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 $^1\text{H}(^{43}\text{Ar},\text{p}')$  [1999Ma89](#)

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Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh and Jun Chen <sup>#</sup>		NDS 126, 1 (2015)	31-Mar-2015

[1999Ma89](#):  $^{43}\text{Ar}$  secondary beam produced by the fragmentation of a  $^{48}\text{Ca}$  beam at  $E=60$  MeV/nucleon, provided by the K1200 cyclotron at the NSCL, on a  $285\text{ mg/cm}^2$  Be production target, followed by a fragment-separator analyzer. Intensity of  $^{43}\text{Ar}$  beam=16,000 particles/sec at 33 MeV/nucleon. Target of a thin  $2\text{ mg/cm}^2$   $\text{CH}_2$  foil. Recoiling protons were detected by a group of eight particle-detector telescopes (FWHM=850 keV). Measured  $\sigma(E_p, \theta)$ . Deduced levels, J,  $\pi$  from DWBA analysis.

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 $^{43}\text{Ar}$  Levels

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E(level)	J $\pi$	L	Comments
0	(5/2 <sup>-</sup> , 7/2 <sup>-</sup> )		J $\pi$ : from systematics ( <a href="#">1999Ma89</a> ). 7/2 <sup>-</sup> is inconsistent with log $ft$ values.
1610 40	(3/2 <sup>-</sup> )	2	L: from $\sigma(\theta)$ and comparison with DWBA calculations. J $\pi$ : suggested by syst ( <a href="#">1999Ma89</a> ). $\beta_2=0.25$ 3, assuming E2 excitation. For analysis of (p,p') data, J $\pi$ (g.s.)=5/2 <sup>-</sup> was assumed by <a href="#">1999Ma89</a> .