

$^{112}\text{Cd}(\text{d},\text{d}')$ [1990Pi14](#),[1990Pi08](#)

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

[1990Pi14](#),[1990Pi08](#): Facility: KVI cyclotron; Beam: E(d)=50.4 MeV; Target: 1 mg/cm² enriched to 98% in ^{112}Cd ; Detectors: KVI QMG/2 magnetic spectrograph, multiwire drift chamber, scintillator counter. FWHM=15 MeV; Measured: $d\sigma/d\Omega$, coupled-channel calculations; Deduced: ^{112}Cd levels, J^π , $B(\lambda)$.

Others: [1966Ki04](#): Beam: E(d)=15 MeV; Measured: $\sigma(E,\theta)$; FWHM \approx 40-50 keV; Deduced: ^{112}Cd levels.

 ^{112}Cd Levels

E(level) [†]	J^π [‡]	Comments
0.0	0 ⁺	
617 2	2 ⁺	
1224 2	0 ⁺	
1312 2	2 ⁺	
1416 2	4 ⁺	
1469 2	2 ⁺	
1871 2	0 ⁺	
2005 2	3 ⁻	
2121 2	2 ⁺	
2156 2	2 ⁺	
2231 2	2 ⁺	
2299 2	0 ⁺	
2373 2	5 ⁻	
2416 2	3 ⁻	
2454 2	4 ⁺	
2492 2	4 ⁺	
2506 5	(1 ⁻)	
2569 5	6 ⁺	
2590 5	4 ⁻	
2632 5	5 ⁻	
2657 5	1 ⁻	E(level): 2647 in 1990Pi14 .
2667 5	2 ⁻	
2711 5	4 ⁺	
2724 5	2 ⁺	
2765 5	2 ⁺	
2791 5	5 ⁻	
2815 5	4 ⁺	
2836 5	4 ⁺	
2866 5	3 ⁻	
2895 5	4 ⁺	
2928 5	5 ⁻	E(level): 2923 keV in 1990Pi14 .
2942 5	2 ⁺	
2969 5	2 ⁺	
3046 5	1 ⁻	
3072 5	4 ⁺	
3102 5	4 ⁺	
3131 5	3 ⁻	E(level): 3130 keV in 1990Pi14 .
3176 5	2 ⁺	
3204 5	4 ⁺	
3244 5	(6 ⁺)	
3265 5	4 ⁺	
3292 5	(6 ⁺)	
3327 5	(5 ⁻)	
3359 5	2 ⁺	
3417 5	4 ⁺	

Continued on next page (footnotes at end of table)

$^{112}\text{Cd}(\text{d},\text{d}') \quad \mathbf{1990\text{Pi14},1990\text{Pi08}}$ (continued) ^{112}Cd Levels (continued)

<u>E(level)[†]</u>	<u>J^{π‡}</u>	<u>Comments</u>
3452 5	6 ⁺	
3534 5	4 ⁺	
3557 5	3 ⁻	
3586 5	3 ⁻	E(level): 3583 keV in 1990Pi14 .
3614 5	3 ⁻	
3664 5	3 ⁻	E(level): 3663 keV in 1990Pi14 .
3691 5	4 ⁺	
3748 5	4 ⁺	
3764 5	4 ⁺	
3800 5	4 ⁺	
3815 5	3 ⁻	
3835 5	4 ⁺	
3863 5	4 ⁺	
3892 5		
3945 5	4 ⁺	
4010 5	3 ⁻	
4034 5	3 ⁻	
4060 5	4 ⁺	
4090 5	3 ⁻	
4118 5	4 ⁺	
4172 5	3 ⁻	
4221 5	7 ⁻	
4248 5	3 ⁻	
4279 5	3 ⁻	
4320 5	4 ⁺	
4338 5	7 ⁻	
4364 5	4 ⁺	
4385 5	3 ⁻	
4419 5	(4 ⁺)	
4468 5	3 ⁻	
4499 5	3 ⁻	

[†] From [1990Pi08](#). Note, that one 2⁻ and two 4⁻ levels were reported in [1990Pi14](#), but there is no information on their energies.

[‡] From [1990Pi08](#), based on $d\sigma/d\Omega$ and coupled-channel analysis.