^{41}Ca(d,α) 1979Su04

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Jun Chen	NDS 149, 1 (2018)	1-Jan-2018

$J^{\pi}(^{41}\text{Ca g.s.})=7/2^{-}$.

1979Su04: E=22 MeV deuteron beam was produced from the University of Rochester NSRL MP Tandem Van de Graaff. Target was 25 μg/cm^2 thick isotopically enriched ^{41}Ca. Reaction products were momentum-analyzed with an Engel split-pole magnetic spectrograph (FWHM=17 keV) and detected with photographic emulsions. Measured $\sigma(\theta)$. Deduced levels, J, π, L-transfers, strengths from DWBA analysis.

^{39}K Levels

E(level)†	J$^{\pi}$‡	L†	(d,α) strength†	Comments
0	$3/2^{+}$			
3597 *5*	$9/2^{-}$		<0.10	
3945 *5*	$11/2^{-}$	4	0.29 *3*	
4522 *5*	$9/2^{-}$	4	0.39 *4*	
5719 *5*	$13/2^{-}$	4	1.00 *10*	J$^{\pi}$: from combined analysis of (α,α') (from 1977Bo12) and their (d,α) data, 1979Su04 strongly favor J=13/2 over 9/2.

† From 1979Su04.
‡ From Adopted Levels.