Adopted Levels 2018Le18

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	J. H. Kelley, G. C. Sheu	ENSDF	01-Jan-2019

Q(β^-)=3.190×10^4 *44*; S(n)=−1.56×10^3 *15* 2017Wa10,2018Le18

Q(β^-),S(n): From $^{20}B_{g.s.}$=E_{res}(n+^{19}B)=1.56 MeV *15*, which implies ΔM(^{20}B)=69.40 MeV *38* (2018Le18).

Predictions on the mass (2006Ko02, 2009Pa46, 2012Yu07, 2017Wa10) and excited states (1992Wa22) of ^{20}B are given in the literature. Notably, (2017Wa10) had predicted ΔM=68.45 MeV *80*.

^{20}B Levels

Cross Reference (XREF) Flags

A ^{12}C(^{22}N,19βn)

E(level)‡	J$^\pi$†	$T_{1/2}$	$E_{rel.}$(n+^{19}B) (MeV)	XREF	Comments
0	(1$^-$,2$^-$)	<500 keV	1.56 *15*	A	%n=100 E(level): A fit with a single resonance at E(n+^{19}B)=2.44 MeV *9* and Γ=1.2 MeV *4* is also compared with the excitation spectrum; the three resonance fit is prefered.
0.94×10^3 *17*	(1$^-$,2$^-$)	0.9 MeV *3*	2.50 *9*	A	%n≈100
3.30×10^3 *30*	(0$^-$,3$^-$)	<500 keV	4.86 *25*	A	%n≈100

† From shell model systematics.

‡ $E_{g.s.}$ from E_{res}(^{19}C+n)=1.56 MeV *15*.