^{188}Os(α,6nγ) 1990He19,1987He29

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

No change compared to previous evaluation (2003Ba44).

1990He19, 1987He29: Eα=80 MeV; measured Eγ, Iγ, $\gamma\gamma$ coin, $\alpha\gamma$(t), DCO ratios (θ=36° and 93°).

^{186}Pt Levels

E(level)[†]	J$^{\pi}$[‡]	T$_{1/2}$[#]	Comments
0.0[&]	0$^+$		
191.5[&] *3*	2$^+$		
471.5[a] *11*	0$^+$		
490.2[&] *4*	4$^+$		
607.0[b] *4*	2$^+$		
798.5[a] *4*	2$^+$		
877.3[&] *4*	6$^+$		
956.4[b] *4*	3$^+$		
991.3[b] *4*	4$^+$		
1222.2[a] *4*	4$^+$		
1342.7[&] *4*	8$^+$		
1362.6[b] *4*	5$^+$		
1407.5[e] *4*	3$^-$		
1470.0[b] *4*	6$^+$		
1600.1[a] *4*	6$^+$		
1632.3[f] *4*	4$^-$		
1692.5[e] *4*	5$^-$		
1801.1[b] *4*	(7$^+$)		J$^{\pi}$: based on γ decay pattern; however, 6$^-$ is not excluded.
1857.8[&] *5*	10$^+$		
1952.1[e] *4*	7$^-$		
1969.3[f] *4*	6$^-$		
2004.1[b] *4*	8$^+$		
2051.2[j] *4*	7$^-$		
2108.3[k] *5*	10$^+$		
2122.8 *4*	(7$^-$)		
2194.8 *5*	8$^-$[@]	8.0 ns *13*	
2253.7[f] *4*	8$^-$		
2279.9[b] *5*	(9$^+$)		J$^{\pi}$: based on γ decay pattern; however, J=8 is not excluded.
2316.7[i] *4*	8$^-$		
2336.0[&] *5*	12$^+$		
2355.8 *5*	9$^-$		
2374.7[e] *4*	9$^-$		
2430.3[j] *4*	9$^-$		
2544.4[b] *5*	10$^+$		
2559.2[g] *5*	10$^-$		
2611.5[k] *5*	12$^+$	≤0.5 ns	
2632.7[f] *4*	10$^-$		
2696.1[i] *5*	10$^-$		

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^{188}Os(α,6nγ) 1990He19,1987He29 (continued)

^{186}Pt Levels (continued)

E(level)[†]	J^π[‡]	$T_{1/2}$[#]	E(level)[†]	J^π[‡]	E(level)[†]	J^π[‡]
2787.8[e] 5	11^-		3566.7[f] 6	14^-	4539.7[c] 7	$19^{(-)}$
2791.9[h] 5	11^-		3599.5[g] 5	14^-	4660.9?[k] 7	(18^+)
2824.9[&] 5	14^+		3664.4[d] 6	16^+	4698.8[f] 8	18^-
2864.2[d] 5	12^+	≤0.5 ns	3700.7[i] 7	14^-	4788.1[&] 7	20^+
2887.0[j] 5	11^-		3873.6[e] 6	15^-	4835.7[g] 6	(18^-)
3042.8[g] 5	12^-		3892.8[h] 5	15^-	4938.2 7	
3073.2[f] 5	12^-		3963.1[k] 6	(16^+)	4956.0[d] 7	20^+
3171.4[i] 6	12^-		3983.7[c] 6	$17^{(-)}$	5188.4[c] 7	$21^{(-)}$
3191.9[c] 5	$13^{(-)}$		4051.1[&] 7	18^+	5321.0[f] 8	(20^-)
3192.2[d] 5	14^+	≤0.5 ns	4110.4[f] 7	16^-	5596.9[&] 8	22^+
3269.4[k] 5	14^+		4172.3[i] 8	16^-	5737.9[d] 8	(22^+)
3299.6[e] 5	13^-		4208.2[g] 6	16^-	5921.6[c] 8	$23^{(-)}$
3310.5[h] 5	13^-		4258.3[d] 7	18^+	6463.6[&] 8	24^+
3394.6[&] 6	16^+		4393.0 7		6582.3[d] 9	(24^+)
3421.2[j] 6	13^-		4482.8[e] 7	(17^-)	6729.6[c] 13	$25^{(-)}$
3530.6[c] 6	$15^{(-)}$		4517.8[h] 6	(17^-)	7407.6?[&] 13	(26^+)

[†] From least-squares adjustment of Eγ.
[‡] From 1990He19, based on measured DCO ratios and deduced band structure.
[#] From 1990He19; $T_{1/2}$(2195 level) is from 243γ-1075γ(t), $T_{1/2}$ limits are from centroid shift.
[@] By analogy to ^{184}Pt and ^{182}Os high-K isomers with probable prolate configuration=(ν 9/2[624])(ν 7/2[514]). However, deexcitation of state differs, possibly due to availability in ^{186}Pt of decay path to 7^- (1952 keV) level with similar configuration.
[&] Band(A): Prolate g.s. band.
[a] Band(B): β band.
[b] Band(C): γ band.
[c] Band(D): π=(−),α=1 prolate band. π assignment tentative; supported by failure of band to interact with g.s. band which it intersects near $J^\pi=21^{(-)}$. Possible configuration=((π,$h_{9/2}$)(π,$i_{13/2}$)).
[d] 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.
[e] Band(F): π=−,α=1 band. Signature partner of band including 4^- 1632 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).
[f] Band(G): π=−,α=0 band. Signature partner of band including 3^- 1408 level.
[g] Band(H): π=−,α=0 band. Possible configuration=(ν 11/2[615])(ν 9/2[505])10^-.
[h] Band(I): $K^\pi=(10^-)$,α=1 band. Possible configuration=(ν 11/2[615])(ν 9/2[505])10^-.
[i] Band(J): π=−,α=0 band.
[j] Band(K): π=−,α=1 band.
[k] Band(L): π=+,α=0 band.

^{188}Os(α,6nγ) 1990He19,1987He29 (continued)

γ(^{186}Pt)

