^{40}Ar(d,n) 1970Ha37

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	C. D. Nesaraja, E. A. Mccutchan	NDS 133, 1 (2016)	30-Sep-2015

1970Ha37 (also 1970Fu01): E=5.6 MeV. Measured $\sigma(\theta)$ for neutrons with tof method (FWHM≈80 keV); DWBA analysis.
Others:
1958Be03: E=2.5, 3.0 MeV. Measured neutron energies using gas recoil fast neutron spectrometer. Three groups reported at 1370, 2400, and 3100 keV.
1950Wo03: E=3.2 MeV. Measured neutron energies using recoil coincidence technique. Four groups reported at g.s., 1340, 3100 and 4400 keV.

^{41}K Levels

E(level)[†]	L[‡]	(2J+1)C^{2}S[a]	Comments
0	2	1.6	
980[@]	0	0.16	
1294[@]	3	2.0	E(level): other: 1340 *150* (1950Wo03).
1650[#] *50*	1	0.32	
3100[&]			
4400[&]			
8380[#] *20*	(3)	0.9	(2J+1)C^{2}S: 1978En02 give (2J+1)S=4.5 (C^2=1/5 for T=5/2).
8760[#] *20*	1	0.03	
8870[#] *20*	1	0.09	(2J+1)C^{2}S: 1978En02 give (2J+1)S=0.45 (C^2=1/5 for T=5/2).

[†] From 1970Ha37.
[‡] From DWBA analysis (1970Ha37).
[#] Unresolved multiplet.
[@] From the Adopted Levels rounded to the nearest keV. 1970Ha37 provide values from the literature.
[&] From 1950Wo03, uncertainty is probably 200 keV.
[a] 1978En02 quote (2J+1)S values (C^2=1) for first four levels, adjusted upwards by ≈25%, based on standardized normalization factors deduced in 1977En02.