α(L)=0.000183 *3*; α(M)=4.15×10^{-5} *6* α(N)=1.024×10^{-5} *15*; α(O)=1.84×10^{-6} *3*; α(P)=1.239×10^{-7} *18*; α(IPF)=2.28×10^{-5} *9*

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Adopted Levels, Gammas (continued)

γ(^{186}Pt) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[&]	δ[&c]	α[b]	Comments
1417.89	(3)$^+$	461.8[‡] *3*	<10[‡]	956.48	3$^+$	M1(+E2+E0)			α(K)=0.05 *3*; α(L)=0.010 *4*; α(M)=0.0022 *7* α(N)=0.00056 *18*; α(O)=0.00010 *4*; α(P)=6.E−6 *4* Mult.: α_k = 0.5 from ε decay.
		810.7[‡] *3*	38[‡] *4*	607.17	2$^+$				
		927.3[‡] *4*	25[‡] *6*	490.35	4$^+$				
		1226.1[‡] *3*	100[‡] *6*	191.54	2$^+$				
1470.21	(6$^+$)	478.7 *3*	<200	991.44	4$^+$	(E2)[a]		0.0276	α(K)=0.0201 *3*; α(L)=0.00565 *8*; α(M)=0.001377 *20* α(N)=0.000338 *5*; α(O)=5.70×10^{-5} *8*; α(P)=2.12×10^{-6} *3*
		592.3 *3*	100 *47*	877.51	6$^+$				
		979.7 *3*	87 *35*	490.35	4$^+$				
1600.26	(6$^+$)	722.6 *3*	100 *11*	877.51	6$^+$				
		1110.0 *3*	≈34	490.35	4$^+$				
1612.3		1121.9[‡] *3*	100[‡]	490.35	4$^+$				
1632.78	(4$^-$)	225.1[‡] *3*	13.2[‡] *11*	1407.60	3$^-$	M1+E2	1.3 *+14−5*	0.40 *11*	α(K)=0.29 *11*; α(L)=0.0887 *16*; α(M)=0.0218 *5* α(N)=0.00534 *10*; α(O)=0.000894 *22*; α(P)=3.1×10^{-5} *13*
		676.2[#] *4*	100 *4*	956.48	3$^+$	E1+M2	−0.014 *10*	0.00445	α(K)=0.00372 *6*; α(L)=0.000561 *8*; α(M)=0.0001282 *18* α(N)=3.15×10^{-5} *5*; α(O)=5.62×10^{-6} *8*; α(P)=3.61×10^{-7} *5*
		1142.4[#] *4*	12.6 *14*	490.35	4$^+$	(E1)		1.67×10^{-3}	α(K)=0.001403 *20*; α(L)=0.000205 *3*; α(M)=4.65×10^{-5} *7* α(N)=1.147×10^{-5} *16*; α(O)=2.06×10^{-6} *3*; α(P)=1.382×10^{-7} *20*; α(IPF)=4.17×10^{-6} *7* Eγ=1142.0 *3*, Iγ=54 *20* in (α,6nγ).
		1441.3[‡] *4*	14.3[‡] *14*	191.54	2$^+$				Mult.: see comment in ^{186}Au ε decay.
1671.9	3$^+$,4	1181.5[‡] *5*	100[‡]	490.35	4$^+$				
1692.68	(5$^-$)	285.3 *3*	9.2 *24*	1407.60	3$^-$				
		470.1 *3*	27.1 *22*	1222.46	4$^+$				
		700.9 *3*	16.4 *20*	991.44	4$^+$				
		1202.8 *3*	100 *5*	490.35	4$^+$	(E1)		1.54×10^{-3}	α(K)=0.001281 *18*; α(L)=0.000186 *3*; α(M)=4.24×10^{-5} *6* α(N)=1.045×10^{-5} *15*; α(O)=1.87×10^{-6} *3*; α(P)=1.263×10^{-7} *18*; α(IPF)=1.81×10^{-5} *3* Mult.: DCO consistent with pure stretched D or with D+Q (δ≥1.4) ΔJ=0 transition. ΔJ=1, Δπ=yes from level scheme.
1801.4	(7$^+$)	438 *1*	100 *6*	1363.09	(5$^+$)				
		923.7 *3*	88 *10*	877.51	6$^+$				

$^{186}_{78}Pt_{108}$-7

Adopted Levels, Gammas (continued)

γ(^{186}Pt) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[&]	δ[&c]	α[b]	Comments
1814.1		1323.7[‡] *4*	100	490.35	4^+				
1837.96	$(4)^-$	205.0[‡] *3*	97[‡] *8*	1632.78	(4^-)	M1+E2	−0.309 *23*	0.824 *14*	α(K)=0.669 *12*; α(L)=0.1190 *18*; α(M)=0.0278 *5* α(N)=0.00686 *11*; α(O)=0.001220 *18*; α(P)=7.62×10^{-5} *14*
		430.3[‡] *3*	85[‡] *8*	1407.60	3^-	M1+E2	+6.6 *9*	0.0379 *8*	α(K)=0.0272 *7*; α(L)=0.00812 *13*; α(M)=0.00198 *3* α(N)=0.000488 *8*; α(O)=8.17×10^{-5} *13*; α(P)=2.86×10^{-6} *8*
		615.6[‡] *3*	<2.9[‡]	1222.46	4^+				
		881.6[‡] *3*	100[‡] *6*	956.48	3^+	E1+M2	−0.04 *+2−13*	0.0027 *12*	α(K)=0.0023 *10*; α(L)=0.00034 *17*; α(M)=8.E−5 *4* α(N)=1.9×10^{-5} *10*; α(O)=3.4×10^{-6} *18*; α(P)=2.3×10^{-7} *12*
1858.0	10^+	515.1 *3*	100	1342.9	8^+	(E2)[a]		0.0230	α(K)=0.01711 *24*; α(L)=0.00452 *7*; α(M)=0.001095 *16* α(N)=0.000269 *4*; α(O)=4.56×10^{-5} *7*; α(P)=1.80×10^{-6} *3* B(E2)(W.u.)=291 *25*
1896.5	$2^+,3^+$	905.1[‡] *3*	18[‡] *3*	991.44	4^+				
		1098.0[‡d] *3*	20.6[‡] *25*	798.48	2^+				Assignment to ^{186}Au ε decay is not certain.
		1289.2[‡] *5*	100[‡] *6*	607.17	2^+				
1952.33	(7^-)	259.8 *3*	74 *5*	1692.68	(5^-)	E2		0.1528	B(E2)(W.u.)=29 *4* α(K)=0.0876 *13*; α(L)=0.0492 *8*; α(M)=0.01241 *19* α(N)=0.00304 *5*; α(O)=0.000490 *8*; α(P)=8.66×10^{-6} *13* Mult.: Q from DCO ratio in (α,6nγ) and γ(θ) in (α,4nγ), ...; not M2 from RUL.
		352.0 *3*	17.3 *15*	1600.26	(6^+)	(E1)[a]			B(E1)(W.u.)=4.2×10^{-6} *7*
		481.7 *3*	27.2 *28*	1470.21	(6^+)	(E1)[a]			B(E1)(W.u.)=2.6×10^{-6} *5*
		1074.8 *3*	100 *5*	877.51	6^+	(E1)[a]			B(E1)(W.u.)=8.6×10^{-7} *12*
1969.63	(6^-)	277.0 *3*	30 *4*	1692.68	(5^-)				
		336.9 *3*	38 *6*	1632.78	(4^-)	Q[a]			
		606.6 *3*	100 *10*	1363.09	(5^+)				Mult.: not stretched Q from (α,6nγ).
		1092.0 *3*	14 *5*	877.51	6^+				
2004.33	(8^+)	533.9 *3*	100 *10*	1470.21	(6^+)	(Q)[a]			
		661.2 *3*	45 *11*	1342.9	8^+				
		1127.4 *3*	52 *8*	877.51	6^+				
2051.4	(7^-)	1173.8 *3*	100	877.51	6^+				Mult.: DCO excludes stretched Q in (α,6nγ).
2108.5	(10^+)	250.5 *3*	43 *4*	1858.0	10^+				Mult.: not ΔJ=2 from DCO in (α,6nγ).
		765.6 *3*	100 *4*	1342.9	8^+				
2123.05	$(7^-,8^+)$	170.6 *3*	91 *14*	1952.33	(7^-)				
		1246.0 *3*	100 *13*	877.51	6^+				
2159.5	4^+	796.4[‡] *4*	36[‡] *8*	1363.09	(5^+)				
		1203.0[‡] *3*	100[‡] *7*	956.48	3^+				
2195.0	(8^-)	242.6 *3*	100	1952.33	(7^-)	M1+E2			Mult.: from DCO ratio in (α,6nγ); M1(+E2) from K/L and α(K)exp in (α,4nγ). δ: ≤0.46 from K/L in (α,4nγ).
2216.2	$3^+,4^+$	1725.9[‡] *4*	63[‡] *9*	490.35	4^+				

