

$^1\text{H}(^{36}\text{Ar},\text{D})$ [2010Le03](#),[2011Le01](#)

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

Inverse Kinematics. Target=(CH₂)_n, primary beam=³⁶Ar at E=33 MeV/nucleon; measured deuterons in High-Resolution Array (HiRA) in coincidence with recoil residues detected in the S800 spectrometer and 16 HiRA telescopes at NSCL facility. Residues identified using energy loss and time-of-flight information. FWHM=470 keV for g.s. Measured angular distributions for g.s., and ADWA analysis Deduced neutron spectroscopic factors for g.s. Comparison with shell-model calculations.

Other: [2011Nu01](#).

 ^{35}Ar Levels

E(level)	J ^π	L [‡]	S	Comments
0	3/2 ⁺	2		J ^π : from L=2 and d _{3/2} configuration. S: extracted neutron spectroscopic factors for g.s., d _{3/2} : 1.60 <i>I</i> 6, 0.76 <i>I</i> 8, 2.29 <i>I</i> 23, 1.09 <i>I</i> 11 using different sets of parameters (2010Le03). 2011Le01 give 2.3 <i>I</i> 2 for CH89 parameters and 1.6 <i>I</i> for JLM+HF parameters.
1180	1/2 ⁺	0	1.2 <i>I</i>	J ^π : from L=0. S: for CH89 parameters (2011Le01).
2980 [†]				
3190 [†]				
5570				

[†] Unresolved group.

[‡] From $\sigma(\theta)$ ([2011Le01](#),[2010Le03](#)).