

$^{106}\text{Cd}(^3\text{He},\alpha)$  1975Ch21

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

Facility: Harwell tandem accelerator; Beam:  $E(^3\text{He})=18$  MeV; Target:  $150 \mu\text{g}/\text{cm}^2$ , enriched to 82.1% in  $^{106}\text{Cd}$ ; Detectors: multigap spectrograph with  $\text{FWHM}\approx 45$  keV, photo emulsions; Measured:  $d\sigma/d\Omega(E)$ ; Deudced: L from DWBA,  $^{105}\text{Cd}$  level scheme; Also, from the same collaboration: 1972ChYC.

 $^{105}\text{Cd}$  Levels

E(level) <sup>†</sup>	$J\pi^{\ddagger}$	L <sup>#</sup>	S <sup>#</sup>	Comments
0	$5/2^+$	2	2.2 1	
134 10	$7/2^+$	(4,5)	3.8 1	L: authors favor L=4.
262 10	$(7/2)^+$	(2)	0.37,0.45 <sup>@</sup> 1	
679 10	$(3/2^+,5/2^+)$	2	0.16,0.19 <sup>@</sup> 1	
776 10	$(3/2^+,5/2^+)$	2	0.43,0.52 <sup>@</sup> 1	
836 10			0.27 12	
1162 10	$11/2^-$	(4,5)	0.67 2	L: authors favor L=5.
2123 10	$(7/2^+,9/2^+)$	(4,5)	0.29 1	L: authors favor L=4.
2730 10			0.24 10	
2818 10	$(7/2^+,9/2^+)$	(4,5)	0.82 2	L: authors favor L=4.
2874 10	$(7/2^+,9/2^+)$	(4,5)	1.04 3	L: authors favor L=4.

<sup>†</sup> From 1975Ch21.

<sup>‡</sup> From the Adopted Levels.

<sup>#</sup> From DWBA in 1975Ch21. Based on angular distribution profile L=4 state is undistinguishable from L=5 state.

<sup>@</sup> For J=5/2 and 3/2, respectively.