

Table 11.20 from (1975AJ02): Energy levels of ^{11}C ^a

E_x in ^{11}C (MeV \pm keV)	$J^\pi; T$	τ or $\Gamma_{\text{c.m.}}$ (keV)	Decay	Reactions
g.s.	$\frac{3}{2}^-; \frac{1}{2}$	$\tau_{1/2} = 20.40 \pm 0.04$ min	β^+	1, 2, 4, 5, 12, 14, 15, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 35, 36
2.0000 ± 0.5	$\frac{1}{2}^-$	$\tau_m < 0.5$ psec	γ	2, 4, 5, 12, 14, 17, 21, 22, 23, 26, 28, 29, 30, 31, 32, 33
4.3188 ± 1.2	$\frac{5}{2}^-$	< 0.14 psec	γ	2, 4, 5, 12, 14, 17, 21, 23, 26, 28, 32
4.8042 ± 1.2	$\frac{3}{2}^-$	< 0.5 psec	γ	2, 4, 12, 14, 17, 21, 23, 26, 28, 32
6.3392 ± 1.4	$\frac{1}{2}^+$	< 0.11 psec	γ	2, 4, 12, 14, 17, 21, 28
6.4782 ± 1.3	$\frac{7}{2}^-$	< 0.25 psec	γ	2, 4, 5, 12, 14, 17, 21, 23, 26, 28, 32
6.9048 ± 1.4	$\frac{5}{2}^+$	< 69 fsec	γ	2, 4, 12, 14, 17, 23, 26, 28, 32
7.4997 ± 1.5	$\frac{3}{2}^+$	< 91 fsec	γ	2, 4, 12, 14, 17, 26, 28, 32
8.1045 ± 1.7	$\frac{3}{2}^-$		(γ)	4, 12, 14, 17, 26, 28
8.425 ± 8	$\frac{5}{2}^-$		γ	2, 4, 12, 14, 17, 26, 28
8.655 ± 8	$\frac{7}{2}^+$	$\Gamma \ll 9$ keV	(γ)	12, 14, 17, 26
8.701 ± 20	$\frac{5}{2}^+$	15 ± 1		12, 14, 26
9.732 ± 5	($\frac{5}{2}^+$)	450 ± 50	γ, p, α	5, 7, 11, 26
10.084 ± 5	$\frac{7}{2}^+$	≈ 230	p, α	7, 11, 14, 26
10.680 ± 5	$\frac{9}{2}^+$	200 ± 30	p, α	7, 11, 12, 26
(10.799 ± 5)			p, α	7, 11
11.030 ± 5	$T = \frac{1}{2}$	300 ± 60	p, α	7, 11, 26, 32
11.44 ± 10		360	p, α	7, 11, 26
11.954 ± 7			p, α	7, 11
(12.16 ± 40)	($T = \frac{3}{2}$)	270 ± 50	p	4, 8, 22
12.4	$\pi = -$	$1 - 2$ MeV	γ, p	5
12.50 ± 30	$\frac{1}{2}^-; \frac{3}{2}$	490 ± 40	p, α	4, 8, 22, 32
12.65 ± 20	($\frac{7}{2}^+$)	360	$\text{p}, ^3\text{He}, \alpha$	7, 8, 10, 11
(13.01)			γ, p	5

Table 11.20 from (1975AJ02): Energy levels of ^{11}C ^a (continued)

E_x in ^{11}C (MeV \pm keV)	$J^\pi; T$	τ or $\Gamma_{\text{c.m.}}$ (keV)	Decay	Reactions
13.33 \pm 60		270 \pm 80		32
13.4		1100 \pm 100	p, α	7, 11
13.90 \pm 20	$(T = \frac{3}{2})$	200 \pm 100	p	4, 8, 22, 32
14.07 \pm 20		135 \pm 50	n, p	6, 7, 32
14.76 \pm 40		\approx 450	n, p, ^3He	6, 8, 10
15.35 \pm 50	$\pi = -$	broad	γ , n, p	5, 6, 8
15.59 \pm 50		\approx 450	n, p	6, 8
16.7	$\pi = -$	800 \pm 100	γ , p	5
(18.2)			γ , p	5

^a See also [Table 11.21](#).