

$^{12}\text{C}(\pi^+, \text{p})$  **1978Am01,1981An10**

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

1974Am01:  $^{12}\text{C}(\pi^+, \text{p})$  E=70 MeV, measured  $\sigma(\theta)$ .

1977Ja15:  $^{12}\text{C}(\pi^+, \text{p})$  E=160, 100, 200 MeV, measured proton yield.

1978Am01:  $^{12}\text{C}(\pi^+, \text{p})$  E=49.3 MeV, measured  $\sigma(\theta)$ .

1980Go16:  $^{12}\text{C}(\pi^+, \text{p})$  E=75 MeV, measured  $\sigma(\theta, E_{\text{p}})$ . Deduced reaction mechanism.

1980Mc03:  $^{12}\text{C}(\pi^+, \text{p})$  E=100, 160, 220 MeV, measured inclusive production  $\sigma(\theta)$ .

1980Mc10:  $^{12}\text{C}(\pi^+, \text{p})$  E=220 MeV, analyzed  $\sigma(\theta_{\text{p}}, E_{\text{p}})$ . Deduced possible common reaction mechanism via isobar production.

1980Th01:  $^{12}\text{C}(\pi^+, \text{p})$  E=180 MeV, measured  $\sigma(E_{\text{p}}, \theta), \sigma(E_{\text{d}}, \theta)$ .

1981An10:  $^{12}\text{C}(\pi^+, \text{p})$  E=90, 170, 180 MeV, measured  $\sigma(\theta_{\text{p}}, E_{\text{p}})$ . Deduced reaction mechanism.

1981Ka43:  $^{12}\text{C}(\pi^+, \text{p})$  E=400, 475 MeV, measured yields. Deduced two-nucleon pion absorption effects.

1981Mc02,1981Mc09:  $^{12}\text{C}(\pi^+, \text{p})$  E=100, 160, 220 MeV, measured  $\sigma(\theta, E_{\text{p}})$ , inclusive pion yields.

1982Do01:  $^{12}\text{C}(\pi^+, \text{p})$  E=32-81 MeV, measured  $\sigma(E_{\text{p}}), \sigma(\theta)$ .  $^{11}\text{C}$  levels deduced L, relative two-nucleon pickup strength.

1985La20:  $^{12}\text{C}(\pi^+, \text{p})$  E=170 MeV, measured particle yields.

1991Ki02:  $^{12}\text{C}(\pi^+, \text{p})$  E At 450-570 MeV/c, measured  $\sigma(E_{\text{p}}, \theta_{\text{p}}=0^\circ)$ . Deduced reaction mechanism, effective nucleon number,  $\pi N$  amplitude role.

$J^\pi$  from (1980Aj01).

 $^{11}\text{C}$  Levels

E(level)	$J^\pi$	Comments
0	$3/2^-$	E(level): from (1978Am01).
$2.0 \times 10^3$	$1/2^-$	E(level): from (1978Am01).
$4.40 \times 10^3$	$5/2^-$	E(level): from (1978Am01). E(level): Unresolved.
$4.8 \times 10^3$	$3/2^-$	E(level): Unresolved.
$6.4 \times 10^3$	$7/2^-$	E(level): from (1978Am01).
$8.5 \times 10^3$	$2$	E(level): from (1978Am01).
$12.5 \times 10^3$	$3$	T=3/2 E(level): from (1978Am01).
$13.3 \times 10^3$		E(level): from (1981An10) who do not see the 12.5 MeV state observed by (1978Am01); also see (1982Do01).