

Table 19.5 from (1995TI07): Levels of ^{19}O from $^{17}\text{O}(t, p)$ and $^{18}\text{O}(d, p)$ ^a

E_x (MeV \pm keV)	$\Gamma_{\text{c.m.}}$ (keV)	l_n ^b	l_{2n} ^c	S ^d	J^π
0		2	0	0.57	$\frac{5}{2}^+$
0.0960 \pm 0.5		2	2		$\frac{3}{2}^+$
1.4719 \pm 0.5		0	2	1.00	$\frac{1}{2}^+$
2.3715 \pm 1.0		2	(2 + 4)		$\frac{9}{2}^+$
2.7790 \pm 0.9		(2)	2		$\frac{7}{2}^+$
3.0671 \pm 2.6			(2 + 4)		$\frac{3}{2}^+$
3.1535 \pm 2.4		2	(0 + 2)	(0.06)	$\frac{5}{2}^+$
3.237 \pm 5					$\frac{3}{2}^+$
3.944 \pm 3		1		0.11	$\frac{3}{2}^-$
4.118 \pm 5	< 15	2	(2)	0.33	$\frac{3}{2}^+$
4.333 \pm 12	< 15				
4.402 \pm 12	< 15				
4.584 \pm 12	75 \pm 5	1		0.15	$\frac{3}{2}^-$
4.707 \pm 12	< 15	2		0.02	$\frac{5}{2}^+$
4.998 \pm 12	< 15				
5.150 \pm 10	< 15	2		0.08	$\frac{5}{2}^+$
5.455 \pm 10	320 \pm 25	2	(2 + 4)	0.85	$\frac{3}{2}^+$
5.502 \pm 12	< 15				
5.714 \pm 12	< 15	2		0.17	$(\frac{3}{2}^+)$
6.280 \pm 12	< 15	3		0.13	$\frac{7}{2}^-$
6.480 \pm 15					
6.560 \pm 15					
6.899 \pm 15					
6.997 \pm 15					
7.117 \pm 15					
7.248 \pm 15					

^a For references see [Table 19.3 in \(1978AJ03\)](#). However, see note in [Table 19.4 of \(1987AJ02\)](#) concerning errors in that table and subsequent corrections.

^b $^{18}\text{O}(d, p)^{19}\text{O}$.

^c $^{17}\text{O}(t, p)^{19}\text{O}$.

^d $E_d = 14.8$ MeV: polarization and differential cross section measurements. The spectroscopic factors for the states with $E_x > 4.1$ MeV have been calculated in the weakly bound approximation: see [\(1978AJ03\)](#).