

Table 11.4 form (1985AJ01): Energy levels of ^{11}B

E_x (MeV \pm keV)	$J^\pi; T$	τ_m (fsec) ^a or $\Gamma_{\text{c.m.}}$ (keV)	Decay	Reactions
0	$\frac{3}{2}^-; \frac{1}{2}$	stable	—	1, 2, 6, 7, 8, 12, 13, 14, 15, 16, 17, 21, 22, 23, 24, 25, 28, 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
2.124693 ± 0.027	$\frac{1}{2}^-$	$\tau_m = 5.5 \pm 0.4$	γ	1, 6, 7, 8, 12, 13, 14, 15, 16, 17, 21, 22, 23, 28, 30, 31, 33, 34, 37, 38, 41, 46, 48, 49, 50, 51, 52, 53, 54, 55, 57, 58, 59, 60, 61, 62, 63
4.44489 ± 0.50	$\frac{5}{2}^-$	1.18 ± 0.04	γ	1, 2, 6, 7, 8, 12, 13, 14, 17, 21, 22, 23, 25, 27, 28, 30, 31, 33, 34, 37, 38, 41, 49, 51, 52, 53, 54, 58, 59, 60, 61, 62, 63
5.02031 ± 0.30	$\frac{3}{2}^-$	0.34 ± 0.01	γ	1, 6, 7, 8, 13, 14, 21, 22, 23, 25, 28, 30, 31, 33, 34, 37, 38, 49, 50, 52, 53, 54, 58, 59, 60, 61, 63
6.7429 ± 1.8	$\frac{7}{2}^-$	22 ± 5	γ	1, 2, 6, 13, 14, 17, 21, 22, 23, 25, 27, 30, 34, 37, 38, 49, 52, 53, 55, 58, 59, 60, 62, 63
6.79180 ± 0.30	$\frac{1}{2}^+$	1.7 ± 0.2	γ	1, 2, 6, 13, 14, 21, 22, 23, 28, 30, 34, 38, 41, 52, 53, 55, 63
7.28551 ± 0.43	$\frac{5}{2}^+$	0.57 ± 0.04	γ	1, 2, 6, 12, 13, 14, 21, 22, 23, 28, 30, 34, 53, 63
7.97784 ± 0.42	$\frac{3}{2}^+$	0.57 ± 0.06	γ	1, 2, 13, 21, 22, 28, 30, 34
8.5603 ± 1.8	$\leq \frac{5}{2}^-$	0.70 ± 0.07	γ	1, 12, 13, 21, 22, 30, 31, 34, 59
8.9202 ± 2.0	$\frac{5}{2}^-$	$\Gamma = 4.37 \pm 0.02 \text{ eV}$	γ, α	1, 2, 12, 13, 17, 21, 22, 25, 26, 30, 31, 34, 58, 59
9.1850 ± 2.0	$\frac{7}{2}^+$	$1.9_{-1.1}^{+1.5} \text{ eV}$	γ, α	1, 2, 13, 21, 22, 26, 34, 61
9.2744 ± 2	$\frac{5}{2}^+$	4	γ, α	1, 2, 13, 21, 22, 34, 61

Table 11.4 form (1985AJ01): Energy levels of ^{11}B (continued)

E_x (MeV \pm keV)	$J^\pi; T$	τ_m (fsec) ^a or $\Gamma_{c.m.}$ (keV)	Decay	Reactions
9.876 \pm 8	$\frac{3}{2}^+$	110 \pm 15	α	5, 13, 28
10.26 \pm 15	$\frac{3}{2}^-$	165 \pm 25	γ, α	2, 5, 13
10.33 \pm 11	$\frac{5}{2}^-$	110 \pm 20	γ, α	2, 5, 13, 22, 34
10.597 \pm 9	$\frac{7}{2}^+$	100 \pm 20	γ, α	2, 5, 13, 18, 20, 34
10.96 \pm 50	$\frac{5}{2}^-$	4500	α	5
11.265 \pm 17	$\frac{9}{2}^+$	110 \pm 20	α	5, 13
11.444 \pm 19		103 \pm 20	α	5, 13
11.589 \pm 26	$\frac{5}{2}^+$	170 \pm 30	n, α	3, 5, 13, 18, 20, 34
11.886 \pm 17	$\frac{5}{2}^-$	200 \pm 20	n, α	3, 5, 13, 18, 20
12.0 \pm 200	$\frac{7}{2}^+$	\approx 1000	n, α	5, 8, 20
12.557 \pm 16	$\frac{1}{2}^+(\frac{3}{2}^+); \frac{3}{2}$	210 \pm 20	γ, p, α	5, 13, 16, 37
12.916 \pm 12	$\frac{1}{2}^-; \frac{3}{2}$	155 \pm 25	γ, p, α	5, 13, 16, 34, 37, 58
13.137 \pm 40	$\frac{9}{2}^-$	426 \pm 40	n, t, α	3, 13, 18, 19, 20
13.16	$\frac{5}{2}^+, \frac{7}{2}^+$	430	n, α	18, 20
14.04 \pm 100	$\frac{11}{2}^+$	500 \pm 200	n, α	3, 18, 20
14.34 \pm 20	$\frac{5}{2}^+; \frac{3}{2}$	254 \pm 18	γ, p	13, 16, 37
14.565 \pm 15		\leq 30	n, t, α	3, 5, 13, 18, 19, 20, 37
15.32 \pm 100	$(\frac{3}{2}, \frac{5}{2}, \frac{7}{2})^+; (\frac{3}{2})$	635 \pm 180	γ, p, n, α	16, 18, 20, 34
16.437 \pm 20	$T = \frac{3}{2}$	\leq 30	p, d, α	10, 13, 31, 34
17.33		\approx 1000	n, d, t, α	10, 19, 20
17.43 \pm 50	$T = \frac{3}{2}$	100 \pm 30	γ, n, p, d, α	3, 8, 10, 13
18.0	$T = \frac{3}{2}$	870 \pm 100		13
18.37 \pm 50	$(\frac{1}{2}, \frac{3}{2}, \frac{5}{2})^+$	260 \pm 80	γ, d	8
19.146 \pm 30	$(\pi = +), \frac{3}{2}$	115 \pm 25		13
19.7	$(\frac{1}{2}^+)$	broad	γ, d	8, 29
21.27 \pm 50	$T = \frac{3}{2}$	300 \pm 30		13
23.7	$(\frac{1}{2}, \frac{3}{2}, \frac{5}{2})^+$		γ, d	8
26.5		broad	γ, n	29

^a From Table 11.5.