

${}^{60}\text{Ni}(\pi^+, \pi^{+'}), (\pi^-, \pi^{-'})$ 1990CI02

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

$(\pi^+, \pi^{+'}), (\pi^-, \pi^{-'})$: E= 162 MeV. FWHM= 190 keV. For the 8^- states.

Measured σ at $\theta(\text{c.m.})=65.3^\circ, 80.3^\circ, \text{ and } 90.3^\circ$ for π^+ ; and at $65.3^\circ, \text{ and } 80.3^\circ$ for π^- (1990CI02). E= 180 MeV. $\sigma(\theta)$ for giant-quadrupole resonance at 16.4 MeV (1989Oa01).

$(\pi^+, \pi^{+'}), (\pi^-, \pi^{-'})$: E= 50 MeV. Measured $\sigma(\theta)$ (1988Mi14), see also 1987Wr04 (E= 30 MeV), and 1986Fi12 (E= 65 MeV) from the same group.

For theoretical analysis of the 30 MeV data see 1988Fr10.

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

E(level) [†]	J π [#]	E(level) [†]	J π [#]	E(level) [†]	J π [#]	E(level) [†]	J π [#]
0.0 [‡]	0 ⁺	5110 20	8 ^{-@}	6910 20		9210 30	8 ⁻
1330 [‡]	2 ⁺	5700 40		7570 20	8 ⁻	13910 40	8 ⁻
4040 [‡]	3 ⁻	6220 20		8960 30	8 ⁻		

[†] From 1990CI02, except as noted.

[‡] From Adopted Levels.

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[@] From comparison of $\sigma(\theta)$ to DWIA calculation.