

Table 12.5 from (2017KE05): Energy levels of ^{12}B

E_x in ^{12}B (MeV \pm keV)	$J^\pi; T$	τ or Γ_{cm} (keV)	Decay	Reactions
0	$1^+; 1$	$T_{1/2} = 20.20 \pm 0.02$ ms	β^-	1, 2, 3, 4, 7, 9, 10, 12, 14, 15, 18, 19, 20, 21, 22, 23, 24, 26, 27, 28, 30, 31, 32, 33, 35, 36, 37, 38, 39
0.95314 ± 0.6	2^+	$\tau_m = 260 \pm 40$ fs	γ	2, 3, 4, 9, 10, 14, 15, 18, 19, 20, 21, 23, 26, 30, 31, 33, 35, 36, 37, 38, 39
1.67365 ± 0.6	2^-	< 50 fs	γ	3, 4, 9, 10, 14, 18, 19, 20, 21, 26, 31, 33, 35, 36
2.6208 ± 1.2	1^-	< 48 fs	γ	2, 3, 4, 10, 14, 18, 19, 20, 26, 31, 32, 33, 35, 36
2.723 ± 11	0^+		γ	3, 4, 10, 14, 19, 20, 38
3.3891 ± 1.6	3^-	$\Gamma = 3.1 \pm 0.6$ eV	γ, n	3, 9, 10, 14, 16, 18, 19, 20, 31, 33, 35, 36
3.760 ± 6	2^+	40 ± 4 keV	γ, n	2, 3, 9, 10, 14, 16, 18, 19, 31, 33, 38
4.0	0^-			31
4.302 ± 6	1^-	9 ± 4	γ, n	3, 10, 14, 16, 18, 19, 33
4.46^a	2^-	260	n	16, 23, 30, 31, 33, 35, 36
4.523 ± 8^a	4^-	110 ± 20	γ, n	3, 10, 14, 16, 18, 19, 20, 23, 30, 31, 33, 35
4.990 ± 12	1^+	50 ± 15	γ, n	2, 3, 10, 14, 16, 18, 31, 38
5.610 ± 8	3^+	115 ± 20	n	2, 3, 10, 14, 16, 18, 20, 31, 35, 39
5.726 ± 8	3^-	58 ± 12	n	10, 14, 16, 20, 33
6.0 (6.2)	1^-	broad	n	16

Table 12.5 from (2017KE05): Energy levels of ^{12}B (continued)

E_x in ^{12}B (MeV \pm keV)	$J^\pi; T$	τ or Γ_{cm} (keV)	Decay	Reactions
6.6	1^+	140	n	16
7.06	1^-	broad	n	16
7.3		very broad		32
7.545 ± 20		< 14	n	10, 14, 16
7.67	2^-	45	n	8, 16
$7.7 \pm 100^{\text{a}}$	1^-	$\approx 2 \text{ MeV}$		23, 30, 31, 35, 36
7.8^{b}		$4.0 \pm 0.5 \text{ MeV}$		30, 33, 36
7.836 ± 20	1^-	60 ± 40	n	8, 10, 16
7.937 ± 20	1^-	< 40	n	8, 10, 16
8.130 ± 15	(3^-)	260 ± 80	n	8, 10, 16
8.165 ± 25		45 ± 15		8, 10, 14
8.24 ± 30	3^-	65	n	10, 16
8.39 ± 20		40 ± 15		8, 10, 14
8.58 ± 30	(3^-)	75	n	10, 14, 16
8.707 ± 20	3^-		n	10, 16
9.035 ± 5	1^-	95 ± 20	n	8, 10, 14, 16
9.175 ± 20	(2^-)		n	10, 16
9.3^{e}	0^-	≈ 330		31
9.397 ± 6		35 ± 10		8
9.44 ± 8		60 ± 20		8, 10, 14
9.582 ± 3	3^-	34 ± 4	n	8, 10, 14, 16
9.758 ± 20				10
(9.83)				10
10.00 ± 40		100	n	10, 16
10.115 ± 11	1^-	≈ 200		8, 10, 31
10.211 ± 12	2^-	9 ± 3		8, 10, 14, 19
10.42 ± 10	$< 4^-$	76 ± 20		8, 10
10.564 ± 3	2^-	11 ± 3		8, 10, 14, 19
(10.58)		200		17
10.881 ± 4	3^+	17 ± 4	α	5, 8, 10, 14, 19

Table 12.5 from (2017KE05): Energy levels of ^{12}B (continued)

E_x in ^{12}B (MeV \pm keV)	$J^\pi; T$	τ or Γ_{cm} (keV)	Decay	Reactions
(11.08)				10
11.337 \pm 7	< 8	90 \pm 25		8, 10
11.573 \pm 6	< 8	60 \pm 20	α	4, 5, 8, 10
12.227 \pm 9		155 \pm 60	n	8, 16
12.335 \pm 15		62 \pm 25		8, 10, 14
12.733 \pm 40	0 ⁺ ; 2	< 40	α	34, 39
12.76 \pm 15		110 \pm 35		8, 10
12.8 \pm 500		3500 \pm 500		33
13.31 \pm 15		53 \pm 12		8, 10
13.4 \pm 100		broad	α	4, 5, 6, 14, 35
c				
\approx 14.1			(t), α	4, 5, 6, 10
14.82 \pm 50	2 ⁺ ; 2	< 100	p, t, α	34, 39
\approx 15.7			(t), α	4, 5, 6, 10
17.4				5, 10
17.8 \pm 1500		3500 \pm 1500		33
18.2				36
d				

^a Spin Dipole.

^b GDR.

^c Thirteen states with $13.6 < E_x < 14.7$ are reported in ⁹Be(t, n) (1961VA1C).

^d See other neutron resonances shown in (1979AU07).

^e A duplicate level at 9.0 MeV has been removed after publication.