

$^{60}\text{Ni}(^3\text{He,t})$  1978Zi01

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

$E(^3\text{He})=38$  MeV. Measured  $\sigma(\theta)$ ,  $\theta(\text{lab.})=2.5^\circ-65^\circ$ . Magnetic spectrograph,  $\text{FWHM}\approx 55$  keV (1978Zi01).

$E(^3\text{He})=24$  MeV. Measured  $\sigma(\theta)$ ,  $\theta(\text{lab.})=10^\circ-80^\circ$ .  $\Delta E$ -E semi telescopes,  $\text{FWHM}=40-60$  keV (1973Ru03).

Others: 1971Be29, 1972Be38, 1983Be24.

2007Ze06: Extracted differential cross section for transition to final stage with known Fermi strength, in this case  $0^+$  level at 2.54 MeV.

 $^{60}\text{Cu}$  Levels

E(level) <sup>†</sup>	L <sup>@</sup>	Comments
0.0 <sup>‡</sup>	2	
62 <sup>‡</sup>	(1)	L: 1973Ru03 obtained (0+2).
287 5	2	
324 5		
357 5		
455 <sup>‡</sup>	4	L: 1973Ru03 obtained (2+4).
555 5	4	
587 5	2	
667 <sup>‡</sup>		L: 1973Ru03 obtained (0+2).
779 <sup>‡</sup>	4	
900 <sup>‡</sup>	4	L: 1973Ru03 obtained (2+4).
943 <sup>‡</sup>	(1)	
1333 10	(1)	
1432 10	4	
1492 10	4	
1594 10	6	
1646 10	(2)	
1694 10	4	
1768 10		L: 1973Ru03 obtained (0+2).
1887 10	4	
1918 10	(1)	
1981 10	2	
2170 10	2	L: 1973Ru03 obtained (0+2).
2231 10	2	
2286 10	2+4	
2344 10	2+4	
2474 10	4	
2540 <sup>‡</sup>	0	E(level): IAS $^{60}\text{Ni}(\text{g.s.})$ (1973Ru03).
2593 10		
2633 10		
2726 10	(2)	
2791 10	2	
2888 10	(2)	
2915 10	2+4	
3001 10	2	
3044 10	(2)	
3094 10	(2)	
3162 10	4	
3282 10		
3344 10	(4)	
3452 10	(2)	
3592 10	2+4	

Continued on next page (footnotes at end of table)

${}^{60}\text{Ni}({}^3\text{He,t})$  [1978Zi01](#) (continued) ${}^{60}\text{Cu}$  Levels (continued)

<u>E(level)<sup>†</sup></u>	<u>L<sup>@</sup></u>	<u>Comments</u>
3705 <i>10</i>	2+4	
3874 <sup>‡</sup>	2&	E(level): IAS ${}^{60}\text{Ni}(1332)$ ( <a href="#">1973Ru03</a> ).
3980 <sup>#</sup>		

<sup>†</sup> From [1978Zi01](#), except as noted. There is good agreement between the results of [1973Ru03](#) and [1978Zi01](#).

<sup>‡</sup> Used for energy calibration ([1978Zi01](#)).

<sup>#</sup> From [1973Ru03](#).

<sup>@</sup> From comparisons of  $\sigma(\theta)$  with coupled-channels calculations ([1978Zi01](#)), except as noted.

<sup>&</sup> From [1973Ru03](#).