^{106}Cd(^{12}C,p2nγ) 1985Pi02

History			
Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Jean Blachot	NDS 113, 2391 (2012)	1-Sep-2012

Other: 1994Ko13.
1985Pi02: E(^{12}C)=58 and 63 MeV, enriched target (3.5 mg/cm^2).
Measured: γ, $\gamma\gamma$, $\gamma(\theta)$,Ge(Li) detectors these results supersede preliminary ones by 1978ChZQ (see 1982PiZY).
1994Ko13 have measured $T_{1/2}$ γ-r.f. coincidences.

^{115}I Levels

E(level)	J$^\pi$[†]	$T_{1/2}$	Comments
0.0	(5/2$^+$)	1.3 min *2*	$T_{1/2}$: from Adopted Levels.
56.7 *3*	(7/2$^+$)		
564.4 *3*	(9/2$^+$)	0.50 ns *10*	$T_{1/2}$: from 1994Ko13.
633.6 *3*	(9/2$^+$)		
731.8 *3*	(9/2$^+$)		
837.5 *3*	(11/2$^-$)	0.90 ns *20*	$T_{1/2}$: from 1994Ko13.
877.9[#]	(11/2$^+$)		
1198.1[#] *3*	(13/2$^+$)		
1248.2[‡] *3*	(15/2$^-$)		
1540.7[#] *3*	(15/2$^+$)		
1765.2[‡] *3*	(19/2$^-$)		
1899.0[#] *3*	(17/2$^+$)		
2273.6[#] *3*	(19/2$^+$)		
2387.0[‡] *3*	(23/2$^-$)		
2659 *3*	(21/2$^+$)		
3051[#] *3*	(23/2$^+$)		
3115.6[‡] *3*	(27/2$^-$)		
3462[#] *3*	(25/2$^+$)		E(level): the band assignment was not adopted.
3912.5[‡] *3*	(31/2$^-$)		
4762[‡] *1*	(35/2$^-$)		
5656[‡] *1*	(39/2$^-$)		

[†] Author's values based on band assignments.
[‡] Band(A): (π $h_{11/2}$) decoupled band; ΔJ=2 sequence up to 39/2$^-$.
[#] Band(B): 9/2(404) deformed proton-hole band;ΔJ=1 sequence up to 17/2$^+$.

γ(^{115}I)

E$_\gamma$[#]	I$_\gamma$[†]	E$_i$(level)	J$_i^\pi$	E$_f$	J$_f^\pi$	Mult.[‡]	δ[#]
56.7 *3*	≈80	56.7	(7/2$^+$)	0.0	(5/2$^+$)		
105.8 *3*	46.3 *6*	837.5	(11/2$^-$)	731.8	(9/2$^+$)	(E1)	
203.7 *3*	69.2 *8*	837.5	(11/2$^-$)	633.6	(9/2$^+$)	(E1)	
313.5 *3*	35.2 *8*	877.9	(11/2$^+$)	564.4	(9/2$^+$)	M1+E2	+0.13 *4*
320.2 *3*	26.4 *8*	1198.1	(13/2$^+$)	877.9	(11/2$^+$)	M1+E2	+0.16 *5*
342.6 *3*	17.6 *6*	1540.7	(15/2$^+$)	1198.1	(13/2$^+$)	M1+E2	≤0.08
357.9 *3*	19.1 *6*	1899.0	(17/2$^+$)	1540.7	(15/2$^+$)	M1+E2	≤0.02
374.6 *3*	24.7 *8*	2273.6	(19/2$^+$)	1899.0	(17/2$^+$)	M1+E2	+0.07 *5*
385.2[@] *3*	4.2 *6*	2659	(21/2$^+$)	2273.6	(19/2$^+$)	(M1+E2)	

Continued on next page (footnotes at end of table)

^{106}Cd(^{12}C,p2nγ) 1985Pi02 (continued)

$\gamma(^{115}I)$ (continued)

