^{10}B(^{3}He,n),(^{3}He,X):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

1955Bi26: ^{10}B(^{3}He,X) E=900 keV; measured particle spectra.
1957Aj71: ^{10}B(^{3}He,n) E=2.54 and 3.60 MeV; analyzed ^{12}N yields.
1963Pe10: ^{10}B(^{3}He,n) E=2-6.3 MeV; measured excitation function.
1972Be05: ^{10}B(^{3}He,p), ^{10}B(^{3}He,γ) E=4-14 MeV; measured $\sigma(E_{^{3}He},E_{\gamma})$; reported no resonances.
1972Be56: ^{10}B(^{3}He,n), (^{3}He,p), (^{3}He,d), (^{3}He,α) E=11-19 MeV; measured $\sigma(E,E_{n})$, $\sigma(E,E_{p},\theta)$, $\sigma(E,E_{d},\theta)$, for θ=90° and 150° and $\sigma(E,E_{\alpha},\theta)$ for θ=30° to 150°. Analyzed existing data and deduced resonances at E_{res}= 5.6 MeV (α_0, d_0, $p_{0,2,3}$, pγ(12.71,15.11), n, γ_0), 8.5 MeV (α_0, p_0, pγ(12.71,15.11), γ_0), and 13.5 MeV ($\alpha_{1,2}$, $d_{4,5}$, γ_0).

See also:
1966Za01: ^{10}B(^{3}He,n) E=2.6, 3.0, 4.0, 5.8 MeV; measured $\sigma(E_{n},\theta)$. Deduced reaction Q-value.
1968Ad03: ^{10}B(^{3}He,n) E=3 MeV; measured $\sigma(E_{n})$. Deduced Q-value.
1970Bo39: ^{10}B(^{3}He,n) E=6.2 MeV, ^{10}B(^{3}He,n/p) E=10, 11 MeV, measured $\sigma(E_{n},\theta)$, $\sigma(E_{p},\theta)$.
1970Si16: ^{10}B(^{3}He,n) E=6.9-30.6 MeV; measured σ(E).
1974Fu11: ^{10}B(^{3}He,n) E=10.5-13 MeV; measured $\sigma(E_{n},\theta)$.

^{13}N Levels

E(level)	Γ	$E_{^{3}He}$(res) (MeV)	Comments
25.9×10^{3}	1000 keV	5.6	(1972Be56) indicate a state near 26 MeV that decays via α_0, d_0,$p_{0,2,3}$,γ_0, (n).
$28.\times10^{3}$		8.5	(1972Be56) indicate a state near 28 MeV that decays via α_0,p_0,γ_0.
$32.\times10^{3}$	≈2 MeV	13.5	(1972Be56) indicate a state near 32 MeV that decays via α_1,$d_{4\&5}$,γ_0.