E_γ†	I_γ†	E_i(level)	J_i^π	E_f	J_f^π	Mult.‡	Comments
161.1 *3*	2.7 *2*	2355.8	9⁻	2194.8	8⁻	D(+Q)	DCO=2.08 *14* for intraband γ excludes stretched Q and ΔJ=0.
170.6 *3*	0.84 *7*	2122.8	(7⁻)	1952.1	7⁻	Q	DCO=1.10 *24*.
191.6 *3*	76 *4*	191.5	2⁺	0.0	0⁺	Q	DCO=1.02 *2* for intraband γ.
202.6 *3*	0.48 *15*	2632.7	10⁻	2430.3	9⁻		
203.5 *3*	3.5 *3*	2559.2	10⁻	2355.8	9⁻	D+Q	DCO=2.45 *15* implies ΔJ=1.
228.7 *3*	1.5 *2*	2787.8	11⁻	2559.2	10⁻	D+Q	DCO=2.35 *23* implies ΔJ=1.
232.7 *3*	1.0 *1*	2791.9	11⁻	2559.2	10⁻	D+Q	DCO=2.3 *3*; connects levels in signature partner bands.
242.6 *3*	5.0 *3*	2194.8	8⁻	1952.1	7⁻	D+Q	DCO=1.23 *6*. $\delta\approx$0.3 or$\approx$5 for ΔJ=1 (from fig. 1 of 1990He19).
250.5 *3*	2.1 *2*	2108.3	10⁺	1857.8	10⁺		DCO=0.79 *8* excludes ΔJ=2; a little low for authors′ ΔJ=0 placement.
251.0 *3*	0.53 *13*	3042.8	12⁻	2791.9	11⁻	D(+Q)	DCO=1.7 *5*; connects levels in signature partner bands.
252.2 *3*	0.64 *12*	2374.7	9⁻	2122.8	(7⁻)	Q	DCO=0.68 *25*; somewhat low for authors′ ΔJ=2 placement.
253.1 *3*	0.59 *9*	2864.2	12⁺	2611.5	12⁺		DCO=0.8 *3*.
255.1 *3*	0.85 *7*	3042.8	12⁻	2787.8	11⁻		DCO=1.8 *4*; not stretched Q.
257.9 *3*	1.2 *2*	2632.7	10⁻	2374.7	9⁻	D+Q	DCO=3.3 *6* implies ΔJ=1.
259.8 *3*	6.0 *3*	1952.1	7⁻	1692.5	5⁻	Q	DCO=1.00 *6* for intraband γ.
268.0 *3*	0.82 *13*	3310.5	13⁻	3042.8	12⁻	D+Q	DCO=3.1 *7* implies ΔJ=1.
275.6 *3*	1.0 *1*	2611.5	12⁺	2336.0	12⁺		DCO=0.84 *14*.
277.0 *3*	0.64 *6*	1969.3	6⁻	1692.5	5⁻		
284.4 *3*	0.93 *8*	2253.7	8⁻	1969.3	6⁻	Q	DCO=1.05 *15* for intraband γ.
285.3 *3*	0.54 *14*	1692.5	5⁻	1407.5	3⁻		
289.2 *3*	0.86 *13*	3599.5	14⁻	3310.5	13⁻	D(+Q)	DCO=2.6 *10*; connects levels in signature partner bands.
293.4 *3*	0.55 *15*	3892.8	15⁻	3599.5	14⁻	D+Q	DCO=3.2 *13*; connects levels in signature partner bands.
298.6 *3*	100	490.2	4⁺	191.5	2⁺	Q	DCO=1.03 *2* for intraband γ.
301.7 *3*	4.5 *5*	2253.7	8⁻	1952.1	7⁻	Q	DCO=0.98 *16*; connects levels in signature partner bands.
315.5 *3*	0.3 *1*	4208.2	16⁻	3892.8	15⁻		
315.7 *3*	0.48 *8*	2632.7	10⁻	2316.7	8⁻		
319.9 *3*	0.42 *8*	2864.2	12⁺	2544.4	10⁺		DCO=1.1 *3*.
323.4 *3*	0.74 *8*	2374.7	9⁻	2051.2	7⁻		DCO=1.08 *22*; consistent with authors′ ΔJ=2 placement.
327 *1*		798.5	2⁺	471.5	0⁺		
328.2 *3*	1.7 *2*	3192.2	14⁺	2864.2	12⁺	Q	DCO=0.95 *11* for intraband γ.
336.9 *3*	0.80 *10*	1969.3	6⁻	1632.3	4⁻	Q	DCO=0.92 *15* for intraband γ.
338.6 *3*	1.2 *2*	3530.6	15$^{(-)}$	3191.9	13$^{(-)}$	(Q)	DCO=0.89 *11* for intraband γ.
347.3 *3*	2.2 *2*	2316.7	8⁻	1969.3	6⁻		DCO=1.09 *7*; consistent with authors′ ΔJ=2 placement.
352.0 *3*	1.4 *1*	1952.1	7⁻	1600.1	6⁺	D+Q	DCO=1.50 *25*; consistent with small Q admixture if ΔJ=1.
364.3 *3*	0.8 *3*	2559.2	10⁻	2194.8	8⁻		DCO=0.8 *3*.
366.9 *3*	0.28 *9*	3191.9	13$^{(-)}$	2824.9	14⁺		
367.3 *3*	0.27 *9*	3192.2	14⁺	2824.9	14⁺		
377.0# *3*	0.89 *15*	3073.2	12⁻	2696.1	10⁻		
379.1 *3*	<8	2632.7	10⁻	2253.7	8⁻	Q	DCO=1.09 *6* for intraband γ. I_γ: I(379.1γ+379.2γ+379.4γ)=7.6 *4* (1990He19).
379.2 *3*	<8	2430.3	9⁻	2051.2	7⁻	Q	DCO=1.02 *20* for intraband γ. I_γ: I(379.1γ+379.2γ+379.4γ)=7.6 *4* (1990He19).
379.4 *3*	<8	2696.1	10⁻	2316.7	8⁻	Q	DCO=1.10 *9* for intraband γ. I_γ: I(379.1γ+379.2γ+379.4γ)=7.6 *4* (1990He19).
384.1 *3*	1.2 *1*	991.3	4⁺	607.0	2⁺	Q	DCO=0.91 *14* for intraband γ.
387.0 *3*	93 *5*	877.3	6⁺	490.2	4⁺	Q	DCO=0.99 *2* for intraband γ.
406 *1*	0.60 *20*	1362.6	5⁺	956.4	3⁺		
413.2 *3*	2.4 *2*	2787.8	11⁻	2374.7	9⁻	Q	DCO=0.96 *8* for intraband γ.
415.3 *3*	1.9 *1*	607.0	2⁺	191.5	2⁺		DCO=1.6 *4* rules out stretched Q.
417.2 *3*	3.2 *2*	2791.9	11⁻	2374.7	9⁻	Q	DCO=1.08 *6*; consistent with authors′ ΔJ=2 placement.
422.4 *3*	3.6 *2*	2374.7	9⁻	1952.1	7⁻	Q	DCO=0.95 *8* for intraband γ.
423.9 *3*	0.5 *1*	1222.2	4⁺	798.5	2⁺	Q	DCO=0.92 *7* for intraband γ.