Adopted Levels, Gammas (continued)

γ(^{186}Pt) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[&]	α[b]	Comments
2216.2	3+,4+	2024.6[‡] *5*	100[‡] *9*	191.54	2+			
2227.6	3+,4+	1271.1[‡] *5*	17.4[‡] *25*	956.48	3+			
		1737.6[‡] *4*	65[‡] *8*	490.35	4+			
		2035.6[‡] *5*	100[‡] *7*	191.54	2+			
2253.95	(8−)	284.4 *3*	20.7 *29*	1969.63	(6−)	(E2)[a]	0.1156	α(K)=0.0698 *10*; α(L)=0.0346 *5*; α(M)=0.00870 *13* α(N)=0.00213 *4*; α(O)=0.000346 *5*; α(P)=6.98×10^{-6} *10*
		301.7 *3*	100 *11*	1952.33	(7−)	(M1+E2)[a]		
2280.1	(9+)	479 *1*	<200	1801.4	(7+)			
		937.2 *3*	100 *17*	1342.9	8+			
2317.0	(8−)	347.3 *3*	100 *9*	1969.63	(6−)	(E2)	0.0644	α(K)=0.0426 *6*; α(L)=0.01654 *24*; α(M)=0.00411 *6* α(N)=0.001008 *15*; α(O)=0.0001658 *24*; α(P)=4.37×10^{-6} *7* Mult.: DCO consistent with stretched E2.
		515.4 *3*	<50	1801.4	(7+)			
2336.2	12+	478.2 *3*	100	1858.0	10+	E2	0.0276	α(K)=0.0202 *3*; α(L)=0.00567 *8*; α(M)=0.001381 *20* α(N)=0.000339 *5*; α(O)=5.72×10^{-5} *8*; α(P)=2.12×10^{-6} *3* B(E2)(W.u.)=2.5×10^{2} *3* Mult.: stretched Q from (α,6nγ); not M2 from RUL.
2356.1	(9−)	161.1 *3*	100	2195.0	(8−)	D(+Q)[a]		
2374.92	(9−)	252.2 *3*	17.8 *35*	2123.05	(7−,8+)			
		323.4 *3*	20.6 *25*	2051.4	(7−)			
		422.4 *3*	100 *6*	1952.33	(7−)	(E2)[a]	0.0379	α(K)=0.0268 *4*; α(L)=0.00845 *12*; α(M)=0.00207 *3* α(N)=0.000509 *8*; α(O)=8.50×10^{-5} *12*; α(P)=2.79×10^{-6} *4*
2430.5	(9−)	379.2 *3*		2051.4	(7−)	(E2)[a]	0.0505	α(K)=0.0345 *5*; α(L)=0.01215 *18*; α(M)=0.00300 *5* α(N)=0.000737 *11*; α(O)=0.0001220 *18*; α(P)=3.57×10^{-6} *5* I_γ: I(379γ triplet):I(1088γ)=100 *5*:21.1 *13* in (α,6nγ). I_γ: see comment on 579.2γ.
		1087.7 *3*		1342.9	8+			
2544.5	(10+)	540.3 *3*	100	2004.33	(8+)	(E2)[a]	0.0205	α(K)=0.01541 *22*; α(L)=0.00391 *6*; α(M)=0.000946 *14* α(N)=0.000233 *4*; α(O)=3.95×10^{-5} *6*; α(P)=1.627×10^{-6} *23*
2559.4	(10−)	203.5 *3*	100 *9*	2356.1	(9−)	[a]		Mult.: DCO indicates ΔJ=1 transition.
		364.3 *3*	23 *9*	2195.0	(8−)			
2611.7	(12+)	275.6 *3*	15.6 *16*	2336.2	12+			
		503.2 *3*	27 *3*	2108.5	(10+)	E2	0.0244	α(K)=0.0180 *3*; α(L)=0.00485 *7*; α(M)=0.001176 *17* α(N)=0.000289 *4*; α(O)=4.89×10^{-5} *7*; α(P)=1.90×10^{-6} *3* B(E2)(W.u.)>0.10 Mult.: stretched Q from DCO in (α,6nγ); not M2 from RUL.
		753.6 *3*	100 *6*	1858.0	10+	[E2]	0.00976	α(K)=0.00770 *11*; α(L)=0.001574 *22*; α(M)=0.000373 *6* α(N)=9.18×10^{-5} *13*; α(O)=1.594×10^{-5} *23*; α(P)=8.15×10^{-7} *12* B(E2)(W.u.)>0.051 Mult.: DCO in (α,6nγ) consistent with stretched Q; not M2 from RUL.
2632.90	(10−)	202.6 *3*	40 *13*	2430.5	(9−)			
		257.9 *3*	100 *17*	2374.92	(9−)	M1(+E2)[a]		Mult.: DCO in (α,6nγ) implies ΔJ=1.
		315.7 *3*	40 *7*	2317.0	(8−)			

$^{186}_{78}Pt_{108}$-9

Adopted Levels, Gammas (continued)

