

$^{11}\text{B}(\text{p,n})$:res **2017Ke05**

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	J. H. Kelley, J. E. Purcell and C. G. Sheu		NP A968,71 (2017)	1-Jan-2017

- [1969Mo32](#): $^{11}\text{B}(\text{p,n})$ E not given, measured thresholds.
[1969Ra36](#): $^{11}\text{B}(\text{p,n})$ E $\approx$ 20 MeV, surveyed quasi-elastic $\sigma(\theta)$ data.
[1970Cl01](#): $^{11}\text{B}(\text{p,n})$ E=30,50 MeV, measured $\sigma(E, E_n, \theta)$.
[1972Mo41](#): $^{11}\text{B}(\text{p,n})$ E=24.5 MeV, measured analyzing power(θ).
[1974Pe04](#): $^{11}\text{B}(\text{p,n})$ E<6 MeV, measured ^{11}C yield.
[1976Hi11](#): $^{11}\text{B}(\text{pol. p,n})$ E=16.3,21.3,26.5 MeV, measured transverse polarization transfer coefficient.
[1976Li08](#): $^{11}\text{B}(\text{pol. p,n})$ E=7-15 MeV, measured transverse polarization transfer coefficients.
[1978Va12](#): $^{11}\text{B}(\text{p,n})$ E=3-4.9 MeV, measured $\sigma(E, E_n, \theta)$. ^{12}C level deduced J, π .
[1979Ba68](#): $^{11}\text{B}(\text{p,n})$ E=1 GeV, measured $\sigma(E_n, \theta)$. Deduced dependency of quasielastic neutron production on mass.
[1980Ra16](#): $^{11}\text{B}(\text{p,n})$ E=3-6 MeV, measured absolute $\sigma(E)$. ^{12}C deduced resonances, J, π , T.
[1981An16](#): $^{11}\text{B}(\text{p,n})$ E=10.9-27.5 MeV, measured $\sigma(E)$, thick target yields.
[1981Ba22](#): $^{11}\text{B}(\text{p,n})$ E=4-12 MeV, measured thick target yields, $\sigma(E)$.
[1981Ho13](#): $^{11}\text{B}(\text{p,n})$ E=5.4-7.5 MeV, measured $\sigma(E, \theta)$. Deduced direct, resonance effects. ^{12}C deduced resonances, Γ , J, π .
[1985Gr09](#): $^{11}\text{B}(\text{p,n})$ E=16-26 MeV, measured $\sigma(E_n)$, $\sigma(\theta)$. Deduced residual production σ . DWA analysis.
[1985Ku13](#): $^{11}\text{B}(\text{p,n})$ E=9.1 MeV, measured absolute thick target γ yields.
[1985Sc08](#): $^{11}\text{B}(\text{p,n})$ E=13.7-14.7 MeV, measured absolute $\sigma(\theta)$ vs E.
[1986Ai04](#): $^{11}\text{B}(\text{p,n})$ E<14.7 MeV, measured σ , residuals yields.
[1986Mu08](#): $^{11}\text{B}(\text{p,n}), (\text{pol. p,n})$ E=12.77-17.22 MeV, measured $\sigma(\theta)$, analyzing power vs θ .
[1987Ra23](#): $^{11}\text{B}(\text{p,n})$ E=7-9 MeV, measured absolute thick target γ yield, relative neutron yield.
[1988Ka30](#): $^{11}\text{B}(\text{p,n})$ E=15.8,18.6 MeV, measured $\sigma(\theta)$. Deduced residual nuclei vertex constants.
[1989Ra09](#): $^{11}\text{B}(\text{p,n})$ E=492 MeV, measured $\sigma(\theta, E)$. Deduced unit $\sigma(\text{ratio})$.
[1990Ta15](#): $^{11}\text{B}(\text{p,n})$ E=160-795 MeV, measured $\sigma(E_n, \theta=0^\circ)$.
[1994Ga49](#): $^{11}\text{B}(\text{p,n})$ E=1 GeV, analyzed $\sigma(\theta)$, mass dependences. Deduced resonance phenomena related features.
[1994Wa22, 1994Ra23, 1995Ya12](#): $^{11}\text{B}(\text{p,n}), (\text{pol. p,n})$ E=186 MeV, measured $\sigma(\theta, E_n)$, polarization transfer coefficient, analyzing power vs θ .
[1995Wa16](#): $^{11}\text{B}(\text{pol. p,n})$ E=295 MeV, measured $\sigma(\theta)$, polarization coefficient vs excitation energy. Deduced spin-flip strength, effective tensor interactions related features.

 ^{12}C Levels

E(level) [†]	T _{1/2}	Comments
18.40 $\times 10^3$	44 keV	
18.85 $\times 10^3$	92 keV	
19.17 $\times 10^3$	458 keV	
19.42 $\times 10^3$	46 keV	
19.70 $\times 10^3$ [‡]	183 keV	
19.88 $\times 10^3$	92 keV	
20.25 $\times 10^3$ [‡]	156 keV	
20.60 $\times 10^3$ [‡]	174 keV	
20.99 $\times 10^3$ [‡]	367 keV	
21.48 $\times 10^3$ ^{‡#}	513 keV	
21.8 $\times 10^3$ [‡]		T _{1/2} : Broad.
22.37 $\times 10^3$ [‡]	312 keV	
22.64 $\times 10^3$ ^{‡#}	330 keV	
23.05 $\times 10^3$ ^{‡#}	60 keV	
23.52 $\times 10^3$ ^{‡#}	348 keV	

Continued on next page (footnotes at end of table)

 $^{11}\text{B}(\text{p},\text{n}):\text{res}$ [2017Ke05](#) (continued)

 ^{12}C Levels (continued)

<u>E(level)[†]</u>	<u>T_{1/2}</u>	<u>E(level)[†]</u>	<u>T_{1/2}</u>
23.89×10 ³ ^{‡@}	165 keV	24.93×10 ³ ^{‡#}	917 keV
24.2×10 ³		25.25×10 ³ ^{‡@}	165 keV
24.44×10 ³ ^{‡@}	101 keV	25.96×10 ³ [‡]	403 keV
		26.85×10 ³	275 keV

[†] See references listed in [\(2017Ke05\)](#).

[‡] Resonant in n₀.

Resonant in n₁.

@ Resonant in n₂.