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^{188}Os(α,6nγ) 1990He19,1987He29 (continued)

γ(^{186}Pt) (continued)

E_γ †	I_γ †	E_i(level)	J^π_i	E_f	J^π_f	Mult.‡	Comments
431.9 *3*	1.1 *1*	2787.8	11⁻	2355.8	9⁻	Q	DCO=0.98 *13*; authors placement requires stretched Q.
438 *1*	1.6 *1*	1801.1	(7⁺)	1362.6	5⁺		
440.5 *3*	5.8 *3*	3073.2	12⁻	2632.7	10⁻	Q	DCO=0.95 *6* for intraband γ.
444.7 *3*	0.92 *10*	3269.4	14⁺	2824.9	14⁺	Q	DCO=1.08 *25*.
453.1 *3*	2.6 *2*	3983.7	17$^{(-)}$	3530.6	15$^{(-)}$	(Q)	DCO=0.92 *7* for intraband γ (1987He29); no DCO given in 1990He19.
456.7 *3*	1.8 *2*	2887.0	11⁻	2430.3	9⁻	Q	DCO=1.00 *14* for intraband γ.
465.1 *3*	68 *3*	1342.7	8⁺	877.3	6⁺	Q	DCO=0.99 *2* for intraband γ.
470.1 *3*	1.6 *1*	1692.5	5⁻	1222.2	4⁺		
471.6 *3*	0.56 *12*	4172.3	16⁻	3700.7	14⁻	Q	DCO=1.02 *13* for intraband γ.
472.2 *3*	4.2 *2*	3664.4	16⁺	3192.2	14⁺	Q	DCO=1.06 *9* for intraband γ.
475.3 *3*	1.3 *3*	3171.4	12⁻	2696.1	10⁻	Q	DCO=0.92 *8* for intraband γ.
478.2 *3*	37.8 *19*	2336.0	12⁺	1857.8	10⁺	Q	DCO=1.02 *2* for intraband γ.
478.7 *3*	<3	1470.0	6⁺	991.3	4⁺	Q	DCO=1.10 *19* for intraband γ.
479 *1*	<1.2	2279.9	(9⁺)	1801.1	(7⁺)		
481.7 *3*	2.2 *2*	1952.1	7⁻	1470.0	6⁺	D+Q	DCO=1.45 *25*; consistent with small Q admixture if ΔJ=1.
483.4 *3*	2.2 *2*	3042.8	12⁻	2559.2	10⁻		DCO=0.76 *13* for intraband γ; too low for authors′ ΔJ=2 placement.
488.9 *3*	21.9 *11*	2824.9	14⁺	2336.0	12⁺	Q	DCO=1.00 *2* for intraband γ.
493.5 *3*	3.5 *2*	3566.7	14⁻	3073.2	12⁻	Q	DCO=1.03 *6* for intraband γ.
500.9 *3*	1.9 *3*	991.3	4⁺	490.2	4⁺		DCO=1.8 *3*; rules out stretched Q.
503.2 *3*	1.7 *2*	2611.5	12⁺	2108.3	10⁺	Q	DCO=0.94 *10* for intraband γ.
507.7 *3*	0.80 *13*	3299.6	13⁻	2791.9	11⁻	Q	DCO=1.02 *19*; consistent with authors′ ΔJ=2 placement.
511.8 *3*	3.0 *6*	3299.6	13⁻	2787.8	11⁻	Q	DCO=1.08 *13* for intraband γ.
515.1 *3*	53 *3*	1857.8	10⁺	1342.7	8⁺	Q	DCO=1.04 *2* for intraband γ.
515.4 *3*	<1.1	2316.7	8⁻	1801.1	(7⁺)		DCO=1.9 *11*.
518.5 *3*	1.9 *4*	3310.5	13⁻	2791.9	11⁻	Q	DCO=0.91 *12* for intraband γ.
519.4 *3*	0.70 *20*	4393.0		3873.6	15⁻		DCO=0.71 *23*.
527.8 *3*	0.30 *10*	2864.2	12⁺	2336.0	12⁺		
529.3 *3*	0.95 *25*	3700.7	14⁻	3171.4	12⁻	Q	DCO=0.97 *11* for intraband γ.
533.9 *3*	2.0 *2*	2004.1	8⁺	1470.0	6⁺	(Q)	DCO=0.94 *25* for intraband γ.
534.2 *3*	0.63 *16*	3421.2	13⁻	2887.0	11⁻	(Q)	DCO=1.06 *26* for intraband γ.
540.3 *3*	0.95 *13*	2544.4	10⁺	2004.1	8⁺	Q	DCO=1.06 *21* for intraband γ.
543.7 *3*	3.0 *2*	4110.4	16⁻	3566.7	14⁻	Q	DCO=1.07 *7* for intraband γ.
545.2 *3*	0.35 *12*	4938.2		4393.0			
556.0 *3*	2.3 *2*	4539.7	19$^{(-)}$	3983.7	17$^{(-)}$	Q	DCO=1.05 *11* for intraband γ.
556.6 *3*	1.9 *2*	3599.5	14⁻	3042.8	12⁻	Q	DCO=1.08 *14* for intraband γ.
568# *1*		3963.1	(16⁺)	3394.6	16⁺		Contaminated line.
569.8 *3*	12.1 *6*	3394.6	16⁺	2824.9	14⁺	Q	DCO=0.98 *2* for intraband γ.
574.0 *3*	3.0 *2*	3873.6	15⁻	3299.6	13⁻	Q	DCO=0.92 *9* for intraband γ.
580.4 *3*	3.3 *3*	3192.2	14⁺	2611.5	12⁺		DCO=1.01 *5*; consistent with authors′ ΔJ=2 placement.
582.3 *3*	1.3 *3*	3892.8	15⁻	3310.5	13⁻	Q	DCO=1.15 *16* for intraband γ.
588.4 *3*	0.94 *10*	4698.8	18⁻	4110.4	16⁻	Q	DCO=1.00 *13* for intraband γ.
589.1 *3*	1.6 *2*	3983.7	17$^{(-)}$	3394.6	16⁺	(D)	DCO=1.92 *17*; excludes stretched Q.
592.3 *3*	1.5 *5*	1470.0	6⁺	877.3	6⁺		DCO=1.4 *5*.
593.9 *3*	2.3 *2*	4258.3	18⁺	3664.4	16⁺	Q	DCO=1.03 *14* for intraband γ.
606.6 *3*	2.1 *2*	1969.3	6⁻	1362.6	5⁺		DCO=1.70 *22*; excludes stretched Q.
607 *1*		607.0	2⁺	0.0	0⁺		
607.2 *3*		798.5	2⁺	191.5	2⁺		
608.6 *3*	1.2 *3*	4208.2	16⁻	3599.5	14⁻	Q	DCO=0.95 *16* for intraband γ.
609.2 *3*	2.7 *2*	4482.8	(17⁻)	3873.6	15⁻		DCO=1.3 *3* for intraband γ.
622.2 *3*	0.38 *6*	5321.0	(20⁻)	4698.8	18⁻		DCO=1.2 *4* for intraband γ.
625.0 *3*	0.51 *12*	4517.8	(17⁻)	3892.8	15⁻	Q	DCO=0.9 *3* for intraband γ.
627.5 *3*	0.58 *16*	4835.7	(18⁻)	4208.2	16⁻	Q	DCO=0.95 *25* for intraband γ.
648.7 *3*	1.09 *12*	5188.4	21$^{(-)}$	4539.7	19$^{(-)}$	Q	DCO=1.01 *10* for intraband γ.

