

$^{12}\text{C}(\pi^+, \pi^+ \text{p})$ 1978Mo01,1980Aj01

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

- 1974Gi08: $^{12}\text{C}(\pi^+, \pi^+ \text{p})$ E=60, 112 MeV, measured $\sigma(\theta)$, $\sigma(E_p, \theta)$.
- 1977Be35: $^{12}\text{C}(\pi^+, \pi^+ \text{p})$ E=170 MeV, measured integral σ , $\sigma(E_p, \theta)$. Deduced reaction mechanism.
- 1978Co02: $^{12}\text{C}(\pi^+, \pi^+ \text{p})$ E=100 MeV, measured σ , π^- -P-coin.
- 1978Mo01: $^{12}\text{C}(\pi^+, \text{X})$, (π^-, X) , E \approx 180 MeV; measured $\sigma(E_{\pi^-})/\sigma(E_{\pi^+})$.
- 1979Zi05: $^{12}\text{C}(\pi^+, \pi^+ \text{P})$ E=180 MeV, measured ratio of σ . PWIA analysis.
- 1980Bu07: $^{12}\text{C}(\pi^+, \pi^+ \text{p})$ E=291 MeV, measured $\sigma(\theta_{\pi^+}, E_{\pi^+})$.
- 1981Pi05: $^{12}\text{C}(\pi^+, \pi^+ \text{p})$ E=245 MeV, measured $\sigma(\theta_{\pi^+}, \theta_p, E_p)$, $\sigma(\theta_{\pi^+}, \theta_p)$, $\sigma(\theta_{\pi^+})/\sigma(\theta_{\pi^-})$. Deduced consistency with quasifree scattering.
- 1981Zi01: $^{12}\text{C}(\pi^+, \pi^+ \text{p})$ E=130-200 MeV, measured $\sigma(\theta_{\pi^+}, \theta_p)$ vs scattered pion momentum.
- 1984Fa11: $^{12}\text{C}(\pi^+, \pi^+ \text{p})$ E=220 MeV, measured $\sigma(\theta_{\pi^+}, E_{\pi^+})$, $\sigma(\theta_{\pi^+}, \theta_p, E_p)$, $\sigma(\theta_{\pi^+}, \theta_p, E_{\pi^+})$, $\sigma(\theta_{\pi^+}, \theta_p)$, $\sigma(\theta_{\pi^+}, \theta_p)$ vs missing mass. Deduced reaction mechanism.
- 1984Tr09: $^{12}\text{C}(\pi^+, \pi^+ \text{p})$ E \approx resonance, measured $\sigma(\theta_p, \theta_{\pi^+})$. Deduced isobar resonance role.
- 1986Mo26: $^{12}\text{C}(\pi^+, \pi^+ \text{p})$ E=250 MeV, measured $\sigma(\theta_{\pi^+}, \theta_p)$ vs pion momentum.
- 1987Hu02: $^{12}\text{C}(\pi^+, \pi^+ \text{p})$ E=130, 150 MeV, measured $\sigma(E_{\pi^+}, E_p, \theta_{\pi^+})$. DWIA analysis.
- 1989Yo06: $^{12}\text{C}(\pi^+, \pi^+ \text{P})$ E=180 MeV, measured $\sigma(\theta_{\pi^+}, \theta_p, E_{\pi^+})$. Deduced $\sigma(\pi^+, \pi^+ \text{p})/\sigma(\pi^-, \pi^- \text{p})$ near GDR. DWIA analysis.
- 1998Mo09: $^{12}\text{C}(\pi^+, \pi^+ \text{p})$ E=500 MeV, measured $\sigma(\text{DCX})/\sigma(\text{NCX})$. Deduced nuclear wave function Δ^+ components.

 ^{11}B Levels

E(level)	J^π
0	
2.12×10^3	
4.44×10^3	$5/2^-$