

Table 17.14 from (1971AJ02): States of ^{17}O from $^{16}\text{O}(\text{d}, \text{p})^{17}\text{O}$ and $^{19}\text{F}(\text{d}, \alpha)^{17}\text{O}$

E_x^a (MeV \pm keV)	$\Gamma_{\text{c.m.}}^a$ (keV)	E_x^b (MeV \pm keV)	E_x^c (MeV \pm keV)	S^d	$\theta_{\text{abs.}}^2{}^e$	$J^\pi{}^f$
0	< 8	0	0	0.81	0.045	$\frac{5}{2}^+$
0.871 ± 4^g	< 8	0.870 ± 20	0.883 ± 11	0.71	0.16	$\frac{1}{2}^+$
3.055 ± 4^g	< 8	3.060 ± 30	3.069 ± 10	0.032	0.0024	$\frac{1}{2}^-$
3.846 ± 5^g	< 8	3.850 ± 30	3.856 ± 11	0.028	0.0022	$\frac{7}{2}^-{}^i$
4.553 ± 6	40 ± 5	4.580 ± 20	4.567 ± 14		0.0071	$\frac{3}{2}^-$
5.083 ± 10	95 ± 5	5.070 ± 20			0.047	$\frac{3}{2}^+$
5.215 ± 5	< 8		5.229 ± 13			
5.378 ± 7	28 ± 7	5.310 ± 20	5.397 ± 14			$\frac{3}{2}^-$
5.695 ± 5^h	< 8				0.013	$\frac{7}{2}^-$
5.731 ± 5^h	< 8	5.760 ± 20	5.723 ± 14			
5.866 ± 5	< 8		5.875 ± 15			
5.940 ± 15	23 ± 10		5.957 ± 15			
		6.240 ± 20				
		6.890 ± 30	6.869 ± 14			
			(6.986 ± 15)			
			(7.371 ± 15)			
		7.510 ± 30				
		8.270 ± 40				
		(8.590 ± 40)				
		9.060 ± 40				

^a $^{16}\text{O}(\text{d}, \text{p})^{17}\text{O}$: (1957BR82).

^b $^{16}\text{O}(\text{d}, \text{p})^{17}\text{O}$ and $^{19}\text{F}(\text{d}, \alpha)^{17}\text{O}$: (1951BU1A).

^c $^{19}\text{F}(\text{d}, \alpha)^{17}\text{O}$: (1952WA1A).

^d $^{16}\text{O}(\text{d}, \text{p})^{17}\text{O}$: (1970DA14).

^e $^{16}\text{O}(\text{d}, \text{p})^{17}\text{O}$: (1961KE01, 1963YA03).

^f Assignments from (1955AJ61, 1956GR37, 1958RI1A, 1961KE01, 1963YA03, 1964SC12).

^g (1965GA1A) report $E_x = 873 \pm 5, 3056 \pm 4$ and 3838 ± 4 keV.

^h ΔE_x between $^{17}\text{O}^*(5.73, 5.70) = 34 \pm 2$ keV (1968BI1A).

ⁱ $J^\pi = \frac{5}{2}^-$: see, for instance, reaction 46.