Table 19.3 from (1972AJ02): Levels of ^{19}O from ^{17}O(t, p)^{19}O and ^{18}O(d, p)^{19}O

E_x (MeV ± keV)											Γ [e] (keV)	l_n [a,e,f]	L [b,e,f]	J^π
(1961AR06) [a]	(1961SJ01) [a]	(1963YA03) [a]	(1964EL1A) [a]	(1964MO24, 1965MO19) [b]	(1965MO16) [a]	(1971BR02) [c,d]	(1965WI1B, 1966WI05) [a,b]	(1969FI07) [a]	(1969FI07, 1970FI08) [c]	(1971HI06) [c,d]				
0	0	0	0	0	0		0	0				2	0	$\frac{5}{2}^+$
	0.098 ± 6	[h]	0.095 ± 10	0.093 ± 10	0.097 ± 10	0.096 ± 2	0.096 ± 12	0.097 ± 4	0.097 ± 2 [i]			2	2	$\frac{3}{2}^+$
			0.348 ± 10											
	(1.257 ± 30)													
1.469 ± 11	1.469 ± 28	1.468 ± 15	1.467 ± 10	1.468 ± 10	1.468 ± 10	1.470 ± 2	1.467 ± 12	1.468 ± 4	1.470 ± 3 [j]	1.4719 ± 0.5		0	(2)	$\frac{1}{2}^+$
	2.353 ± 29		2.371 ± 10	2.367 ± 10		2.367 ± 4	2.373 ± 12	2.370 ± 5	2.369 ± 4	2.3715 ± 1.0		2	(2)	$(\frac{3}{2}^+)$ [m]
		2.612 ± 15	2.617 ± 10											
	2.765 ± 30		2.794 ± 10	2.775 ± 10		2.774 ± 4	2.779 ± 12	2.780 ± 5	2.777 ± 3	2.7790 ± 0.9			2	$\frac{9}{2}^+$ [m]
						(2.794 ± 3)								
	(3.047 ± 30)			3.061 ± 10	3.064 ± 10	3.066 ± 3	3.070 ± 12	3.070 ± 5					(2)	$(\frac{3}{2}^+, \frac{5}{2}^+, \frac{7}{2}^+)$
3.164 ± 30	3.144 ± 29	3.171 ± 15	3.161 ± 10	3.153 ± 10	3.155 ± 10	3.150 ± 3	3.156 ± 12	3.160 ± 5	3.157 ± 3			2	0	$\frac{5}{2}^+$
			3.243 ± 10	3.223 ± 15	3.233 ± 15		3.229 ± 12	3.237 ± 5				0 [l]		$\frac{1}{2}^+$
	(3.791 ± 31)													
3.948 ± 30	3.942 ± 30	3.942 ± 15	3.953 ± 10	3.946 ± 15	4.055 ± 15		3.945 ± 12	3.951 ± 6	3.944 ± 3			1	[k]	$(\frac{1}{2}^-)$
(4.123 ± 40)	4.109 ± 20	4.111 ± 15	4.116 ± 10	4.107 ± 15			4.111 ± 12	4.118 ± 5			< 15	2	2	$(\frac{3}{2}, \frac{5}{2})^+$
				(4.328 ± 15)			4.333 ± 12				< 15			
			4.421 ± 10	4.396 ± 15			4.402 ± 12				< 15		[k]	
(4.586 ± 40)			4.599 ± 10				4.584 ± 12				75 ± 15			
(4.706 ± 40)			4.725 ± 10				4.707 ± 12				< 15		0	$\frac{5}{2}^+$
			4.954 ± 10				4.998 ± 12				< 15		[k]	
			5.107 ± 10											
(5.165 ± 40)		5.153 ± 15	5.172 ± 10				5.148 ± 12				< 15		0	$\frac{5}{2}^+$
		5.447 ± 15					5.460 ± 12				310 ± 30	(2)		
5.45 [g]							5.502 ± 12				< 15		[k]	
			5.582 ± 10											
5.707 ± 35		(5.708 ± 15)					5.714 ± 12				< 15	[k]		
6.279 ± 30		6.282 ± 15					6.280 ± 12				< 15	(3)		
		6.480 ± 15												
		6.560 ± 15												
		6.899 ± 15												
		6.997 ± 15												
		7.117 ± 15												
		7.248 ± 15												

[a] ^{18}O(d, p)^{19}O: proton spectra measurements. [b] ^{17}O(t, p)^{19}O: proton spectra measurements. [c] ^{18}O(d, p)^{19}O: γ-ray measurements. [d] ^{17}O(t, p)^{19}O: γ-ray measurements. [e] (1965WI1B, 1966WI05).
[f] See also (1961AR06, 1963YA03, 1964MO24, 1965MO16, 1965MO19, 1969FI07). [g] Unresolved. [h] Observed but group was weak.
[i] Other values for this level are $E_x = 96 \pm 11$ (1959AJ76), 96 ± 6 (1961JA23), 95 ± 2 (1963GI12) and 96.0 ± 0.5 keV (1971MC11). [j] (1971MC11) find $E_x = 1472 \pm 1$ keV. [k] Angular distribution for l_n or L not obtained.
[l] See also (1969FI07). [m] See however (1971HI06).