

$^{110}\text{Cd}(\text{}^3\text{He,d})$ 1988Ta01

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Jean Blachot	NDS 110, 1239 (2009)	1-Feb-2008

$E(\text{}^3\text{He})=22.5$ MeV.

Enriched target 96%.40 $\mu\text{g}/\text{cm}^2$.

Outgoing deuterons analyzed by an Enge split-pole magnetic spectrometer and recorded on nuclear emulsion plates.

Measured at 12 angles from 7.5° to 60° .

Normalization to absolute σ done with ^3He detected with scattering chamber and Si detector at 37.4° .

The FWHM for deuterons is 16 keV.

 ^{111}In Levels

E(level)	L	C^2S^\dagger	Comments
0	4	0.16	
536 5	1	0.084	
801 5	1	0.054	
1101 5	2	0.45	
1188 5	0	0.27	
1216 5	2	0.024	
1344 5	2	0.20	
1500 5	4	0.30	
1919 5	2	0.046,0.087	
2085 7	0	0.19	
2303 7	2	0.014,0.025	
2341 7	2	0.031,0.053	
2373 7			
2481 7	2	0.033,0.062	
2531 7	2+5		C^2S : 0.037,0.072,0.23 for $5/2^+,3/2^+,11/2^-$, respectively.
2589 7	2	0.035,0.067	
2616 7	0	0.0059	
2657 7	2	0.015,0.030	
2688 7			
2769 7	2	0.045,0.075	
2804 7			
2821 7	2+4		C^2S : 0.036,0.061,0.075 for $5/2^+,3/2^+,7/2^+$, respectively.
2850 7			Shown in authors fig. 3 but not table ii.
2886 7	0		
2965 7			
3015 7	0	0.034	
3028 7	0		J^π : the 3028 level is given with L=2 by 1988Ta01 but assigned as $1/2^+$. The L=2 is apparently a misprint. In the authors' Fig. 2, $\sigma(\theta)$ for 3015+3028 (mislabelled as 3028 and 3074) is fitted with L=0. See also Fig. 3.
3074 7	2	0.054,0.096	
3112 7			
3132 7	2	0.032,0.055	
3160 7	2	0.019,0.032	Mislabelled as 3260 in authors' table 7. See fig. 3.
3244 7	0	0.032	
3254 7	0	0.034	
3388 7			

† Normalized to the sum-rule limit for the lowest three levels which are assumed to be single-hole states. Above 1500 the pairs of values correspond to $5/2^+$ and $3/2^+$, respectively.