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^{188}Os(α,6nγ) 1990He19,1987He29 (continued)

γ(^{186}Pt) (continued)

E_γ †	I_γ †	E_i(level)	J^π_i	E_f	J^π_f	Mult.‡	Comments
656.5 3	7.1 5	4051.1	18^+	3394.6	16^+	Q	DCO=0.96 3 for intraband γ.
657.8 3	2.2 2	3269.4	14^+	2611.5	12^+	Q	DCO=0.92 9 for intraband γ.
661.2 3	0.90 20	2004.1	8^+	1342.7	8^+		
675.8 3	0.61 12	1632.3	4^-	956.4	3^+		DCO=1.5 4.
693.7 3	2.4 2	3963.1	(16^+)	3269.4	14^+	(Q)	DCO=1.2 3 for intraband γ.
697.7 3	1.4 2	4956.0	20^+	4258.3	18^+	Q	DCO=1.00 23 for intraband γ.
697.8# 3	2.8 2	4660.9?	(18^+)	3963.1	(16^+)		Contaminated line.
700.9 3	0.97 11	1692.5	5^-	991.3	4^+		DCO=1.4 4.
705.8 3	3.1 2	3530.6	$15^{(-)}$	2824.9	14^+	(D)	DCO=1.92 15; excludes stretched Q.
722.6 3	1.9 2	1600.1	6^+	877.3	6^+		DCO=0.88 13.
731.6 3	0.8 3	1222.2	4^+	490.2	4^+		
733.2 3	0.47 9	5921.6	$23^{(-)}$	5188.4	$21^{(-)}$	Q	DCO=1.15 21 for intraband γ.
737.0 3	2.4 2	4788.1	20^+	4051.1	18^+	Q	DCO=0.96 13 for intraband γ.
753.6 3	6.4 4	2611.5	12^+	1857.8	10^+	Q	DCO=0.98 5; consistent with authors′ ΔJ=2 placement.
764.7 3	1.6 7	956.4	3^+	191.5	2^+		
765.6 3	4.9 2	2108.3	10^+	1342.7	8^+	Q	DCO=1.04 5; consistent with authors′ ΔJ=2 placement.
781.9 3	0.40 14	5737.9	(22^+)	4956.0	20^+	Q	DCO=1.1 4 for intraband γ.
798 1		798.5	2^+	0.0	0^+		
799.6 3	1.5 3	991.3	4^+	191.5	2^+		
799.9# 3	1.5 2	1407.5	3^-	607.0	2^+		Placement probably incorrect; Iγ disagrees strongly with adopted branching.
808 1	≈0.35	6729.6	$25^{(-)}$	5921.6	$23^{(-)}$		
808.8 3	1.2 4	5596.9	22^+	4788.1	20^+	Q	DCO=0.94 10 for intraband γ.
844.4 3	0.08 5	6582.3	(24^+)	5737.9	(22^+)		
855.9 3	1.32 18	3191.9	$13^{(-)}$	2336.0	12^+		DCO=1.81 17; excludes stretched Q.
856.4 3	1.25 14	3192.2	14^+	2336.0	12^+	Q	DCO=1.05 18; consistent with authors′ ΔJ=2 placement.
866.7 3	0.3 1	6463.6	24^+	5596.9	22^+	(Q)	DCO=1.12 23 for intraband γ.
872.3 3	2.7 2	1362.6	5^+	490.2	4^+		DCO=1.05 9.
916.2# 3	0.43 13	1407.5	3^-	490.2	4^+		Placement probably incorrect; neither Eγ nor Iγ agrees well with adopted value.
923.7 3	1.40 13	1801.1	(7^+)	877.3	6^+		DCO=1.1 2.
933.3 3	1.2 1	3269.4	14^+	2336.0	12^+		DCO=1.24 16.
937.2 3	0.60 10	2279.9	(9^+)	1342.7	8^+		
944# 1		7407.6?	(26^+)	6463.6	24^+		
979.7 3	1.3 3	1470.0	6^+	490.2	4^+		
1006.3 3	1.2 1	2864.2	12^+	1857.8	10^+	Q	DCO=1.01 14; consistent with authors′ ΔJ=2 placement.
1030.6 3	1.4 1	1222.2	4^+	191.5	2^+		
1074.8 3	8.1 4	1952.1	7^-	877.3	6^+	D+Q	DCO=1.73 6; Q admixture is small if ΔJ=1.
1087.7 3	1.6 1	2430.3	9^-	1342.7	8^+		DCO=1.83 18; excludes stretched Q.
1092.0 3	0.30 10	1969.3	6^-	877.3	6^+		
1110.0 3	≈0.65	1600.1	6^+	490.2	4^+		
1127.4 3	1.03 13	2004.1	8^+	877.3	6^+		DCO=1.6 5.
1138 1	0.6 4	3963.1	(16^+)	2824.9	14^+		
1142.0 3	0.33 12	1632.3	4^-	490.2	4^+		
1173.8 3	2.6 2	2051.2	7^-	877.3	6^+		DCO=1.74 15; excludes stretched Q.
1202.8 3	5.9 3	1692.5	5^-	490.2	4^+		DCO=1.71 8; consistent with pure stretched D or with Q(+D) ($\delta \geq 1.4$) ΔJ=0 transition (1990He19).
1216.3 3	0.94 10	1407.5	3^-	191.5	2^+		
1246.0 3	0.92 12	2122.8	(7^-)	877.3	6^+		

† From 1990He19. Uncertainty in Eγ is 0.3 keV, except for unresolved multiplets (in which case, ΔE=1 keV). The evaluators presume that the latter uncertainty is the appropriate one for those lines quoted to the nearest keV in 1990He19.

Continued on next page (footnotes at end of table)

^{188}Os(α,6nγ) 1990He19,1987He29 (continued)

γ(^{186}Pt) (continued)

