

$^{56}\text{Fe}(\text{d},\text{d}')$ 1970Jo07,1968Ma36,1996De16

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

[1996De16](#): E=56 MeV, measured $\sigma(\theta)$, coupled-channels analysis, determined matrix elements for transitions from g.s. and first 2^+ state to 2^+ , 3^- , and 4^+ states. The isospin character of the transitions is deduced. See also [1990Ta38](#).

[1970Jo07](#): E=11.5 MeV, measured $\sigma(\text{E}(\text{d}'),\theta)$, DWBA analysis.

[1968Ma36](#): E=12 MeV, measured $\sigma(\text{E}(\text{d}'),\theta)$, DWBA analysis.

For polarized deuteron beam and optical model parameters, see [1977Pe07](#) and [1980Bu02](#).

All data are from [1970Jo07](#), except as noted.

 ^{56}Fe Levels

E(level)	L^\dagger	β_L^\ddagger	Comments
0			
846 [#]	2	0.27 <i>l</i>	
2085 [#]	(4)	0.13	L,β_L : from 1968Ma36 .
2657 [#]	2	0.086 <i>5</i>	
2960 [#]	2	0.063 <i>6</i>	
3123 [#]	4	0.106 <i>4</i>	
3370 [#]	2	0.071 <i>6</i>	
3602 [#]	2	0.055 <i>3</i>	
3832 [#]	2	0.056 <i>3</i>	
4100	4	0.096 <i>6</i>	
4510	3	0.20 <i>l</i>	

[†] Based on $\sigma(\theta)$ fits with DWBA.

[‡] From DWBA.

[#] From [1996De16](#).