

$^{58}\text{Ni}(t,p), (\text{pol } t,p)$ 1971Da16

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	E. Browne, J. K. Tuli		NDS 114, 1849 (2013)	31-Dec-2012

(t,p): E \approx 12 MeV. Measured $\sigma(\theta)$, $\theta=12.5$ \backslash° -57.5 \backslash° .
Magnetic spectrograph, enriched target (1971Da16).
(pol t,p): E=17 MeV. Polarized beam. Measured $\sigma(\theta)$,
analyzing power, $A_y(\theta)$, $\theta=10$ \backslash° -60 \backslash° .
Enriched target, magnetic spectrograph, FWHM \approx 40 keV
(1980A111).
E=17 MeV. Polarized beam. Measured $\sigma(\theta)$, analyzing
power, $A_y(\theta)$, $\theta(\text{c.m.})\approx 15$ \backslash° to 60 \backslash° , for
reaction to 2620, 3^+ level. Enriched target, magnetic
spectrograph (1977Bo11).

 ^{60}Ni Levels

E(A),L(A) From 1980A111.

E(level) [†]	L [†]	Comments
0.0	0	
1338 10	2	
2160	2	
2293 10	0	
2512 10	4	
2620		E(level): known $J^{\pi}=3^+$ level. $\sigma(\theta)$ and analyzing power reproduced reasonably well by sequential transfer reaction calculation (1977Bo11).
3120 10		E(level): L=2+4 doublet proposed by 1969Jo04.
3190 10		
3272 10	(2)	
3318 10		
3394 10	2	
3737 10		
3875 10		
4009 10		
4042 10	3	
4321 10		E(level): probable doublet, L=(2+?).
4359 10		
4577 10	2	
4849 10		
5012 10	4	
5064 10	(1)	
5233 10	4	
5347 10		
5398 10	3	
5443 10	2	
5531 10	(0)	
5643 10		
5925 10		
5985 10		
6062 10		
6116 10		
6149 10		
6178 10	(1)	
6230 10		
6291 10		

Continued on next page (footnotes at end of table)

${}^{58}\text{Ni}(\text{t,p})$, (pol t,p) [1971Da16](#) (continued)

${}^{60}\text{Ni}$ Levels (continued)

E(level)[†]

6324 *10*

6355 *10*

6463 *10*

6586 *10*

[†] From [1971Da16](#), except as noted. L from comparison of $\sigma(\theta)$ with levels of known spins.