$$^{32}S(^{13}C,^{12}C) \quad \textbf{1976We21}$$

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Jun Chen and Balraj Singh	NDS 199,1 (2025)	30-Sep-2024

1976We21: E=36 MeV ^{13}C beam was produced from the University of Texas E(n) tandem. Target was about 6 μg/cm^2 Li$_2$S evaporated onto a carbon backing. Reaction products were detected with four silicon surface-barrier detectors and a ΔE-E silicon telescope. Measured $\sigma(\theta)$. Deduced J, π, spectroscopic factor for g.s. and 841 level from DWBA analysis.

1983Os08: DWBA calculation of $\sigma(\theta)$.

$$\underline{^{33}S \text{ Levels}}$$

Spectroscopic factor C^{2}S: C^{2}S=$\sigma(\theta)_{exp}/\sigma(\theta)_{DWBA}/(N{\times}g)$, where N is the normalization factor and g=$(2J_f+1)/(2J_i+1)$.

E(level)†	C^{2}S†
0	1.64
841	0.48

† From 1976We21.