

Table 12.50 from (2017KE05): Measurements of $^{12}\text{C}(^3\text{He}, \text{t})$

| Beam Energy (MeV) | Measured | Deduced | References |
|-------------------|---|---|--------------------------------|
| 40-50 | $\sigma(E_{3\text{He}}, \theta), \sigma(E_{\text{t}}, \theta)$ ^a | OM parameters, $^{12}\text{C}, ^{12}\text{N}$ levels | (1969BA06) |
| 36 | $\sigma(E_{3\text{He}}, \theta), \sigma(E_{\text{t}}, \theta)$ ^a | $^{12}\text{C}, ^{12}\text{N}$ levels, J^π , isobaric analogs | (1970AR05) |
| 217 | $\sigma(E_{\text{t}}, \theta)$ | ^{12}N levels reaction mechanism | (1974WI16, 1976WI05) |
| 49.3 | $\sigma(E_{\text{t}}, \theta)$ | ^{12}N levels, Γ | (1976MA15) |
| 44 | $\sigma(E_{3\text{He}}, \theta), \sigma(E_{\text{t}}, \theta)$ ^a | ^{12}N levels, Γ, J^π, T | (1976CE02) |
| 52 | $\sigma(E_{\text{t}}, \theta)$ | reaction mechanism | (1981AA01) |
| 170 | $\sigma(E_{3\text{He}}, \theta), \sigma(E_{\text{t}}, \theta)$ ^a | $^{12}\text{C}, ^{12}\text{N}$ IAS of levels and GDR | (1982TA05) |
| 75, 81 | $\sigma(E_{\text{t}}, \theta)$ | ^{12}N levels, $\Delta L = 1$ transition strength | (1984VA43, 1989VA09) |
| 197 | $\sigma(E_{\text{t}}, \theta = 15^\circ)$ | ^{12}N IAS of ^{12}C GDR | (1984TA11) |
| 0.6-2.3 GeV | $\sigma(E_{\text{t}}, \theta)$ | G-T, spin-flip and Δ isobar excitations | (1987BE25, 1988RO17) |
| 76, 200 | $\sigma(E_{\text{t}}, \theta = 0^\circ)$ | low-lying transition strengths | (1991JA04) |
| 450 | $\sigma(E_{\text{t}}, \theta); ^{12}\text{N}^*$ proton decay | ^{12}N levels, J^π | (1994HA40, 1998IN02, 1998HA43) |
| 420 | $\sigma(E_{\text{t}}, \theta < 2.5^\circ)$ | ^{12}N level transition strength, $B(\text{GT})$ | (2007ZE06) |
| 140 | $\sigma(E_{\text{t}}, \theta = 0^\circ)$ | ^{12}N levels | (2009FU03) |
| 4.37-10.78 GeV/c | $\sigma(\theta)$ | Δ isobar excitations | (1984AB06, 1988AB08) |
| 1.5, 2, 2.3 GeV | $\sigma(E_{\text{t}}, \theta)$ | Δ isobar excitations | (1986CO03) |
| 0.2, 0.9, 2 GeV | $\sigma(E_{\text{t}}, \theta)$ | Δ isobar excitations | (1987EL14) |
| 2 GeV | triton plus π^+ or p coincidence | Δ isobar resonance decay | (1991HE12, 1992HE08) |
| 35 | $\sigma(E_{\text{t}}, \theta = 10^\circ)$ | ^{12}N levels | (2013HA39) |

^a Also measured ($^3\text{He}, ^3\text{He}'$).