E_γ[#]	I_γ[†]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[‡]	δ[#]
393.5 *3*	≈10	3051	(23/2$^+$)	2659	(21/2$^+$)		
409.8 *3*	≈10	3462	(25/2$^+$)	3051	(23/2$^+$)		
410.7 *3*	<104	1248.2	(15/2$^-$)	837.5	(11/2$^-$)	E2	
507.4 *3*	≈15	564.4	(9/2$^+$)	56.7	(7/2$^+$)		
517.0 *3*	100 *1*	1765.2	(19/2$^-$)	1248.2	(15/2$^-$)	E2	
564.7 *3*	24.6 *12*	564.4	(9/2$^+$)	0.0	(5/2$^+$)	E2	
576.9 *3*	59.0 *14*	633.6	(9/2$^+$)	56.7	(7/2$^+$)	M1+E2	−1.2 *7*
621.8 *3*	86.7 *12*	2387.0	(23/2$^-$)	1765.2	(19/2$^-$)	E2	
633.5 *3*	≈15	633.6	(9/2$^+$)	0.0	(5/2$^+$)		
701.3 *3*	13.0 *8*	1899.0	(17/2$^+$)	1198.1	(13/2$^+$)	E2	
728.6 *3*	37.2 *12*	3115.6	(27/2$^-$)	2387.0	(23/2$^-$)	E2	
731.8 *3*	37.3 *12*	731.8	(9/2$^+$)	0.0	(5/2$^+$)	E2	
796.9 *3*	24.5 *12*	3912.5	(31/2$^-$)	3115.6	(27/2$^-$)	E2	
850.1 *3*	16.6 *12*	4762	(35/2$^-$)	3912.5	(31/2$^-$)	E2	
893.9 *3*	10.2 *9*	5656	(39/2$^-$)	4762	(35/2$^-$)	(E2)	

† Relative photon intensity.
‡ From $\gamma(\theta)$ (1985Pi02).
# From 1985Pi02.
@ Placement of transition in the level scheme is uncertain.

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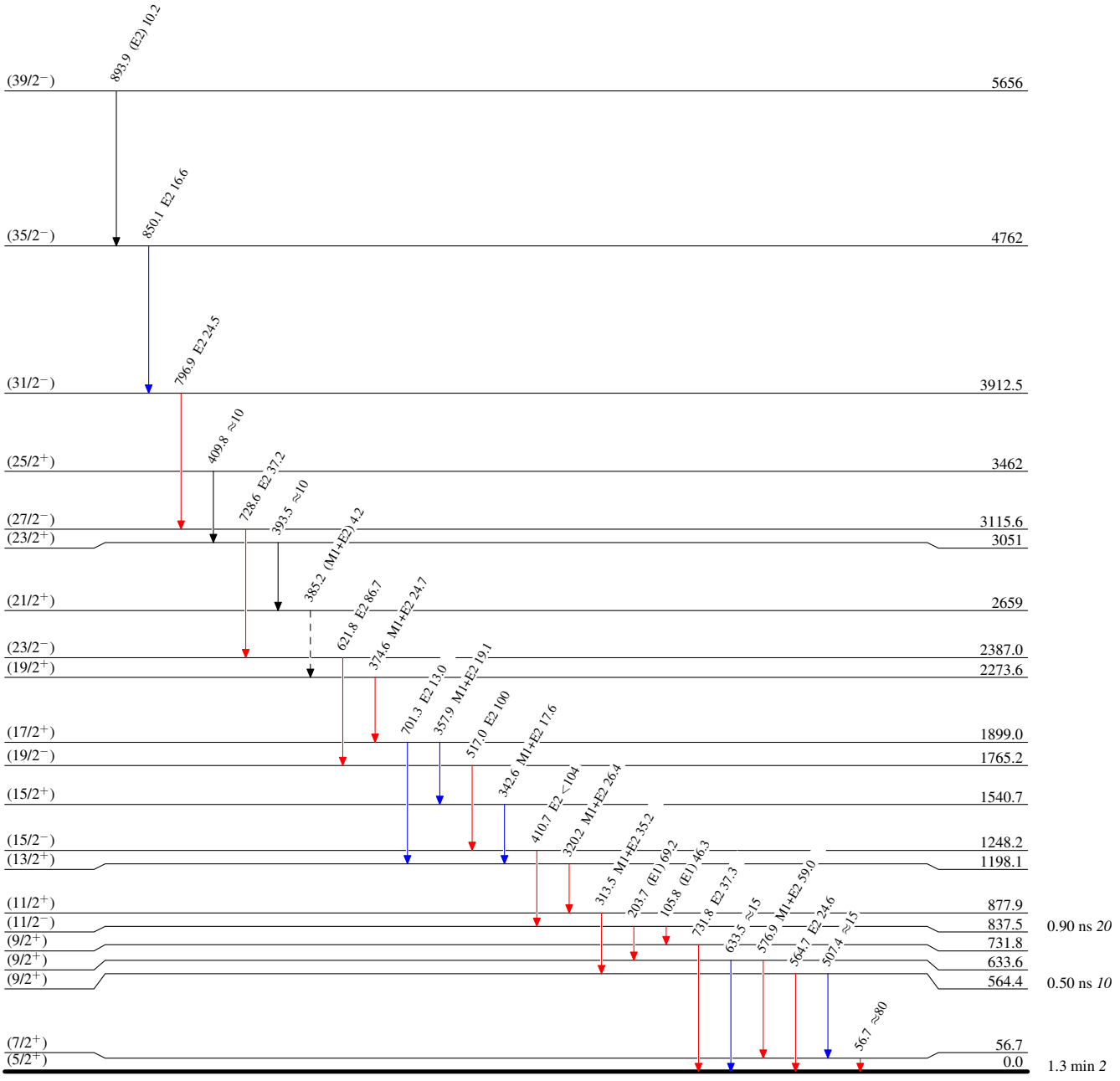
Level Scheme

