

Table 11.3 from (1990AJ01): Energy Levels of ^{11}B

E_x	$J^\pi; T$ (MeV \pm keV)	τ_m (fs) or $\Gamma_{\text{c.m.}}$ (keV)	Decay	Reactions
0	$\frac{3}{2}^-; \frac{1}{2}$	stable		1, 2, 6, 7, 9, 13, 14, 15, 16, 17, 19, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64
2.124693 ± 0.027	$\frac{1}{2}^-$	$\tau_m = 5.5 \pm 0.4$	γ	1, 6, 7, 9, 13, 14, 15, 16, 17, 23, 24, 25, 26, 27, 29, 30, 32, 33, 36, 37, 38, 40, 47, 48, 49, 51, 52, 53, 55, 58, 59, 60, 61, 62, 63, 64
4.44489 ± 0.50	$\frac{5}{2}^-$	1.18 ± 0.04	γ	1, 2, 6, 7, 9, 13, 14, 15, 19, 23, 24, 25, 26, 27, 29, 30, 32, 33, 36, 37, 38, 40, 47, 49, 51, 53, 59, 60, 61
5.02031 ± 0.30	$\frac{3}{2}^-$	0.34 ± 0.01	γ	1, 6, 7, 9, 14, 15, 23, 24, 25, 26, 27, 29, 30, 32, 33, 36, 37, 38, 47, 48, 51, 52, 53, 55, 59, 60, 61
6.7429 ± 1.8	$\frac{7}{2}^-$	22 ± 5	γ	1, 2, 6, 14, 15, 19, 23, 24, 25, 26, 29, 33, 36, 37, 38, 47, 48, 53, 55, 59, 60, 61
6.79180 ± 0.30	$\frac{1}{2}^+$	1.7 ± 0.2	γ	1, 2, 6, 14, 15, 23, 24, 25, 27, 29, 33, 37, 40, 47, 48, 51, 55, 60
7.28551 ± 0.43	$\frac{5}{2}^+$	0.57 ± 0.04	γ	1, 2, 6, 13, 14, 15, 23, 24, 25, 27, 29, 33, 38, 48, 53

Table 11.3 from (1990AJ01): Energy Levels of ^{11}B (continued)

E_x	$J^\pi; T$ (MeV \pm keV)	τ_m (fs) or $\Gamma_{\text{c.m.}}$ (keV)	Decay	Reactions
7.97784 ± 0.42	$\frac{3}{2}^+$	0.57 ± 0.06	γ	1, 2, 14, 23, 24, 27, 29, 33, 48, 53
8.5603 ± 1.8	$(\frac{3}{2}^-)$	0.70 ± 0.07	γ	1, 13, 14, 23, 24, 29, 30, 33, 48, 53, 60, 61
8.9202 ± 2.0	$\frac{5}{2}^-$	$\Gamma = 4.37 \pm 0.02 \text{ eV}$	γ, α	1, 2, 13, 14, 19, 23, 24, 26, 29, 30, 33, 38, 55, 59, 60, 61
9.1850 ± 2.0	$\frac{7}{2}^+$	$1.9_{-1.1}^{+1.5} \text{ eV}$	γ, α	1, 2, 14, 23, 24, 26, 33, 62
9.2744 ± 2	$\frac{5}{2}^+$	4	γ, α	1, 2, 14, 23, 24, 33, 62
9.82 ± 25	$(\frac{1}{2}^+)$			48
9.876 ± 8	$\frac{3}{2}^+$	110 ± 15	α	5, 14, 27
10.26 ± 15	$\frac{3}{2}^-$	150 ± 25	γ, α	2, 5, 14, 61
10.33 ± 11	$\frac{5}{2}^-$	110 ± 20	γ, α	2, 5, 14, 24, 61
10.597 ± 9	$\frac{7}{2}^+$	100 ± 20	γ, α	2, 5, 14, 20, 22
10.96 ± 50	$\frac{5}{2}^-$	4500	α	5
11.265 ± 17	$\frac{9}{2}^+$	110 ± 20	α	5, 14
11.444 ± 19		103 ± 20	α	5, 14
11.600 ± 30	$\frac{5}{2}^+$	170 ± 30	n, α	3, 5, 14, 20, 22, 33, 61
11.886 ± 17	$\frac{5}{2}^-$	200 ± 20	n, α	3, 5, 14, 20, 22
12.0 ± 200	$\frac{7}{2}^+$	≈ 1000	n, α	5, 20, 22
12.557 ± 16	$\frac{1}{2}^+(\frac{3}{2}^+); \frac{3}{2}$	210 ± 20	γ, p, α	5, 14, 17, 18, 36
12.916 ± 12	$\frac{1}{2}^-; \frac{3}{2}$	200 ± 25	γ, p, α	5, 14, 17, 18, 33, 59, 61
13.137 ± 40	$\frac{9}{2}^-$	426 ± 40	$\text{n t}, \alpha$	3, 14, 20, 21, 22
13.16	$\frac{5}{2}^+; \frac{7}{2}^+$	430	n, α	20, 22
14.04 ± 100	$\frac{11}{2}^+$	500 ± 200	n, α	3, 20, 22
14.34 ± 20	$\frac{5}{2}^+; \frac{3}{2}$	254 ± 18	γ, p	14, 17, 36
14.565 ± 15		≤ 30	$\text{n}, \text{t}, \alpha$	3, 14, 20, 21, 22, 36, 61
15.29 ± 25	$(\frac{3}{2}, \frac{5}{2}, \frac{7}{2})^+; (\frac{3}{2})$	250 ± 50	$\gamma, \text{p}, \text{n}, \alpha$	20, 22, 33, 61

Table 11.3 from (1990AJ01): Energy Levels of ^{11}B (continued)

E_x	$J^\pi; T$ (MeV \pm keV)	τ_m (fs) or $\Gamma_{\text{c.m.}}$ (keV)	Decay	Reactions
16.437 \pm 20	$T = \frac{3}{2}$	≤ 30	p, d, α	11, 14, 22, 30, 33, 61
17.33		≈ 1000	n, d, t, α	11, 21, 22
17.43 \pm 50	$T = \frac{3}{2}$	100 \pm 30	γ , n, p, d, α	3, 9, 11, 14
18.0	$T = \frac{3}{2}$	870 \pm 100		14
18.37 \pm 50	$(\frac{1}{2}, \frac{3}{2}, \frac{5}{2})^+$	260 \pm 80	γ , d	9
19.13 \pm 30	$(\pi = +); \frac{3}{2}$	115 \pm 25		14, 61
19.7	$(\frac{1}{2}^+)$	broad	γ , d	9, 28
21.27 \pm 50	$T = \frac{3}{2}$	300 \pm 30		14
23.7	$(\frac{1}{2}, \frac{3}{2}, \frac{5}{2})^+$		γ , d	9
26.5		broad	γ , n	28