

⁵⁸Ni(d,d') **1962Jo05,1971Du09**

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Caroline D. Nesaraja, Scott D. Geraedts and Balraj Singh		NDS 111,897 (2010)	12-Jan-2010

2001Ba18: E=170 MeV, $\sigma(\theta)$.

1992Ra31: E=34 and 80 MeV; measured $\sigma(\theta)$; strong absorption model analysis; deduced deformation parameters.

E=15 MeV, FWHM≈40 keV (1962Jo05), 80 MeV (1971Du09), E=52 MeV, FWHM≤500 keV (1968Hi09), FWHM=250-300 keV (1968Tj01).

Measured: $\sigma(E,\theta)$ (1974Co06,1971Du09,1969Jo01,1968Tj01,1968Hi09, 1962Jo05).

Additional information 1.

2008Gr22: E=37 MeV. measured deuteron spectra, $\sigma(\theta)$ from 16-61°, deduced giant resonances at ≈16.5 MeV.

⁵⁸Ni Levels

E(level) [†]	L	Comments
0.0		
1450	2	Relative=600. $\beta_2=0.175$ 20 (1971Du09) others: 0.12 (1968Tj01), 0.19 (1968Hi09), 0.232 (1969Jo01), 0.147 (1992Ra31). L: from 1971Du09.
2460		Relative=60.
2770		Relative=15.
3040		Relative=49.
3270		Relative=80.
3520		Relative=19.
3570		Relative=30.
3870		Relative=16.
3900		Relative=13. E(level): multiple peak.
4100		Relative=13.
4430		E(level): weak group.
4500	3	Relative=65. L: from 1969Jo01. $\beta_3=0.123$ (1969Jo01). Other: 0.083 (1968Tj01). Relative=24.
4750		

[†] From 1962Jo05.