

$^{35}\text{Cl}(^3\text{He,p})$ 1964CaZZ

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	John Cameron, Jun Chen and Balraj Singh, Ninel Nica		NDS 113, 365 (2012)	15-Jan-2012

$J^\pi(^{35}\text{Cl})=3/2^+$.

1964CaZZ: E=6.5 MeV, used emulsion plates and magnetic spectrometer and found 32 excited states. Measured angular distributions for eleven states with DWBA analysis for two states.

1966Mc13: E=11.5 MeV, enriched target. Measured 16 excited states and $\sigma(\theta)$.

1972Hu02: E=9-14 MeV, 96.9%-enriched ^{35}Cl targets. Measured six excited states, $\sigma(\theta)$, and did DWBA analysis (inconclusive results).

 ^{37}Ar Levels

E(level) [†]	L [‡]	Comments
0.0	(2)	
1406 4	(2)	E(level): other: 1410 (1972Hu02).
1607 4		E(level): other: 1610 (1972Hu02).
2213 4		E(level): other: 2220 (1972Hu02).
2484 4		E(level): other: 2490 (1972Hu02).
2792 4		E(level): other: 2800 (1972Hu02).
3167 4		E(level): other: 3170 from 3170+3270 doublet (1972Hu02).
3266 5		E(level): other: 3270 from 3170+3270 doublet (1972Hu02).
3515 5		
3593 5		
3693 5		
3930 5		
4003 [#] 6		
4188 5		
4277 5		
4385 5		
4435 [#] 5		
4562 [#] 5		
4614 5		E(level): 4613 5 (1964CaZZ); 4623 16 (1966Mc13).
4729 5		E(level): 4729 5 (1964CaZZ); 4733 16 (1966Mc13).
4830? 10		
4877 [@] 16		
4978 5		E(level): 4978 5 (1964CaZZ); 4976 16 (1966Mc13).
5036 [#] 6		E(level): 5036 6 (1964CaZZ); 5035 16 (1966Mc13).
5103 [#] 5		E(level): 5105 5 (1964CaZZ); 5087 16 (1966Mc13).
5203 5		E(level): 5203 5 (1964CaZZ); 5204 16 (1966Mc13).
5341 6		E(level): 5341 6 (1964CaZZ); 5338 16 (1966Mc13).
5401 [#] 6		E(level): 5401 6 (1964CaZZ); 5400 16 (1966Mc13).
5426 [@] 16		
5533 [@] 16		
5573 6		E(level): 5574 7 (1964CaZZ); 5568 16 (1966Mc13).
5662 6		E(level): 5662 7 (1964CaZZ); 5664 16 (1966Mc13).
5761 6		E(level): 5761 6 (1964CaZZ); 5762 16 (1966Mc13).
5845 6		E(level): 5846 6 (1964CaZZ); 5840 16 (1966Mc13).
5955 6		
6066 6		

[†] From 1964CaZZ when a single value is listed, or the weighted average of the values reported by 1964CaZZ and 1966Mc13. The values measured only by 1966Mc13 are marked separately.

[‡] From 1964CaZZ.

Continued on next page (footnotes at end of table)

$^{35}\text{Cl}(^3\text{He,p})$ [1964CaZZ](#) (continued)

^{37}Ar Levels (continued)

Values from [1964CaZZ](#) postulated by author on the basis of unusually wide structure.

@ From [1966Mc13](#).