
$^{12}\text{C}(^{13}\text{C}, ^{13}\text{N})$ 1988Vo06, 1989Be50, 1987Ad07

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	J. H. Kelley, J. E. Purcell and C. G. Sheu		NP A968, 71 (2017)	1-Jan-2017

1986Vo02: $^{12}\text{C}(^{13}\text{C}, ^{13}\text{N})$ E=30 MeV/nucleon, measured $\sigma(E(^{13}\text{N}))$, $\sigma(E(^{13}\text{B}))$. ^{12}B deduced GDR excitation.

1987Ad07: $^{12}\text{C}(^{13}\text{C}, ^{13}\text{N})$ E=390 MeV, measured $\sigma(\theta)$. Deduced reaction mechanism.

1988Vo06: $^{12}\text{C}(^{13}\text{C}, ^{13}\text{N})$ E=30 MeV/nucleon, measured σ .

1989Be50, 1993Be19: $^{12}\text{C}(^{13}\text{C}, ^{13}\text{N})$ E=50 MeV/nucleon, measured $\sigma(\theta)$. ^{12}B deduced GDR IAS. DWBA.

1993Bo03, 1999Bo26: $^{12}\text{C}(^{13}\text{C}, ^{13}\text{N})$ E=379.1 MeV, measured spectra, Q, $\sigma(\theta)$ In some cases.

1995Ic01: $^{12}\text{C}(^{13}\text{C}, ^{13}\text{N})$ E=100 MeV/nucleon, measured Q-value spectra, $\sigma(\theta)$. Deduced reaction mechanism, spin-flip, nonspin-flip excitation evidence.

^{12}B Levels

E(level)	Γ	Comments
0 ^{†‡#}		
0.95×10 ³ ^{†‡#}		
1.67×10 ³ [†]		
2.62×10 ³ [†]		
3.39×10 ³ [†]		
4.46×10 ³ ^{†‡#}		
≈5.5×10 ³ [#]		
7.7×10 ³ ^{†‡#}	I	E(level), Γ : From (1989Be50, 1993Be19). Identified as the Spin Dipole Resonance (1995Ic01).
≈8×10 ³		Identified as the Giant Dipole Resonance (1995Ic01).
10.1×10 ³ [#]		
18.2×10 ³ [#]		

[†] Reported in (1988Vo06, 1999Bo26).

[‡] Reported in (1989Be50, 1993Be19).

[#] Reported in (1987Ad07).