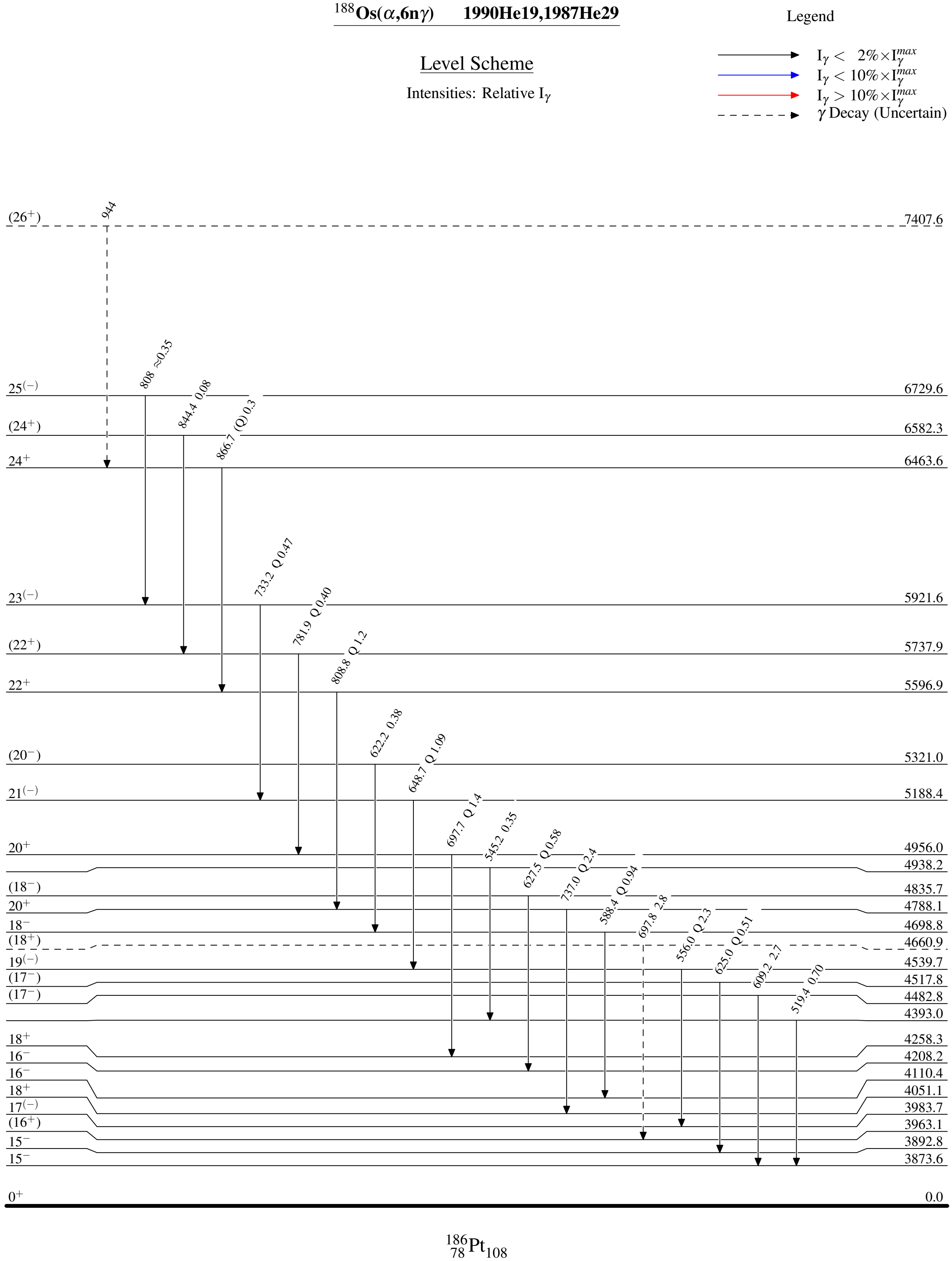
‡ From DCO ratios in 1990He19 (stretched Q transition in gate) and deduced band structure. Expected ratios are 1.00 for Q (ΔJ=2), 1.94 for pure D (ΔJ=1), 0.91 for pure D (ΔJ=0) transitions (see 1987He29,1990He19); ratios $\geq$2 imply mult=D+Q, ΔJ=1.

Placement of transition in the level scheme is uncertain.

$^{188}Os(\alpha,6n\gamma)$ 1990He19,1987He29

Level Scheme

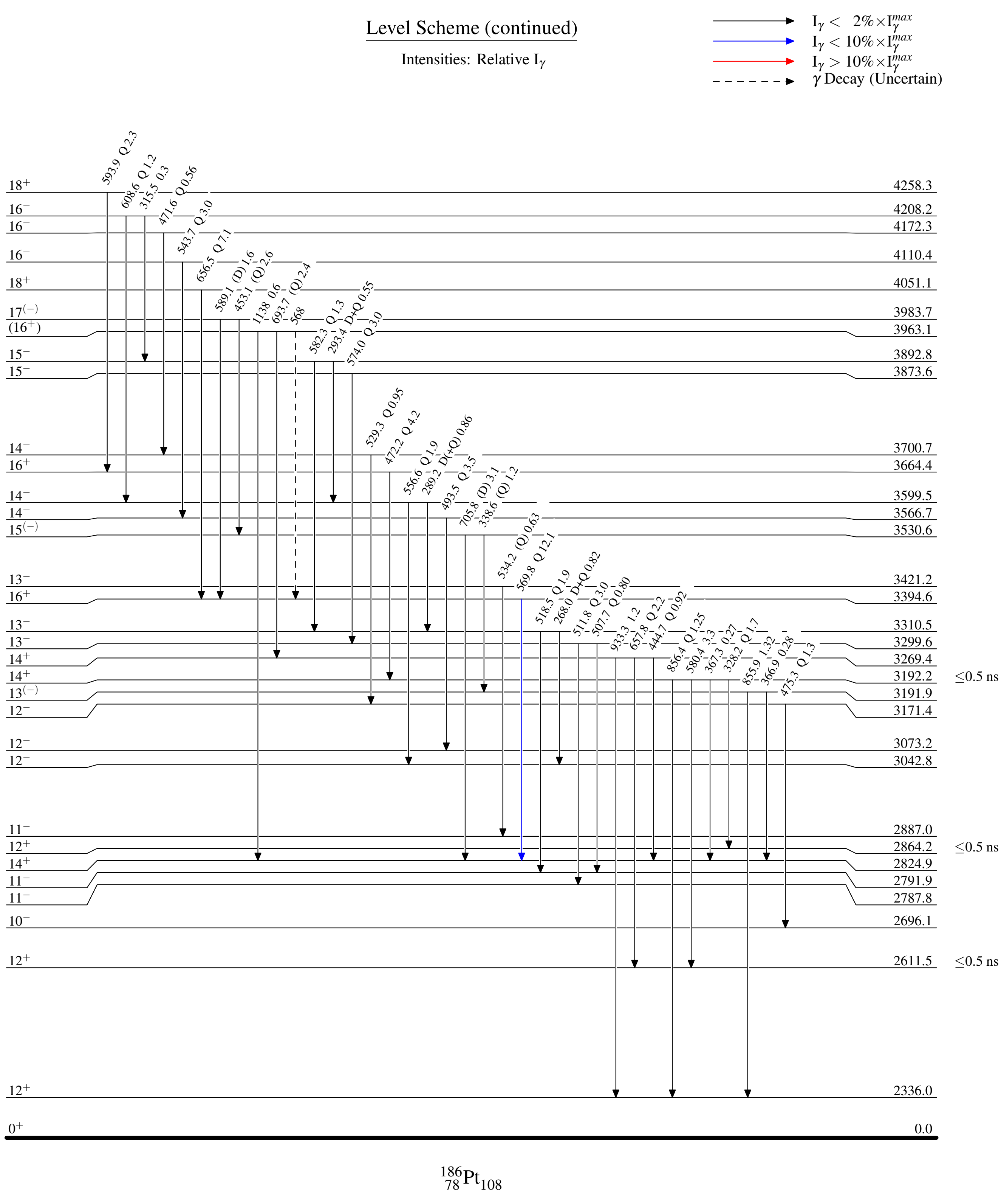
Intensities: Relative I_γ



^{188}Os(α,6nγ) 1990He19,1987He29

Level Scheme (continued)

