

$^{114}\text{Cd}(\text{d,p})$ 1968Mo04

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Jean Blachot	NDS 113, 2391 (2012)	1-Sep-2012

E=12 MeV.

Others: 1964Ro17, 1964Si18.

Q(d,p)=3929 20 (1964Si18), 3923 30 (1964Ro17), 3916.30 32 (1990Pi05).

Spectrograph resolution: FWHM \approx 8 keV.

 ^{115}Cd Levels

E(level) [†]	L#@	S'&	E(level) [†]	L#@	S'&	E(level) [†]	L#@	S'&
0.0	0	0.70	955	0	0.03	1544		
178	5	3.96	1042	(1)	0.007	1574		
227	2	2.12	1062	4	0.36	1597	2	0.03
357	2	0.58	1085	2	0.14	1620	(2,0)	0.06,0.006
389	4	2.16	1125			1725		
469	2	0.74	1175	0	0.04	1818	2	0.04
503	2	0.41	1214	3	0.19	1840	(2,0)	0.02,0.01
644	0	0.17	1248 [‡]	2	0.07	1876	(2)	0.08
695	(3)	0.02	1265			1906	(2,4)	0.12,1.00
743	2	0.20	1308	2	0.07	1928	(1)	0.06
770	2	0.50	1326	2	0.13	1954		
803	0	0.01	1348	(4)	0.23	1976	(2,4)	0.48,0.21
872	3	0.03	1365	2	0.28	1999	1	0.13
896			1479			2019	1	0.05

[†] E(level) vary from 3 keV to 17 keV lower than the values from ^{115}Ag β^- decay (1978Ma18) for E(level)=178 to 1725.

[‡] May correspond with L=2 (d,p),(d,t) excitation at 1260 keV (1964Ro17).

Deduced from measured angular distributions between 10° and 50° compared with DWBA and earlier experiments.

@ Assignments for L=0,4,5 are respectively s1/2,g7/2,h11/2 from shell theory; L=1,3 are respectively p3/2,f7/2. Some L=2 states are assigned to d3/2 or d5/2 shell-model states according to exp (d,p)/(d,t) cross-section ratio (1964Ro17); otherwise, low-lying states are classified as d3/2, high-lying states as d5/2.

& Authors summed spectroscopic strengths of single-particle states assigned to ^{115}Cd .