^{35}Cl(α,d)   **1977Na10**

History

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

J^{π}(^{35}Cl)=3/2^{+}.

1977Na10,1975Na18: E=40 MeV, 99.4% ^{35}Cl-enriched target and used Si detector and Enge split-pole magnetic spectrograph with proportional-counter plastic-scintillator combination with FWHM=40-60 keV; measured dσ/dΩ (30% accuracy) with DWBA fits and deduced L values.

^{37}Ar Levels

dσ/dΩ (In mb/sr) At 5° are given In the table (estimated by evaluators from figs. 5,6 "The (α,d) angular DISTRIBUTION" of 1977Na10).

E(level)	J^{π}	L	Comments
5210 *10*	7/2 to 17/2^{+}	6	dσ/dΩ(5°)=0.20.
6150 *10*	3/2 to 13/2^{+}	4	dσ/dΩ(5°)=0.25.
6320 *10*			
6430 *10*	7/2 to 17/2^{+}	6	dσ/dΩ(5°)=0.12.
6470 *10*	7/2 to 13/2^{+}	4+6	dσ/dΩ(5°)=0.24.
6790 *10*	7/2 to 13/2^{+}	4+6	dσ/dΩ(5°)=0.32.
6840 *10*	7/2 to 13/2^{+}	4+6	dσ/dΩ(5°)=0.60.
7070 *10*	(17/2)$^{+}$	6	dσ/dΩ(5°)=1.02.
			J^{π}: from measured L=6 and theory arguments (1975Na18).
7290 *10*	7/2 to 13/2^{+}	4+6	dσ/dΩ(5°)=0.65.
7710 *10*	3/2 to 13/2^{+}	4	dσ/dΩ(5°)=0.21.
7770 *10*	3/2 to 13/2^{+}	4	dσ/dΩ(5°)=0.20.
7890 *10*	3/2 to 13/2^{+}	4	dσ/dΩ(5°)=0.26.
8130 *10*	7/2 to 13/2^{+}	4+6	dσ/dΩ(5°)=0.23.
8300 *10*	7/2 to 13/2^{+}	4+6	dσ/dΩ(5°)=0.50.