^{54}Fe(α,d)   1980Ok03,1969Lu07,1972KaYG

History

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

1980Ok03 and 1972KaYG: E=23.9 MeV, FWHM: 80-keV; measured $\sigma(\theta)$, DWBA analysis.
1969Lu07: E=50 MeV, FWHM: 170-keV; measured $\sigma(E(d),\theta)$.
1994Fi01: E=55 MeV, measured $\sigma(E(d),\theta)$, DWBA analysis.

^{56}Co Levels

E(level)[†]	J$^\pi$[‡]	L[b]	Comments
0.0		4	
157		2	
576 10	5$^+$	4[#]	J$^\pi$: $\sigma(\theta)$ DWBA and configuration=((π 1f$_{7/2}$)(ν 1p$_{3/2}$))5$^+$ (1994Fi01).
830			
970		2+4	970 and 1010 unresolved.
1010			970 and 1010 unresolved.
			L: L=2+4 for 970+1010 doublet.
1110[&]			
1720		0	
1930		2	
2060[&]		2	
2300		2	
2370[&]		6	
2470[&]		4	
2730		0	
2790			
3070		0	
3180			
3570[@]			
3790[&]			
4040			
4990 20	8$^-$	7[#]	J$^\pi$: $\sigma(\theta)$ and configuration=((π f$_{7/2}$)(ν g$_{9/2}$))8$^-$ (1994Fi01).
5340			
5430[a]	6$^-$		J$^\pi$: configuration=((π p$_{3/2}$)(ν g$_{9/2}$))6$^-$ (1994Fi01).
5500			
6570[a]	6$^-$		J$^\pi$: configuration=((π g$_{9/2}$)(ν p$_{3/2}$))6$^-$ (1994Fi01).
7350[a]			
8920[@] 30	9$^+$		J$^\pi$: configuration=((π g$_{9/2}$)(ν g$_{9/2}$))9$^+$ (1994Fi01).

[†] From 1980Ok03.
[‡] From $\sigma(\theta)$ DWBA and shell-model analyses.
[#] From 1980Ok03 based on $\sigma(\theta)$ fits with DWBA.
[@] From 1969Lu07.
[&] From 1972KaYG.
[a] From 1994Fi01.
[b] From 1972KaYG based on $\sigma(\theta)$ fits with DWBA.