

$^{56}\text{Fe}(^3\text{He},\alpha)$ [1980Za05](#),[1975We07](#),[1975Ri05](#)

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Huo Junde	NDS 109, 787 (2008)	30-Apr-2007

1980Za05: E=18 MeV, FWHM=30 keV, measured $\sigma(e3\text{he},\theta)$; DWBA analyses.

1975We07: E=82.7 MeV; enriched target (99.95%); silicon detectors telescopes; measured $\sigma(\theta)$ (10° – 140°); DWBA analyses.

1975Ri05: E=38.2 MeV; natural target; energy-loss spectrograph and helical cathode proportional chamber (FWHM: 45 keV); measured $\sigma(\theta)$; DWBA analysis.

For studies of the J dependence of the cross section, see also [1962Bl06](#), [1966Le12](#), and [1967Gl01](#).

All data are from [1980Za05](#), except as noted.

 ^{55}Fe Levels

E(level)	L	C ² S	E(level)	L	C ² S	E(level)	L	C ² S
0.0	1	0.63	3880 25			6053 15	3	0.21
410 [†]	1	0.47	3920 25			6159 15	3	0.16
930 [†]	3	0.43	4000 [†]			6323 15	3	0.23
1313 15	3	0.62	4140 25			6376 15		
1411 15	3	4.68	4270 25			7406 15		
2100 [‡]	3 [‡]	0.38 [‡]	4458 15	0 0	0.96	7480 [‡]	3 [‡]	0.44,0.61 [‡]
2220 25	3	0.062	4650 [‡]	2,3 [‡]	0.35,0.27 [‡]	7520 25		
2600 25			4663 15	3	0.12	7625 15	3	0.059
2880 [‡]	3 [‡]	0.73 [‡]	4809 15			7749 15	3	1.56
2946 15	3	1.21	4881 16	2	0.65	8420 15		
3327 15	3	0.093	5215 15	3	0.18	8527 15		
3570 25	1	0.038	5277 15	3	0.31	8892 15	2	0.13
3610 [‡]	1 [‡]	0.31 [‡]	5396 15	3	0.28	9115 15	1	0.10
3713 15	1	0.084	5444 15	3	0.14			
3815 15	3	0.22	5668 15	3	0.12			

[†] From [1975Ri05](#).

[‡] From [1975We07](#).