

Coulomb excitation **2001Ke08**

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

2001Ke08,2001Ke02: ${}^{60}\text{Ni}$ beam on a magnetized target consisting of C, Gd, Ta, and Cu layers, $E=155, 160$ MeV. ${}^{12}\text{C}({}^{60}\text{Ni}, {}^{12}\text{C})$, measured ${}^{12}\text{C}-\gamma$ (θ), $T_{1/2}$ DSA.

1969CI05: 28– 38 MeV ${}^{16}\text{O}$, 65– 70 MeV ${}^{32}\text{S}$: Measured $\sigma(E(\text{HI}),\theta)$, magnetic spectrograph, FWHM at 60° was 65 keV and 160 keV for ${}^{16}\text{O}$ and ${}^{32}\text{S}$ respectively, enriched target.

1974Le13: 70 MeV ${}^{32}\text{S}$: Measured $\sigma(E\gamma,\theta({}^{32}\text{S}),\theta({}^{32}\text{S},\gamma))$.

Others: **1960An07** (${}^{14}\text{N}, {}^{14}\text{N}'$), **1962St02** (α, α'), **1973Fi15** (${}^{35}\text{Cl}, {}^{35}\text{Cl}'$), **1978Ha13** (${}^{32}\text{S}, {}^{32}\text{S}'$).

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

E(level)	J^π	$T_{1/2}$	Comments
0			
1332.5 10	2 ⁺	0.91 ps 2	B(E2) $\uparrow=0.0928$ 20 (1969CI05,1974Le13); $g=0.16$ 3 (2001Ke08) B(E2) \uparrow : measurement of 1969CI05 corrected by 1974Le13 . $T_{1/2}$: from 2001Ke08 . Other: 0.69 ps 5 from DSA measurement of 1973Fi15 .
2158.6 15	2 ⁺		
2505.7 15	4 ⁺	3.3 ps 10	$T_{1/2}$: from 2001Ke08 .

 $\gamma({}^{60}\text{Ni})$

E_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π
826.1	2158.6	2 ⁺	1332.5	2 ⁺
1173.2	2505.7	4 ⁺	1332.5	2 ⁺
1332.5	1332.5	2 ⁺	0	

Coulomb excitation 2001Ke08Level Scheme