(HI,xnγ) 1988KaZW,2014Mu12,2017Mu12

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	F. G. Kondev, S. Juutinen, D. J. Hartley	NDS 150, 1 (2018)	1-Feb-2018

1988KaZW: ^{174}Yb(^{18}O,4nγ) E=85 MeV. Measured γ, $\gamma\gamma$, $\gamma(\theta)$.
2014Mu12,2017Mu12: ^{18}O beam at 85 MeV from Pelletron Linac Facility at TIFR. Target=1.14 mg/cm^2 ^{174}Yb with ≈750 μg/cm^2 Al backing. Detector: INGA array of 18 Clover Compton-suppressed HPGe detectors. Measured: Eγ, Iγ, $\gamma\gamma$-coin, $\gamma\gamma(\theta)$(DCO) and γ-ray polarization. Deduced: levels, J^π, Mult. bands.
2017Ro07: ^{176}Yb(^{16}O,4nγ) E=79 MeV. Measured level lifetimes using the recoil distance doppler shift method.
1979DaZN, 1975Pi02: ^{188}Os(α,4nγ) E=48.6 MeV. Measured γ, $\gamma\gamma$, $\gamma(\theta)$.
1979Ri08: ^{176}Yb(^{16}O,4nγ) E=77-88 MeV. Measured ce, ce γ coin.
Others: 1967Bu02, 1967Bu18, 1967Ne02, 1969Dz04, 1977Nu03, 1978Ti02, 1988Ne03, 1996St12, 2008Li18.

The level scheme is based on that of 2017Mu12 and 2014Mu12.

^{188}Pt Levels

E(level)[†]	J^π[‡]	$T_{1/2}$[#]	Comments
0.0[@]	0^+		
265.59[@] 16	2^+	66 ps 3	g=+0.29 4 $T_{1/2}$: Weighted average of 65 ps 5 (1995AnZQ) and 67 ps +4−3 (2017Ro07), both using the Dopler-shift recoil distance method. g: from $\gamma\gamma(\theta$,H,t) in 1996St12 using the transient-field integral PAC technique. $\omega\tau(2^+)$=160 mrad 10 and $T_{1/2}(2^+)$=65 ps 5 were used.
605.91[b] 16	2^+		
670.80[@] 20	4^+	5.1 ps +15−11	
936.5 3	(3^+)		
1085.16[b] 19	4^+		
1116.5? 4	$(2)^+$		
1184.25[@] 23	6^+	1.53 ps 14	
1349.79 24	3^-		J^π: From Adopted Levels.
1443.8?[h] 4			
1565.42[d] 23	5^-		
1636.12[b] 22	6^+		
1767.96[d] 24	7^-	0.20 ns 2	$T_{1/2}$: From 203ce(K)(t) in 1979Ri08. Other: 0.621 ns 38 from 203ce(K)(t) in 1978Ti02, but the line is weak and contaminations cannot be excluded (see 1978Ti02 for details). A long-lived compnent of 14 ns 2 was also reported to the 203ce(K) line in 1978Ti02, but not in 1979Ri08, which may suggest that the line is contaminated.
1782.0[@] 3	8^+	0.97 ps 14	
2179.6[c] 3	8^-		
2246.34[b] 25	8^+		
2312.3[d] 3	9^-		
2436.9[@] 3	10^+	0.49 ps +28−21	
2457.9[e] 3	9^-	≈0.66 ns	$T_{1/2}$: Observed longer-lived component in the electron line associated with the 689-keV γ ray in 1979Ri08.
2620.0 4	(8^+)		J^π: Assigned (9^+) in 1988KaZW, but no value given in 1979DaZN. The relatively lower population, compared to the 10^+ level at 2664 keV, would suggest a lower spin.
2651.1[c] 3	10^-		
2663.4[b] 3	10^+		
2701.2[e] 3	10^-		
2701.8 3	10^+		
2772.5[d] 4	11^-		

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(HI,xnγ) 1988KaZW,2014Mu12,2017Mu12 (continued)

^{188}Pt Levels (continued)

E(level)[†]	J^{π}[‡]	$T_{1/2}$[#]	Comments
2809.9[&] 3	12^+	0.66 ns 4	$T_{1/2}$: From 108-, 147- and 373ce(K)(t) in 1979Ri08. configuration: $\nu(i_{13/2}^{-2})$ rotational-aligned state. The proposed shape isomer interpretation in 2014Mu12 seems to be incorrect. It is based on the observed reduced B(E2) values from 2002Si10 and comparison with Cranked-model calculations, but the values quoted in 2002Si10 are incorrect.
2874.9[a] 4	$11^{(+)}$		
2960.2[e] 4	11^-		
3102.3[c] 4	12^-		
3103.4[@] 4	12^+	<0.42 ps	
3138.8[&] 4	14^+		
3181.8 4	12^+		
3226.5[e] 4	12^-		
3261.1[a] 4	$13^{(+)}$		
3325.0[d] 4	13^-		
3564.8[e] 4	13^-		
3580.3[@] 4	14^+		
3625.6[c] 4	14^-		
3626.8[&] 4	16^+		
3749.4[a] 4	$15^{(+)}$		
3867.0[e] 4	14^-		
3946.4[d] 4	15^-		
4007.4[@] 4	16^+		
4174.3[c] 4	16^-		
4237.6[e] 5	15^-		
4243.6[&] 5	18^+		
4280.3[f] 5	$17^{(-)}$		
4353.0[a] 5	(17^+)		
4478.6[@] 7	(18^+)		
4549.5[e] 7	(16^-)		
4593.2[f] 5	$18^{(-)}$		
4665.2[d] 5	(17^-)		
4765.2[c] 7	(18^-)		
4947.4[f] 5	(19^-)		
4960.5[&] 5	20^+		
5201.1[g] 6			
5505.0[g] 7			
5744.7[&] 7	(22^+)		
6549.7[&] 9	(24^+)		
7367.8[&] 10	(26^+)		

[†] From least-squares fit to Eγ′s.
[‡] From deduced γ-ray transition multipolarities, based on the measured $\gamma\gamma(\theta)$(DCO), $\gamma(\theta)$, ce ratios, γ-ray polarization and the apparent band structure.
[#] From 2017Ro07, using the recoil distance doppler shift method, unless otherwise stated.
[@] Band(A): $K^{\pi}=0^+$, ground-state band.
[&] Band(B): Band based on the 2809.8-keV level, associated with a pair of $i_{13/2}$ neutrons (α=0).