γ(^{186}Pt) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[&]	α[b]	Comments
2632.90	(10$^-$)	379.1 *3*	<667	2253.95	(8$^-$)	(E2)[a]	0.0506	α(K)=0.0345 *5*; α(L)=0.01216 *18*; α(M)=0.00301 *5* α(N)=0.000738 *11*; α(O)=0.0001221 *18*; α(P)=3.57×10^{-6} *5* I_γ: 633 *33* for 379γ triplet in (α,6nγ).
2696.4	(10$^-$)	379.4 *3*	100	2317.0	(8$^-$)	(E2)[a]	0.0505	α(K)=0.0345 *5*; α(L)=0.01213 *18*; α(M)=0.00300 *5* α(N)=0.000735 *11*; α(O)=0.0001218 *18*; α(P)=3.56×10^{-6} *5*
2788.0	(11$^-$)	228.7 *3*	63 *8*	2559.4	(10$^-$)	D+Q		DCO implies ΔJ=1.
		413.2 *3*	100 *8*	2374.92	(9$^-$)	(E2)[a]	0.0401	α(K)=0.0282 *4*; α(L)=0.00908 *13*; α(M)=0.00223 *4* α(N)=0.000548 *8*; α(O)=9.13×10^{-5} *13*; α(P)=2.93×10^{-6} *5*
		431.9 *3*	46 *4*	2356.1	(9$^-$)			
2792.1	(11$^-$)	232.7 *3*	31 *3*	2559.4	(10$^-$)	(M1+E2)[a]		DCO implies ΔJ=1.
		417.2 *3*	100 *6*	2374.92	(9$^-$)	(E2)	0.0391	α(K)=0.0276 *4*; α(L)=0.00880 *13*; α(M)=0.00216 *3* α(N)=0.000531 *8*; α(O)=8.85×10^{-5} *13*; α(P)=2.87×10^{-6} *4*
2825.0	(14$^+$)	488.9 *3*	100	2336.2	12$^+$	(E2)[a]	0.0262	α(K)=0.0192 *3*; α(L)=0.00529 *8*; α(M)=0.001288 *19* α(N)=0.000316 *5*; α(O)=5.34×10^{-5} *8*; α(P)=2.02×10^{-6} *3* B(E2)(W.u.)=214 *21*
2864.4	(12$^+$)	253.1 *3*	49 *8*	2611.7	(12$^+$)			
		319.9 *3*	35 *7*	2544.5	(10$^+$)			
		527.8 *3*	25 *8*	2336.2	12$^+$			
		1006.3 *3*	100 *8*	1858.0	10$^+$			
2887.2	(11$^-$)	456.7 *3*	100	2430.5	(9$^-$)	(E2)[a]	0.0310	α(K)=0.0224 *4*; α(L)=0.00656 *10*; α(M)=0.001602 *23* α(N)=0.000393 *6*; α(O)=6.60×10^{-5} *10*; α(P)=2.35×10^{-6} *4*
3043.0	(12$^-$)	251.0 *3*	24 *6*	2792.1	(11$^-$)	D(+Q)[a]	0.498	α(K)=0.410 *6*; α(L)=0.0672 *10*; α(M)=0.01552 *23* α(N)=0.00384 *6*; α(O)=0.000691 *10*; α(P)=4.67×10^{-5} *7*
		255.1 *3*	39 *3*	2788.0	(11$^-$)			Mult.: DCO in (α,6nγ) excludes stretched Q.
		483.4 *3*	100 *9*	2559.4	(10$^-$)			
3073.4	(12$^-$)	377.0[d] *3*	15.3 *26*	2696.4	(10$^-$)			
		440.5 *3*	100 *5*	2632.90	(10$^-$)	(E2)[a]	0.0340	α(K)=0.0243 *4*; α(L)=0.00737 *11*; α(M)=0.00180 *3* α(N)=0.000443 *7*; α(O)=7.42×10^{-5} *11*; α(P)=2.54×10^{-6} *4*
3171.7	(12$^-$)	475.3 *3*	100	2696.4	(10$^-$)	(E2)[a]	0.0281	α(K)=0.0205 *3*; α(L)=0.00578 *9*; α(M)=0.001408 *20* α(N)=0.000346 *5*; α(O)=5.82×10^{-5} *9*; α(P)=2.15×10^{-6} *3*
3192.1	(13$^-$)	366.9 *3*	21 *7*	2825.0	(14$^+$)			
		855.9 *3*	100 *14*	2336.2	12$^+$	D		DCO in (α,6nγ) excludes stretched Q.
3192.4	(14$^+$)	328.2 *3*	52 *6*	2864.4	(12$^+$)	(E2)[a]	0.0757	B(E2)(W.u.)>1.2 α(K)=0.0489 *7*; α(L)=0.0203 *3*; α(M)=0.00506 *8* α(N)=0.001239 *18*; α(O)=0.000203 *3*; α(P)=4.98×10^{-6} *7*
		367.3 *3*	8 *3*	2825.0	(14$^+$)			
		580.4 *3*	100 *9*	2611.7	(12$^+$)	(E2)	0.01737	α(K)=0.01321 *19*; α(L)=0.00318 *5*; α(M)=0.000765 *11* α(N)=0.000188 *3*; α(O)=3.21×10^{-5} *5*; α(P)=1.397×10^{-6} *20* B(E2)(W.u.)>0.13 Mult.: DCO in (α,6nγ) consistent with stretched Q; not M2 from RUL.
		856.4 *3*	38 *4*	2336.2	12$^+$	(E2)	0.00747	α(K)=0.00598 *9*; α(L)=0.001147 *16*; α(M)=0.000270 *4* α(N)=6.66×10^{-5} *10*; α(O)=1.163×10^{-5} *17*; α(P)=6.32×10^{-7} *9* B(E2)(W.u.)>0.0072

$^{186}_{78}Pt_{108}$-10

Adopted Levels, Gammas (continued)

γ(^{186}Pt) (continued)

E_i(level)	J_i^π	E_γ †	I_γ †	E_f	J_f^π	Mult.&	α b	Comments
3269.6	(14$^+$)	444.7 *3*	42 *6*	2825.0	(14$^+$)			
		657.8 *3*	100 *9*	2611.7	(12$^+$)	(E2)[a]	0.01309	α(K)=0.01016 *15*; α(L)=0.00225 *4*; α(M)=0.000536 *8* α(N)=0.0001320 *19*; α(O)=2.27×10^{-5} *4*; α(P)=1.075×10^{-6} *15*
		933.3 *3*	55 *7*	2336.2	12$^+$			
3299.8	(13$^-$)	507.7 *3*	27 *7*	2792.1	(11$^-$)	(E2)[a]	0.0239	α(K)=0.01766 *25*; α(L)=0.00472 *7*; α(M)=0.001144 *17* α(N)=0.000281 *4*; α(O)=4.76×10^{-5} *7*; α(P)=1.86×10^{-6} *3*
		511.8 *3*	100 *20*	2788.0	(11$^-$)	(E2)[a]	0.0234	α(K)=0.01735 *25*; α(L)=0.00460 *7*; α(M)=0.001116 *16* α(N)=0.000274 *4*; α(O)=4.64×10^{-5} *7*; α(P)=1.83×10^{-6} *3*
3310.7	(13$^-$)	268.0 *3*	43 *11*	3043.0	(12$^-$)	(M1+E2)[a]		Mult.: ΔJ=1 transition from DCO in (α,6nγ).
		518.5 *3*	100 *21*	2792.1	(11$^-$)	(E2)[a]	0.0227	α(K)=0.01686 *24*; α(L)=0.00442 *7*; α(M)=0.001072 *16* α(N)=0.000264 *4*; α(O)=4.47×10^{-5} *7*; α(P)=1.778×10^{-6} *25*
3394.8	(16$^+$)	569.8 *3*	100	2825.0	(14$^+$)	(E2)[a]	0.0181	α(K)=0.01374 *20*; α(L)=0.00335 *5*; α(M)=0.000807 *12* α(N)=0.000199 *3*; α(O)=3.39×10^{-5} *5*; α(P)=1.452×10^{-6} *21* B(E2)(W.u.)=1.9×10^2 *4*
3421.4	(13$^-$)	534.2 *3*	100	2887.2	(11$^-$)	(E2)[a]	0.0211	α(K)=0.01580 *23*; α(L)=0.00405 *6*; α(M)=0.000979 *14* α(N)=0.000241 *4*; α(O)=4.09×10^{-5} *6*; α(P)=1.667×10^{-6} *24*
3530.8	(15$^-$)	338.6 *3*	39 *7*	3192.1	(13$^-$)	(E2)[a]	0.0692	α(K)=0.0453 *7*; α(L)=0.0181 *3*; α(M)=0.00451 *7* α(N)=0.001105 *16*; α(O)=0.000182 *3*; α(P)=4.63×10^{-6} *7*
		705.8 *3*	100 *6*	2825.0	(14$^+$)	(E1)	0.00409	α(K)=0.00342 *5*; α(L)=0.000514 *8*; α(M)=0.0001174 *17* α(N)=2.89×10^{-5} *4*; α(O)=5.15×10^{-6} *8*; α(P)=3.32×10^{-7} *5* DCO in (α,6nγ) excludes stretched Q.
3566.9	(14$^-$)	493.5 *3*	100	3073.4	(12$^-$)	(E2)[a]	0.0256	α(K)=0.0188 *3*; α(L)=0.00514 *8*; α(M)=0.001250 *18* α(N)=0.000307 *5*; α(O)=5.19×10^{-5} *8*; α(P)=1.98×10^{-6} *3*
3599.8	(14$^-$)	289.2 *3*	45 *8*	3310.7	(13$^-$)	(M1+E2)[a]		Mult.: ΔJ=1 transition from DCO in (α,6nγ).
		556.6 *3*	100 *11*	3043.0	(12$^-$)	(E2)[a]	0.0192	α(K)=0.01445 *21*; α(L)=0.00359 *5*; α(M)=0.000865 *13* α(N)=0.000213 *3*; α(O)=3.62×10^{-5} *6*; α(P)=1.527×10^{-6} *22*
3664.6	(16$^+$)	472.2 *3*	100	3192.4	(14$^+$)	(E2)[a]	0.0285	α(K)=0.0208 *3*; α(L)=0.00590 *9*; α(M)=0.001438 *21* α(N)=0.000353 *5*; α(O)=5.95×10^{-5} *9*; α(P)=2.18×10^{-6} *3*
3701.0	(14$^-$)	529.3 *3*	100	3171.7	(12$^-$)	(E2)[a]	0.0216	α(K)=0.01612 *23*; α(L)=0.00416 *6*; α(M)=0.001007 *15* α(N)=0.000247 *4*; α(O)=4.20×10^{-5} *6*; α(P)=1.700×10^{-6} *24*
3873.8	(15$^-$)	574.0 *3*	100	3299.8	(13$^-$)	(E2)[a]	0.0178	α(K)=0.01352 *19*; α(L)=0.00328 *5*; α(M)=0.000790 *12* α(N)=0.000194 *3*; α(O)=3.32×10^{-5} *5*; α(P)=1.430×10^{-6} *20*
3893.0	(15$^-$)	293.4 *3*	42 *15*	3599.8	(14$^-$)	(M1+E2)[a]		
		582.3 *3*	100 *23*	3310.7	(13$^-$)	(E2)[a]	0.01724	α(K)=0.01312 *19*; α(L)=0.00315 *5*; α(M)=0.000758 *11* α(N)=0.000186 *3*; α(O)=3.18×10^{-5} *5*; α(P)=1.387×10^{-6} *20*
3963.3	(16$^+$)	568[d] *1*		3394.8	(16$^+$)			
		693.7 *3*	100 *8*	3269.6	(14$^+$)	(E2)[a]	0.01165	α(K)=0.00910 *13*; α(L)=0.00195 *3*; α(M)=0.000464 *7* α(N)=0.0001142 *16*; α(O)=1.97×10^{-5} *3*; α(P)=9.64×10^{-7} *14*
		1138 *1*	25 *17*	2825.0	(14$^+$)			
3983.9	(17$^-$)	453.1 *3*	100 *8*	3530.8	(15$^-$)	(E2)[a]	0.0316	α(K)=0.0228 *4*; α(L)=0.00672 *10*; α(M)=0.001643 *24* α(N)=0.000404 *6*; α(O)=6.77×10^{-5} *10*; α(P)=2.39×10^{-6} *4*
		589.1 *3*	62 *9*	3394.8	(16$^+$)	(D)		DCO in (α,6nγ) excludes stretched Q.

