

$^{37}\text{Cl}(\text{p,d})$ 1975Ri01

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Ninel Nica, John Cameron and Balraj Singh		NDS 113, 1 (2012)	31-Dec-2011

$J^\pi(^{37}\text{Cl})=3/2^+$.

1975Ri01: E=35 MeV; measured deuteron angular distribution, did DWBA analysis, and deduced L values and C^2S spectroscopic factors.

Others: 1973Kr08 (E=19,20 MeV), 1972Vi04 (E=40 MeV).

 ^{36}Cl Levels

E(level)	L	$\text{C}^2\text{S}^\dagger$	E(level)	L	$\text{C}^2\text{S}^\dagger$	E(level)	L	$\text{C}^2\text{S}^\dagger$
0.0	2	1.10	4205 4	0+2	0.01+0.04	6354 6	0+2	0.02+0.04
789 1	2	1.16	4299 3	2	0.29	6379 5	0+2	0.03+0.18
1165 1	0+2	0.05+0.36	4316 4			6423 5	1+3	0.01+0.08 ‡
1600 1	0+2	0.16+0.11	4524 4	(1+3)	0.01+0.04	6480 7	1+3	0.02+0.15
1958 1	0+2	0.23+0.24	4551 4	0+2	0.04+0.06	6550 5	0+2	0.01+0.01
2467 2	1	0.01	4720 4			6596 7	(1+3)	0.01+0.02 ‡
2491 2	0+2	0.17+0.19	4738 5			6618 5	2	0.15
2517 2	(3)	0.05	4830 5	(1+3)	0.01+0.02	6683 5	(1+3)	0.01+0.07 ‡
2675 2	0+2	0.07+0.31	4852 4	1+3	0.01+0.01 ‡	6750 6	0+2	0.01+0.05
2799 3	(3)	0.05	4884 4	0+2	0.05+0.05	6774 6	2	0.31
2863 2	2	0.45	4953 5			6826 6	2	0.36
2894 2			5144 6	(1+3)	0.01+0.01 ‡	6893 7	0+2	0.02+0.04
2995 2	(1+3)	0.01+0.01 ‡	5249 5	(1+3)	0.01+0.01 ‡	7007 6		
3208 4	(1)	<0.01	5517 5	1+3	0.01+0.02 ‡	7088 6	2	0.22
3331 3	1	0.01	5605 5	0+2	0.02+0.04	7165 7		
3470 3	0+2	0.05+0.07	5702 5	(1+3)	0.02+0.02	7512 6	0+2	0.01+0.06
3566 4	0+2	0.01+0.01	5734 6	3	0.09	7557 6	0+2	0.18+0.18
3598 3	(1+3)	0.01+0.02 ‡	5913 [#] 5	0+2	0.01+0.04	7665 6	0+2	0.01+0.02
3661?			5957 5	0+2	0.01+0.05	7755 6	(1+3)	0.01+0.04 ‡
3772 4	3	0.04	5986 5	(1+3)	0.01+0.02 ‡	7870 6	0+2	0.02+0.02
3962 4	(1+3)	0.01+0.01 ‡	6095 5	0+2	0.02+0.15	8184 6	(0+2)	0.01+0.04 ‡
3990 4	(1)	<0.01	6146 5	0+2	0.01+0.05 ‡			
4030 5	1	<0.01	6184 5	0+2	0.01+0.07			

† Relative spectroscopic factors arbitrarily normalized to a g.s. transition strength of 1.10 (1975Ri01).

‡ First value is an upper limit (1975Ri01).

$^\#$ 5973 In 1975Ri01 (table 4) is a typographical error.