

Table 17.12 from (1993TI07): Resonances in $^{13}\text{C}(\alpha, n)$ and $^{13}\text{C}(\alpha, \alpha)$ ^a

E_{res} (MeV \pm keV)	$\Gamma_{\text{c.m.}}$ (keV)	Γ_{α}/Γ	J^{π}	E_x (MeV)
1.0563 \pm 1.5	1.5 \pm 0.2		$\frac{5}{2}$	7.1669
1.3367 \pm 1.5	0.6 ^{+0.2} _{-0.1}			7.3813
1.3406 \pm 1.5	0.8 ^{+0.3} _{-0.2}			7.3842
1.590 \pm 2	≤ 1		$\frac{7}{2}^{-}$	7.575
1.745 \pm 6	≤ 15		$\frac{5}{2}^{+}$	7.693
2.083 \pm 8	75	0.03	$\frac{1}{2}^{-}$	7.952
2.250 \pm 8	110	0.05	$\frac{3}{2}^{+}$	8.080
2.407 \pm 8	70	0.11	$\frac{3}{2}^{-}$	8.200
2.604 \pm 4	9 \pm 3	0.44	$\frac{1}{2}^{+}$	8.350
2.680 \pm 3	4 \pm 3	0.08	$\frac{5}{2}^{+}$	8.408
2.763 \pm 3	7 \pm 3	0.97	$\frac{7}{2}^{+}$	8.472
2.808 \pm 3	5 \pm 3	0.26	$\frac{5}{2}^{-}$	8.506
3.059 \pm 5	50 \pm 3	0.06	$\frac{3}{2}^{-}$	8.698
(3.1)	broad		$\frac{1}{2}^{-}$	(8.7)
3.318 \pm 8	101 \pm 3	0.50	$\frac{3}{2}^{+}$	8.896
3.415 \pm 4	21 \pm 3	0.04	$\frac{7}{2}^{-}$	8.970
3.645 \pm 4	4 \pm 3	0.45	$\frac{1}{2}^{-}$	9.146
(3.69)	3	1.00	$\frac{7}{2}^{-}$	(9.18)
3.714 \pm 4	5.5 \pm 1	0.20	$\frac{5}{2}^{+}$	9.199
4.096 \pm 4	15 \pm 1	0.85	$\frac{5}{2}^{-}$	9.491
(4.3)			$\frac{3}{2}^{-}$	(9.6)
4.394 \pm 5	16 \pm 1	0.70	$\frac{7}{2}^{+}$	9.719
4.465 \pm 15	≈ 25	0.90	$\frac{3}{2}^{+}$	9.773
4.583 \pm 5	14			9.863
4.600 \pm 15	≈ 10			9.876
4.730 \pm 20	≈ 80	0.78	$\frac{5}{2}^{+}$	9.976
4.820 \pm 20	≈ 100			10.044
(4.94)	138	0.85	$\frac{5}{2}^{+}$	(10.14)
4.993 \pm 5	45	0.15	$\frac{7}{2}^{-}$	10.177
(5.08)	122	0.60	$\frac{7}{2}^{+}$	(10.2)
5.200 \pm 15	150		$\frac{5}{2}^{+}, \frac{7}{2}^{-}$	10.335

Table 17.12 from (1993TI07): Resonances in $^{13}\text{C}(\alpha, n)$ and $^{13}\text{C}(\alpha, \alpha)$ ^a
(continued)

E_{res} (MeV \pm keV)	$\Gamma_{\text{c.m.}}$ (keV)	Γ_{α}/Γ	J^{π}	E_x (MeV)
5.315 \pm 3	14 \pm 3			(10.423)
5.40	75 \pm 30		$\frac{5}{2}^{+}, \frac{7}{2}^{-}$	10.49
5.492 \pm 3	51 \pm 2		$\frac{7}{2}^{-}, \frac{9}{2}^{+}$	(10.558)
(5.68)	≤ 25	1.00	$(\frac{7}{2}^{+})$	(10.70)
5.778 \pm 3	74 \pm 3		$\frac{1}{2}^{+}, \frac{7}{2}^{-}$	(10.777)
5.945 \pm 3	46 \pm 2		$\frac{5}{2}$	(10.904)
6.117 \pm 3	31 \pm 3			(11.036)
6.168	5.0 \pm 1.1		$\frac{1}{2}^{-}; T = \frac{3}{2}$	(11.075 \pm 0.005)
6.380 \pm 3	80 \pm 3			(11.237)
6.883 \pm 3	65 \pm 2			(11.621)
7.051 \pm 10	40 \pm 25			11.750
7.136 \pm 15	12 \pm 3			11.815
7.384 \pm 15				12.004
7.52 \pm 20	150 \pm 50			12.11
7.736 \pm 15	100 \pm 30			12.273
7.88 \pm 20				12.38
7.927 \pm 15				12.419
7.976	8 \pm 2		$\frac{3}{2}^{-}; T = \frac{3}{2}$	12.457 \pm 0.005
8.156 \pm 15	75 \pm 30			12.594
8.253 \pm 15	≈ 5			12.668
8.44 \pm 25				12.81
8.59 \pm 20	≥ 150			12.93
8.612	6 \pm 2		$\frac{1}{2}^{+}; T = \frac{3}{2}$	12.943 \pm 0.006
8.676	≤ 3		$\frac{5}{2}^{-}; T = \frac{3}{2}$	12.992 \pm 0.006
8.72 \pm 20				13.03
8.785 \pm 15	16 \pm 4			13.075
9.319 \pm 15	≈ 120			13.483
9.483 \pm 15	250 \pm 100			13.609

^a See references listed in Tables 17.8 of (1977AJ02, 1982AJ01). See also Table 17.17 here.