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Adopted Levels, Gammas (continued)

γ(^{186}Pt) (continued)

E_i(level)	J_i^π	E_γ †	I_γ †	E_f	J_f^π	Mult.&	α[b]	Comments
4051.3	(18$^+$)	656.5 *3*	100	3394.8	(16$^+$)	(E2)[a]	0.01315	α(K)=0.01020 *15*; α(L)=0.00226 *4*; α(M)=0.000539 *8* α(N)=0.0001327 *19*; α(O)=2.28×10^{-5} *4*; α(P)=1.080×10^{-6} *16* B(E2)(W.u.)>58
4110.6	(16$^-$)	543.7 *3*	100	3566.9	(14$^-$)	(E2)[a]	0.0202	α(K)=0.01520 *22*; α(L)=0.00384 *6*; α(M)=0.000928 *13* α(N)=0.000228 *4*; α(O)=3.88×10^{-5} *6*; α(P)=1.605×10^{-6} *23*
4172.6	(16$^-$)	471.6 *3*	100	3701.0	(14$^-$)	(E2)[a]	0.0286	α(K)=0.0208 *3*; α(L)=0.00592 *9*; α(M)=0.001444 *21* α(N)=0.000355 *5*; α(O)=5.97×10^{-5} *9*; α(P)=2.19×10^{-6} *3*
4208.5	(16$^-$)	315.5 *3*	25 *10*	3893.0	(15$^-$)			
		608.6 *3*	100 *25*	3599.8	(14$^-$)	(E2)[a]	0.01558	α(K)=0.01194 *17*; α(L)=0.00278 *4*; α(M)=0.000667 *10* α(N)=0.0001641 *23*; α(O)=2.81×10^{-5} *4*; α(P)=1.264×10^{-6} *18*
4258.5	(18$^+$)	593.9 *3*	100	3664.6	(16$^+$)	(E2)[a]	0.01648	α(K)=0.01258 *18*; α(L)=0.00298 *5*; α(M)=0.000715 *10* α(N)=0.0001760 *25*; α(O)=3.01×10^{-5} *5*; α(P)=1.331×10^{-6} *19*
4393.2		519.4 *3*	100	3873.8	(15$^-$)			
4483.0	(17$^-$)	609.2 *3*	100	3873.8	(15$^-$)			
4518.0	(17$^-$)	625.0 *3*	100	3893.0	(15$^-$)			
4539.9	(19$^-$)	556.0 *3*	100	3983.9	(17$^-$)	(E2)[a]	0.0192	α(K)=0.01448 *21*; α(L)=0.00360 *5*; α(M)=0.000868 *13* α(N)=0.000213 *3*; α(O)=3.63×10^{-5} *6*; α(P)=1.530×10^{-6} *22*
4661.1?	(18$^+$)	697.8[d] *3*	100	3963.3	(16$^+$)			
4699.0	(18$^-$)	588.4 *3*	100	4110.6	(16$^-$)	(E2)[a]	0.01683	α(K)=0.01283 *18*; α(L)=0.00306 *5*; α(M)=0.000735 *11* α(N)=0.000181 *3*; α(O)=3.09×10^{-5} *5*; α(P)=1.357×10^{-6} *19*
4788.3	(20$^+$)	737.0 *3*	100	4051.3	(18$^+$)	(E2)[a]	0.01023	α(K)=0.00805 *12*; α(L)=0.001666 *24*; α(M)=0.000395 *6* α(N)=9.73×10^{-5} *14*; α(O)=1.687×10^{-5} *24*; α(P)=8.53×10^{-7} *12*
4836.0	(18$^-$)	627.5 *3*	100	4208.5	(16$^-$)	(E2)[a]	0.01454	α(K)=0.01120 *16*; α(L)=0.00255 *4*; α(M)=0.000611 *9* α(N)=0.0001505 *22*; α(O)=2.58×10^{-5} *4*; α(P)=1.186×10^{-6} *17*
4938.4		545.2 *3*	100	4393.2				
4956.2	(20$^+$)	697.7 *3*	100	4258.5	(18$^+$)	(E2)[a]	0.01151	α(K)=0.00900 *13*; α(L)=0.00192 *3*; α(M)=0.000457 *7* α(N)=0.0001125 *16*; α(O)=1.94×10^{-5} *3*; α(P)=9.53×10^{-7} *14*
5188.6	(21$^-$)	648.7 *3*	100	4539.9	(19$^-$)	(E2)[a]	0.01350	α(K)=0.01045 *15*; α(L)=0.00233 *4*; α(M)=0.000557 *8* α(N)=0.0001372 *20*; α(O)=2.36×10^{-5} *4*; α(P)=1.107×10^{-6} *16*
5321.2	(20$^-$)	622.2 *3*	100	4699.0	(18$^-$)			
5597.1	(22$^+$)	808.8 *3*	100	4788.3	(20$^+$)	(E2)[a]	0.00841	α(K)=0.00669 *10*; α(L)=0.001319 *19*; α(M)=0.000311 *5* α(N)=7.67×10^{-5} *11*; α(O)=1.336×10^{-5} *19*; α(P)=7.08×10^{-7} *10*
5738.1	(22$^+$)	781.9 *3*	100	4956.2	(20$^+$)			
5921.8	(23$^-$)	733.2 *3*	100	5188.6	(21$^-$)	(E2)[a]	0.01034	α(K)=0.00814 *12*; α(L)=0.001688 *24*; α(M)=0.000401 *6* α(N)=9.86×10^{-5} *14*; α(O)=1.709×10^{-5} *24*; α(P)=8.62×10^{-7} *12*
6463.8	(24$^+$)	866.7 *3*	100	5597.1	(22$^+$)	(E2)[a]	0.00729	α(K)=0.00584 *9*; α(L)=0.001115 *16*; α(M)=0.000262 *4* α(N)=6.46×10^{-5} *9*; α(O)=1.130×10^{-5} *16*; α(P)=6.17×10^{-7} *9*
6582.5	(24$^+$)	844.4 *3*	100	5738.1	(22$^+$)			
6729.8	(25$^-$)	808 *1*	100	5921.8	(23$^-$)			
7407.8?	(26$^+$)	944[d] *1*	100	6463.8	(24$^+$)			