Intensities: Relative I_γ

Legend

- $I_\gamma < 2\% \times I_\gamma^{max}$
- $I_\gamma < 10\% \times I_\gamma^{max}$
- $I_\gamma > 10\% \times I_\gamma^{max}$
- γ Decay (Uncertain)



$^{115}_{53}I_{62}$

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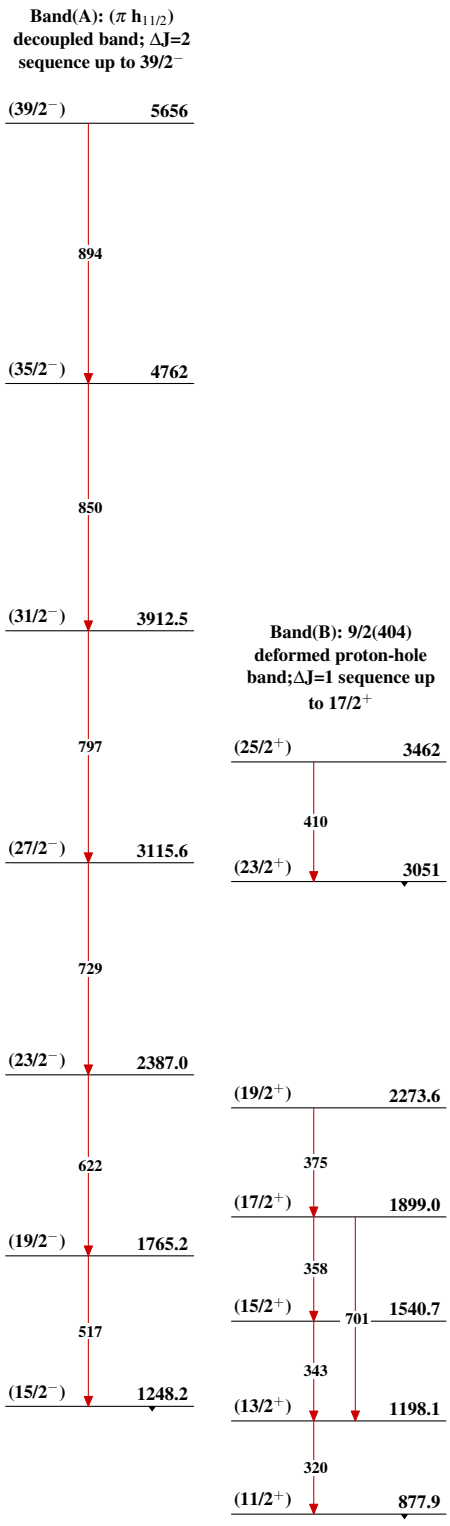

$^{115}_{53}I_{62}$