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(HI,xnγ) 1988KaZW,2014Mu12,2017Mu12 (continued)

^{188}Pt Levels (continued)

[a] Band(C): Band based on the 2874.8-keV level, associated with a pair of $i_{13/2}$ neutrons (α=1).
[b] Band(D): $K^{\pi}=2^{+}$, gamma-vibrational band.
[c] Band(E): Band based on the 2179.4-keV level (α=0). Probably a mixture of several bands within the ν^2(9/2[624],1/2[510]) and ν^2(9/2[624],3/2[512]) configurations (by the evaluators).
[d] Band(F): Band based on the 1767.8-keV level (α=1). Probably a mixture of several bands within the ν^2(9/2[624],1/2[510]) and ν^2(9/2[624],3/2[512]) configurations (by the evaluators).
[e] Band(G): $K^{\pi}=9^{-}$, ν^2(9/2[624],9/2[505]) band.
[f] Band(H): Band based on the 4280.1-keV level.
[g] Band(I): Band based on the 5200.9-keV level.
[h] Seen only in (p,4nγ) (1977Nu03).

γ(^{188}Pt)

E_γ[†]	I_γ[†]	E_i(level)	J^π_i	E_f	J^π_f	Mult.[‡]	Comments
106.0 *5*		4280.3	$17^{(-)}$	4174.3	16^-		
108.1 *2*	1.3 *3*	2809.9	12^+	2701.8	10^+	E2	E_γ: Other: 107.8 *2* from ce data in 1979Ri08. Mult.: from K/L≈0.4 (1979Ri08).
131.8 *2*	1.2 *2*	1767.96	7^-	1636.12	6^+	E1	Mult.: A_2=−0.16 *5*, A_4=−0.10 *5* (1988KaZW); A_2=−0.15 *12*, A_4=0.02 *16* (1979DaZN).
145.6 *2*	1.5 *3*	2457.9	9^-	2312.3	9^-		
146.5 *2*	3.2 *6*	2809.9	12^+	2663.4	10^+	E2	Mult.: DCO=1.15 *4* (2017Mu12); K/L≈0.7 (1979Ri08); A_2=0.22 *8*, A_4=−0.23 *10* (1979DaZN); A_2=0.10 *5*, A_4=−0.01 *6* (1988KaZW).
173.1 *2*	2.3 *5*	2874.9	$11^{(+)}$	2701.8	10^+	(M1)	Mult.: DCO=0.66 *19* (2017Mu12).
202.6 *2*	17.3 *9*	1767.96	7^-	1565.42	5^-	E2	Mult.: DCO=1.20 *2* and POL=0.28 *5* (2017Mu12); A_2=0.28 *5*, A_4=−0.11 *6* (1988KaZW); A_2=0.22 *3*, A_4=−0.12 *4* (1979DaZN).
215.9 *2*	2.1 *2*	1565.42	5^-	1349.79	3^-	(E2)	Mult.: DCO=1.14 *9* (2017Mu12); A_2=0.32 *11*, A_4=0.01 *14* (1979DaZN).
226.5 *2*	2.9 *4*	2663.4	10^+	2436.9	10^+		
243.3 *2*	2.1 *4*	2701.2	10^-	2457.9	9^-	(M1)	Mult.: DCO=0.71 *5* (2017Mu12); A_2=0.13 *5*, A_4=0.15 *6* (1988KaZW). δ: 6 *+8−3* (1988KaZW).
259.0 *5*	1.0 *2*	2960.2	11^-	2701.2	10^-		
265.6 *2*	>119.7	265.59	2^+	0.0	0^+	E2	Mult.: DCO=1.13 *3* and POL=0.11 *3* (2017Mu12); K/L≈2 (1979Ri08); A_2=0.216 *9*, A_4=−0.030 *11* (1967Ne02); A_2=0.16 *4*, A_4=−0.08 *5* (1988KaZW); A_2=0.21 *2*, A_4=−0.05 *3* (1979DaZN).
266.3 *5*		3226.5	12^-	2960.2	11^-		
300.6 *5*		3625.6	14^-	3325.0	13^-		
302.2[@] *5*		3867.0	14^-	3564.8	13^-		
303.9 *5*		5505.0		5201.1			
312.9 *2*	2.9 *3*	4593.2	$18^{(-)}$	4280.3	$17^{(-)}$	(M1)	Mult.: DCO=0.67 *8* (2017Mu12).
328.9 *2*	5.0 *2*	3138.8	14^+	2809.9	12^+	E2	Mult.: DCO=1.17 *5* and POL=0.22 *4* (2017Mu12); A_2=0.23 *6*, A_4=−0.12 *7* (1979DaZN); A_2=0.25 *5*, A_4=−0.09 *6* (1988KaZW).
329.8 *5*	1.0 *3*	3102.3	12^-	2772.5	11^-		
330.6[#] *3*	1.9[#] *2*	936.5	(3^+)	605.91	2^+	D(+Q)	Mult.: A_2=−0.08 *5*, A_4=0.08 *5* (1988KaZW).
333.9 *2*	3.5 *3*	4280.3	$17^{(-)}$	3946.4	15^-	(E2)	Mult.: DCO=1.26 *9* (2017Mu12).
338.3 *5*	0.8 *2*	3564.8	13^-	3226.5	12^-		
338.8 *2*	1.8 *2*	2651.1	10^-	2312.3	9^-	M1+E2	Mult.: DCO=0.78 *9* and POL=−0.16 *14* (2017Mu12).
340.3 *2*	12.1 *6*	605.91	2^+	265.59	2^+	E2+M1	Mult.: DCO=1.02 *10* and POL=−0.05 *9* (2017Mu12).
354.2 *2*	1.5 *2*	4947.4	(19^-)	4593.2	$18^{(-)}$		