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Adopted Levels, Gammas (continued)

$\gamma(^{186}Pt)$ (continued)

† From (α,6nγ), unless noted otherwise.
‡ From ^{186}Au ε decay.
# Weighted average of data from ^{186}Au ε decay and (α,6nγ).
@ Weighted average of 1990He19 (α,6nγ), 1975De21 (^{16}O,4nγ).
& From measured α(K)exp and/or $\gamma(\theta$,H,T) in ^{186}Au ε decay, unless noted otherwise.
[a] From DCO ratio in (α,6nγ) and band structure. Stretched Q intraband transitions are assigned as (E2), and D+Q intraband transitions or transitions between members of bands which are signature partners are assigned as (M1+E2).
[b] Additional information 1.
[c] If no value given it was assumed δ=1.00 for E2/M1, δ=1.00 for E3/M2 and δ=0.10 for the other multipolarities.
[d] Placement of transition in the level scheme is uncertain.

$^{186}_{78}Pt_{108}$-13

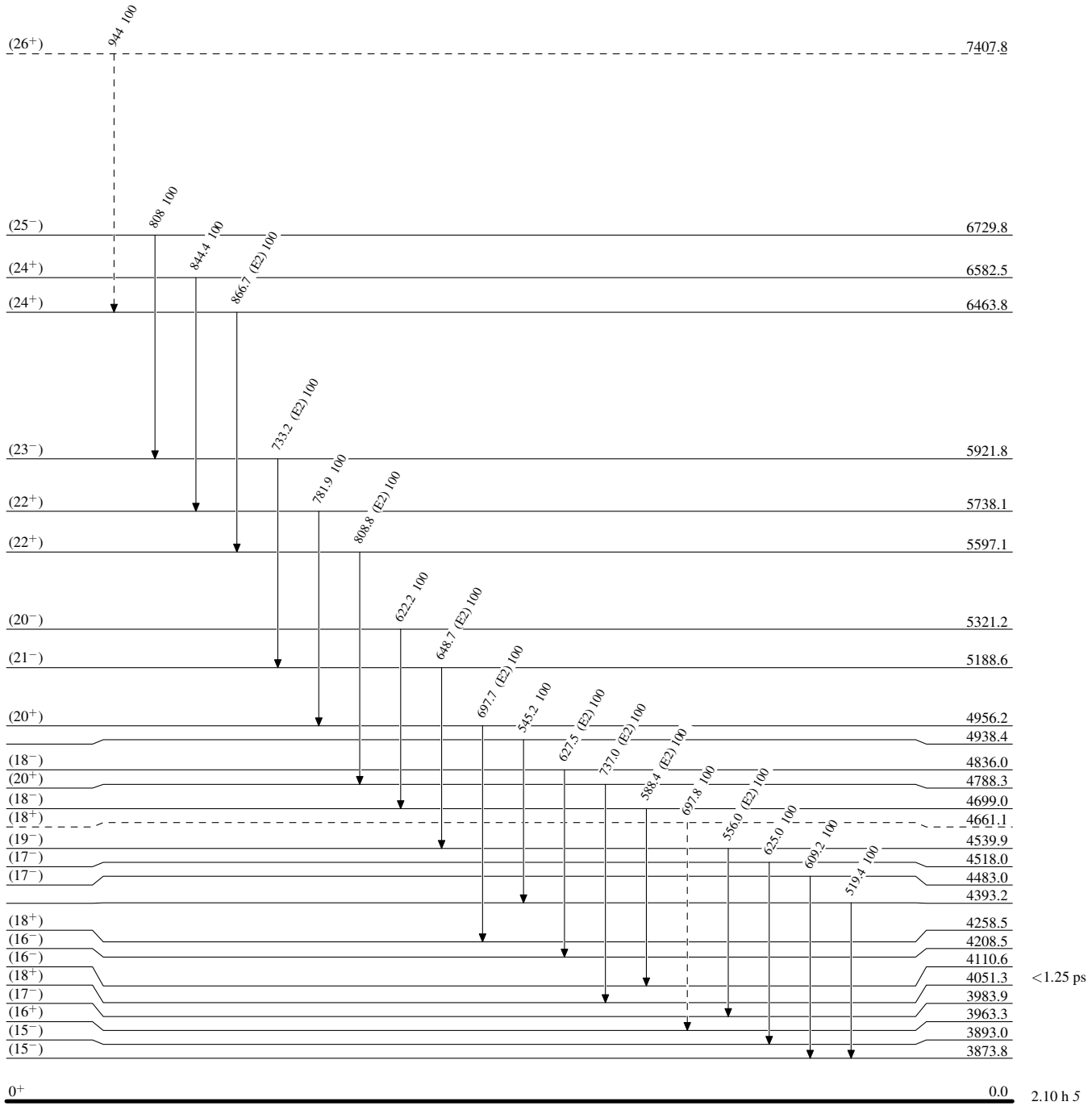
Adopted Levels, Gammas

Legend

Level Scheme

Intensities: Relative photon branching from each level

γ Decay (Uncertain)



