

$^{58}\text{Ni}(\text{p,t})$ 1984Ka07,1974Na19

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

1974Na19: E=40.0 and 45.5 MeV, FWHM: 10-25 keV; measured $\sigma(E(t),\theta)$ from 4° to 55° and triton spectrum; DWBA analysis.

1970Br48: E=45 MeV, FWHM: 45 keV; measured $\sigma(E(t),\theta)$ and triton spectrum; DWBA analysis.

1968Da08: E=50 MeV; measured $\sigma(\theta)$.

1974GrZK: E=40 MeV; broad-range spectrograph (at 10 angles between 7° and 45°); measured $\sigma(E(t),\theta)$.

1984Ka07: E=65 MeV; FWHM: 15 keV for the low-lying states; measured triton spectrum; analysis of double-hole isobaric analog states.

See also 1989Po15, 1970Su09, 1965Ho07, and 1964Ba34.

All data are from 1974Na19, except as noted.

 ^{56}Ni Levels

E(level)	L [†]	Comments
0	0	
2702 3	2	
3923 3	4	
3952 3	0	
4932 3	(3,5)	
5002 3	0	
5316 3	6	
5351 3	2	
5490 3	(4)	L: others: 3 (1970Br48), 2 (1974GrZK).
5679 3	(6)	
5799 3		
5985 3	4#&	L: other: 2 (1974Na19).
6011 3	1&	
6236 3	(2)#	
6327 3	(3)	
6436 3	4	E(level): IAS of 4^+ g.s. in ^{56}Co .
6517 10		
6572 10	(2)#	
6662 6	0	T=0 (1974Na19)
6730 8		
7025 10		
7144 6	1#@	
7250 8	(1)	
7289 25	0#	
7433 8	2#@	T=1 (1970Br48)
7576 6	3#@	
7670 8		
7801 10	(1)	
7913 5	0	T=1 (1974Na19)
8.08×10^3 10	#	
8143 10		
8479 10	(2)@	
8575 10		
8674 8		
8796 6	4	
8870 12		
9008 6		
9042 8		
9109 8		

Continued on next page (footnotes at end of table)

$^{58}\text{Ni}(\text{p,t})$ [1984Ka07](#), [1974Na19](#) (continued) ^{56}Ni Levels (continued)

E(level)	L^\dagger	Comments
9154	<i>10</i>	
9235	<i>12</i>	
9310	<i>10</i>	
9450	8	
9596	6	
9676	6	
9740	5	
9756	5	
9824	3	
9943 [‡]	4 0	T=2 (1984Ka07) E(level): double IAS of 0^+ g.s. in ^{56}Fe .
9994	3 0	
10011 [‡]	6 0	T=2 (1984Ka07)
10041 [‡]	6 0	T=2 (1984Ka07)
10055	3	
10095	5	
10150	5	
10250	6	
10331	<i>10</i>	
10377	<i>10</i>	
10428	8	
10655	<i>10</i>	
10785	<i>15</i>	
10854	<i>10</i>	
11055	<i>15</i>	

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

[‡] From [1984Ka07](#).

From [1970Br48](#).

@ From [1968Da08](#).

& From [1974GrZK](#).