

¹⁰⁶Cd(p,pn γ) 1995Je04

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	S. Lalkovski, J. Timar and Z. Elekes		NDS 161, 1 (2019)	1-Apr-2019

1995Je04: Facility: Oslo cyclotron; Beam: E(p)=30 MeV; Target: 1.4 mg/cm² thick, enriched to 82.6% in ¹⁰⁶Cd; Detectors: four Ge(Li); Measured: γ , γ - γ coinc., E γ , I γ ; Deduced: ¹⁰⁵Cd level scheme.

¹⁰⁵Cd Levels

E(level) [†]	J π [‡]	Comments
0.0 [#]	5/2 ⁺	
131.2 [@] 8	7/2 ⁺	
260.2 10	(7/2) ⁺	J π : 5/2 ⁺ in 1995Je04.
604.0 8	(7/2) ⁺	
770.2 [#] 8	9/2 ⁺	
799.1 [@] 11	11/2 ⁺	
831.8 8	9/2 ⁺	
1162.2 ^{&} 9	(11/2) ⁻	
1577.5 [#] 11	(13/2) ⁺	
1685.3 [@] 13	15/2 ⁺	
1701.5 ^{&} 14	(15/2) ⁻	
2389.7 [#] 13	(17/2) ⁺	
2487.4 ^{&} 17	(19/2) ⁻	

[†] From a least-squares fit to E γ .

[‡] From the Adopted Levels.

[#] Member of $\Delta J=2$ band, based on 5/2⁺.

[@] Member of $\Delta J=2$ band, based on 7/2⁺.

[&] Member of $\Delta J=2$ intruder band, based on 11/2⁻.

γ (¹⁰⁵Cd)

E γ [†]	I γ [†]	E _i (level)	J π _i	E _f	J π _f	E γ [†]	I γ [†]	E _i (level)	J π _i	E _f	J π _f
131.2	100	131.2	7/2 ⁺	0.0	5/2 ⁺	704.5	18.2 10	2389.7	(17/2) ⁺	1685.3	15/2 ⁺
227.8	9.6 6	831.8	9/2 ⁺	604.0	(7/2) ⁺	770.1	34.0 15	770.2	9/2 ⁺	0.0	5/2 ⁺
260.2	31.8 5	260.2	(7/2) ⁺	0.0	5/2 ⁺	778.3	5.7 20	1577.5	(13/2) ⁺	799.1	11/2 ⁺
330.5	34.8 7	1162.2	(11/2) ⁻	831.8	9/2 ⁺	785.9	12.1 10	2487.4	(19/2) ⁻	1701.5	(15/2) ⁻
392.0	28.6 9	1162.2	(11/2) ⁻	770.2	9/2 ⁺	807.4	59.1 15	1577.5	(13/2) ⁺	770.2	9/2 ⁺
539.3	43.9 20	1701.5	(15/2) ⁻	1162.2	(11/2) ⁻	812.1	30.3 15	2389.7	(17/2) ⁺	1577.5	(13/2) ⁺
604.0	18.9 10	604.0	(7/2) ⁺	0.0	5/2 ⁺	831.8	35.4 15	831.8	9/2 ⁺	0.0	5/2 ⁺
639.0	39.2 15	770.2	9/2 ⁺	131.2	7/2 ⁺	886.3	32.1 15	1685.3	15/2 ⁺	799.1	11/2 ⁺
667.8	59.1 15	799.1	11/2 ⁺	131.2	7/2 ⁺						




[†] From 1995Je04.

$^{106}\text{Cd}(p,pn\gamma)$ 1995Je04

Level Scheme

Intensities: Type not specified

Legend

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

