

Table 14.6 from (1981AJ01): Levels of ^{14}C from $^9\text{Be}(^6\text{Li}, \text{p})^{14}\text{C}$ ^a

E_x (MeV \pm keV)	$\Gamma_{\text{c.m.}}$ (keV)	σ^{b} (μb)	$2J_f + 1^{\text{c}}$	$J\pi^{\text{d}}$	$\theta_n^2^{\text{e}}$
6.089 \pm 10		71	2.5 [3]		
6.588 \pm 10		30	1.0 [1]		
6.726 \pm 10		220	7.6 [7]		
6.899 \pm 10		31	1.1 [1]		
7.016 \pm 10		130	4.5 [5]		
7.341 \pm 10		151	5.2 [5]		
8.318 \pm 10	22 \pm 6	146	5.1	2 ⁺	0.08 \pm 0.02
9.796 \pm 10	45 \pm 12	223	7.7	3	0.4 \pm 0.1 if $\pi = +$ 0.04 \pm 0.01 if $\pi = -$
10.441 \pm 15		312	10.8	2 ⁺ , 3	
10.512 \pm 15	26 \pm 8	262	9.1	4	0.08 \pm 0.02 if $\pi = +$ 1.3 \pm 0.4 if $\pi = -$
10.743 \pm 15	20 \pm 7	444	15.4		
11.306 \pm 15	46 \pm 12	70	2.4	1 ⁻	0.012 \pm 0.003
11.397 \pm 15	22 \pm 7	179	6.2	2 ⁺ , 3	
11.667 \pm 15	20 \pm 7	358	12.4	5 ⁻	0.20 \pm 0.07
11.74 \pm 20					
12.57 \pm 25	80 \pm 20	435	15.1		
12.867 \pm 20	30 \pm 10	300	10.4	4, 5	
12.970 \pm 20	30 \pm 10	225	7.8	3, 4	
14.667 \pm 20	57 \pm 15			2 ⁺ , 3, 4, 5, 6 ⁺	
14.867 \pm 25					
15.19 \pm 30					
(15.37 \pm 30)					
15.44 \pm 40					
(16.02 \pm 50)					
16.411 \pm 20					
(16.57 \pm 40)					
16.715 \pm 30					
(17.28 \pm 40)					

Table 14.6 from (1981AJ01): Levels of ^{14}C from $^9\text{Be}(^6\text{Li}, \text{p})^{14}\text{C}$ ^a (continued)

E_x (MeV \pm keV)	$\Gamma_{\text{c.m.}}$ (keV)	σ ^b (μb)	$2J_f + 1$ ^c	$J\pi$ ^d	θ_n^2 ^e
17.95 \pm 40					
18.10 \pm 40					

^a (1973AJ01): $E(^6\text{Li}) = 20$ MeV.

^b Total cross section for formation of this state; absolute value: $\pm 20\%$ except for the last six values, $\pm 30\%$.

^c The first number gives $2J_f + 1$, based on a best fit to the experimentally determined values for the cross section of the states with known spins. These $2J_f + 1$ values are determined to $\pm 10\%$, except for the last six values which are determined to $\pm 20\%$. The second number, in brackets, gives $2J_f + 1$ derived from the J_f assignments shown in Table 14.3.

^d Suggested from the $2J_f + 1$ rule and comparison of predicted neutron width with observed $\Gamma_{\text{c.m.}}$ assuming $0.01 < \theta_n^2 < 1.0$.

^e Calculated from neutron penetration of the centrifugal barrier, assuming that the total width is the neutron decay width Γ_n .