

$^{10}\text{B}(\alpha, \text{n})$ **1973Va25**

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	J. H. Kelley, C. G. Sheu and J. E. Purcell		NDS 198,1 (2024)	1-Aug-2024

- [1935Ru01](#): $^{10}\text{B}(\alpha, \text{n})$. Measured ^{13}N $T_{1/2} \approx 14$ minutes.
[1956Qu04](#): $^{10}\text{B}(\alpha, \text{n})$ $E=8.0$ MeV; measured states at $^{13}\text{N}^*$ (2.4 MeV 3, 3.6 3, (4.3 3), 5.0 3).
[1973Va25](#): $^{10}\text{B}(\alpha, \text{n})$ $E=1.0$ -5.0 MeV; studied excitation functions and deduced ^{14}N levels and level parameters.
[1975Wi04](#): $^{10}\text{B}(\alpha, \text{n})$ $E=2$ -10 MeV; studied excitation functions and deduced ^{14}N levels and level parameters.
[1976Du08](#): $^{10}\text{B}(\alpha, \text{n}_{0,1})$ $E=18$ -20 MeV; measured $\sigma(E, \theta)$.
[1977Li19](#): $^{10}\text{B}(\alpha, \text{n})$; analyzed $\sigma(E < 7$ MeV).
[1979Ba48](#): $^{10}\text{B}(\alpha, \text{n})$ $E=3$ -7.5 MeV; measured neutron yield, deduced $\sigma(E)$.
[1979Gi09](#): $^{10}\text{B}(\alpha, \text{n})$ $E=4$ -14 MeV; measured $\sigma(E)$ via activation technique.
[1983Ro26](#): $^{10}\text{B}(\alpha, \text{n})$ $E=3.2$ -14 MeV; measured yield.
[2019Li42](#): $^{10}\text{B}(\alpha, \text{n}_0)$ $E=2.2$ -4.9 MeV; measured $\sigma(E, \theta)$, analyzed available data.
[2020Li08](#): $^{10}\text{B}(\alpha, \text{n}_0)$ $E=575$ -2522 keV. Measured $\sigma(\theta)$, analyzed available data. Discussed astrophysical relevance.
[2021Wi02](#): $^{10}\text{B}(\alpha, \text{n})$: Analyzed available $\sigma(E_\alpha, \theta)$ data for astrophysically relevant reactions.
[2023Gu04](#): $^{10}\text{B}(\alpha, \text{n}), (\alpha, \text{X})$ $E=0.21$ -1.4 MeV; R-matrix analysis of available data.

 ^{13}N Levels

E(level) [†]	$T_{1/2}$	Comments
0	≈ 14 min	$T_{1/2}$: From (1935Ru01).
2366		
3.51×10^3		
3.55×10^3		

[†] From ([1973Va25](#)).