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(HI,xnγ) 1988KaZW,2014Mu12,2017Mu12 (continued)

γ(^{188}Pt) (continued)

E_γ[†]	I_γ[†]	E_i(level)	J^π_i	E_f	J^π_f	Mult.[‡]	Comments
373.0 *2*	2.5 *3*	2809.9	12$^+$	2436.9	10$^+$		
380.6 *5*	0.5 *2*	4007.4	16$^+$	3626.8	16$^+$		
381.1 *2*	2.0 *3*	1565.42	5$^-$	1184.25	6$^+$		Mult.: A_2=0.29 *5*, A_4=0.38 *6* (1988KaZW).
386.2 *2*	3.7 *7*	3261.1	13$^{(+)}$	2874.9	11$^{(+)}$	(E2)	Mult.: DCO=1.28 *7* (2017Mu12).
388.9 *2*	2.2 *5*	2701.2	10$^-$	2312.3	9$^-$		
398.5 *2*	1.9 *5*	3580.3	14$^+$	3181.8	12$^+$		
405.1 *2*	100	670.80	4$^+$	265.59	2$^+$	E2	Mult.: DCO=1.02 *2* and POL=0.12 *2* (2017Mu12); A_2=0.270 *13*, A_4=−0.044 *14* (1967Ne02); A_2=0.23 *4*, A_4=−0.07 *5* (1988KaZW); A_2=0.26 *2*, A_4=−0.07 *3* (1979DaZN).
411.6 *2*	7.8 *5*	2179.6	8$^-$	1767.96	7$^-$	M1+E2	Mult.: DCO=0.77 *3* and POL=−0.17 *11* (2017Mu12); A_2=0.51 *5*, A_4=0.03 *6* (1988KaZW); A_2=0.50 *7*, A_4=0.11 *8* (1979DaZN).
414.4 *2*	6.6 *4*	1085.16	4$^+$	670.80	4$^+$	M1(+E2)	Mult.: A_2=−0.06 *5*, A_4=−0.07 *5* (1988KaZW); A_2=−0.22 *12*, A_4=−0.03 *16* (1979DaZN).
417.1 *2*	8.4 *5*	2663.4	10$^+$	2246.34	8$^+$	E2	Mult.: DCO=1.14 *4* and POL=0.10 *4* (2017Mu12); A_2=0.32 *4*, A_4=−0.09 *6* (1988KaZW); A_2=0.38 *7*, A_4=0.06 *9* (1979DaZN).
418.9 *5*		4593.2	18$^{(-)}$	4174.3	16$^-$		
427.1 *2*	5.6 *6*	4007.4	16$^+$	3580.3	14$^+$	E2	Mult.: DCO=0.98 *4* and POL=0.09 *5* (2017Mu12); A_2=0.34 *5*, A_4=−0.11 *6* (1988KaZW).
441.5 *5*	0.8 *3*	3580.3	14$^+$	3138.8	14$^+$		
451.2 *2*	7.5 *5*	3102.3	12$^-$	2651.1	10$^-$	E2	Mult.: DCO=0.99 *4* and POL=0.13 *8* (2017Mu12).
451.2 *5*		3261.1	13$^{(+)}$	2809.9	12$^+$		
451.9 *2*	5.1 *5*	1636.12	6$^+$	1184.25	6$^+$		
460.2 *2*	5.2 *5*	2772.5	11$^-$	2312.3	9$^-$	E2	Mult.: DCO=0.96 *7* and POL=0.12 *3* (2017Mu12); A_2=0.27 *4*, A_4=−0.12 *6* (1988KaZW); A_2=0.16 *7*, A_4=−0.21 *9* (1979DaZN).
464.3 *2*	2.5 *6*	2246.34	8$^+$	1782.0	8$^+$	D	Mult.: A_2=−0.12 *5*, A_4=−0.02 *5* (1988KaZW).
471.2 *5*		4478.6	(18$^+$)	4007.4	16$^+$		
471.5 *2*	5.7 *5*	2651.1	10$^-$	2179.6	8$^-$	E2	Mult.: DCO=1.08 *5* and POL=0.11 *9* (2017Mu12).
476.9 *2*	4.0 *6*	3580.3	14$^+$	3103.4	12$^+$	E2	Mult.: DCO=1.05 *4* and POL=0.15 *10* (2017Mu12); A_2=0.32 *4*, A_4=−0.14 *6* (1988KaZW).
479.2 *2*	14.0 *8*	1085.16	4$^+$	605.91	2$^+$	E2	Mult.: DCO=1.17 *7* and POL=0.09 *5* (2017Mu12); A_2=0.26 *5*, A_4=−0.07 *5* (1988KaZW); A_2=0.43 *14*, A_4=0.08 *17* (1979DaZN).
480.1 *5*	4.6 *2*	1565.42	5$^-$	1085.16	4$^+$	E1	I_γ: From 1988KaZW. Mult.: A_2=−0.36 *5*, A_4=0.12 *5* (1988KaZW); A_2=−0.22 *18*, A_4=0.05 *24* (1979DaZN).
488.0 *2*	3.5 *4*	3626.8	16$^+$	3138.8	14$^+$	E2	Mult.: DCO=1.11 *4* and POL=0.11 *5* (2017Mu12); A_2=0.31 *4*, A_4=−0.13 *6* (1988KaZW); A_2=0.28 *7*, A_4=−0.14 *9* (1979DaZN).
488.3 *2*	3.5 *7*	3749.4	15$^{(+)}$	3261.1	13$^{(+)}$	E2	Mult.: DCO=1.05 *4* (2017Mu12); A_2=0.31 *4*, A_4=−0.13 *6* (1988KaZW); A_2=0.28 *7*, A_4=−0.14 *9* (1979DaZN).
502.3 *2*	3.4 *5*	2960.2	11$^-$	2457.9	9$^-$	(E2)	Mult.: DCO=1.22 *3* (2017Mu12); A_2=0.39 *5*, A_4=−0.08 *6* (1988KaZW).
507.3 *3*		1443.8?		936.5	(3$^+$)		E_γ,I_γ: from (p,4nγ) data (1977Nu03). Iγ(507γ)/Iγ(266γ)=0.102 *5*.
513.4 *2*	64.5 *32*	1184.25	6$^+$	670.80	4$^+$	E2	Mult.: DCO=0.95 *5* and POL=0.10 *4* (2017Mu12); A_2=0.187 *22*, A_4=−0.078 *25* (1967Ne02); A_2=0.23 *4*, A_4=−0.07 *5* (1988KaZW); A_2=0.24 *3*, A_4=−0.08 *4* (1979DaZN).
523.3 *2*	8.4 *7*	3625.6	14$^-$	3102.3	12$^-$	E2	Mult.: DCO=0.98 *3* and POL=0.18 *5* (2017Mu12).
525.3 *2*	3.4 *6*	3226.5	12$^-$	2701.2	10$^-$	E2	Mult.: DCO=1.27 *6* (2017Mu12); A_2=0.28 *4*, A_4=−0.09 *5* (1988KaZW); A_2=0.44 *11*, A_4=0.05 *13* (1979DaZN).
544[@] *1*		2179.6	8$^-$	1636.12	6$^+$		E_γ: From 1988KaZW.

