^{38}Ar(p,d) 1975Pa08

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

1975Pa08: E=26 MeV, FWHM=70 keV, 93.65%-enriched ^{38}Ar target; used Si ΔE/E telescopes and measured dσ/dΩ (covering $\theta_{c.m.}$= 16° *13*232°) and did DWBA analysis (code DWUCK).

^{37}Ar Levels

E(level)†	Jπ‡	L#	C^{2}S	E(level)†	Jπ‡	L#	C^{2}S	E(level)†	Jπ‡	L#	C^{2}S
0	$(3/2)^+$	2	3.5	4020 *20*				6290 *20*	$(5/2)^+$	2	0.24
1409	$(1/2)^+$	0	0.87	4630 *20*				6650 *20*	$(1/2)^+$	0	3.5
1611	$(7/2)^-$	3	0.22	4980 *20*	$(3/2)^+$	2	3.0	7070 *20*			
2220				5390 *20*				7880 *20*			
2491	$(3/2)^-$	1	0.03	5670 *20*	$(5/2)^+$	2	0.32	8080 *20*			
2796	$(5/2)^+$	2	1.1	5880 *20*							
3520 *20*				6112 *20*	$(5/2)^+$	2	0.24				

† According to 1975Pa08 E(level)>3 MeV were extracted with ΔE=20 MeV on the basis on the known energies of low-lying states In ^{37}Ar and ^{39}Ar, together with energy-loss corrections for the incident beam, ΔE=39 keV (E(level)<3 MeV are taken by 1975Pa08 from literature, except for 2220 given In fig. 2 showing d spectrum At θ_{lab}=25°).

‡ π′s based on 1975Pa08 measured L values (J values are assumed by them to estimate C^{2}S values).

From DWBA fits.