

Table 15.19 from (1981AJ01): Radiative decays in  $^{15}\text{O}$ 

$E_i$ (MeV)	$J_i^\pi$	$E_f$ (MeV)	$J_f^\pi$	Branch (%)	$\delta^b$	Refs.
5.24	$\frac{5}{2}^+$	0	$\frac{1}{2}^-$	100	$+0.10 \pm 0.04$ (E3/M2)	<sup>b</sup>
6.18	$\frac{3}{2}^-$	0	$\frac{1}{2}^-$	100	$-0.141 \pm 0.016$ $-0.121 \pm 0.008$ (E2/M1)	(1965WA16, 1974KE02) (1971AV04)
6.79	$\frac{3}{2}^+$	5.18	$\frac{1}{2}^+$	< 2.5		(1965WA16)
		5.24	$\frac{5}{2}^+$	< 2.5		(1965WA16)
		0	$\frac{1}{2}^-$	100	$-0.02 \pm 0.02$ (M2/E1)	(1965WA16, 1968GI11, 1971AV04)
6.86	$\frac{5}{2}^+$	5.18	$\frac{1}{2}^+$	< 3		(1968GI11)
		5.24	$\frac{5}{2}^+$	< 3		(1968GI11)
		6.18	$\frac{3}{2}^-$	< 7		(1965WA16)
		0	$\frac{1}{2}^-$	< 10		(1965WA16)
		5.18	$\frac{1}{2}^+$	< 4		(1968GI11)
7.28	$\frac{7}{2}^+$	5.24	$\frac{5}{2}^+$	100	$+0.04 \pm 0.03$ (E2/M1)	(1965WA16, 1968GI11, 1971AV04)
		6.18	$\frac{3}{2}^-$	< 0.4		(1965WA16)
		0	$\frac{1}{2}^-$	< 30		(1965WA16)
				< 12		(1968GI11)
				$3.8 \pm 1.2$		(1969KU01)
		5.18	$\frac{1}{2}^+$	< 10		(1965WA16)
				< 4		(1968GI11)
		5.24	$\frac{5}{2}^+$	100		(1965WA16, 1968GI11)
				$96.2 \pm 1.2$		(1969KU01)
		6.18	$\frac{3}{2}^-$	< 2		(1965WA16)
7.56	$\frac{1}{2}^+$	0	$\frac{1}{2}^-$	$\approx 3$ $3.5 \pm 0.5$	(1960TA17) (1963HE11)	
7.56	$\frac{1}{2}^+$	5.18	$\frac{1}{2}^+$	$16.2 \pm 2$ $15.8 \pm 0.6$		(1960TA17) (1963HE11)
		6.18	$\frac{3}{2}^-$	$57.9 \pm 0.6$ $57.4 \pm 0.6$		(1960TA17) (1963HE11)
		6.79	$\frac{3}{2}^+$	$22.9 \pm 2$ $23.3 \pm 0.6$		(1960TA17) (1963HE11)

Table 15.19 from (1981AJ01): Radiative decays in  $^{15}\text{O}$  (continued)

$E_i$ (MeV)	$J_i^\pi$	$E_f$ (MeV)	$J_f^\pi$	Branch (%)	$\Gamma_\gamma$ (eV)	Refs.
8.28	$\frac{3}{2}^+$	6.86	$\frac{5}{2}^+$	c	f	
		0	$\frac{1}{2}^-$	$53.8 \pm 0.25$	0.531	(1966EV01)
		5.24	$\frac{5}{2}^+$	$42.7 \pm 0.5$	0.405	(1966EV01)
		6.18	$\frac{3}{2}^-$	$2.2 \pm 0.6$	0.021	(1966EV01)
		6.86	$\frac{5}{2}^+$	$1.2 \pm 0.3$	0.011	(1966EV01)
8.74	$\frac{1}{2}^+$	5.18	$\frac{1}{2}^+$	67	0.32	(1966EV01)
		6.18	$\frac{3}{2}^-$	33	0.16	(1966EV01)
		8.922 <sup>d</sup>	$\frac{1}{2}^-$	0	$50 \pm 25$	
8.982	$(\frac{3}{2})^-$	5.18	$\frac{1}{2}^+$	$20 \pm 10$		(1972KR14)
		6.18	$\frac{3}{2}^-$	$20 \pm 10$		(1972KR14)
		6.86	$\frac{5}{2}^+$	$(10 \pm 10)$		(1972KR14)
		0	$\frac{1}{2}^-$	$94 \pm 1$		(1972KR14)
9.49	$\frac{5}{2}^-$	5.18	$\frac{1}{2}^+$	$6 \pm 1$		(1972KR14)
		6.18	$\frac{3}{2}^-$	$< 1$		(1972KR14)
		6.86	$\frac{5}{2}^+$	$< 1$		(1972KR14)
		0	$\frac{1}{2}^-$	86	2.1	(1967EV02)
		5.24	$\frac{5}{2}^+$	6.5	0.15	(1967EV02)
9.50 <sup>e</sup>	$\frac{3}{2}^+(\frac{1}{2}^+)$	6.18	$\frac{3}{2}^-$	0.7	0.22	(1967EV02)
		6.86	$\frac{5}{2}^+$	3.4	0.08	(1967EV02)
		7.28	$\frac{7}{2}^+$	5.1	0.11	(1967EV02)
		0	$\frac{1}{2}^-$	$\approx 100$		(1967EV02)
9.61	$\frac{3}{2}^-$	0	$\frac{1}{2}^-$	79	4.0	(1967EV02)
		5.24	$\frac{5}{2}^+$	19	1.0	(1967EV02)
		6.18	$\frac{3}{2}^-$	2	0.1	(1967EV02)
		5.24	$\frac{5}{2}^+$	$62 \pm 6$	$18 \pm 6^g$	(1977KU03)
10.46	$(\frac{9}{2}^+)$	6.86	$\frac{5}{2}^+$	$< 4$	$< 1.5$	(1977KU03)
		7.28	$\frac{7}{2}^+$	$38 \pm 6$	$11 \pm 4^g$	(1977KU03)
		0	$\frac{1}{2}^-$	$60 \pm 8$	$0.21 \pm 0.07^g$	(1977KU03)
10.48	$(\frac{3}{2})^-$	5.24	$\frac{5}{2}^+$	$40 \pm 6$	$0.14 \pm 0.01^g$	(1977KU03)
		6.18	$\frac{3}{2}^-$	$< 4$	$< 0.02$	(1977KU03)
		9.79	$\frac{3}{2}^+$	$< 4$	$< 0.02$	(1977KU03)
		0	$\frac{1}{2}^-$	$44 \pm 8$	$14 \pm 4$	(1972PH02)
10.94	$\frac{1}{2}^+$	5.18	$\frac{1}{2}^+$	$34 \pm 3$	$11 \pm 2$	(1972PH02)

