^{54}Fe(^{16}O,^{12}C) 1979Ha23,1972CoZM

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Caroline D. Nesaraja, Scott D. Geraedts and Balraj Singh	NDS 111,897 (2010)	12-Jan-2010

E=50 MeV, FWHM≈60 keV (1979Ha23), FWHM≈100 keV (1972CoZM), E=40-48 MeV, FWHM≈275 keV (1970Fa05, also 1971Fa10).
Measured: σ(E,θ) (1979Ha23), σ(E) (1972CoZM).

^{58}Ni Levels

E(level)[#]	J$^\pi$[‡]	S[†]	Comments
0.0	0^+	0.26	
1450 *20*	2^+	0.16	
2460 *20*	4^+	0.056	
2770 *20*	2^+	0.020	
3260[@] *20*	2^+	<0.026	
3430[@] *20*	3^+	<0.026	
3540 *20*	0^+	0.35	
3620[@]	4^+	<0.026	E(level): adopted value.
3760[@] *20*		<0.013	
3900 *20*	2^+	0.037	
4110 *20*	2^+	0.12	
4290[@] *20*		<0.026	
4360[@] *20*		<0.026	
4470 *20*		0.19	
5220? *50*			
5590 *50*			
6030 *50*			
6450 *50*			
6800 *50*			
7.2×10^3 *1*			E(level): observed only by 1971Fa10.
7560 *50*			
7800 *50*			
8060 *50*			
8200 *50*			
9500			
9900			
10100			
10950			

[†] Defined by σ(exp)/σ(theory)=((2J$_f$+1)/(2J$_i$+1))C^{2}S (1979Ha23).
[‡] Adopted values.
[#] Data for E<5000 are from 1979Ha23, for E=5000-8100 from 1972CoZM, for E>8100 from 1970Fa05.
[@] Weakly populated group.