

$^{12}\text{C}(^3\text{He},2\text{p})$

| Type | Author | History | Citation | Literature Cutoff Date |
|-----------------|--|---------|------------------|------------------------|
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[1971St21](#),[1971StZL](#): $^{12}\text{C}(^3\text{He},2\text{p})$ E=40 MeV; measured $\sigma(E(p1), \theta(p1), \theta(p2)), \sigma(\theta)$; deduced p-p final-state interaction contribution. The angular distributions for the transitions to $^{13}\text{C}^*(0,3.85)$ have been studied.

[1974No01](#): $^{12}\text{C}(^3\text{He},2\text{p})$ E=12,13.5,14 MeV; measured $\sigma(E(p,\theta), pp(\theta))$. The sequential proton decay of via various ^{14}N states to $^{13}\text{C}_{\text{g.s.}}$ was measured.

[1976StYX](#): $^{12}\text{C}(^3\text{He},2\text{p})$ E=60 MeV; measured σ .

[1980StZO](#): $^{12}\text{C}(^3\text{He},2\text{p})$ E=60 MeV; measured $\sigma(E(^2\text{He}),\theta(^2\text{He}))$ via pp-coin; deduced final state interaction effects. Zero-range, exact finite-range, microscopic DWBA calculations. Kinematically complete coincidence measurement,charge exchange reaction.

[1980Aa01](#), [1984Aa01](#): $^{12}\text{C}(^3\text{He},2\text{p})$ E=52 MeV; measured inclusive $\sigma(\theta p), \sigma(Ep), \sigma(\theta1,\theta2,Ep1), \sigma(\theta1,\theta2)$; deduced reaction mechanism, σ vs target mass. Quasifree breakup calculations.

[1986Ka44](#): $^{12}\text{C}(\text{pol. } ^3\text{He},2\text{p})$ E=33 MeV; measured $\sigma(\theta)$, analyzing power vs E1, E2, θ_1, θ_2 ; deduced j-dependence. Deduced level normalization. Sequential breakup model analysis. $^{13}\text{C}^*(3.85)$ is strongly populated. $^{13}\text{C}^*(0,8.0(\text{broad}),9.5)$ have also been populated.

 ^{13}C Levels

| E(level) | Comments |
|----------------|--|
| 0 | Q=-2.77 MeV (1971St21). E(level): Reported in (1971St21 , 1974No01 , 1986Ka44). |
| 3850 | E(level): Reported in (1971St21 , 1986Ka44 : strongly populated). |
| ≈ 8000 | Γ =broad (1986Ka44). |
| 9500 | E(level): Reported in (1986Ka44). |