^{12}C(p,2p) 1966Ty01,1965Pu02

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	J. H. Kelley, C. G. Sheu	NP A880,88 (2012)	1-Jan-2011

1965Pu02: ^{12}C(p,2p) E=50 MeV.
1966Ty01: ^{12}C(p,2p) E=460 MeV, measured $\sigma(E_P,\theta)$, Q.
1967Go01: ^{12}C(p,2p) E=159.6 MeV, measured $\sigma(E_{P'1},E_{P'2},\theta_1,\theta_2)$.
1967Pu01:^{12}C(p,2p) E=50 MeV.
1967Yu02: ^{12}C(p,2p) E=120 MeV, measured $\sigma(E_P,\theta)$.
1969Ep01: ^{12}C(p,2p) E=57 MeV, measured $\sigma(E_P,E_\alpha)$. Deduced reaction mechanism.
1969Ja05: ^{12}C(p,2p) E=385 MeV, measured $\sigma(E_P,\theta,\Phi)$.
1970Si01: ^{12}C(p,2p) E=1 GeV, measured $\sigma(E_{p1},E_{P2},\theta_{p1},\theta_{P2})$. Deduced distorted momentum distributions for P-, S-shells of C, the triplet state of D.
1970We07: ^{12}C(p,2p) E=44 MeV, measured $\sigma(E_{p1},E_{P2})$.
1971Ha61: ^{12}C(p,2p) E=50 MeV, measured $\sigma(\theta_{pp})$.
1971Ho03: ^{12}C(p,2p) E=156 MeV, measured coplanar, non-coplanar $\sigma(E_{p1}+E_{P2})$. Deduced optical-model parameters.
1971Ku17,1971La16: ^{12}C(p,2p) E=600 MeV, measured separation-energy spectra.
1971La16: ^{12}C(p,2p) E=600 MeV.
1973Fr09: ^{12}C(p,2p) E=460 MeV, calculated σ(proton separation energy). ^{11}B levels calculated J, π, S.
1976Bh02: ^{12}C(p,2p) E=100 MeV, measured $\sigma(E_P)$, pp(θ). Deduced distorted recoil momentum distributions. DWIA analysis.
1978Ko30: ^{12}C(p,2p) E=640 MeV, measured $\sigma(\theta)$ for backward emission of fast protons.
1979De35: ^{12}C(p,2p) E=100 MeV, measured pp-coin, pp(θ). ^{11}B levels deduced excitation mechanism. DWIA calculations.
1979Ja20: ^{12}C(p,2p) E=400 MeV, measured $\sigma(E_P,\theta_P)$.
1980Sm03: ^{12}C(p,2p) E=98.7 MeV, analyzed symmetric, asymmetric energy-sharing data.
1984Vd01: ^{12}C(p,2p) E=50 MeV, measured $\sigma(\theta_{p1})$, $\sigma(\theta(^{11}B))$, $\sigma(E_{p1})$, $\sigma(E(^{11}B))$ vs momentum. Deduced reaction mechanism, residual level production σ.
1985Be30: ^{12}C(p,2p) E=1 GeV, measured angle-integrated $\sigma(E_{p1})$. Deduced proton, neutron space distribution role.
1985Do16: ^{12}C(p,2p) E=1 GeV, measured energy spectra. Deduced potential parameters.
1988Co02: ^{12}C(p,2p) E=200 MeV, measured $\sigma(E_{p1},\theta_{p1},E_{P2},\theta_{P2})$, $\sigma(E_{p1},\theta_{p1},\theta_{P2})$.
1988Ku16: ^{12}C(pol. p,2p) E=84 MeV, analyzed $\sigma(\theta)$, analyzing powers. DWIA formalism.
1989Co17: ^{12}C(p,2p) E=200 MeV, measured $\sigma(E_1,E_2,\theta_1,\theta_2)$. ^{11}B levels deduced spectroscopic factors. DWIA analysis.
1989Pi12: ^{12}C(p,2p) E=200 MeV, measured $\sigma(E_1,E_2,\theta_1,\theta_2)$. Deduced relation to inelastic scattering.
1997Ha15: ^{12}C(pol. p,2p) E=392 MeV, measured $\sigma(\theta_1,\theta_2,E_1)$, analyzing power. Deduced nuclear medium effect evidence, averaged density. DWIA analysis.
1997Te14: ^{12}C(p,2p) E=156 MeV, measured E_P, I_P, $\sigma(\theta,E_P)$.
1998Ma67,1999Ac03: ^{12}C(p,2p) E=6, 7.5 MeV, measured protons missing energy, momentum spectra. Deduced high momentum transfer reaction mechanism.
1998No04: ^{12}C(pol. p,2p) E=392 MeV, measured separation energy spectra, $\sigma(\theta)$, A_Y. Deduced small multistep process contribution, medium effects.
1999Ca11: ^{12}C(pol. p,2p) E=200 MeV, measured A_Y(THETA). Deduced quasifree dynamics, medium modification effect.
1999Ca15: ^{12}C(p,2p) E=200 MeV, measured $\sigma(E,\theta)$, pp-coin. Deduced single-step NN scattering contributions, other reaction mechanism features.
2000No03: ^{12}C(pol. p,2p) E=392 MeV, measured A_Y, spin transfer coefficients. Deduced medium effects. PWIA, DWIA calculations.
2001Ya08: ^{12}C(p,2p) E=392 MeV, measured excitation energy spectra In singles and In coincidence with light charged particles, decay branching ratios.
2003Ta03: ^{12}C(p,2p) E At 5.9, 8.0, 9.0 GeV/c, measured particle spectra, directional correlations.
2003Yo01: ^{12}C(p,2p) E=392 MeV, measured particle spectra following compound nucleus decay. ^{11}B level deduced configuration, decay branching ratio.
2004Yo06, 2004Yo08: ^{12}C(p,2p), E=392 MeV; measured excitation energy spectra, decay fragment spectra from deep-hole states. ^{11}B deduced cluster structure features.
Spectroscopic factors from (1980Aj01).

^{12}C(p,2p) 1966Ty01,1965Pu02 (continued)

^{11}B Levels

E(level)	J^{π}	$T_{1/2}$	S	Comments
0			2.0	
2.12×10^{3}			0.37	E(level): from (1965Pu02).
4.44×10^{3}			0.15	E(level): from (1965Pu02).
5.02×10^{3}			1.08	E(level): from (1965Pu02).
6.79×10^{3}			0.25	E(level): from (1965Pu02).
7.3×10^{3}?				E(level): from (1965Pu02).
$\approx8.5\times10^{3}$				
$\approx10.\times10^{3}$				
16.1×10^{3} *1*		5.3 MeV *5*		E(level): from (2003Yo01). This level and those At 21.9 MeV and 28.7 MeV are interpreted As the S-hole state (fragmented). Earlier work had reported the S-hole state At E_x=18.3 MeV *8* (1966Ty01), E_x=19.5 MeV *10* (1971La16).
$\approx19.5\times10^{3}$	$1/2^{+}$			E(level): J^{π}: see (1975Aj01).
21.9×10^{3} *2*		8.1 MeV *2*		
28.7×10^{3} *7*		9.7 MeV *25*		