^{10}B(n,γ) E=th 1967Th05,1986Ko19,2008FiZZ

History

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

1969We07: ^{10}B(N,γ) E=thermal, measured E_γ, Doppler shift attenuation. ^{11}B levels deduced $T_{1/2}$.
1975Ar19: ^{10}B(N,γ) E=14 MeV, measured γ-yields, I_γ(THETA).
1986Ko19: ^{10}B(N,γ) E=thermal, measured E_γ, I_γ. Deduced σ. ^{11}B deduced neutron binding energy, transitoin energies. ^{11}B deduced J=(7/2)$^+$, J=(5/2)$^+$ state relative importance, interference effects role.
2001Ac04: ^{10}B(N,γ) E=thermal, measured E_γ, I_γ. Deduced k_0 factors.
2003ChZX: ^{10}B(n,γ); measured E_γ, I_γ. Deduced prompt k_0-factors, partial σ.
2003MoZU: ^{10}B(n,γ), E=thermal; compiled, analyzed k_0 factors. ^{10}B(n,γ), E not given; compiled, analyzed capture σ, neutron biniding energies.
2004Ma76: ^{10}B(n,γ), E=cold, thermal; analyzed data. Deduced k_0 factors, γ-emission probabilities.
2004Sh01: ^{10}B(n,γ), E=1-1000 eV; measured E_γ, I_γ, capture σ.
2005Ge07: ^{10}B(pol. n,γ), E=low; measured parity-violating γ-ray asymmetry.
2008FiZZ: ^{10}B(n,γ), E=thermal; measured cross sections.

^{11}B Levels

E(level)†	J$^\pi$	Comments
0	3/2$^-$	
2120 *5*		
4444.98 *7*	5/2$^-$	
5020 *5*	3/2$^-$	
6741.85 *8*	7/2$^-$	
8920.47 *11*	5/2$^-$	
11454.13 *7*	(5/2$^+$,7/2$^+$)	E(level): Capture state.

† Level energies are from a least squares fit to the γ-ray energies, with the recoil correction applied.

γ(^{11}B)

E_γ†	I_γ‡	E_i(level)	J^π_i	E_f	J^π_f
2120 *5*	<3	2120		0	3/2$^-$
2296.63 *13*	8.9 *16*	6741.85	7/2$^-$	4444.98	5/2$^-$
2533.40 *14*	14.1 *14*	11454.13	(5/2$^+$,7/2$^+$)	8920.47	5/2$^-$
4444.03 *8*	65.6 *23*	4444.98	5/2$^-$	0	3/2$^-$
4474.5 *3*	0.74 *13*	8920.47	5/2$^-$	4444.98	5/2$^-$
4711.18 *7*	25.6 *9*	11454.13	(5/2$^+$,7/2$^+$)	6741.85	7/2$^-$
5019 *5*	<2	5020	3/2$^-$	0	3/2$^-$
6739.53 *16*	19.0 *8*	6741.85	7/2$^-$	0	3/2$^-$
7006.75 *7*	55.3 *16*	11454.13	(5/2$^+$,7/2$^+$)	4444.98	5/2$^-$
8916.67 *16*	13.3 *8*	8920.47	5/2$^-$	0	3/2$^-$
11447.72 *13*	4.70 *26*	11454.13	(5/2$^+$,7/2$^+$)	0	3/2$^-$

† γ energies are from the weighted average of (1986Ko19) and references cited In (2008FiZZ).
‡ γ-ray intensities are from the weighted average of (1967Th05, 1986Ko19) and references cited In (2008FiZZ).

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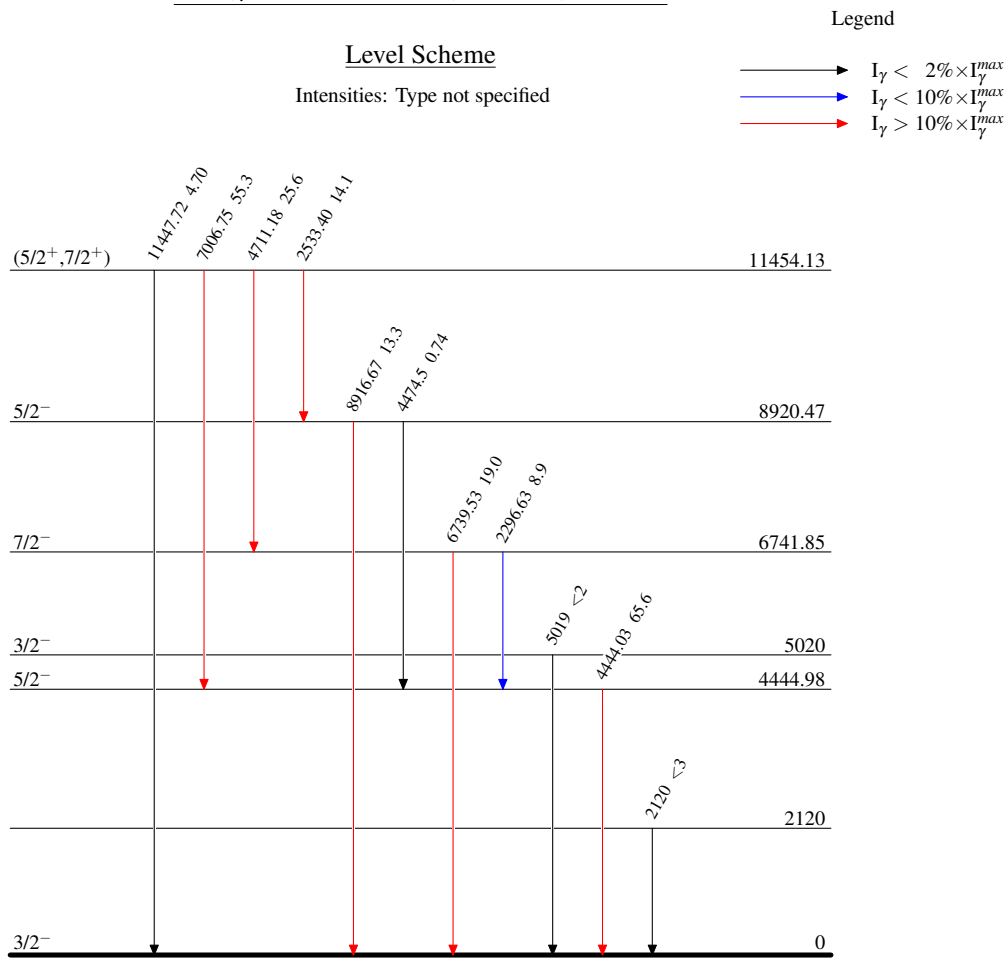
Level Scheme

Intensities: Type not specified



$^{11}_{5}B_{6}$