^{37}Cl(d,t),(pol d,t) 1981Bh04,1976Be53

History

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

$J^\pi(^{37}Cl)=3/2^+$.
1981Bh04: ^{37}Cl(d,t), E=23.35 MeV; measured σ(ET,θ), DWBA analysis.
1976Be53: ^{37}Cl(pol d,t), E=12.0 MeV; measured σ(ET,θ), vector analyzing power iT11(ET,θ).

^{36}Cl Levels

Given In comments are $C^2S(1/2)$, $C^2S(3/2)$, $C^2S(5/2)$ from 1976Be53 (where 1/2,3/2,5/2 are the values of the total angular momentum j_n of the transferred neutron).

E(level)[†]	J^π[‡]	L[#]	C^2S[#]	Comments
0.0	2^+	2	0.90	C^2S: 0, 1.21, 0.
780	3^+	2	1.30	C^2S: 0, 1.41, 0.
1160	1^+	0+2	0.01+0.28	C^2S: 0.05, 0.36, 0.
1590	1^+	0+2	0.08+0.28	C^2S: 0.17, 0, 0.11 or 0.19, 0.08, 0.
1950	2^+	0+2	0.10+0.43	C^2S: 0.20, 0, 0.20 or 0.20, 0.25, 0.
2490	2^+	0+2	0.13+0.25	
2690	1^+	0+2	0.06+0.28	
2850	$(2,3)^+$	2	0.42	
3470	$(1,2)^+$	0+2	0.02+0.07	
4290	0^+	2	0.14	

[†] From 1981Bh04.
[‡] Cited by 1981Bh04 As from 1978En02.
[#] From 1981Bh04.