

$^{56}\text{Fe}(t, ^3\text{He})$ 1985Aj02

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

E=25 MeV, measured $\sigma(E(t))$, $\sigma(\theta)$ with Q3D $\theta=5.5^\circ-50^\circ$; coupled-channels calculations.

 ^{56}Mn Levels

E(level)	$J^\pi^\dagger$	L	E(level)	$J^\pi^\dagger$	L	E(level)	$J^\pi^\dagger$	L	E(level)	$J^\pi^\dagger$	L
0	(3 ⁺)	2+4	1515 8	(2 ⁺)	2	2555 20	(5 ⁺)	4+6	3608 $\ddagger$ 20		
29 5	(2 ⁺)	2	1560 10	(1 ⁺)	0+2	2617 15	(1 ⁺)		3650 $\ddagger$ 20	(1 ⁺)	0+2
112 5	(1 ⁺)	0+2	1655 15	(1 ⁺)		2679 $\ddagger$ 20			3707 $\ddagger$ 20		
213 $\ddagger$ 5		2	1724 8			2759 20	(1 ⁺)		3740 20		
340 $\ddagger$ 8			1752 10			2792 15	(2 ⁺ ,3 ⁺)		3773 20		
455 8	(3 ⁺)	2+4	1780 15			2824 15			3795 $\ddagger$ 30		
487 5	(3 ⁺)	2+4	1825 10	(1 ⁺)	0+2	2849 $\ddagger$ 15			3847 $\ddagger$ 30		
710 8	(4 ⁺)	4	1861 $\ddagger$ 20	(2 ⁺)		2914 20			3911 20	(5 ⁺)	4+6
754 8			1970 10	(3 ⁺)	2+4	2988 15			3928 30		
845 $\ddagger$ 10	(3 ⁺)		2005 10			3008 15			3980 $\ddagger$ 30	(5 ⁺)	4+6
1140 10			2045 15			3069 $\ddagger$ 20			3998 $\ddagger$ 20	(1 ⁺)	0+2
1165 10	(1 ⁺)	0+2	2075 $\ddagger$ 15	(2 ⁺)	2	3118 $\ddagger$ 20	(5 ⁺)	4	4051 $\ddagger$ 30		
1195 10	(3 ⁺)	2+4	2118 $\ddagger$ 15	(4 ⁺)	4	3185 $\ddagger$ 20	(1 ⁺)	0+2	4120 $\ddagger$ 40		
1245 8	(1 ⁺ ,2 ⁺)		2176 15	(1 ⁺)		3228 $\ddagger$ 20			4170 $\ddagger$ 40	(4 ⁺)	
1295 8	(2 ⁺)	2	2236 $\ddagger$ 15			3260 20	(1 ⁺)		4210 $\ddagger$ 40		
1357 $\ddagger$ 10			2294 $\ddagger$ 15	(2 ⁺)	2	3312 $\ddagger$ 25			4250 $\ddagger$ 40		
1447 15			2415 $\ddagger$ 20	(2 ⁺)		3370 $\ddagger$ 20			4320 $\ddagger$ 40		
1484 8	(1 ⁺ ,2 ⁺)		2521 20	(1 ⁺)	0+2	3544 $\ddagger$ 30	(1 ⁺)				

[†] Based on comparison between $\sigma(\theta)$ measurements and coupled-channels calculations.

$\ddagger$ Unresolved states.