$^{186}_{78}Pt_{108}$

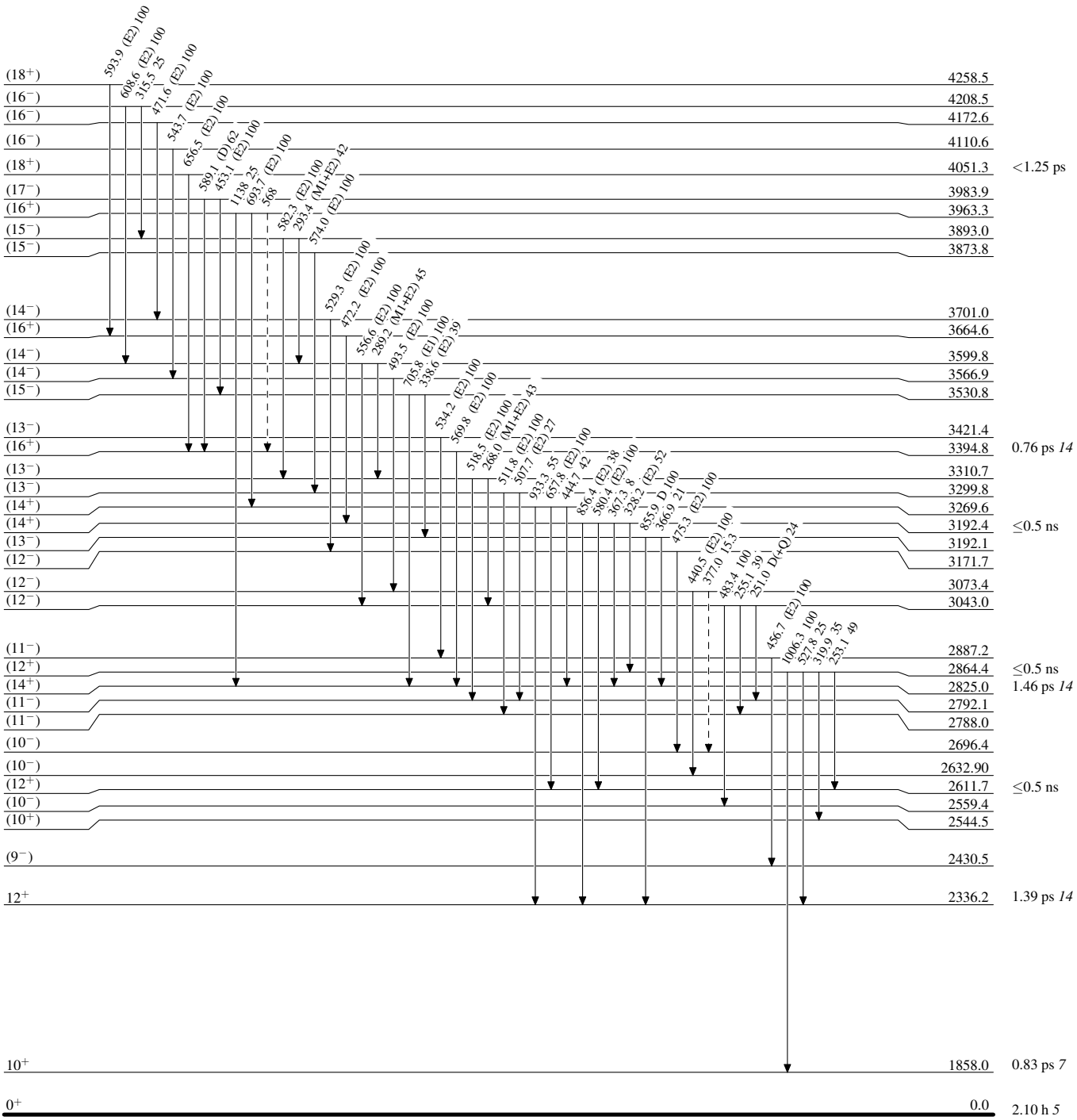
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

– – – – – – ► γ Decay (Uncertain)

