

⁶²Ni(d,α), (pol d,α) 1983Na12,1972Se05

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

(pol d,α) E(d)=78 MeV. Measured $\sigma(\theta)$ for $\theta(\text{c.m.})=8^\circ-48^\circ$, $A_y(\theta)$ for $\theta(\text{c.m.})=8^\circ-30^\circ$. Magnetic spectrograph, enriched target (97.9%). FWHM=55 keV (1983Na12). See 1988Na01 from the same group for theoretical analysis.

(d,α) E(d)=15 MeV. Measured $\sigma(\theta)$ for $\theta(\text{c.m.})\approx 30^\circ$ to 110° . Enriched target (99%). FWHM $\approx 20-25$ keV (1972Se05).

⁶⁰Co Levels

E(level) [†]	J π [‡]	L [#]	Comments
0.0	5 ⁺	4	
57 10		2	
278 10		4	
288 10		(4)	
433 10		(2,6)	
504 10		2	
539 10		2	
612 10	3 ⁺	2	
735 10		0+2	
782 10		4	
1004 10		4	
1125 10		(4)	
1210 10	6 ⁺	6 [@]	L: (0+2) (1972Se05).
1380 10	6 ⁺	6 [@]	L: 3 (1972Se05).
1510 10	7 ⁺	6 [@]	
1639 10			
1788 10	4 ⁺	4 [@]	
1883 10			
1982 10			
2046 10			
2074 10			
2131 10		(5)	
2221 10			
2280 10	5 ⁺	4	
2346 10	5 ⁺	4 [@]	
2452 10			
2589 10			
2713 10		3	
2768 10		(3,4)	
2884 10	5 ⁺	4 [@]	
3108 10	7 ⁺	6 [@]	
3212 10			
3288 10			
3350 10			
3416 10			
3469 10	7 ⁺	6 [@]	L: 2 (1972Se05).
3529 10			
3560 [@] 20	5 ⁺	4 [@]	
3674 10	7 ⁺	6 [@]	
3780 20	7 ⁺	6 [@]	
4040 30	7 ⁺	6 [@]	
4280 30		4 [@]	
4550 30	7 ⁺	6 [@]	

Continued on next page (footnotes at end of table)

 ${}^{62}\text{Ni}(\text{d},\alpha)$, (pol d,α) [1983Na12](#),[1972Se05](#) (continued) ${}^{60}\text{Co}$ Levels (continued)

<u>E(level)[†]</u>	<u>J^π[‡]</u>	<u>L[#]</u>
4700 30	7 ⁺	6 [@]
4800 30	7 ⁺	6 [@]

[†] From [1972Se05](#) for E<3.7 MeV, from [1983Na12](#) for E>3.7 MeV.

[‡] From comparison with vector analyzing powers for other nuclei with known properties ([1983Na12](#)).

[#] From [1972Se05](#), except as noted. L-values of [1972Se05](#) are from comparison with DWBA. L-values of [1983Na12](#) are from comparison with $\sigma(\theta)$ for other nuclei with known properties.

[@] From [1983Na12](#).