

Table 12.2 from (1980AJ01): Energy levels of ^{12}B ^a

E_x in ^{12}B (MeV \pm keV)	$J^\pi; T$	τ or $\Gamma_{\text{c.m.}}$ (keV)	Decay	Reactions
0	$1^+; T = 1$	$\tau_{1/2} = 20.20 \pm 0.20$ msec	β^-	1, 2, 3, 6, 7, 9, 10, 13, 16, 17, 18, 19, 21, 22, 23, 24, 25
0.95314 ± 0.60	2^+	$\tau_m = 260 \pm 40$ fsec	γ	2, 3, 7, 9, 13, 16, 17, 19, 20, 21, 22, 24
1.67365 ± 0.60	2^-	$\tau_m < 50$ fsec	γ	2, 3, 7, 9, 13, 16, 17, 19
2.6208 ± 1.2	1^-	$\tau_m < 70$ fsec	γ	2, 3, 7, 9, 13, 16, 17, 19
2.723 ± 11	0^+		γ	2, 3, 7, 9, 13, 19, 21
3.3889 ± 1.4	3^-	$\Gamma_{\text{c.m.}} = 3.1 \pm 0.6$ eV	γ, n	2, 7, 9, 10, 11, 13
3.759 ± 6	2^+	40 ± 4 keV	γ, n	7, 9, 10, 11, 13, 21
4.303 ± 7	1^-	9 ± 4	γ, n	7, 9, 10, 11, 18
4.37	2^-	broad	n	11
4.521 ± 7	4^-	110 ± 20	γ, n	7, 9, 10, 11, 13
5.00 ± 20	1^+	50 ± 15	γ, n	7, 9, 10, 11, 16, 21
5.612 ± 8	3^+	110 ± 40	n	7, 9, 11, 22
5.724 ± 8	3^-	50 ± 20	n	7, 9, 11
6.0	$(2)^-$	broad	n	11
6.6		140	n	11
6.9		broad	n	11
7.545 ± 20		≤ 14	n	7, 9, 11
7.836 ± 20		60 ± 40	n	7, 11
7.937 ± 20		27	n	7, 11
8.1 ± 100		900 ± 200		7
8.120 ± 20				7, 9
8.24 ± 30	3^-	65	n	7, 11
8.376 ± 20		40 ± 20	n	7, 9, 11
8.58 ± 30		75	n	7, 9, 11
8.707 ± 20	(1^+)		n	7, 11
9.04 ± 20	(2^-)	95 ± 20	n	7, 9, 11
9.175 ± 20				7
9.43 ± 20		85 ± 30		7, 9

Table 12.2 from (1980AJ01): Energy levels of ^{12}B ^a (continued)

E_x in ^{12}B (MeV \pm keV)	$J^\pi; T$	τ or $\Gamma_{\text{c.m.}}$ (keV)	Decay	Reactions
9.585 \pm 5		34 \pm 5		7, 9, 11
9.758 \pm 20 (9.83)				7
10.00 \pm 40		100	n	7, 11
10.11 \pm 40				7
10.220 \pm 20		< 25		7, 9
10.435 \pm 20		75 \pm 40		7
10.59 \pm 20		< 30	n	7, 9, 11
10.90 \pm 20 (11.08)		30 \pm 10		7, 9
11.31 \pm 30		130 \pm 60		7
11.59 \pm 20		75 \pm 25		7
12.345 \pm 25		100 \pm 30	n	7, 9, 11
12.75 \pm 50 ^b	$0^+; T = 2$	85 \pm 40		7, 22
13.33 \pm 30 (13.4 \pm 100) ^c		50 \pm 20 broad		7 9 22
14.82 \pm 100 15.5	$(2^+; T = 2)$	$\lesssim 200$		22 7

^a See also [Table 12.6](#).

^b The state at $E_x = 12.77 \pm 0.05$ MeV reported in [reaction 7](#), and the $T = 2$ state at 12.72 ± 0.07 MeV [$\Gamma \lesssim 200$ keV] may not be the same states.

^c Thirteen resonances are reported in $^9\text{Be}(t, n)^{11}\text{B}$ with $13.6 < E_x < 14.7$ MeV: see [Table 12.3 in \(1975AJ02\)](#).