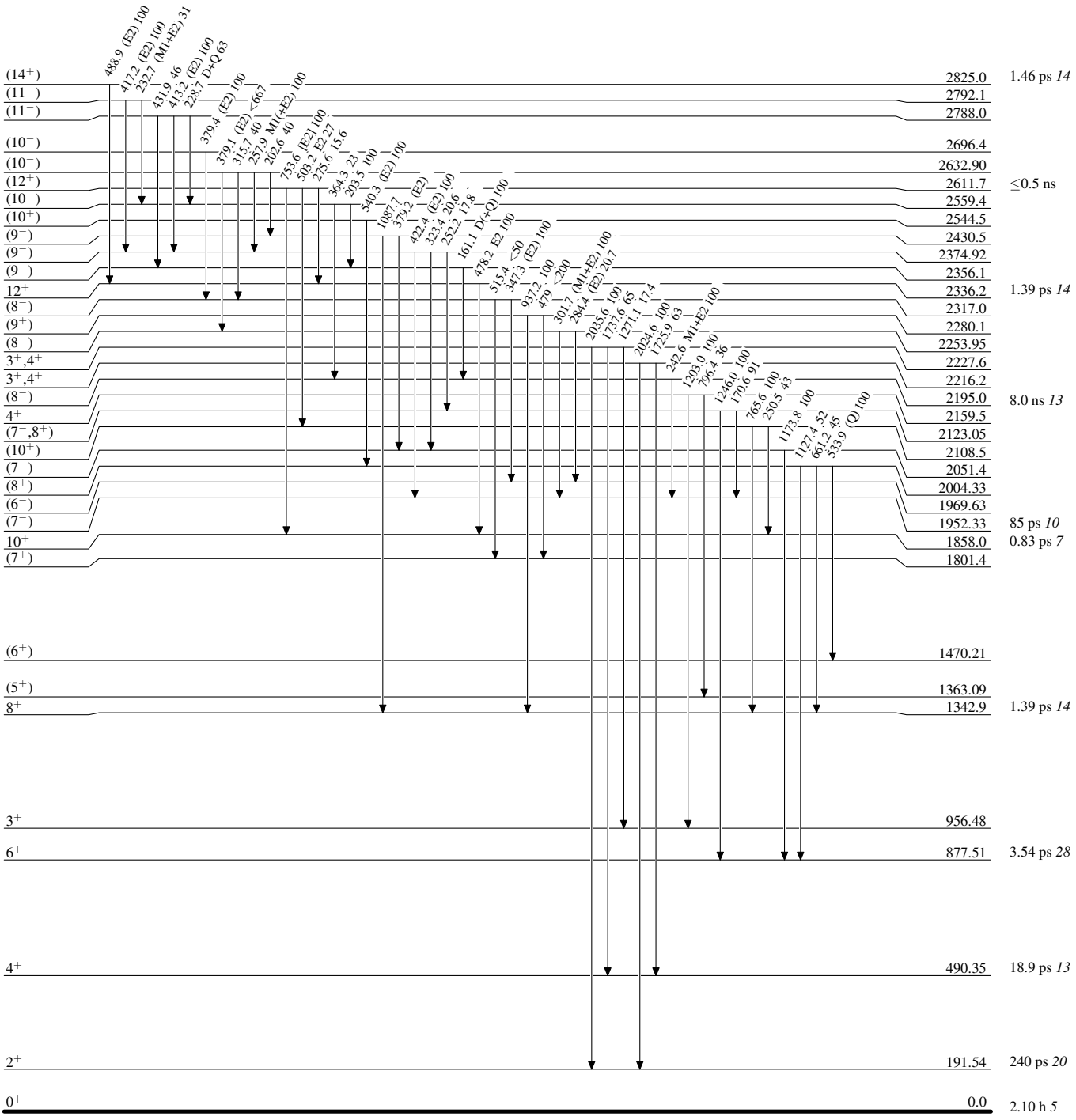


$^{186}_{78}Pt_{108}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level



$^{186}_{78}Pt_{108}$

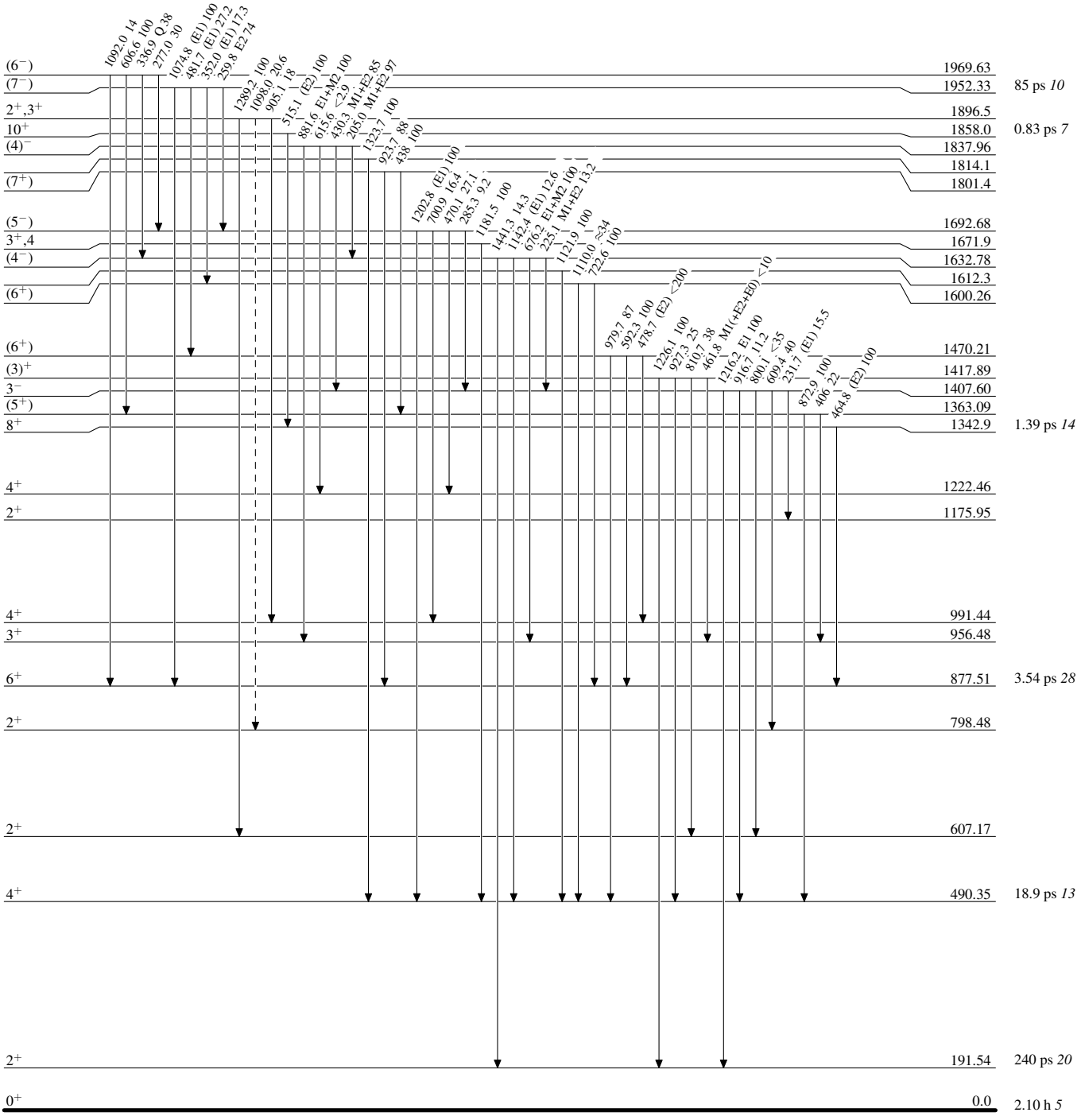
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level

- - - - - - ► γ Decay (Uncertain)



$^{186}_{78}Pt_{108}$

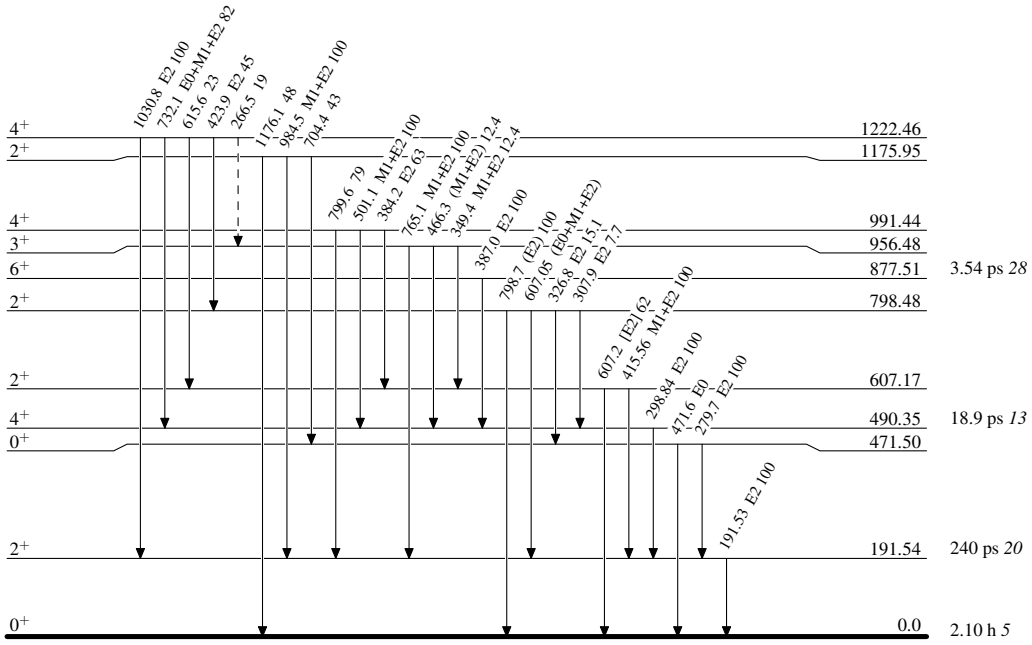
Adopted Levels, Gammas

Legend

Level Scheme (continued)

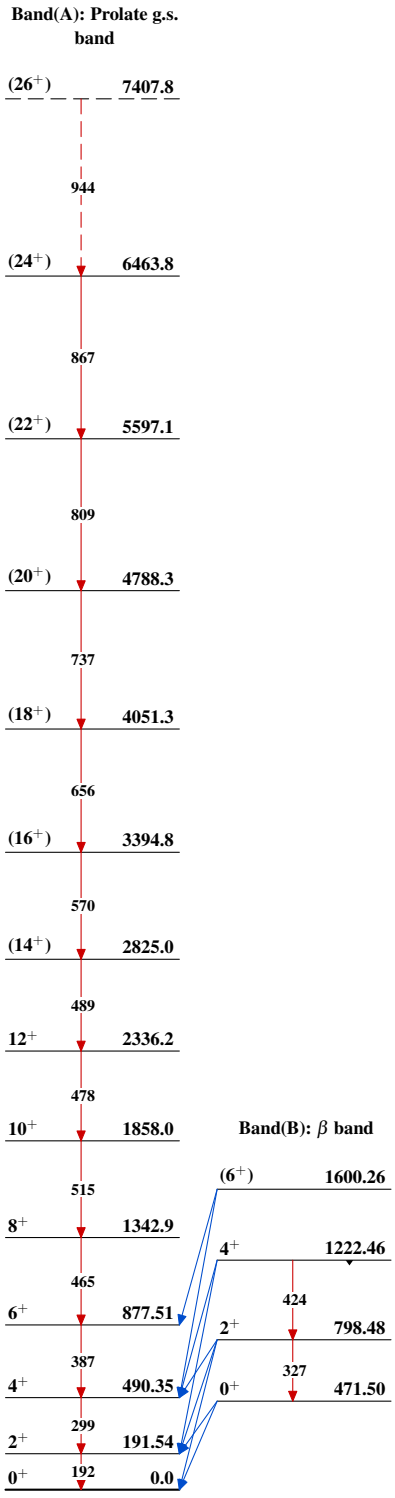
Intensities: Relative photon branching from each level

γ Decay (Uncertain)



