^{36}Ar(n,d) 1977Pa29

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Jun Chen, John Cameron and Balraj Singh	NDS 112,2715 (2011)	20-Oct-2011

1977Pa29: E=14.1 MeV neutron beam produced in the Brown University neutron generator via the ^{3}H(d,n)^{4}He reaction at an average rate of 10^9 neutrons per second into 4π sr. Argon target in the form of a gas cell filled with ^{36}Ar enriched to 99.8% with the target thickness of 2.85 mg/cm^2. Detectors: a time-of-flight counter telescope of two proportional counters and a NaI(Tl) crystal. Measured $\sigma(E_d,\theta)$. Deduced levels, L, spectroscopic factors from the DWBA analysis.

^{35}Cl Levels

Target ^{36}Ar $J^\pi=0^+$.

E(level)	L†	S†	Comments
0	2	3.87 *48*	
1219	0		S: 1.94 *23* and 2.2 *4* from two sets of optical parameters in 1977Pa29.
1763	0		

† Extracted from the comparison of $\sigma(\theta)$ distributions with the DWBA predictions.