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(HI,xnγ) 1988KaZW,2014Mu12,2017Mu12 (continued)

γ(^{188}Pt) (continued)

E_γ †	I_γ †	E_i(level)	J^π_i	E_f	J^π_f	Mult.‡	Comments
544.3 *2*	8.7 *9*	2312.3	9⁻	1767.96	7⁻	E2	Mult.: DCO=1.01 *5* and POL=0.10 *5* (2017Mu12); A_2=0.24 *5*, A_4=−0.07 *5* (1988KaZW); A_2=0.37 *5*, A_4=0.03 *6* (1979DaZN).
548.7 *2*	8.3 *9*	4174.3	16⁻	3625.6	14⁻	E2	Mult.: DCO=1.12 *4* and POL=0.14 *4* (2017Mu12).
550.9 *2*	12.1 *10*	1636.12	6⁺	1085.16	4⁺	E2	Mult.: DCO=1.12 *3* and POL=0.10 *6* (2017Mu12); A_2=0.27 *5*, A_4=−0.08 *5* (1988KaZW); A_2=0.26 *4*, A_4=−0.12 *5* (1979DaZN).
552.5 *2*	4.7 *8*	3325.0	13⁻	2772.5	11⁻	E2	Mult.: DCO=1.20 *6* and POL=0.07 *5* (2017Mu12); A_2=0.28 *4*, A_4=−0.09 *6* (1988KaZW); A_2=0.31 *10*, A_4=−0.06 *13* (1979DaZN).
557.6 *5*		5505.0		4947.4	(19⁻)		
583.7 *2*	19.6 *10*	1767.96	7⁻	1184.25	6⁺	E1	Mult.: DCO=0.53 *2* and POL=0.11 *3* (2017Mu12); A_2=−0.19 *5*, A_4=0.03 *5* (1988KaZW); A_2=−0.15 *3*, A_4=0.02 *3* (1979DaZN).
590.9 *5*		4765.2	(18⁻)	4174.3	16⁻		
597.8 *2*	40.0 *28*	1782.0	8⁺	1184.25	6⁺	E2	Mult.: DCO=0.95 *5* and POL=0.12 *6* (2017Mu12); A_2=0.26 *5*, A_4=−0.06 *5* (1988KaZW); A_2=0.27 *3*, A_4=−0.09 *3* (1979DaZN).
603.6 *2*	3.1 *7*	4353.0	(17⁺)	3749.4	15⁽⁺⁾		
604.6 *2*	2.1 *5*	3564.8	13⁻	2960.2	11⁻	E2	Mult.: DCO=1.14 *6* (2017Mu12); A_2=0.23 *6*, A_4=−0.03 *8* (1979DaZN).
605.9 *2*	10.3 *5*	605.91	2⁺	0.0	0⁺	E2	Mult.: DCO=1.10 *3* and POL=0.11 *5* (2017Mu12); A_2=0.24 *5*, A_4=−0.08 *5* (1988KaZW); A_2=0.23 *6*, A_4=−0.03 *8* (1979DaZN).
607.9 *5*		5201.1		4593.2	18⁽⁻⁾		
610.2 *2*	9.8 *9*	2246.34	8⁺	1636.12	6⁺	E2	Mult.: DCO=1.06 *3* and POL=0.10 *4* (2017Mu12); A_2=0.28 *5*, A_4=−0.05 *6* (1988KaZW); A_2=0.27 *5*, A_4=−0.09 *6* (1979DaZN).
610.6 *5*		3749.4	15⁽⁺⁾	3138.8	14⁺		
616.8 *2*	2.4 *4*	4243.6	18⁺	3626.8	16⁺	E2	Mult.: DCO=1.13 *3* and POL=0.16 *6* (2017Mu12); A_2=0.35 *4*, A_4=−0.29 *6* (1988KaZW).
621.4 *2*	3.9 *8*	3946.4	15⁻	3325.0	13⁻	E2	Mult.: DCO=1.01 *7* and POL=0.18 *8* (2017Mu12); A_2=0.25 *5*, A_4=−0.03 *6* (1988KaZW).
640.5 *2*	1.5 *4*	3867.0	14⁻	3226.5	12⁻	E2	Mult.: DCO=1.06 *6* (2017Mu12); A_2=0.29 *4*, A_4=−0.11 *6* (1988KaZW).
654.9 *2*	22.2 *11*	2436.9	10⁺	1782.0	8⁺	E2	Mult.: DCO=1.11 *4* and POL=0.13 *3* (2017Mu12); A_2=0.31 *3*, A_4=−0.06 *4* (1979DaZN); A_2=0.20 *5*, A_4=−0.05 *6* (1988KaZW).
666.5 *2*	5.4 *8*	3103.4	12⁺	2436.9	10⁺	E2	Mult.: DCO=0.99 *6* and POL=0.12 *10* (2017Mu12); A_2=0.29 *5*, A_4=−0.11 *6* (1988KaZW).
670.8# *3*	2.0# *2*	936.5	(3⁺)	265.59	2⁺	D(+Q)	Mult.: A_2=0.02 *5*, A_4=−0.06 *6* (1988KaZW).
672.8 *2*	1.5 *4*	4237.6	15⁻	3564.8	13⁻	E2	Mult.: A_2=0.24 *4*, A_4=−0.11 *6* (1988KaZW).
679.1# *3*	1.9# *1*	1349.79	3⁻	670.80	4⁺	D	Mult.: A_2=0.06 *5*, A_4=0.00 *6* (1988KaZW).
682.5 *5*	0.9 *3*	4549.5	(16⁻)	3867.0	14⁻	(E2)	Mult.: A_2=0.24 *5*, A_4=0.07 *6* (1988KaZW).
689.9 *2*	4.1 *4*	2457.9	9⁻	1767.96	7⁻	E2	Mult.: DCO=1.07 *5* and POL=0.24 *7* (2017Mu12); A_2=0.25 *10*, A_4=−0.18 *13* (1979DaZN); A_2=0.23 *4*, A_4=−0.06 *6* (1988KaZW).
716.9 *2*	1.1 *2*	4960.5	20⁺	4243.6	18⁺	E2	Mult.: DCO=1.20 *10* and POL=0.16 *13* (2017Mu12); A_2=0.12 *5*, A_4=0.07 *6* (1988KaZW).
718.8 *2*	2.4 *4*	4665.2	(17⁻)	3946.4	15⁻		
726.2@ *5*		4353.0	(17⁺)	3626.8	16⁺		
744.9 *2*	4.2 *6*	3181.8	12⁺	2436.9	10⁺	E2	Mult.: DCO=1.21 *20* and POL=0.15 *10* (2017Mu12); A_2=0.38 *8*, A_4=−0.17 *10* (1979DaZN); A_2=0.18 *5*, A_4=−0.06 *6* (1988KaZW).
770.4 *2*	1.5 *4*	3580.3	14⁺	2809.9	12⁺		

