$^{55}\text{Mn}(\alpha,\text{t}),(^3\text{He,d})$ **1968Ma37,1967Hi12**

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Huo Junde, Huo Su, Yang Dong	NDS 112, 1513 (2011)	29-Oct-2009

$J^\pi(^{55}\text{Mn})=5/2^-$.
1968Ma37: $^{55}\text{Mn}(\alpha,\text{t})$ E=29 MeV; measured $\sigma(\text{E(t)},\theta)$, θ(c.m.)=10°−60°; DWBA analysis.
1967Hi12: $^{55}\text{Mn}(^3\text{He,d})$ E=15 MeV; measured $d(\text{E(d)},\theta)$, θ=7°−40°; DWBA analysis.
1996Ne05: spin-dependent sum-rule analysis of 1968Ma37 data.
All data are from 1968Ma37, except as noted.

^{56}Fe Levels

E(level)	L[†]	C^2S'[‡]	Comments
0	3	0.01 2	
850	3	1.45 20	L: other: 1+3 (1967Hi12).
2090	3	0.36 5	L: other: 1+3 (1967Hi12).
2660	3	0.14 5	L: other: 1 (1967Hi12).
2970 40	3	0.08 5	
3150 40	3		
3400 40	3	0.90 10	
3780 40	3	0.25 5	
4080 40	1		
4.42×10^3 10	1		
4.73×10^3 10	1		
5.20×10^3 10	1		

[†] From $\sigma(\theta)$ fits with DWBA.
[‡] From DWBA.