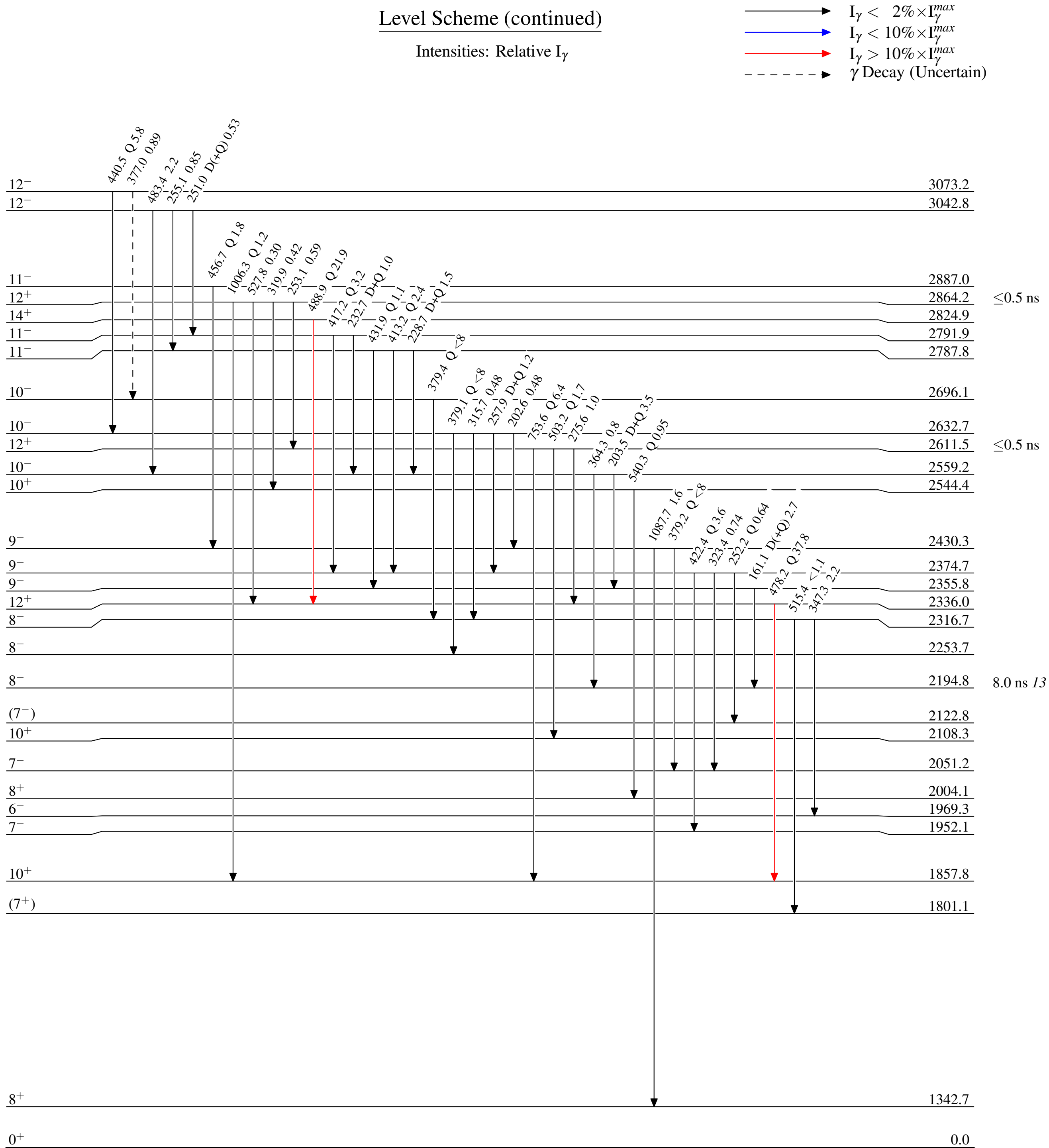
Intensities: Relative I_γ



^{188}Os(α,6nγ) 1990He19,1987He29

Level Scheme (continued)

Intensities: Relative I_γ

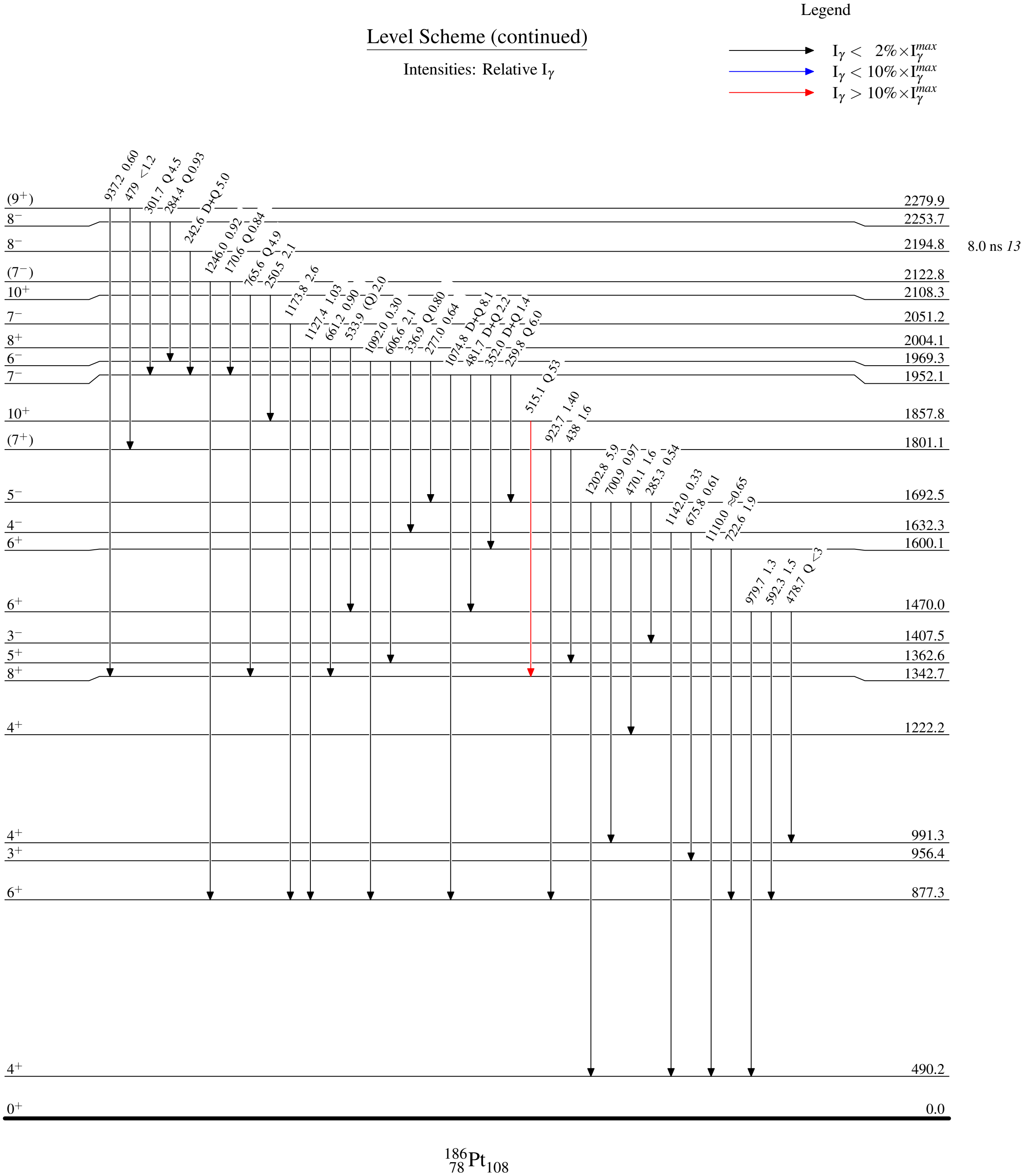


$^{186}_{78}Pt_{108}$

$^{188}Os(\alpha,6n\gamma)$ 1990He19,1987He29

Level Scheme (continued)