Continued on next page (footnotes at end of table)

(HI,xnγ) 1988KaZW,2014Mu12,2017Mu12 (continued)

γ(^{188}Pt) (continued)

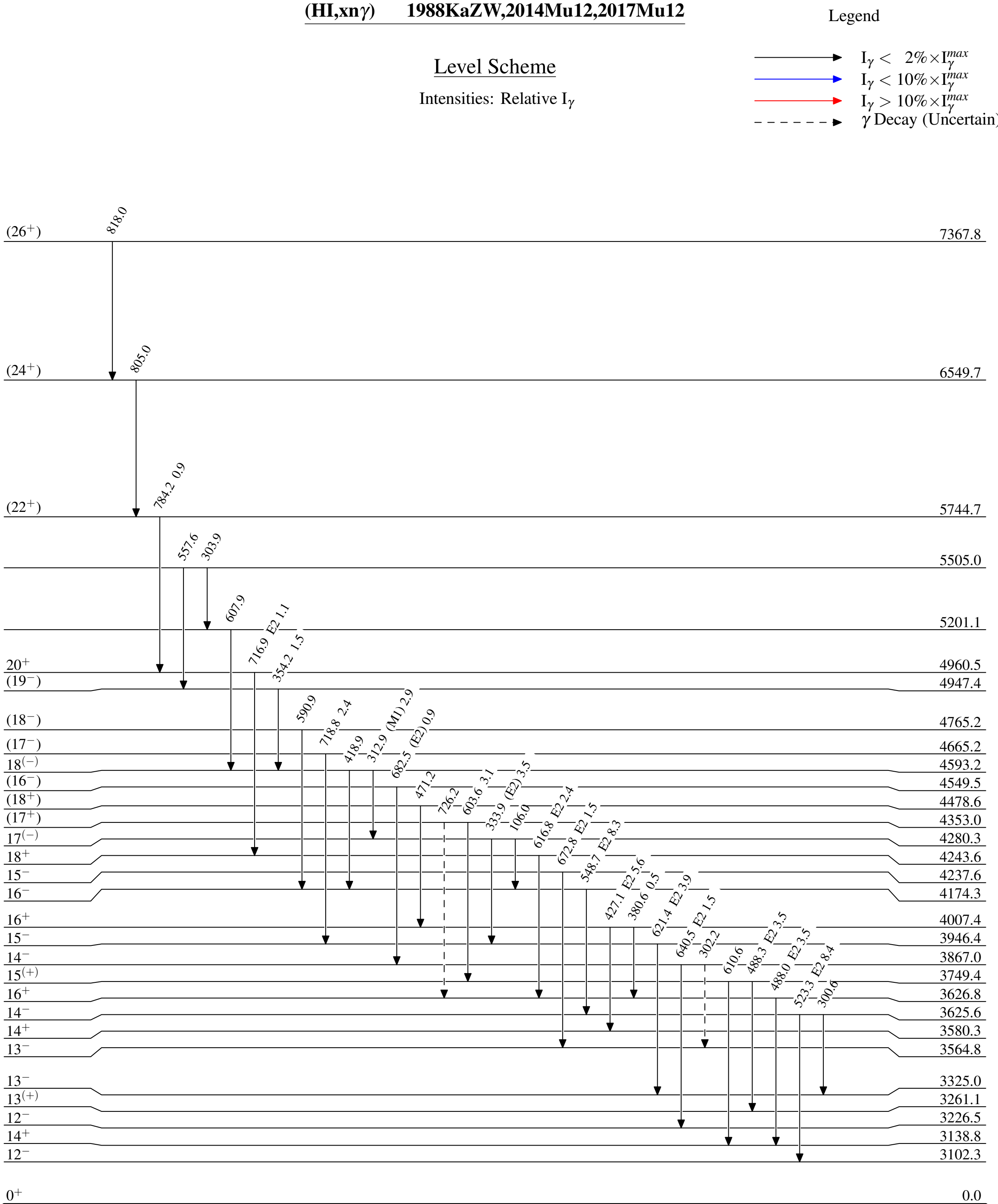
E_γ†	I_γ†	E_i(level)	J^π_i	E_f	J^π_f	Mult.‡	δ	Comments
784.2 *5*	0.9 *3*	5744.7	(22⁺)	4960.5	20⁺			A_2=0.09 *5*, A_4=−0.04 *6* (1988KaZW).
805.0 *5*		6549.7	(24⁺)	5744.7	(22⁺)			
818.0 *5*		7367.8	(26⁺)	6549.7	(24⁺)			
819.5 *2*	5.3 *8*	1085.16	4⁺	265.59	2⁺	E2		Mult.: A_2=0.20 *5*, A_4=0.09 *6* (1988KaZW).
838.0# *2*	5.9# *3*	2620.0	(8⁺)	1782.0	8⁺	E2		Mult.: A_2=0.35 *10*, A_4=0.05 *12* (1979DaZN); A_2=0.17 *5*, A_4=0.05 *6* (1988KaZW).
850.9# *3*	1.5# *2*	1116.5?	(2)⁺	265.59	2⁺	M1+E2	−1.1 *+20−2*	Mult.: A_2=−0.63 *5*, A_4=0.19 *5* (1988KaZW). δ: from $\gamma(\theta)$ (1988KaZW).
881.4 *2*	3.2 *2*	2663.4	10⁺	1782.0	8⁺	(E2)		Mult.: A_2=0.34 *20*, A_4=−0.18 *24* (1979DaZN).
894.5 *2*	22.0 *11*	1565.42	5⁻	670.80	4⁺	E1		Mult.: DCO=0.49 *2* and POL=0.12 *3* (2017Mu12); A_2=−0.30 *5*, A_4=0.06 *5* (1988KaZW); A_2=−0.20 *2*, A_4=0.07 *3* (1979DaZN).
919.8 *2*	6.1 *6*	2701.8	10⁺	1782.0	8⁺	E2		Mult.: DCO=1.08 *2* and POL=0.11 *9* (2017Mu12); A_2=0.28 *4*, A_4=−0.15 *6* (1988KaZW).
965.3 *2*	2.9 *6*	1636.12	6⁺	670.80	4⁺			
1062.1 *2*	2.1 *4*	2246.34	8⁺	1184.25	6⁺			
1084.7# *3*	1.8# *1*	1349.79	3⁻	265.59	2⁺	D		Mult.: A_2=−0.22 *11*, A_4=−0.10 *14* (1979DaZN); A_2=−0.48 *5*, A_4=0.26 *5* (1988KaZW).

