^{35}Cl(d,^{3}He) 1969Pu03,1968Wi20

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Ninel Nica, Balraj Singh	NDS 113, 1563 (2012)	28-May-2012

^{35}Cl target J^{π}: $3/2^{+}$.

1969Pu03: ^{35}Cl(d,^{3}He) E=23.35 *5* MeV, enriched ^{35}Cl lead cloride target on thin C backing. Used scattering chamber with ΔE-E counter covering the angular domain from 12° to 30° In steps of 2° and 3°. DWBA calculations (code JULIE).

1968Wi20: ^{35}Cl(d,^{3}He) E=34.5 MeV, 99%-enriched ^{35}Cl NaCl target on thin C backing. Used ΔE-E solid state telescope to measure angular distributions At eight angles In the forward octant with energy resolution (FWHM) of 80-90 keV. Data At 16° where remeasured with a broad-range magnetic spectrograph and photographic emultions with energy resolution of 45 keV. DWBA analysis.

1962Cu07: ^{35}Cl(d,^{3}He) E=15 MeV, used magnetic spectrometer with CsI detector. DWBA analysis (code SALLY).

^{34}S Levels

E(level)†	L†	S†	Comments
0.0	2	1.50	S: other: 1.29 (1968Wi20); 1.26 (1962Cu07). pickup particle: $d_{3/2}$ (1969Pu03).
2120 *10*	0+2	0.38+0.56	S: other: 0.39-0.32,(<0.39) (1968Wi20); none,<0.93 (1962Cu07). pickup particle: $s_{1/2}$,$d_{3/2}$ (1969Pu03).
3310 *15*	0	1.47	S: other: 1.11-0.99,(<0.78) (1968Wi20, second value for L=(2)). pickup particle: $s_{1/2}$ (1969Pu03).
4090 *15*	0	1.23	S: other: 0.93-0.86,(<0.42) (1968Wi20, second value for L=(2)). pickup particle: $s_{1/2}$ (1969Pu03).
4710 *20*	2	0.75	S: other: 0.62 (1968Wi20). pickup particle: $d_{5/2}$ (1969Pu03).
4900 *20*	2	1.2	S: other: 1.19 (1968Wi20). pickup particle: $d_{5/2}$ (1969Pu03).
5360 *40*	2	0.3	pickup particle: $d_{5/2}$ (1969Pu03).
6220 *50*	2	0.36	L,S: from 1968Wi20; other: L=(2), S=(0.75) (1969Pu03). pickup particle: ($d_{5/2}$) (1969Pu03).
6830	0	0.12	E(level),L,S: from 1968Wi20 (level energy quoted from 1967En05). pickup particle: ($d_{5/2}$) (1968Wi20).
6910 *40*	2	0.75	pickup particle: $d_{5/2}$ (1969Pu03).
7110	0	0.29	E(level),L,S: from 1968Wi20 (level energy quoted from 1967En05). pickup particle: ($d_{5/2}$) (1968Wi20).
7190 *40*	2	0.6	pickup particle: $d_{5/2}$ (1969Pu03).
7780 *30*	2	2.1	pickup particle: $d_{5/2}$ (1969Pu03).

† From 1969Pu03, except when noted.