^{10}B(^{3}He,d):res

History

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

1965Pa10: ^{10}B(^{3}He,d) E=3.5-10 MeV; measured $\sigma(\theta)$ for at E(^{3}He)=3.7, 5.8, 7.5, 9.8 MeV. Mainly focused on the prominent E_{res}=5.8 MeV state.

1972Be56: ^{10}B(^{3}He,n), (^{3}He,p), (^{3}He,d), (^{3}He,α) E=11-19 MeV; measured σ(E,E_n), σ(E,E_p,θ), σ(E,E_d,θ), for θ=90° and 150° and σ(E,E_α,θ) for θ=30° to 150°. Analyzed existing data and deduced resonances at E_{res}=5.6, 8.5, 13.5 MeV.

See also:

1967Ha20: ^{10}B(^{3}He,d) and ^{11}B(^{3}He,t) E=6-18 MeV, measured thick target yields; deduced σ(E). Discussed reaction mechanism.

1970Bo07: ^{10}B(^{3}He,d), ^{10}B(^{3}He,np) E=8, 10, 11 MeV; measured $\sigma(\theta$(n+p)), σ(E_n,E_p). Deduced singlet deuteron emission.

1976Ga27: ^{10}B(^{3}He,d) E=1.5-4.6 MeV; measured σ(E).

^{13}N Levels

E(level)	$T_{1/2}$	$E_{^3He}$(res) (MeV)[†]	Comments
25.9×10^3		5.6	Γ: Broad. $E_{^3He}$(res) (MeV): From (1972Be56) for d_0. See also (1965Pa10) where $E_{^3He}$(res)=5.8 is reported.
32×10^3	≈2 MeV	13.5	$E_{^3He}$(res) (MeV): From (1972Be56) for $d_{4\&5}$.

[†] From (1972Be56).