† From 2017Mu12, unless otherwise stated.
‡ From $\gamma\gamma(\theta)$(DCO), $\gamma(\theta)$, ce ratios, γ-ray polarization and the apparent band structure.
# From 1988KaZW.
@ Placement of transition in the level scheme is uncertain.

(HI,xnγ) 1988KaZW,2014Mu12,2017Mu12

Level Scheme

Intensities: Relative I_γ

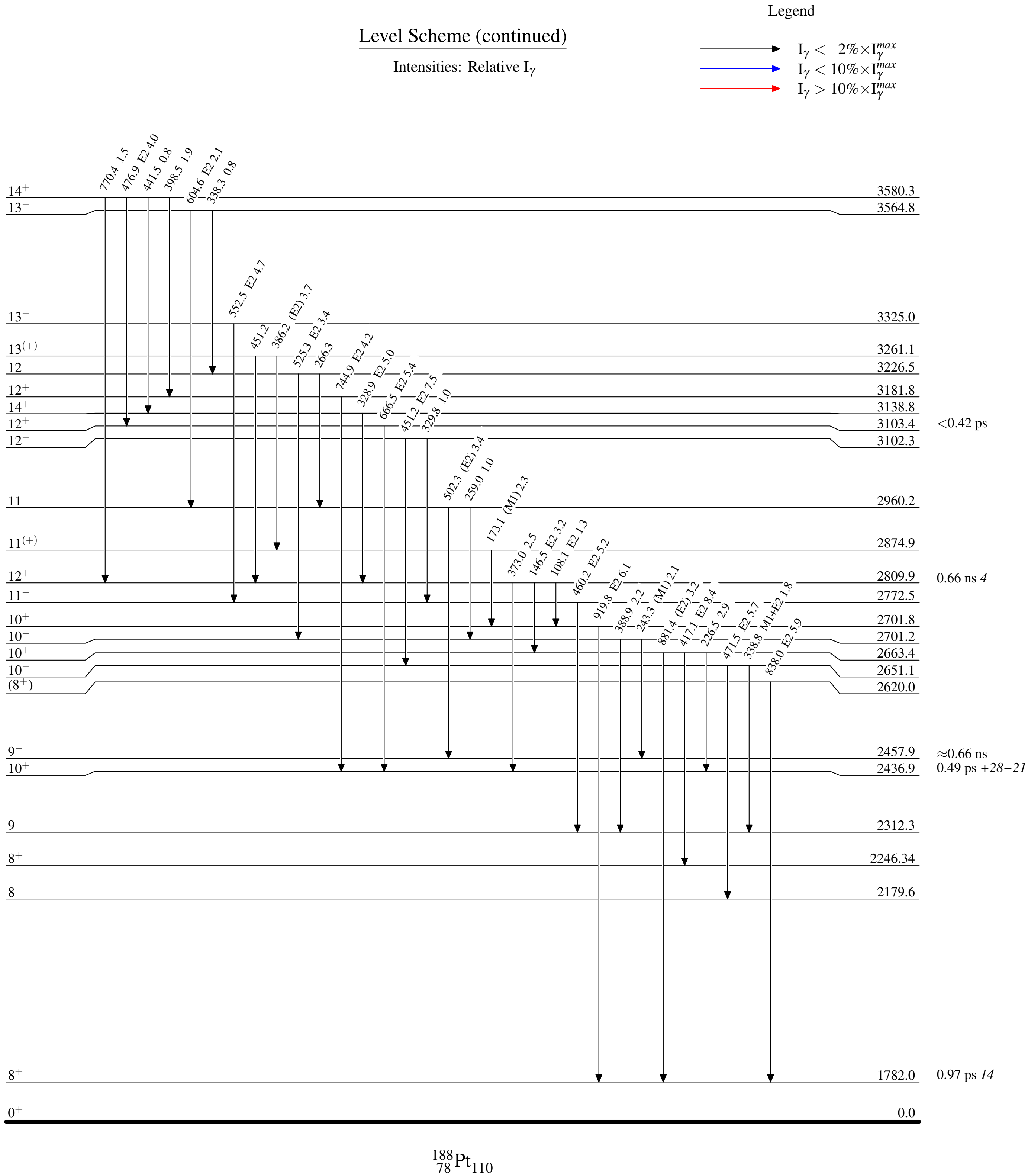


$^{188}_{78}Pt_{110}$

(HI,xnγ) 1988KaZW,2014Mu12,2017Mu12

Level Scheme (continued)