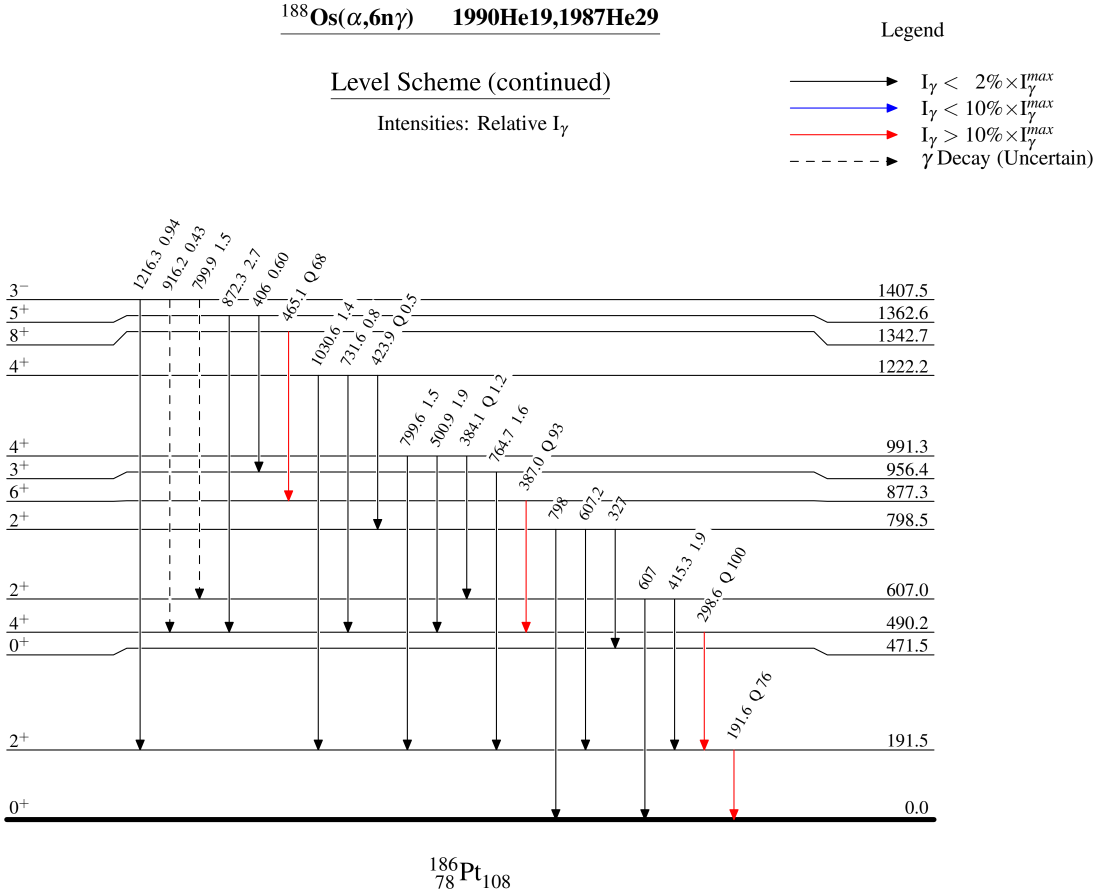
Intensities: Relative I_γ



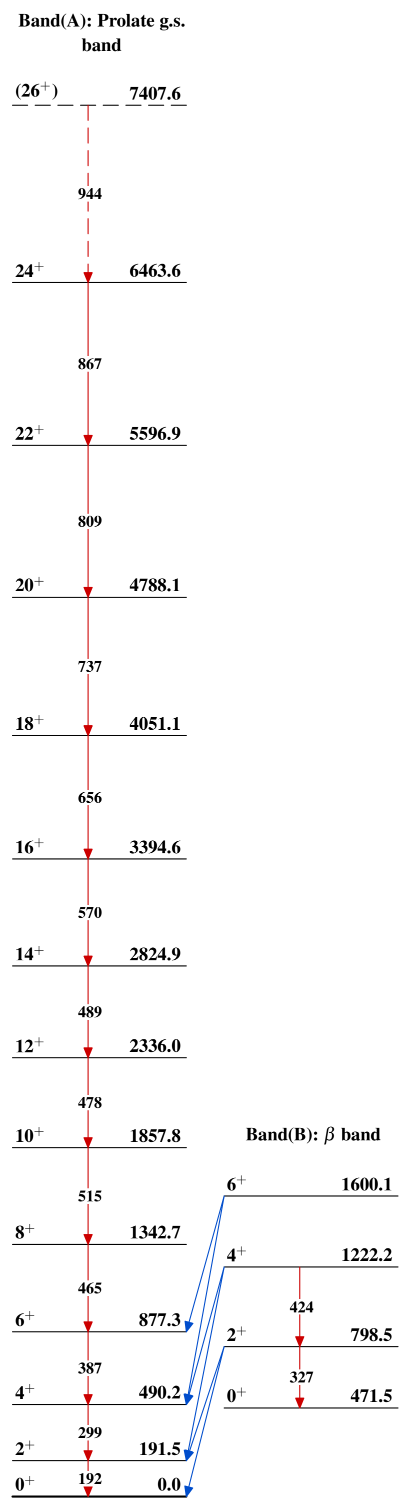
$^{188}Os(\alpha,6n\gamma)$ 1990He19,1987He29

Level Scheme (continued)

