^{11}B(γ,n),(γ,p),(γ,d),(γ,t) 1970So03,1976Kn04

History

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

1958Me77: ^{11}B(γ,X).
1965Ha19: ^{11}B(γ,xn) Eγ≈6-30 MeV, measured activation curve using bremsstrahlung, obtained σ(E) with ΔE=0.5, 1.0 MeV.
1969Mu10: ^{11}B(γ,nγ),(γ,pγ) E<35 MeV, measured σ(E,E$_\gamma$). ^{11}B deduced No T$_{3/2}$ giant resonance.
1969So06: ^{11}B(γ,P) E=15-31.5 MeV, measured σ(E). Deduced integral σ. ^{11}B deduced resonances.
1970So03: ^{11}B(γ,P) E<16.5, 18.5 MeV, measured σ(E$_P$,θ). ^{11}B levels deduced Γ-level, J, π, γ-multipolarities.
1971Du11: ^{11}B(γ,N),(γ,P) E=12-19 MeV, analyzed giant resonance structure.
1971Pa10: ^{11}B(γ,nγ),(γ,pγ) E<35 MeV, measured σ(E,E$_\gamma$). ^{11}B deduced giant resonance isospin splitting.
1975Ad04: ^{11}B(γ,P) E=100-800 MeV bremsstrahlung, measured σ(E).
1979Ka26: ^{11}B(γ,nγ)(γ,pγ) E(max)=30 MeV, measured E$_\gamma$, I$_\gamma$. ^{11}B deduced decay channels for giant dipole resonance.
1981Br28: ^{11}B(γ,N),(γ,P) E=15-31 MeV bremsstahlung, measured yields, σ(E$_P$) vs θ. Deduced σ(total). ^{11}B deduced GDR isospin splitting.
1983IsZU,1983IsZV: ^{11}B(γ,t) E=20, 32 MeV bremsstrahlung, measured σ(E$_{\gamma'}$). Deduced reaction mechanism.
1984Al22: ^{11}B(γ,nγ)(γ,pγ) E=16-28 MeV bremsstrahlung, measured σ(E), σ(θ) vs E. ^{11}B levels deduced J, π.
1988Du04: ^{11}B(γ,d), calculated σ, σ(E). Deduced reactions correlation.

^{11}B Levels

E(level)	Comments
9.19×10^3	Γ: from (1958Me77). (2J+1)Γ$_\gamma$≈0.8 eV from ^{11}B(γ,α) (1958Me77).
12.4×10^3†	
13.1×10^3†	
13.65×10^3†	
14.75×10^3†	
15.1×10^3†	
15.5×10^3†	
15.85×10^3†	
16.2×10^3†	
16.5×10^3†	
16.9×10^3†	
17.5×10^3†	
20.2×10^3?†	
21.6×10^3†	
23.2×10^3†	
24.5×10^3?†	
25.5×10^3†	
26.5×10^3	E(level): from (γ,n) In (1976Kn04). Γ: broad.
27.7×10^3†	
29.2×10^3†	

† From (γ,p) In (1970So03): also see for Γ$_\gamma$ and J$^\pi$.