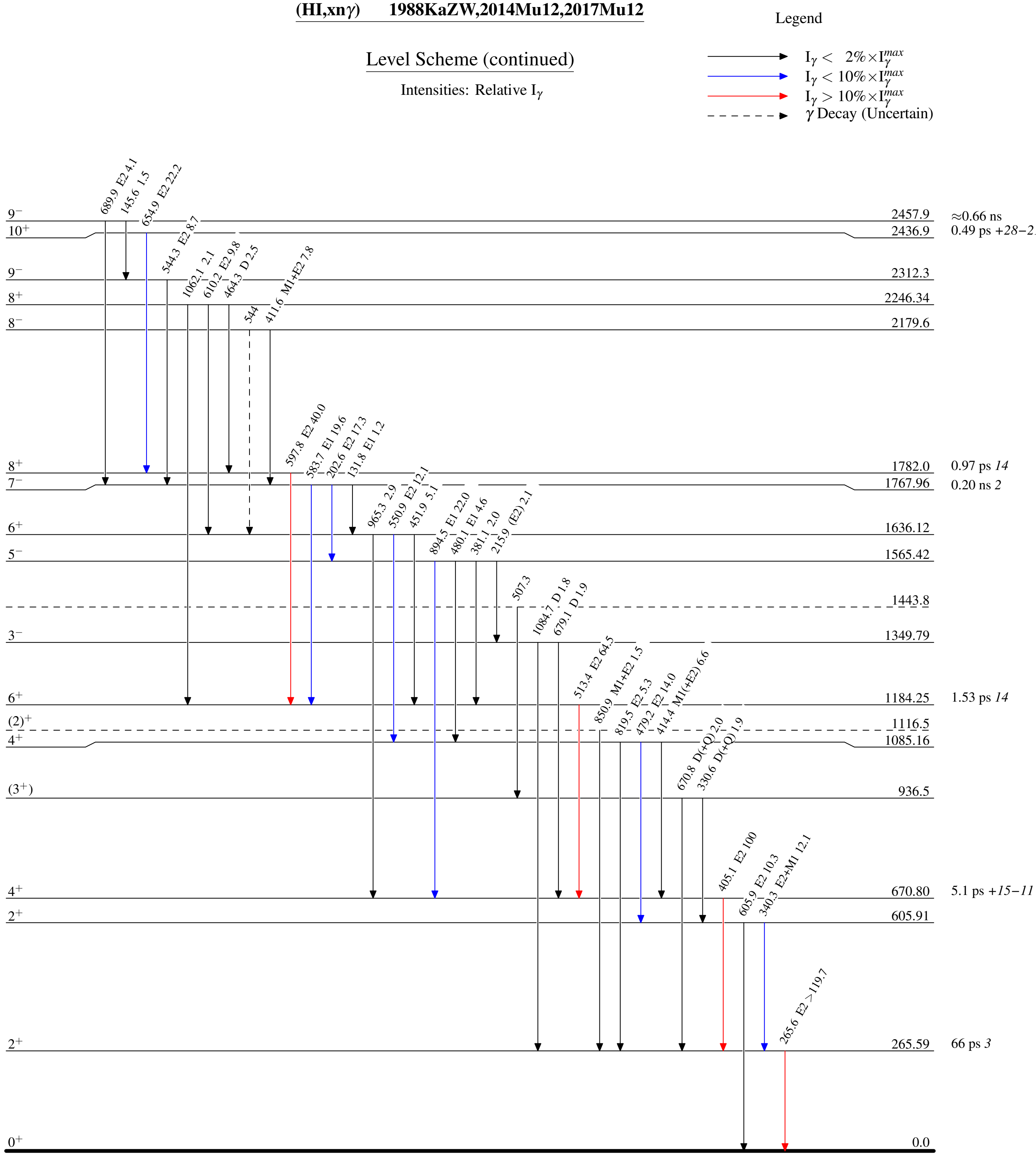
Intensities: Relative I_γ



(HI,xnγ) 1988KaZW,2014Mu12,2017Mu12

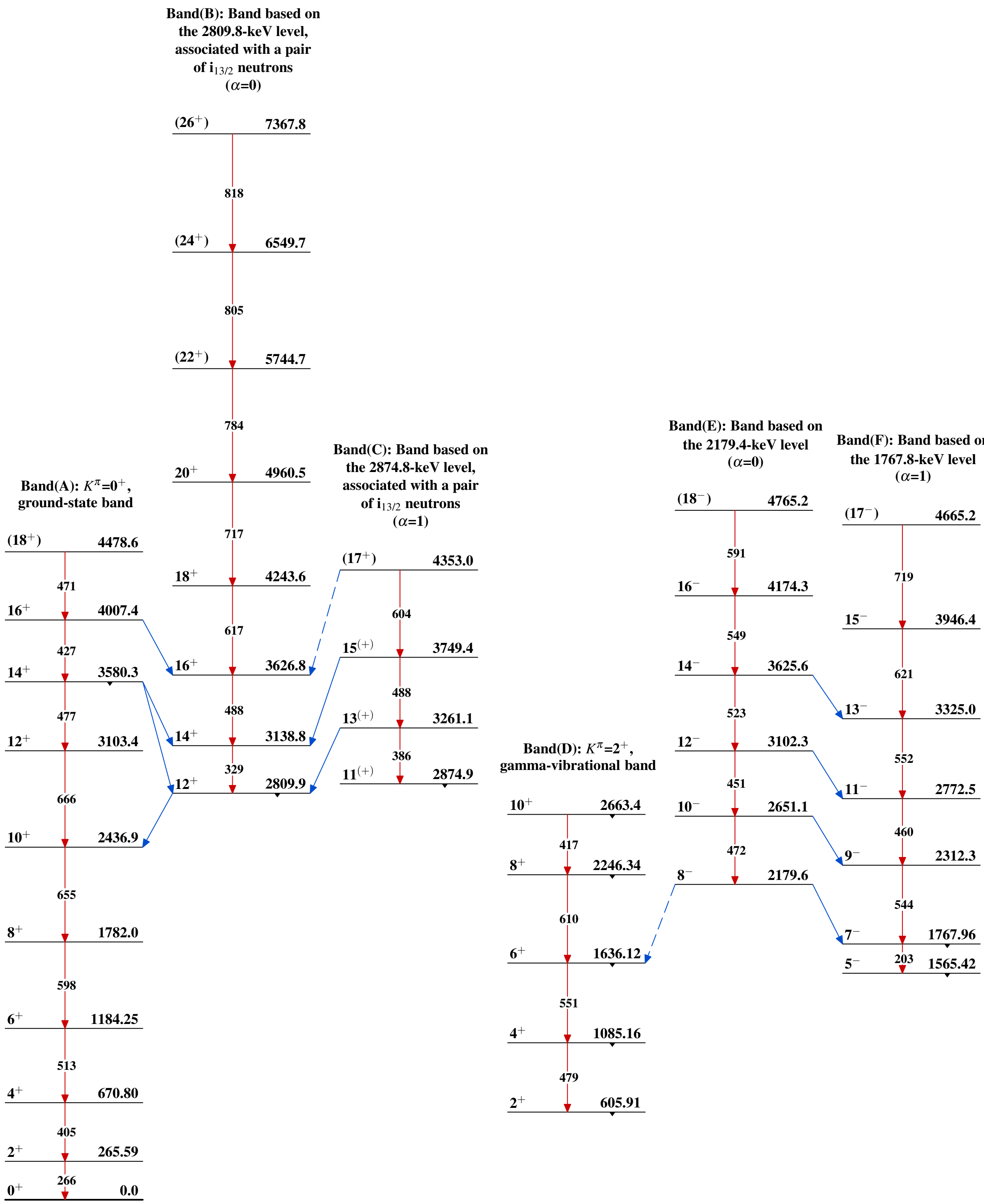
Level Scheme (continued)

Intensities: Relative I_γ