Table 15.19 from (1981AJ01): Radiative decays in  $^{15}\text{O}$  (continued)

$E_i$ (MeV)	$J_i^\pi$	$E_f$ (MeV)	$J_f^\pi$	Branch (%)	$\Gamma_\gamma$ (eV)	Refs.
11.03	$\frac{1}{2}^-$	6.18	$\frac{3}{2}^-$	$22 \pm 8$	$7 \pm 2$	(1972PH02)
		6.79	$\frac{3}{2}^+$	$< 8$	$< 3$	(1972PH02)
		0	$\frac{1}{2}^-$	100	$1.4 \pm 0.4$	(1972PH02)
11.22	$\frac{3}{2}^+$	6.79	$\frac{3}{2}^+$	$< 25$	$< 0.4$	(1972PH02)
		0	$\frac{1}{2}^-$	$74 \pm 5$	$5.5 \pm 0.5$	(1972PH02)
		5.18	$\frac{1}{2}^+$	$14 \pm 5$	$1.0 \pm 0.2$	(1972PH02)
11.57	$\frac{5}{2}^-$	5.24	$\frac{5}{2}^+$	$12 \pm 5$	$0.9 \pm 0.2$	(1972PH02)
		6.79	$\frac{3}{2}^+$	$< 4$	$< 0.4$	(1972PH02)
		0	$\frac{1}{2}^-$	$18 \pm 9$	$0.3 \pm 0.2$	(1972PH02)
		5.24	$\frac{5}{2}^+$	$63 \pm 9$	$1.2 \pm 0.1$	(1972PH02)
11.75	$\frac{5}{2}^+$	6.18	$\frac{3}{2}^-$	$20 \pm 9$	$0.4 \pm 0.2$	(1972PH02)
		6.79	$\frac{3}{2}^+$	$< 3$	$< 0.1$	(1972PH02)
		0	$\frac{1}{2}^-$	$< 30$		(1972PH02)
		5.18	$\frac{1}{2}^+$	$< 25$		(1972PH02)
		5.24	$\frac{5}{2}^+$	$47 \pm 7$	$5 \pm 1$	(1972PH02)
11.85	$\frac{5}{2}^-$	6.18	$\frac{3}{2}^-$	$53 \pm 7$	$5 \pm 1$	(1972PH02)
		6.79	$\frac{3}{2}^+$	$< 20$		(1972PH02)
		0	$\frac{1}{2}^-$	$< 50$		(1972PH02)
		5.24	$\frac{5}{2}^+$	100	$1.4 \pm 0.6$	(1972PH02)
		6.79	$\frac{3}{2}^+$	$< 40$		(1972PH02)

<sup>a</sup>  $\delta$  = multipole mixing ratio.

<sup>b</sup> Average of results of (1966GO15, 1968GI01, 1971AV04) (P.M. Endt, private communication).

<sup>c</sup> Intensity  $< 25\%$  of transition to  $^{15}\text{O}^*(6.79)$ .

<sup>d</sup> See, however, (1977DR02) and the comments in reaction 14.

<sup>e</sup> Unresolved doublet: see Table 15.23.

<sup>f</sup> Sum is 0.97 eV, but see Table 15.23 [ $\Gamma_\gamma = 1.4$  eV].

<sup>g</sup>  $\Gamma_\gamma$  values assume  $J$  values in column 2.