^{12}C(p,α),^{12}C(p,pt)   2004Ti06

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	J. H. Kelley, C. G. Sheu, J. L. Godwin, et al.	NP A745 155 (2004)	31-Mar-2004

1964Ba29: ^{12}C(p,α) E$_P$=12.7-18.3 MeV, measured α-spectra (θ,E$_P$). ^{9}B deduced levels.

1965Is05: ^{12}C(p,α) E=13 MeV, measured σ(E$_\alpha$,θ(α)), σ(E$_{P'}$,$\theta_{P'}$). ^{9}B deduced levels.

1966Ba35: ^{12}C(p,α) E=11.6 MeV, measured σ(E,θ).

1967Ac01: ^{12}C(p,α) E=38 MeV, measured σ(E$_\alpha$,θ).

1967Cr05: ^{12}C(p,α) E=30.5-45.1 MeV, measured σ(E,θ).

1969Ga03: ^{12}C(p,α) E$_P$=38 MeV, measured σ(E$_\alpha$,θ). PWBA analysis.

1969Le18: ^{12}C(p,p), (p,α) E=9-21 MeV, measured σ(E).

1970Gu06: ^{12}C(p,α) E=25-45 MeV, measured σ(θ), σ(E,θ).

1970Ko25: ^{12}C(p,α) E=665 MeV, measured σ(E).

1971Gu23: ^{12}C(p,α) E=19-45 MeV, measured σ(E,θ). Deduced reaction mechanism.

1972Ma21: ^{12}C(p,α) E=54, 43.7, 50.5 MeV, measured σ(E$_\alpha$,θ). ^{9}B levels deduced L. ^{9}B high-lying states deduced J, π.

1975Hi07: ^{12}C(p,p), (p,p'), (p,α) E=14.222-14.242 MeV, measured σ(E,θ).

1977Av01: ^{12}C(p,α) E=660 MeV, measured absolute σ.

1980Da07: ^{12}C(p,α), (p,pt) E=45.2 MeV, measured σ(E$_P$,E$_t$,θ), σ(E$_\alpha$,θ). Finite range DWBA, cluster form factors, final-state interactions.

1981Do13: ^{12}C(pol. p,α) E=72 MeV, measured σ(θ), analyzing powers vs θ. Deduced reaction mechanism. DWBA, triton cluster form factor.

1983Pe07: ^{12}C(p,α) E=42.77 MeV, measured σ(E$_\alpha$), σ(θ). Deduced optical model parameters, reaction mechanism. ^{9}B levels deduced spectroscopic strengths. DWBA analysis.

1985Ku13: ^{12}C(p,α) E=9.1 MeV, measured absolute thick target γ yields.

1985Se15: ^{12}C(p,α) E=150 MeV, measured σ(E$_P$,θ_P), charged particle yields.

1986Wa24: ^{12}C(p,α) E=72 MeV, measured angle integrated spectra. Deduced yields.

1988Ha04: ^{12}C(p,α) E=20-100 MeV, measured E$_\gamma$, I$_\gamma$, σ(θ), analyzing power vs θ.

1989Gu05: ^{12}C(p,α) E=50 MeV, measured σ(θ). Deduced model parameters, structure effects.

1975Gr40: ^{12}C(p,pt) E=75 MeV, measured Pd-, Pt-, P^{3}He-coin. Deduced reaction mechanism.

1977Gr04: ^{12}C(p,pt) E=75 MeV, measured σ(θ). ^{9}B levels deduced S.

L: from (1983Pe07).

^{9}B Levels

E(level)	J$^\pi$	T$_{1/2}$	L	Comments
0.0			1	
1.51×10^3 5				E(level): from E=1.7 MeV 2 (1962Sy01) and E=1.50MeV 5 (1965Is05).
2.32×10^3 4			3	E(level): from unpublished thesis work of C.C. Maples, phd thesis, LBL-25 (1971).
2.9×10^3 2				
6.97×10^3 6	7/2$^-$	2 MeV	3	E(level): Γ: from (1972Ma21).
11.46×10^3 25				E(level): from unpublished thesis work of C.C. Maples, phd thesis, LBL-25 (1971).