

${}^{60}\text{Ni}(\gamma, \gamma')$ 1970Me18, 1970Me08

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

$E\gamma < 4.5$ MeV. Measured $\sigma(e, e'\gamma)$, $\theta = 98^\circ$ and 127° , semi. Nuclear resonance fluorescence (1970Me18).
 $E\gamma = 1332$ keV. Measured resonance fluorescence, scin (1970Me08).
 For the giant dipole resonance, see 1982Bo09, 1981Bo35, 1978Bo27.
 All data are from 1970Me18, except as noted.

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

E(level) [†]	J^π [†]	$T_{1/2}$ [‡]	Comments
0.0	0^+		
1332	2^+	0.715 ps 16	$T_{1/2}$: $\Gamma = 0.638 \times 10^{-3}$ eV 14 from $\Gamma(0)^2/\Gamma = 0.638 \times 10^{-3}$ eV 14 (1970Me08). B(E2) \uparrow : 0.0938 20 (1970Me08).
3124	2^+	>23 fs	$T_{1/2}$: $\Gamma = 8 \times 10^{-3}$ eV 12 from $\Gamma(0)^2/\Gamma = 0.07 \times 10^{-3}$ eV 10 (1970Me18).
3194	1^+	19 fs 7	$T_{1/2}$: $\Gamma = 24 \times 10^{-3}$ eV 8 from $\Gamma(0)^2/\Gamma = 0.63 \times 10^{-3}$ eV 20 (1970Me18).
3269	2^+	>22 fs	$T_{1/2}$: $\Gamma < 21 \times 10^{-3}$ eV from $\Gamma(0)^2/\Gamma < 0.5 \times 10^{-3}$ eV (1970Me18).
4008	2^+	21 fs 7	J^π : $J=2$ from ratio of resonantly scattered γ rays at 98° and 127° . $T_{1/2}$: $\Gamma = 22 \times 10^{-3}$ eV 7 from $\Gamma(0)^2/\Gamma = 3.2 \times 10^{-3}$ eV 5 (1970Me18).
4020	1^+	12 fs 3	J^π : $J=1$ from ratio of resonantly scattered γ rays at 98° and 127° . $T_{1/2}$: $\Gamma = 37 \times 10^{-3}$ eV 9 from $\Gamma(0)^2/\Gamma = 11.1 \times 10^{-3}$ eV 15 (1970Me18).

[†] From Adopted Levels.

[‡] From Γ . Includes uncertainty in branching; adopted branching ratios were used to calculate total Γ .