

$^{43}\text{Ca}(\text{p,d})$ 1973Du02

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Jun Chen [#] and Balraj Singh		NDS 135, 1 (2016)	31-May-2016

Target ^{43}Ca g.s. $J^\pi=7/2^-$.

1973Du02: E=40 MeV proton beam was produced at the Grenoble variable-energy cyclotron. Target of 1 mg/cm² self-supported calcium. Reaction products were detected in a ΔE -E silicon counter telescope and a anti-coincidence counter, FWHM=80-100 keV. Measured $\sigma(\theta)$. Deduced levels, J^π , L, spectroscopic factors from DWBA analysis.

 ^{42}Ca Levels

E(level)	L	C ² S	E(level)	L	C ² S	E(level)	L	C ² S
0	3	0.5	4100	2	0.24	9750	2	0.045 [#] 15
1520	3	0.15	4400	2	0.29	9850	2	0.10
1840	3	0.04	4700	0+2	0.06,0.045	10010	2	0.17
2420	3	0.11	4900	2	0.33	10430	2	0.23
2750	3	0.42	5340	2	0.10	10970	0	0.10
3200	3	0.66 [‡]	5790	0+2	0.057,0.07	11440	0	0.07
3440	0+2	0.18,0.20	6030	(0+2)	0.09,0.11			
3650 [†]	(1)		6500	0+2	0.12,0.07			

[†] Obscured by ^{41}Ca (g.s.).

[‡] Corrected for ^{43}Ca contamination.

[#] Quoted (1973Du02) as >0.03, <0.06.