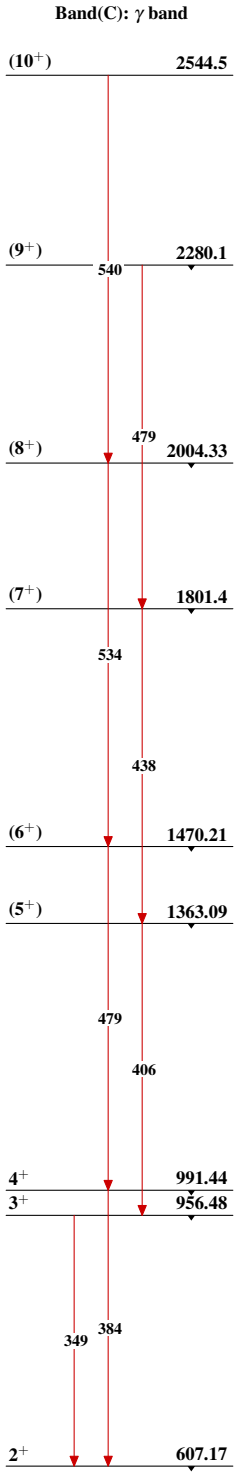
$^{186}_{78}Pt_{108}$

Adopted Levels, Gammas



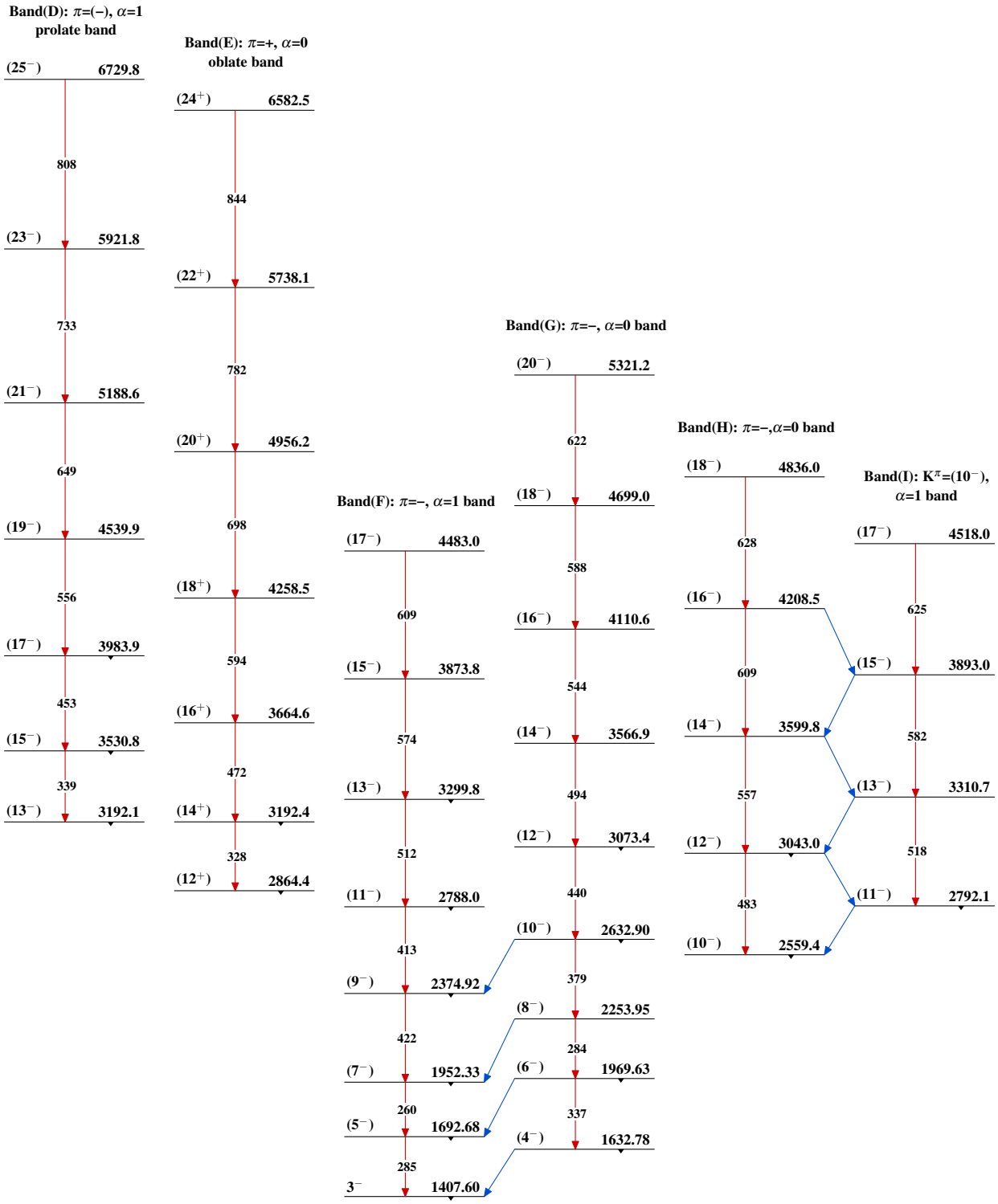
$^{186}_{78}Pt_{108}$

Adopted Levels, Gammas (continued)



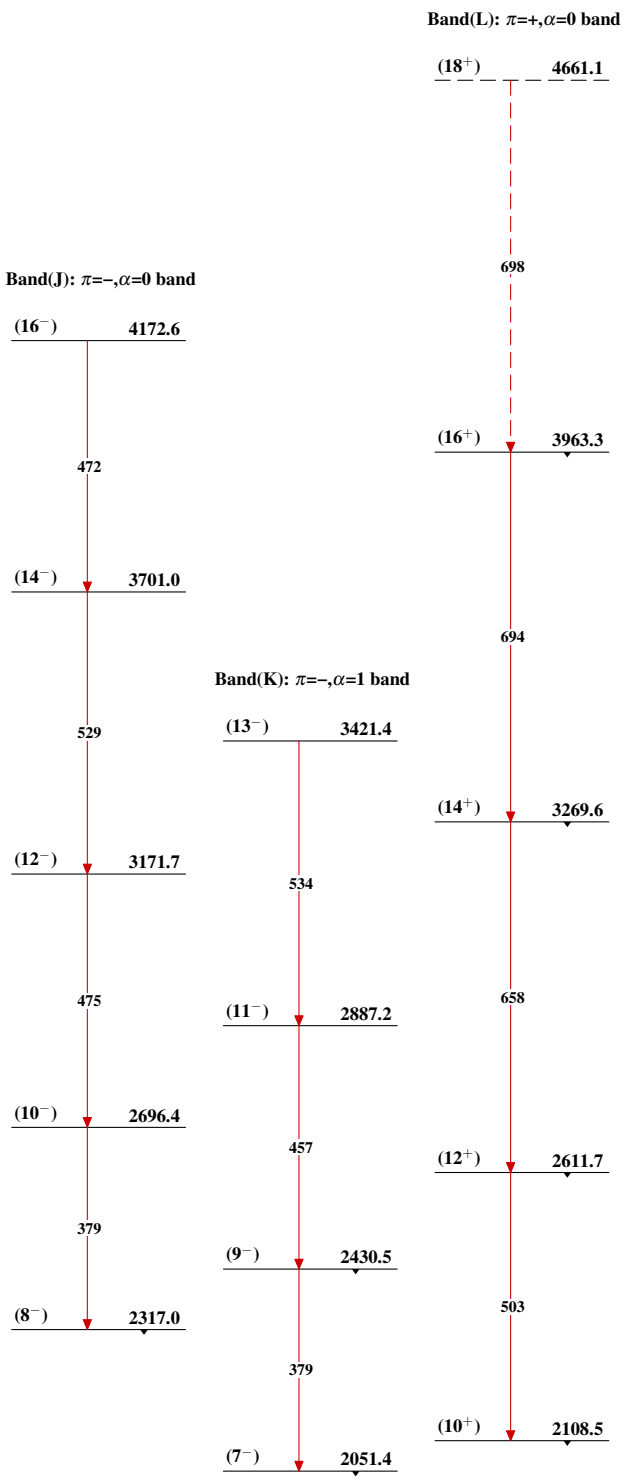
$^{186}_{78}Pt_{108}$

Adopted Levels, Gammas (continued)



$^{186}_{78}Pt_{108}$

Adopted Levels, Gammas (continued)



$^{186}_{78}Pt_{108}$