^{11}B(e,e′) 1962Ed02,1967Sp02,1975Ka02

History

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

1962Ed02: ^{11}B; measured not abstracted; deduced nuclear properties.
1966Ko08: ^{11}B(e,e′) E=50, 60 MeV, measured $\sigma(E_{e'})$. ^{11}B deduced levels, B(λ).
1966St12: ^{11}B(e,e), E=198.5, 333, 400 MeV; measured $\sigma(\theta)$.
1967Sp02: ^{11}B; measured not abstracted; deduced nuclear properties.
1971Vl01: ^{11}B(e,e′) E=600-1150 MeV, measured $\sigma(E,E_{e'})$. Deduced form factors. ^{11}B deduced rms radii.
1975Ka02: ^{11}B(e,e′) E=52.3-90 MeV, measured $\sigma(E,E_{e'},\theta)$. ^{11}B giant resonances, levels deduced B(E2), B(M1), form factors.
1979Po06: ^{11}B(e,e′) E=121, 186, 120 MeV, measured Coulomb form factors.
J^{π} from (1966Ko08).

^{11}B Levels

E(level)	J^{π}	Comments
0	$3/2^{-}$	Q=3.72 fm^2, $<r^2>^{1/2}$=2.42 fm (1966St12). Magnetic elastic scattering at θ = 180° shows strong M3 effects: the derived ratio of static M3/M1, 2.9 fm^2 0.2, suggests a j-j coupling scheme for $^{11}B_{g.s}$.
2.13×10^3 *20*	$1/2^{-}$	$\Gamma_{\gamma 0}$=0.159 eV *15* $\Gamma_{\gamma 0}$: from $\Gamma_{\gamma 0}$=0.16 eV *2* (1966Ko08), $\Gamma_{\gamma 0}$=0.170 eV *34* (1962Ed02), 0.14 eV *4* (1975Ka02).
4.46×10^3 *20*	$5/2^{-}$	$\Gamma_{\gamma 0}$=0.69 eV *5* $\Gamma_{\gamma 0}$: from $\Gamma_{\gamma 0}$=0.60 eV *20* (1966Ko08), $\Gamma_{\gamma 0}$=1.1 eV *4* (1962Ed02),$\Gamma_{\gamma 0}$=0.616 eV *90* [M1:0.60 eV *9* /E2:0.016 eV *2*] (1967Sp02), 0.73 eV *7* (1975Ka02).
5.03×10^3 *20*	$3/2^{-}$	$\Gamma_{\gamma 0}$=1.87 eV *12* $\Gamma_{\gamma 0}$: from $\Gamma_{\gamma 0}$=2.4 eV *8* (1966Ko08), $\Gamma_{\gamma 0}$=3.7 eV 2.5 (1962Ed02),$\Gamma_{\gamma 0}$=1.73 eV *14* (1967Sp02), $\Gamma_{\gamma 0}$=2.12 eV *21* (1975Ka02).
6.8×10^3 *2*	$3/2^{-}$	
7.3×10^3	$(5/2^{-})$	$\Gamma_{\gamma 0}$=1.0 eV *5* $\Gamma_{\gamma 0}$: from 1.0 eV *5* (1962Ed02).
7.9×10^3 *2*	$3/2^{+}$	
8.6×10^3 *2*	$(3/2)^{-}$	$\Gamma_{\gamma 0}$=0.97 eV *8* $\Gamma_{\gamma 0}$: from 1.12 eV *32* [M1:0.72 eV *30*/E2:0.40 eV *10* (1966Sp02), $\Gamma_{\gamma 0}$=0.96 eV *8* [M1:0.73 eV *7*/E2: 0.23 eV *3*] (1975Ka02).
8.92×10^3 *20*	$5/2^{-}$	$\Gamma_{\gamma 0}$: from $\Gamma_{\gamma 0}$=5.1 eV *12* (1966Ko08), $\Gamma_{\gamma 0}$=4.0 eV *6* (1966Sp02), $\Gamma_{\gamma 0}$=4.93 eV *50* (1975Ka02).
9.3×10^3		E(level): see (1975Aj02).
10.6×10^3 *2*		
11.3×10^3 *2*		
12.2×10^3 *2*		
12.65×10^3 *20*		
13.0×10^3 *1*		E(level): from (1975Ka02), also see E_x=13.00 MeV *15* (1985Aj01). Γ: broad.
14.55×10^3 *20*		E(level): see (1985Aj01).
15.5×10^3		E(level): from (1975Ka02): Γ: broad.
16.7×10^3 *2*		E(level): see (1985Aj01).