

$^{60}\text{Ni}(\text{n},\gamma)$ E=0.01-90 keV [1974Br39,1978Be04](#)

Type	History		
	Author	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh	ENSDF	20-Jan-2020

[1978Be04](#): E=7-70 keV, time of flight. Measured E_γ , I_γ , semi, natural target, 47.6 keV resonance.

[1974Br39](#): E=thermal-17 keV, time of flight. Measured $\sigma(E(\text{n}),E_\gamma)$, semi, enriched target, 2.2 and 12 keV resonance.

Others: [1968Al18](#) (E=10-90 keV), [1973Bi11](#) (E $\approx$ 5-60 keV).

For giant resonance, see [1984So16](#).

 ^{61}Ni Levels

E(level) [†]	J ^π [‡]	Comments
0.0	3/2 ⁻	
67.0 14	5/2 ⁻	
283.0 10	1/2 ⁻	
7822.5 9	3/2 ⁻	E(level): p-wave res. 2.249 keV (2018MuZY).
7832.5 9	1/2 ⁺	E(level): s-wave resonance of E(n)=12.423 keV from (2018MuZY).
7868.5 10	1/2 ⁻	E(level): p-wave res. 47.6 keV from (1978Be04).

[†] From Adopted Levels for bound levels, deduced by E(n)+ S(n) for resonances.

[‡] From Adopted Levels.

 $\gamma(^{61}\text{Ni})$

$E_i(\text{level})$	J_i^π	E_γ [†]	I_γ [‡]	E_f	J_f^π	Comments
7822.5	3/2 ⁻	7539	289	283.0	1/2 ⁻	
		7755	814	67.0	5/2 ⁻	
		7822	100	0.0	3/2 ⁻	
7832.5	1/2 ⁺	7549		283.0	1/2 ⁻	Partial radiation $\Gamma_\gamma=0.29$ eV 5 (1978Be04).
		7832		0.0	3/2 ⁻	Partial radiation $\Gamma_\gamma=10.51$ eV 8 (1978Be04).
7868.5	1/2 ⁻	7868		0.0	3/2 ⁻	Partial radiation $\Gamma_\gamma=0.28$ eV 7 (1978Be04).

[†] From level-energy differences.

[‡] Relative intensities normalized to 100 for the g.s. transition ([1974Br39](#)).

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Level Scheme

Intensities: Relative photon branching from each level