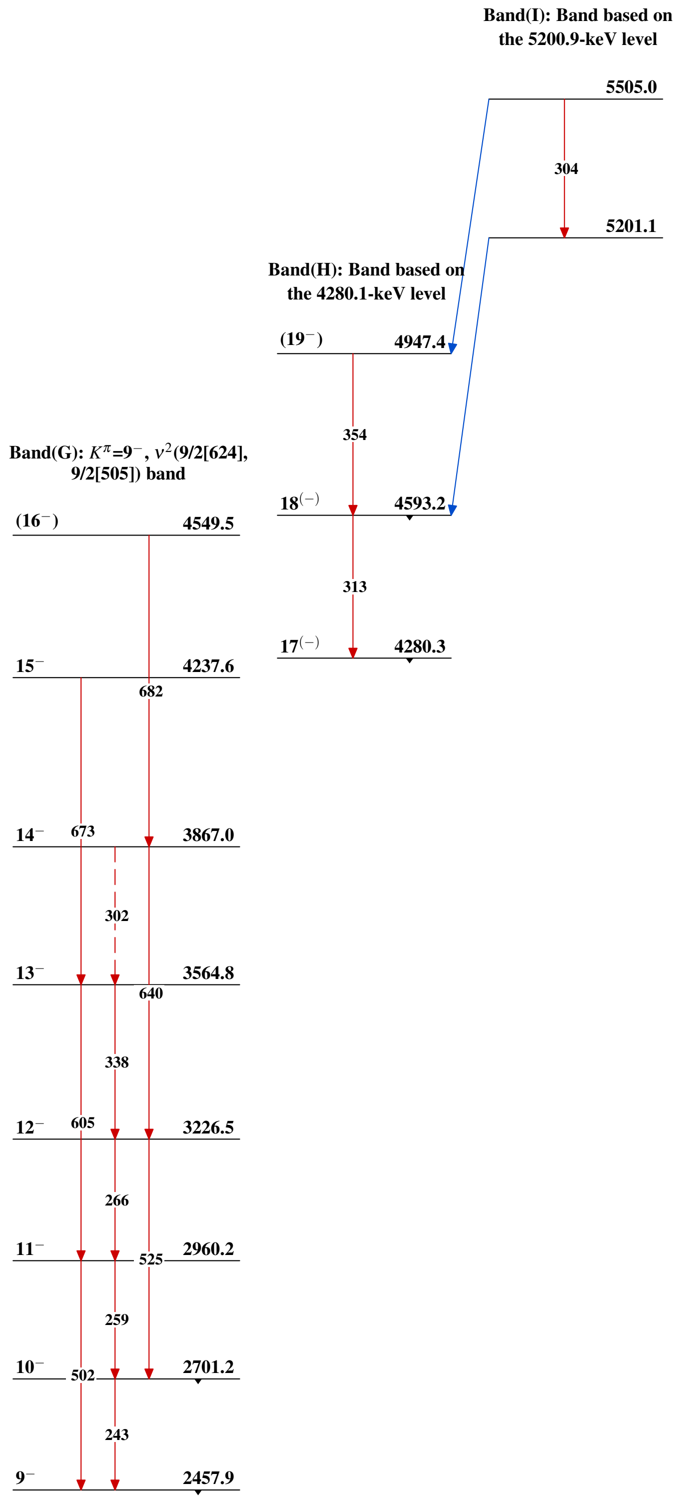
$^{188}_{78}Pt_{110}$

(HI,xnγ) 1988KaZW,2014Mu12,2017Mu12



$^{188}_{78}Pt_{110}$

(HI,xnγ) 1988KaZW,2014Mu12,2017Mu12 (continued)



$^{188}_{78}Pt_{110}$