

Table 19.1 from (1987AJ02): Energy levels of  $^{19}\text{O}$  <sup>a</sup>

$E_x$ (MeV $\pm$ keV)	$J^\pi; T$	$\tau^b$ or $\Gamma_{c.m.}$ (keV)	Decay	Reactions
0	$\frac{5}{2}^+; \frac{3}{2}$	$\tau_{1/2} = 26.91 \pm 0.08$ sec	$\beta^-$	1, 2, 3, 4, 5, 7, 8, 9
0.0960 $\pm$ 0.5	$\frac{3}{2}^+$	$\tau_m = 2.00 \pm 0.07$ nsec $g = -0.48 \pm 0.06$	$\gamma$	3, 4, 7, 8, 9
1.4717 $\pm$ 0.4	$\frac{1}{2}^+$	$\tau_m = 1.27 \pm 0.17$ psec	$\gamma$	3, 4, 7
2.3715 $\pm$ 1.0	$\frac{9}{2}^+$	$> 3.5$ psec	$\gamma$	3, 4, 7
2.7790 $\pm$ 0.9	$\frac{7}{2}^+$	$93 \pm 19$ fsec	$\gamma$	3, 4, 7
3.0674 $\pm$ 1.6	$\frac{3}{2}^+$	$\geq 1$ psec	$\gamma$	3, 4, 7
3.1535 $\pm$ 1.7	$\frac{5}{2}^+$	$(\geq 1$ psec)	$\gamma$	3, 4, 7
3.2316 $\pm$ 2.3	$\frac{3}{2}^+$			3, 4, 7
3.9449 $\pm$ 1.4 <sup>c</sup>	$\frac{3}{2}^-$		$\gamma$	3, 4, 7
4.1093 $\pm$ 1.9	$\frac{3}{2}^+$	$\Gamma < 15$ keV		3, 4, 7
4.3281 $\pm$ 2.4	$\frac{3}{2}^+, \frac{5}{2}^+$	$< 15$		3, 4, 7
4.4025 $\pm$ 2.7	$\frac{3}{2}^+ \rightarrow \frac{7}{2}^-$	$< 15$		3, 4, 7
4.5820 $\pm$ 4.6	$\frac{3}{2}^-$	$52 \pm 3$	n	3, 4, 5, 7
4.7026 $\pm$ 2.7	$\frac{5}{2}^+$	$< 15$		3, 4, 7
4.9683 $\pm$ 5.5	$\frac{5}{2}^+, \frac{7}{2}^-$			3
5.0070 $\pm$ 4.5	$\frac{3}{2}^+, \frac{5}{2}^+$	$< 15$		3, 4, 7
5.0820 $\pm$ 5.4	$\frac{1}{2}^-$	$49 \pm 5$	n	3, 5
5.1484 $\pm$ 3.2	$\geq \frac{5}{2}^+$	$3.4 \pm 1.0$	n	3, 4, 5, 7
5.3840 $\pm$ 2.8	$(\frac{9}{2} \rightarrow \frac{13}{2})$			3
5.5035 $\pm$ 3.1 <sup>c</sup>		$< 15$		3, 4, 7
5.54	$\frac{3}{2}^+$	$\approx 490$	n	5
5.7046 $\pm$ 4.3 <sup>c</sup>	$\frac{7}{2}^-, \frac{5}{2}^+$	$7.8 \pm 1.4$	n	3, 4, 5, 7
6.1196 $\pm$ 3.2 <sup>c</sup>	$\frac{3}{2}^+$	$\approx 110$	n	3, 5
6.1916 $\pm$ 5.5				3
6.2693 $\pm$ 2.6	$\frac{7}{2}^-$	$19.2 \pm 2.4$	n	3, 4, 5, 7
6.4058 $\pm$ 3.1 <sup>c</sup>				3
6.4662 $\pm$ 4.8	$(\frac{7}{2} \rightarrow \frac{11}{2})$		(n)	3, 5, 7
6.583 $\pm$ 6 <sup>c</sup>				3, 7
6.903 $\pm$ 8				3, 7
6.988 $\pm$ 9				3, 7

Table 19.1 from (1987AJ02): Energy levels of  $^{19}\text{O}$  <sup>a</sup> (continued)

$E_x$ (MeV $\pm$ keV)	$J^\pi; T$	$\tau$ <sup>b</sup> or $\Gamma_{\text{c.m.}}$ (keV)	Decay	Reactions
7.118 $\pm$ 10				3, 7
7.242 $\pm$ 8				3, 7
7.508 $\pm$ 10				3
8.048 $\pm$ 20				3
8.132 $\pm$ 20				3
8.247 $\pm$ 20				3
8.450 $\pm$ 20				3
8.561 $\pm$ 20				3
8.591 $\pm$ 20				3
8.916 $\pm$ 20				3
8.923 $\pm$ 20				3
9.022 $\pm$ 20				3
9.064 $\pm$ 20				3
9.253 $\pm$ 20				3
9.324 $\pm$ 20				3
9.43				3
9.56				3
9.6	$\frac{7}{2}^-$		n	3, 5
9.9	$\frac{7}{2}^-$		n	3, 5
9.93				3
9.98				3
10.21	$\frac{7}{2}^-$		n	5
10.66	$\frac{7}{2}^-$		n	5
11.25 $\pm$ 50		240	n, $\alpha$	6
11.58 $\pm$ 50		330	n, $\alpha$	6

<sup>a</sup> See also [Tables 19.2](#) and [19.5](#).

<sup>b</sup> See also [reaction 1](#), and [Table 19.2 in \(1978AJ03\)](#).

<sup>c</sup> See footnotes to [Table 19.3](#).