^{196}Pt(γ,γ') 1996Vo11

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Huang Xiaolong	NDS 108, 1093 (2007)	1-Jan-2006

1996Vo11: magnetic dipole excitations observed between 2 and 3.5 MeV excitation energy.

^{196}Pt Levels

E(e),J(J) From Adopted Levels.

E(level)[†]	J^{π}[‡]	$T_{1/2}$[#]	Comments
0	0^+		
355.7	2^+		
688.7	2^+		
2246.3	$1^+,2^+$	3.5×10^{-3} eV *12*	Γ_0/Γ=0.77 *3*, Γ_0=2.7 meV *9* (for J=1 assumed), B(M1)↑=0.061 *20*.
2571.5	1^+	21.6×10^{-3} eV *41*	Γ_0/Γ=0.63 *6*, Γ_0=13.6 meV *22*, B(M1)↑=0.207 *34*.
2736.1	(1^+)	3.6×10^{-3} eV *13*	Γ_0/Γ=1, Γ_0=3.6 MeV *13*, B(M1)↑=0.046 *16*.
2824.0	1^+	67×10^{-3} eV *12*	Γ_0/Γ=0.41 *4*, Γ_0=27.5 meV *42*, B(M1)↑=0.316 *48*.
2875.4	$1^+,(2^+)$	5.2×10^{-6} eV *9*	Γ_0/Γ=1, Γ_0=5.2 meV *9* (for J=1 assumed), B(M1)↑= 0.057 *10*.
3124.2	1,2	3.5×10^{-3} eV *10*	Γ_0/Γ=1, Γ_0=3.5 meV *10* (for J=1 assumed).
3131.8	1,2	3.4×10^{-3} eV *10*	Γ_0/Γ=1, Γ_0=3.4 meV *10* (for J=1 assumed).
3298.0	2^+	15.7×10^{-3} eV *21*	Γ_0/Γ=1, Γ_0=15.7 meV *21*.
3366.8	1,2	3.5×10^{-3} eV *7*	Γ_0/Γ=1, Γ_0=3.5 meV *7* (for J=1 assumed).
3424.3	1,2	7.1×10^{-3} eV *13*	Γ_0/Γ=1, Γ_0=7.1 meV *13* (for J=1 assumed).

[†] From least-squares fit to Eγ's.
[‡] From M1 excitation, except as noted.
[#] Calculated from Γ_0/Γ and Γ_0 values.

$\gamma(^{196}Pt)$

E_γ	I_γ[†]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[‡]
1883	<180	2571.5	1^+	688.7	2^+	(M1)
2135	38 *13*	2824.0	1^+	688.7	2^+	(M1)
2216	60 *15*	2571.5	1^+	355.7	2^+	(E2)
2246.3	100 *5*	2246.3	$1^+,2^+$	0	0^+	
2468	105 *18*	2824.0	1^+	355.7	2^+	(E2)
2571	100 *16*	2571.5	1^+	0	0^+	M1
2736.1	100	2736.1	(1^+)	0	0^+	
2824	100 *15*	2824.0	1^+	0	0^+	M1
2875.4	100	2875.4	$1^+,(2^+)$	0	0^+	
3124.1	100	3124.2	1,2	0	0^+	
3131.8	100	3131.8	1,2	0	0^+	
3298.0	100	3298.0	2^+	0	0^+	
3366.8	100	3366.8	1,2	0	0^+	
3424.3	100	3424.3	1,2	0	0^+	

[†] Relative intensity normalized to 100 for the g.s. transition.
[‡] From IBM prediction and forbidden in the O(6) limit of IBM-2.

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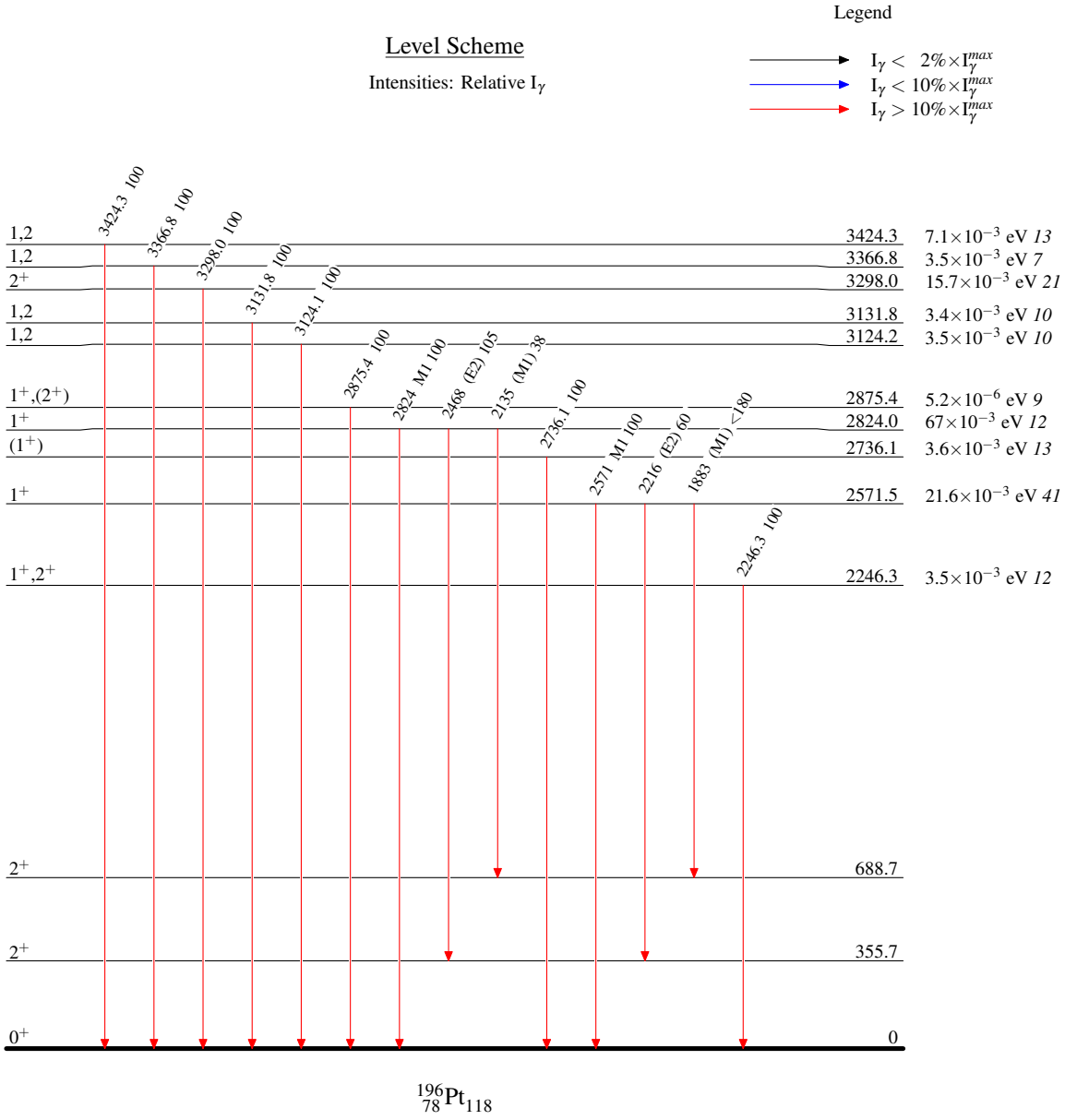
Level Scheme

Intensities: Relative I_γ



$^{196}_{78}Pt_{118}$