

$^{111}\text{Cd}(\text{d,p})$  1967Ba15

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	S. Lalkovski, F. G. Kondev		NDS 124, 157 (2015)	1-Aug-2014

1967Ba15: Facility: MIT-ONR Van de Graaff accelerator; Beam E(d)=7.7 MeV; Targets: 20  $\mu\text{g}/\text{cm}^2$  enriched to 89.9% in  $^{111}\text{Cd}$  evaporated on 100  $\mu\text{g}/\text{cm}^2$  Au, natural Cd.  $J^\pi(^{111}\text{Cd g.s.})=1/2^+$ ; Detectors: MIT spectrograph, 50- $\mu$  NTA photoemulsions, shielded by Ta and Al foils to suppress heavier than proton particles; Measured:  $d\sigma/d\Omega(E,\theta)$ . FWHM $\approx$ 20 keV; Deduced: levels, L, S, DWBA, JULIE code.

Others: 1960Co10.

 $^{112}\text{Cd}$  Levels

E(level) <sup>†</sup>	$J^\pi$ <sup>‡</sup>	L <sup>†</sup>	(2J+1)S <sup>†</sup>	Comments
0.0	0 <sup>+</sup>	0	0.28	
619.8	2 <sup>+</sup>	2	0.36	
1228.8	0 <sup>+</sup>	0	0.051	
1436.8	0 <sup>+</sup>	0	0.078	
1474.8	2 <sup>+</sup>	2	0.095	
1876.8	0 <sup>+</sup>	0	0.11	
2009.8	(2 <sup>+</sup> ,3)	(2,3)	0.033,0.06	
2087.8				
2123.8	2 <sup>+</sup>	2	0.13	
2159.8	2 <sup>+</sup>	2	0.089	
2235.8	(2 <sup>+</sup> ,3)	(2,3)	0.042,0.067	
2302.8	0 <sup>+</sup>	0	0.22	
2374.8				
2424.8	(0 <sup>+</sup> ,1)	(0,1)		
2507.8	2 <sup>+</sup>	2	0.38	
2573.8				
2637.8	2 <sup>+</sup>	2	0.24	
2657.8				
2678.8	2 <sup>+</sup>	2	0.35	
2725.8	2 <sup>+</sup>	2	0.32	
2770.8	2 <sup>+</sup>	2	0.39	
2822.8				L: L=0,2 for the doublet 2822+2840.
2840.8				L: L=0,2 for the doublet 2822+2840.
2875.8				
2901.8				
2936.8	2 <sup>+</sup>	2	0.27	
2965.8	2 <sup>+</sup>	2	0.30	
2988.8				
3071.8				
3113.8	2 <sup>+</sup>	2	1.45	
3184.8	2 <sup>+</sup>	2	0.83	
3240.8				
3304.8	2 <sup>+</sup>	2	0.32	
3344.8				

<sup>†</sup> From 1967Ba15.

<sup>‡</sup> From 1967Ba15, based on L.