
 $^{12}\text{C}(\alpha, t)$ **1972Ha08**

| 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 |

1969Ga11: $^{12}\text{C}(\alpha, t)$ E=56 MeV; measured $\sigma(\theta, E_{t0})$ for $\theta=10^\circ$ to 60° .

1972Ha08: $^{12}\text{C}(\alpha, t)$ E=104 MeV; measured $\sigma(\theta, E_{t0})$ for $\theta=10^\circ$ to 70° . Compared with $(\alpha, ^3\text{He})$ cross sections. Deduced absolute S=1.48.

1990Go05: $^{12}\text{C}(\alpha, t)$ E=160 MeV; measured $\sigma(E_{t0}, \theta=20.7^\circ)$.

1994Da32: $^{12}\text{C}(\alpha, t)$ E=90 MeV; measured $\sigma(\theta, E_{t0})$ for $\theta \approx 20^\circ - 80^\circ$; analyzed nuclear rainbow effects.

 ^{13}N Levels

| E(level) | J^π | L | S | Comments |
|----------|---------|---|------|---|
| 0 | $1/2^-$ | 1 | 1.82 | J^π, L, S : From DWBA analysis in (1972Ha08). |