

$^{13}\text{C}(\text{n},\text{p})$ 1996Wa06

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	J. H. Kelley, C. G. Sheu and J. E. Purcell		NDS 198,1 (2024)	1-Aug-2024

[1987Br32](#): $^{13}\text{C}(\text{n},\text{p})$ E= 65 MeV with neutrons produced via $^7\text{Li}(\text{p},\text{n})$ at the UC Davis laboratory. Measured $\sigma(\text{E}(\text{p}),\theta)$ for $\theta=0^\circ$ to 40° utilizing a dipole magnet and $\Delta\text{E-E}$ telescopes. Data presented only for ^{12}C target.
[1988Ja01](#): $^{13}\text{C}(\text{n},\text{p})$ E=198 MeV. Measured $\sigma(\text{E}(\text{p}),\theta)$ at $\theta=0^\circ$ at the TRIUMF charge exchange facility. Related $\sigma(0^\circ)$ to B_{GT} for $^{13}\text{B}_{\text{g.s.}}$.
[1992So02](#): $^{13}\text{C}(\text{n},\text{p})$ E=60 to 260 MeV. Measured $\sigma(\text{E}(\text{p}),\theta)$ at $\theta=0^\circ$ to 10° for the ground state G-T transition at the LANL/WNR facility. Obtained information on the volume integral of the spin-isospin term of the effective N-N interaction and on the relation between $\sigma(\theta\approx 0^\circ)$ and B_{GT} .
[1996Wa06](#): $^{13}\text{C}(\text{n},\text{p})$ E= 65 MeV. Measured $\sigma(\text{E}(\text{p}),\theta)$ for $\theta=0^\circ$ to 40° at the UC Davis laboratory. Observed peaks at $E_x=0, 3.5, 6.5, 7.6, 10.2$ MeV. Suggest the 6.5 and 7.6 MeV states are spin dipole in character while the broad 10.2 MeV state is likely the giant E1 resonance.
[1996Ma58](#): $^{13}\text{C}(\text{n},\text{p})^{13}\text{B}_{\text{g.s.}}$ E= 118 MeV. Measured $\sigma(\text{E}(\text{p}),\theta)$ for $\theta=0^\circ$ to 19° at IUCF. Analyzed $\sigma(0^\circ)$ vs. G-T strength.
[1998Ha24](#): $^{13}\text{C}(\text{n},\text{p})$ $E_n=118$ MeV. Measured $\sigma(E_p,\theta=0^\circ$ and $7.5^\circ)$ at IUCF. General discussion.

 ^{13}B Levels

E(level) [†]	Comments
0	
3.5×10^3	
6.5×10^3	
7.6×10^3	
10.2×10^3	Γ : Broad.

[†] From ([1996Wa06](#)). Peaks include unresolved states.