

$^{13}C(d,t)$     **1979Co08**

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

- 1968Te04:  $^{13}C(d,t)$  E=12.1-14.0 MeV, measured  $\sigma(E, E_t, \theta)$ .  $^{12}C$  deduced S.
- 1971De03:  $^{13}C(\text{pol. d,t})$   $E_d=12.1$  MeV, measured vector analyzing power  $P_d(\theta)$ .
- 1971Pu01:  $^{13}C(d,t)$  E=0.4-0.85 MeV, measured  $\sigma(E, \theta)$ . Deduced optical-model parameters.
- 1972Br27:  $^{13}C(d,t)$  E=28 MeV, measured  $\sigma(E_{d'})$ ,  $\sigma(\theta)$ .  $^{12}C$  levels deduced isospin mixing, S,  $\beta$ .
- 1973Za06:  $^{13}C(d,t)$  E=13.6 MeV, measured  $\sigma(E_t, \theta)$ .
- 1974Lu06:  $^{13}C(\text{pol. d,t})$  E=15 MeV, measured  $\sigma(E_t, \theta)$ ,  $A(\theta)$ .  $^{12}C$  level deduced S, J-dependence, J-admixtures. DWBA analysis.
- 1975Za06:  $^{13}C(d,t)$ , analyzed data. Deduced J dependence of  $\sigma$ .
- 1977Li02:  $^{13}C(d,t)$  E=24-26 MeV, measured  $\sigma(\theta)$ .  $^{12}C$  levels deduced S. DWBA analysis.
- 1978Da17:  $^{13}C(\text{pol. d,t})$  E=13.0 MeV, measured vector analyzing power  $iT_{11}(\theta)$ ,  $\sigma(\theta)$ . Deduced optical model parameters. DWBA analysis.
- 1979Co08:  $^{13}C(d,t)$  E=29 MeV, measured  $\sigma(\theta)$ ,  $A_y(\theta)$ .  $^{12}C$  levels deduced isospin mixing. DWBA calculations.
- 1988Go02:  $^{13}C(d,t)$  E=18 MeV, measured  $\sigma(\theta)$ . Deduced model parameters, spectroscopic factors. Exact, finite-range DWBA.
- 1988Gu20:  $^{13}C(d,t)$  E=18 MeV, measured  $\sigma(\theta)$ . DWBA.
- 1990Gu26:  $^{13}C(d,t)$  E=18 MeV, analyzed  $\sigma(\theta)$ . Deduced reaction mechanism, differences. DWBA analysis.
- 1995Gu22:  $^{13}C(d,t)$  E=8-50 MeV, analyzed  $\sigma(\theta)$ . Deduced vertex constants. Combined DWBA, dispersion theory approaches.
- 2007Co01:  $^{13}C(d,t)$  E=0.5-1.65 MeV, measured  $\sigma(\theta)$ .

 $^{12}C$  Levels

E(level)
0
$4.4 \times 10^3$
$7.65 \times 10^3$
$12.71 \times 10^3$ <sup>†</sup>
$15.11 \times 10^3$ <sup>†</sup>
$16.11 \times 10^3$ <sup>†</sup>

<sup>†</sup> See (1972Br27, 1977Li02, 1979Co08) for measurements of  $^{12}C^*(12.7, 15.1, 16.1$  MeV) and studies of the charge-dependent matrix element between  $^{12}C^*(12.71, 15.11)$ .