^{60}Ni(d,d′), (pol d,d′) 1965Jo11

History

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

For optical-model parameters from analyzing power(θ), see 1980Ha14, and 1987Nu03.
Others: 1965Di09, 1971Ka32, 1974Ba78.

(d,d′) E= 12 MeV. Measured $\sigma(\theta)$, θ(c.m.)≈20 \° to 100 \° in steps of 5 \° or 10 \°. Magnetic spectrograph, FWHM≈ 25 keV (1969Jo01).
E=15 MeV. Measured $\sigma(\theta)$, θ=25 \° to 157 \° in steps of 5 \°. Semi detectors, magnetic spectrograph, FWHM≈ 70 keV (1965Jo11).

(pol d,d′) E= 15 MeV. Measured $\sigma(\theta)$ and analyzing power versus θ, θ(c.m.)≈20 \° to 160 \°. Semi telescope, enriched target (1974Ba74).

(pol d,d) E=9, 12 MeV. Measured $\sigma(\theta)$, T11, T20, T21, T22 versus θ (1979Bu07).
E= 22 MeV. FWHM=90 keV. Measured $\sigma(\theta)$, T11, T20, T21, T22 versus θ for θ(lab)=30 \° to 170 \° (1987Ta15).

^{60}Ni Levels

E(level)†	L†	β_L†	Comments
0			
1330 *5*	2	0.254#	β_L: others: 0.24 (1974Ba74), 0.30 (1965Jo11).
2160 *10*			
2290 *10*			
2510 *15*	4	0.11@	
2630 *15*			
3130 *15*	3	0.09	L: there is no adopted 3^- level in this energy region. In particular, L(α,α')=2 for a level at 3110 keV which implies $J^\pi=2^+$.
3310 *15*	(2)	0.05	
3380 *15*			
3700‡ *20*			
3910 *20*			
4050 *20*	3	0.176#	β_L: others: 0.17 (1974Ba74), 0.19 (1965Jo11).
4350‡ *20*			
4530 *25*	(3)	0.06	
4630 *25*			
4850 *25*			
5020 *25*			
5140 *25*			
5260 *25*	(2)	0.10	
5460 *30*			
5680 *30*			
5820 *30*			
5950 *30*			
6180 *30*			

† From 1965Jo11, except as noted.
‡ Probable multiplet.
# From 1969Jo01.
@ From 1974Ba74.