Intensities: Relative I_γ

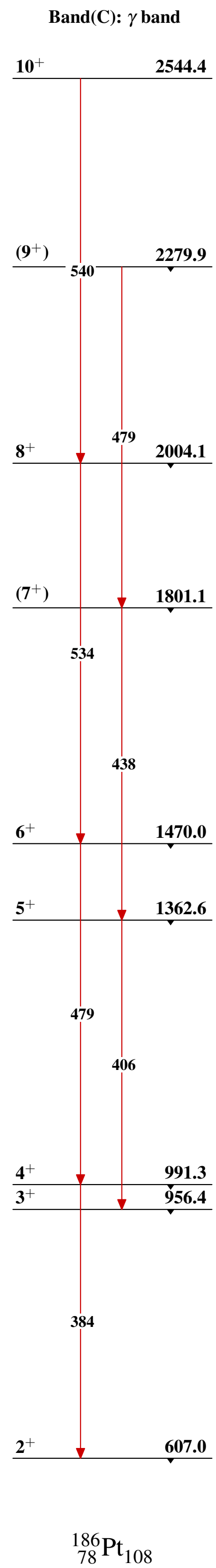


$^{188}Os(\alpha,6n\gamma)$ 1990He19,1987He29

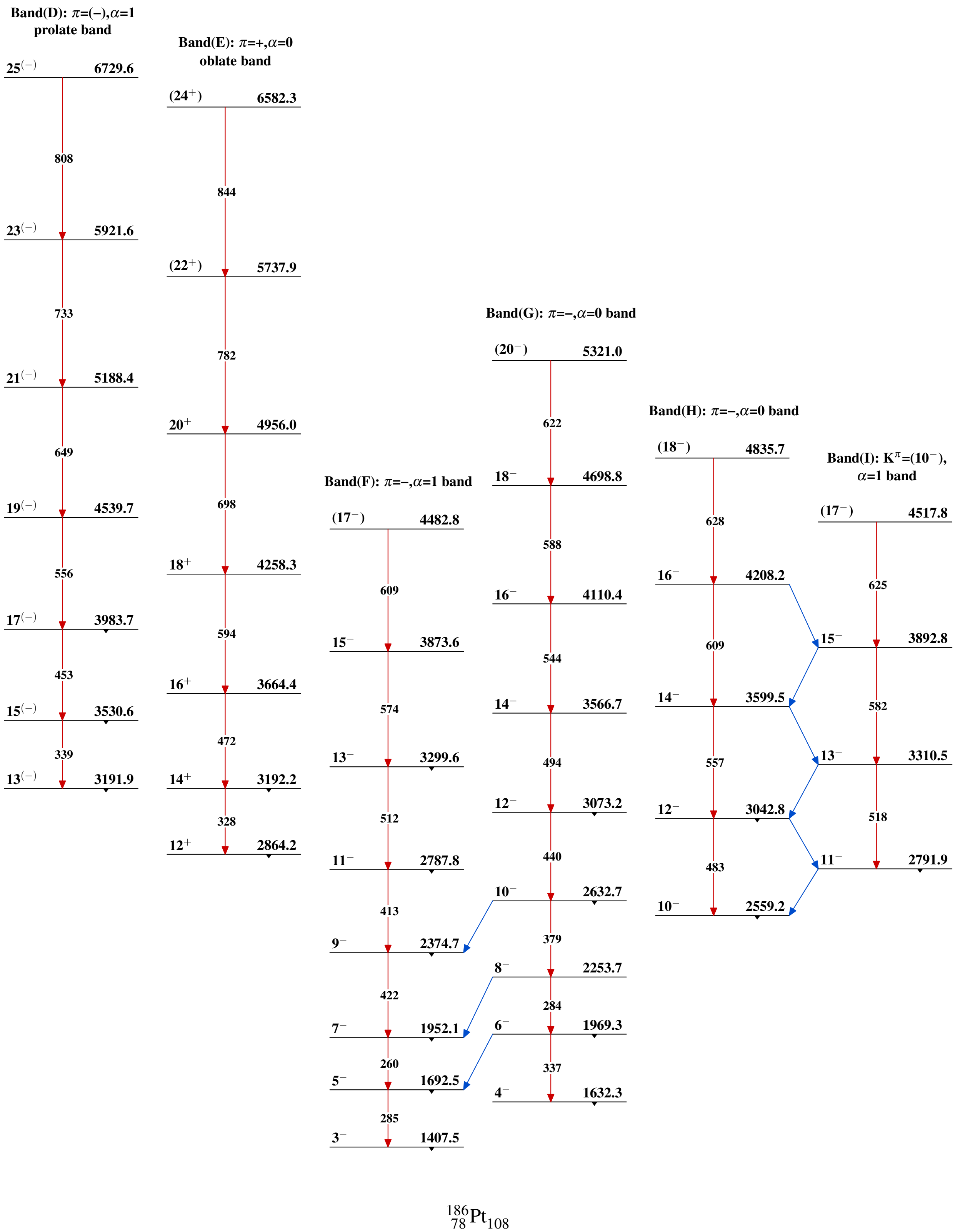


$^{186}_{78}Pt_{108}$

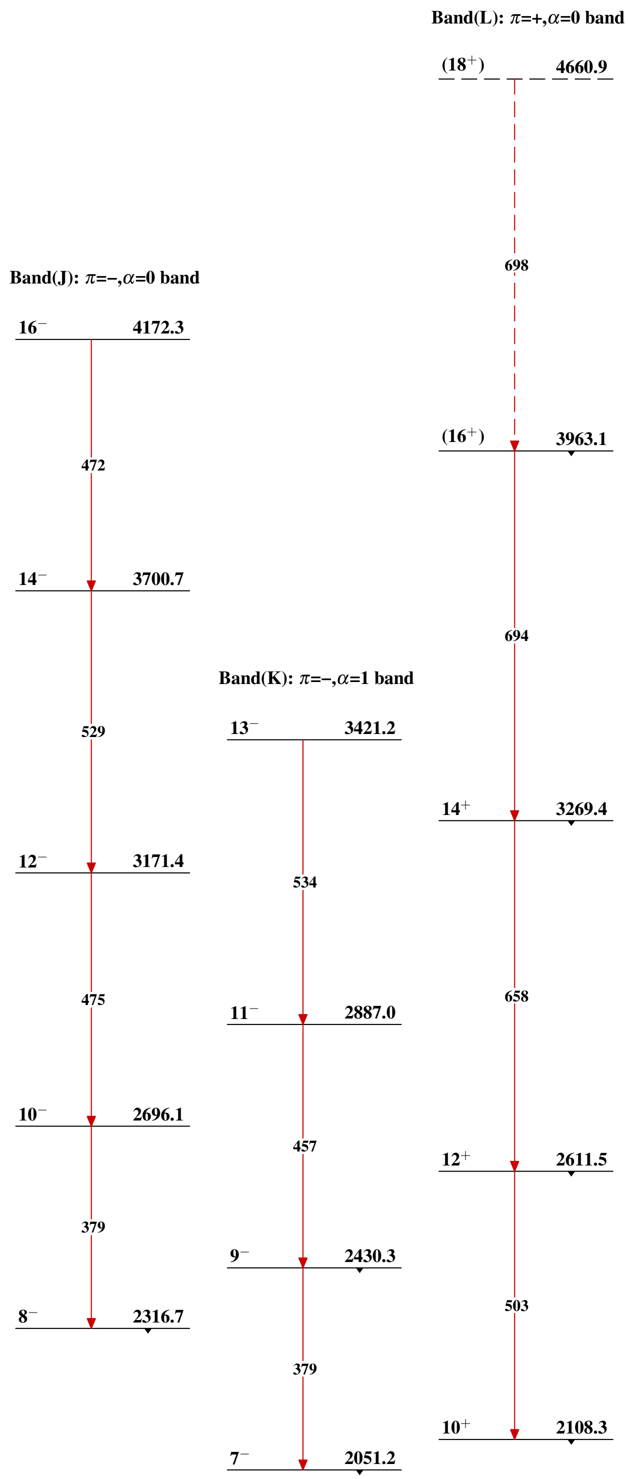
^{188}Os(α,6nγ) 1990He19,1987He29 (continued)



^{188}Os(α,6nγ) 1990He19,1987He29 (continued)



$^{188}Os(\alpha,6n\gamma)$ 1990He19,1987He29 (continued)



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