

Table 17.12 from (1977AJ02): Resonances ^a in ¹⁶O(n, n)¹⁶O and ¹⁶O(n, α)¹³C

E_n^b (keV)	$\Gamma_{c.m.}^b$ (keV)	$\Gamma_{\lambda n}^c$ (keV)	$\Gamma_{\lambda\alpha}^c$ (keV)	$\theta_{\lambda n}^2^c$ (%)	$J\pi^b$	E_x (MeV)
433 ± 2 ^j	45	45		4.4	$\frac{3}{2}^-$	4.553
1000 ± 2 ^j	96	96		68.9 ⁱ	$\frac{3}{2}^+$	5.086
1140 ^d	< 0.1					5.218
1312 ± 2 ^j	42	41.5		0.91	$\frac{3}{2}^-$	5.380
1651 ± 2	3.4 ± 0.3	3.4		9.4	$\frac{7}{2}^-$	5.698
1689 ± 2	< 1				e	5.734
1833 ± 2	6.6 ± 0.7	6.6		0.95	$\frac{3}{2}^+$	5.870
1908 ± 4	32 ± 3	31.5		0.51	$\frac{1}{2}^-$	5.940
2351 ± 8 ^h	124 ± 12	124		0.81	$\frac{1}{2}^+$	6.357
2889 ± 2	< 1				e	6.863
3006 ± 2	< 1				e	6.973
3211 ± 3	1.3 ± 0.4	1.3	0.0033	0.44	$(\frac{5}{2}^-)$	7.166
3250 ± 10	280 ± 30	280	0.07	16.9	$\frac{3}{2}^+$	7.202
3438 ± 3	0.5 ± 0.2	0.5	0.01	0.01	$(\frac{5}{2}^+)$	7.379
3441 ± 3	1.1 ± 0.4	1.1	0.003	0.31	$\frac{5}{2}^-$	7.382
3630 ± 20	500 ± 50	500	0.08	5.1	$\frac{3}{2}^-$	7.560
3647 ^d	< 0.1					7.576
3766 ± 4	18 ± 2	18	0.01	2.9	$\frac{7}{2}^-$	7.688
4053 ± 8 ^f	90 ± 9	84	6.7	0.47	$\frac{1}{2}^+$	7.958
4090 ± 50 ^f	270 ± 30	250	16	3.4	$\frac{1}{2}^-$	7.99
4162 ± 8 ^f	85 ± 9	71	15	8.5	$\frac{3}{2}^+$	8.060
4290 ± 20 ^f	69 ± 7	68	0.8	0.68	$\frac{1}{2}^-$	(8.18)
4310 ± 10 ^f	52	48	4.0	0.43	$(\frac{3}{2}^-)$	8.199
4470	12	10	2.2	0.06	$\frac{1}{2}^+$	8.350
4532	5	4.8	0.54	0.8	$\frac{5}{2}^+$	8.408
4600	8		7.6	0.53	$\frac{7}{2}^+$	8.472
4610	≤ 11				$\geq \frac{3}{2}^+$	8.481
4637	5	3.4	1.9	0.40	$\frac{5}{2}^-$	8.507
4830 ^f	44	42	1.8	0.36	$\frac{3}{2}^-$	8.688
5050 ^f	78	68	9.5	4.2	$\frac{3}{2}^+$	8.895

Table 17.12 from (1977AJ02): Resonances ^a in ¹⁶O(n, n)¹⁶O and ¹⁶O(n, α)¹³C (continued)

E_n^b (keV)	$\Gamma_{c.m.}^b$ (keV)	$\Gamma_{\lambda n}^c$ (keV)	$\Gamma_{\lambda\alpha}^c$ (keV)	$\theta_{\lambda n}^2^c$ (%)	$J\pi^b$	E_x (MeV)
5131 ^f	25	23	2.3	1.5	$\frac{7}{2}^-$	8.971
5320	7				$\frac{1}{2}^-$	9.149
5360	3				$\frac{7}{2}^-$	9.187
5370	7				$\frac{5}{2}^+$	9.196
5610 ^f	120	120		0.91	$\frac{3}{2}^-$	9.422
5640 ^f	15				$\frac{5}{2}^-$	9.450
5640 ^g	140				$\geq \frac{3}{2}^-$	9.450
5914 ± 5	28				$\geq \frac{5}{2}^-$	9.708
6010	28				$\geq \frac{3}{2}^-$	9.798
6100	25				$\geq \frac{1}{2}^-$	9.88
6395 ± 7	38				$\geq \frac{3}{2}^-$	10.160
6807 ± 7	40				$\geq \frac{3}{2}^-$	10.547
7200 ± 8	70				$\geq \frac{3}{2}^-$	10.917
7830	190				$\geq \frac{3}{2}^-$	11.509
8320	270				$\geq \frac{3}{2}^-$	11.970
8740	130					12.365
9050	95					12.656
10130	400					13.672
11140	340				$(\geq \frac{3}{2}^-)$	14.621
11540	180					14.997

^a See also Table 17.8 here and Table 17.11 in (1971AJ02).

^b See (1973FO11, 1973JO01). See (1971AJ02) for the earlier values.

^c See (1973JO01).

^d Not observed in σ_1 : see (1973FO11).

^e Not $\frac{1}{2}^+$ (1973FO11).

^f See also (1974SC1C).

^g For this resonance and all the following ones see (1961FO07, 1969DA13, 1974SC1C).

^h See also (1971WE08, 1973WE06).

ⁱ $S = 0.8 \pm 0.1$ (1974CO10).

^j C.H. Johnson, private communication.