^{53}Cr(p,d) 1967Wh02

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Yang Dong, Huo Junde	NDS 128, 185 (2015)	10-Jul-2015

Target $J^{\pi}=3/2^{-}$.
Other references: 1971Ma58, 1966Fr05, 1962Ma20.
1967Wh02: E=17.5 MeV, dE/dx-E solid state detector telescope, 50-75 keV FWHM, $\sigma(\theta)$.
1971Ma58: E=20 MeV, polarized beam, measured $\sigma(\theta)$, sixteen ΔE-E telescopes, ΔE detectors: silicon surface-barrier junction of 150 to 250 μm thickness, E-detectors: lithium-drifted silicon junction of 3.5 to 4 mm thickness, overall energy resolution: 80 keV for protons, 80-150 keV for deuterons, DWBA analysis.

^{52}Cr Levels

E(level)[†]	L[‡]	C^2S[‡#]	Comments
0.0	1	0.51	C^2S: other: 0.56 (1971Ma58).
1434	1	0.18	An upper limit of S<≈0.27 is assigned for L=3 contribution.
2370	3	0.07	
2648	1	0.018	
2769	3	0.10	
2965			C^2S: <0.008 for p3/2, <0.08 for f7/2.
3115			
3161			C^2S: <0.015 for p3/2, <0.1 for f7/2.
3432[@]	&	&	
3494[@]	&	&	
3614	(3)	<0.04	
3767	3	0.36	
3926			Very weak.
4030	3	1.14	

[†] From 1966Fr05 and 1962Ma20.
[‡] From 1967Wh02, based DWBA analysis.
[#] Authors assume that L=1 corresponds to 2p3/2 and L=3 corresponds to 1f7/2.
[@] Unresolved doublet.
[&] L=3, C^2S=2.3 for the 3432-3494 doublet.