^{13}C(^{13}N,^{13}C)

History

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

1996St05: ^{13}C(^{13}N,^{13}C) E=57,105 MeV; measured $\sigma(\theta=0°)$. Populated $J^{\pi}=1/2^{-}$ ground states along with single and double excitation of the ≈3.5 MeV ^{13}N and ^{13}C $3/2^{-}$ states. Analyzed GT/Fermi strengths. See also (1997Sh11).

Theory:

1993Kr01: ^{13}C(^{13}N,^{13}C) $E_{c.m.}$=7.5-10 MeV; calculated $\sigma(\theta)$ analyzed effective n-p interaction.

1997Be33: E=105 MeV/nucleon; analyzed heavy-ion charge-exchange reactions.

2020Li51: Eikonal model analysis of $\sigma(\theta)$ at E=105 MeV/nucleon.

^{13}N Levels

E(level)	J^{π} †
0	$1/2^{-}$
3.50×10^{3}	$3/2^{-}$

† From Adopted Levels.