

Table 11.21 from (1975AJ02): Gamma decay of ^{11}C levels

E_i (MeV)	J_i^π	τ_m^b (psec)	E_f (MeV)	Branch ^a (%)	Mult. ^a	Branch ^c (%)	X^c
2.00	$\frac{1}{2}^-$	< 0.5	0	100			
4.32	$\frac{5}{2}^-$	< 0.5	0	100	M1	100	$+0.17 \pm 0.03^g$
		$< 0.14^h$	2.00	< 2		< 2	
4.80	$\frac{3}{2}^-$	< 0.5	0	83 ± 4	M1	86 ± 2^f	e
			2.00	17 ± 4		14 ± 2^f	e
6.34	$\frac{1}{2}^+$	< 0.11	0	65 ± 3	E1	68 ± 3	
			2.00	35 ± 3		32 ± 3^d	
			4.32			< 7	
			4.80	< 4		< 3	
6.48	$\frac{7}{2}^-$	< 0.25	0	89 ± 2	E2	88 ± 2	-0.01 ± 0.06
			2.00	< 2		< 4	
			4.32	11 ± 2		12 ± 2	
			4.80			< 2	
6.90	$\frac{5}{2}^+$	< 0.16	0	89 ± 3	E1	91 ± 2	0.02 ± 0.03
		$< 0.07^h$	2.00	< 2		< 1	
			4.32	11 ± 3		4.5 ± 1	
			4.80	< 3		4.5 ± 1	
			6.34	< 5			
			6.48	< 5			
7.50	$\frac{3}{2}^+$	< 0.5	0	36 ± 2	E1	37 ± 3	-0.04 ± 0.04
		$< 0.09^h$	2.00	64 ± 2	E1	63 ± 8	0 ± 0.03
			4.32	< 3		< 1	
			4.80	< 3		< 1	
			6.34	< 3			
			6.48	< 3			
			6.90	< 4			
9.73 ⁱ	$(\frac{5}{2}^+)$		0	65 ± 15			
			2.00	3			
			4.32	12 ± 2			
			6.48	20			

- ^a From ${}^9\text{Be}({}^3\text{He}, n){}^{11}\text{C}$ and ${}^{10}\text{B}(d, n){}^{11}\text{C}$ (1965OL03): includes earlier measurements, except for ${}^{11}\text{C}^*(9.73)$: see footnote ⁱ.
- ^b (1966WA10).
- ^c (1968EA03): ${}^{12}\text{C}({}^3\text{He}, \alpha){}^{11}\text{C}$: $X \equiv \text{amplitude ratio of } (L + 1)/L$.
- ^d The cascade is through ${}^{11}\text{C}^*(2.0)$ and not ${}^{11}\text{C}^*(4.3)$ (1968EA03).
- ^e See ${}^{12}\text{C}({}^3\text{He}, \alpha){}^{11}\text{C}$.
- ^f 86 ± 3 , $14 \pm 3\%$ (1966GA19); 84 ± 3 , $16 \pm 3\%$ (1967BL22).
- ^g $+0.16$ (-0.02 , $+0.06$) (1966GA19); 0.13 ± 0.04 (1967BL22).
- ^h (1969TH01).
- ⁱ (1961JA11): ${}^{10}\text{B}(p, \gamma){}^{11}\text{C}$.