^{106}Cd(p,p$'\gamma$)   **1992Ku01**

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	D. De Frenne and A. Negret	NDS 109, 943 (2008)	1-May-2007

E(p)=7-9 MeV. Measured: Ep$'$, Eγ, E(ce), ppγ, pp(ce). Deduced: ^{106}Cd levels, α(K)exp, J^π. Ge, Si(Li) detectors.

^{106}Cd Levels

E(level)	$J^{\pi\dagger}$	E(level)	$J^{\pi\dagger}$	E(level)	$J^{\pi\dagger}$	E(level)	$J^{\pi\dagger}$
0.0	0^+	1795.3	0^+	2254.0 *5*	$(2^+,3^+)$	2370.6	$(2)^+$
632.6	2^+	2104.6	4^+	2305.1	4^+	2378.6	3^-
1493.8 *3*	4^+	2143.9	0^+	2330.5	5^+		
1716.6	2^+	2252.2 *6*	(4^+)	2347.3			

† From Adopted Levels.

$\gamma(^{106}$Cd)

$E_\gamma^\dagger$	$I_\gamma^\ddagger$	E_i(level)	J_i^π	E_f	J_f^π	Mult.$^\#$	Comments
225.9 *3*	28 *4*	2330.5	5^+	2104.6	4^+	M1+E2	Mult.: No δ given.
388.0 *3*	1.8 *4*	2104.6	4^+	1716.6	2^+	E2	
427.2 *3*	33 *5*	2143.9	0^+	1716.6	2^+	E2	α(K)exp=0.0084 *10*
536.2 *3*	6.5 *11*	2254.0	$(2^+,3^+)$	1716.6	2^+	(M1+E2)	Mult.: No δ given.
575.3 *3*	25 *4*	2370.6	$(2)^+$	1795.3	0^+	E2	α(K)exp=0.0036 *5*
610.7 *3*	34 *5*	2104.6	4^+	1493.8	4^+	M1+E2	Mult.: No δ given.
632.6 *3*	1000	632.6	2^+	0.0	0^+	E2	
653.9 *3*	30 *5*	2370.6	$(2)^+$	1716.6	2^+	M1+E2	Mult.: No δ given.
758.8 *3*	9.5 *15*	2252.2	(4^+)	1493.8	4^+	(M1+E2)	Mult.: No δ given.
811.2 *3*	38 *6*	2305.1	4^+	1493.8	4^+	M1+E2	Mult.: No δ given.
836.8 *3*	8.3 *13*	2330.5	5^+	1493.8	4^+	M1+E2	Mult.: No δ given.
861.2 *3*	128 *19*	1493.8	4^+	632.6	2^+	E2	
1084.0 *3*	197 *30*	1716.6	2^+	632.6	2^+	M1+E2	Mult.: No δ given.
1162.7 *3*	164 *25*	1795.3	0^+	632.6	2^+	E2	
1472.0 *3*	20 *3*	2104.6	4^+	632.6	2^+	E2	
1511.4 *3*	101 *15*	2143.9	0^+	632.6	2^+	E2	α(K)exp=0.00040 *15*
1619.6 *6*	190 *90*	2252.2	(4^+)	632.6	2^+		
1621.4 *4*	100 *50*	2254.0	$(2^+,3^+)$	632.6	2^+		
1672.6 *3*	4.8 *7*	2305.1	4^+	632.6	2^+	E2	
1714.7 *3*	185 *28*	2347.3		632.6	2^+		
1716.6 *3*	168 *25*	1716.6	2^+	0.0	0^+		
1738.0 *3*	90 *14*	2370.6	$(2)^+$	632.6	2^+	M1+E2	Mult.: No δ given.
1746.0 *3*	121 *19*	2378.6	3^-	632.6	2^+	E1	
2143.9		2143.9	0^+	0.0	0^+	E0	
2370.6 *3*	6.3 *10*	2370.6	$(2)^+$	0.0	0^+		

† Authors quote only a single set of Eγ values for (p,p$'\gamma$) and (p,2nγ) experiments.
‡ Correspond to direct level population and do not include gamma ray feeding.
$^\#$ From α(K)exp normalized to α(K)exp=0.00300 *5* [E2 theory: Bricc] and $\gamma(\theta)$ and J^π of Adopted Levels.

$^{106}_{48}Cd_{58}$

$^{106}Cd(p,p'\gamma)$ 1992Ku01

Level Scheme

Intensities: Type not specified

Legend

$I_\gamma <$ $2\% \times I_\gamma^{max}$
$I_\gamma <$ $10\% \times I_\gamma^{max}$
$I_\gamma >$ $10\% \times I_\gamma^{max}$