

Table 12.19 from (1985AJ01):
States of ^{12}C from $^{12}\text{C}(^3\text{He}, ^3\text{He})$, $^{12}\text{C}(\alpha, \alpha)$ and $^{14}\text{N}(\text{d}, \alpha)$ ^a

E_x (MeV \pm keV)	L ^b	Γ (MeV)	$J^\pi; T$
0	0		$0^+; 0$
4.4422 ± 1.5	2		$2^+; 0$
7.65			$0^+; 0$
9.64	3	0.030 ± 0.008	$3^-; 0$
10.84			$1^-; 0$
11.83			$2^-; 0$
12.71	0		$1^+; 0$
13.35 ^c		0.355 ± 0.050	
14.08 ± 30 ^d			$4^+; 0$
15.11	0		$1^+; 1$
15.5 ± 100	2	2.0 ± 0.3	$(2^+; 0)$
16.11	2		$2^+; 1$
16.57			$2^-; 1$
18.40 ± 60	2	0.4 ± 0.1	$(2^+); 1$
18.9 ± 150 ^e	2	0.7 ± 0.15	$(2^+); 1$
19.56 ± 50 ^f		≈ 0.25	$(1, 2, 3)^+$
20.55 ± 100 ^{c,f}		≈ 0.2	$(2, 3)^+$
21.54 ± 110 ^g	2		2^+
22.4 ± 100 ^e		≈ 0.25	$(2)^+$
23.82 ± 110	2	0.6 ± 0.2	
25.9 ± 300	2	2.2 ± 0.3	(2^+)
28.8 ± 400 ^d	2	2.7 ± 0.4	(2^+)

^a See also [Table 12.23 in \(1975AJ02\)](#). For references see [Table 12.19 in \(1980AJ01\)](#). Energies listed without uncertainties are from [Table 12.6](#).

^b From $(^3\text{He}, ^3\text{He})$.

^c Not reported in $(^3\text{He}, ^3\text{He})$.

^d See also [\(1983YA01\)](#).

^e Reported in $(^3\text{He}, ^3\text{He})$ only.

^f See also [\(1982KA1M\)](#).

^g May be unresolved states: if so, $\Gamma = 1.4 \pm 0.2$ MeV and $\Gamma = 0.43 \pm 0.08$ MeV are reported.