^{54}Fe(p,α), (pol p,α) 1976Ta02,1979Ta22

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Wang Jimin and Huang Xiaolong	NDS 144, 1 (2017)	1-Mar-2016

1976Ta02: E=14-16 MeV, measured Eα spectrum with magnetic spectrograph.

1979Ta22: E=14-20 MeV, polarized beam, measured analyzing power and $\sigma(\theta)$ leading to 4459-keV state in ^{51}Mn.

All data from 1976Ta02, except as noted. The uncertainties of E(level) were calculated according to the procedures described in 1974Jo14, and including estimates of both random and systematic uncertainty. 1974Jo14 estimated the magnitude of systematic uncertainty of 0.3% and random uncertainty of 1.8%. It's noted that the ΔE(level) given in 1976Ta02 could be underestimated when quoted in Adopted Levels.

^{51}Mn Levels

E(level)	E(level)	E(level)	E(level)	J$^{\pi}$	L
0.0	2310.6 *9*	3060.8 *16*	3729.0 *12*		
238.0 *7*	2415.8 *10*	3093?	3824.9 *16*		
1139.9 *8*	2702.2 *12*	3131.2 *11*	3835.2 *15*		
1488.9 *8*	2842.2 *17*	3281.2 *11*	3876.6 *17*		
1817.5 *9*	2893.3 *10*	3293.5 *14*	3896.0 *13*		
1824.5 *11*	2914.2 *10*	3425.6 *12*	3955.6 *27*		
1959.3 *9*	2957.0 *11*	3543.5 *14*	4459[†] *5*	7/2^{-}[‡]	3[#]
2140.8 *9*	2984.7 *10*	3554.6 *15*			
2256.7 *9*	3029.5 *11*	3657.9 *14*			
2276.1 *10*	3050.1 *11*	3695.5 *14*			

[†] From 1979Ta22 interpreted by authors as the IAS of the 7/2^{-} g.s. in ^{51}Cr.

[‡] Based on L and analyzing power (1979Ta22).

[#] From 1979Ta22, DWBA analysis.