

Table 15.18 from (1986AJ01): Radiative decays in  $^{15}\text{O}$  <sup>a</sup>

$E_i$ (MeV)	$J_i^\pi$	$E_f$ (MeV)	$J_f^\pi$	Branch (%)	$\delta^b$
5.24	$\frac{5}{2}^+$	0	$\frac{1}{2}^-$	100	$+0.10 \pm 0.04$ (E3/M2)
6.18 <sup>c</sup>	$\frac{3}{2}^-$	0	$\frac{1}{2}^-$	100	$-0.125 \pm 0.007$ (E2/M1) <sup>k</sup>
6.79 <sup>d</sup>	$\frac{3}{2}^+$	0	$\frac{1}{2}^-$	100	$-0.02 \pm 0.02$ (M2/E1)
6.86 <sup>e</sup>	$\frac{5}{2}^+$	5.24	$\frac{5}{2}^+$	100	$+0.04 \pm 0.03$ (E2/M1)
7.28 <sup>f</sup>	$\frac{7}{2}^+$	0	$\frac{1}{2}^-$	$3.8 \pm 1.2$	
		5.24	$\frac{5}{2}^+$	$96.2 \pm 1.2$	
		0	$\frac{1}{2}^-$	$3.5 \pm 0.5$	
		5.18	$\frac{1}{2}^+$	$15.8 \pm 0.6$	
		6.18	$\frac{3}{2}^-$	$57.5 \pm 0.4$	
7.56 <sup>g</sup>	$\frac{1}{2}^+$	6.79	$\frac{3}{2}^+$	$23.2 \pm 0.6$	
		6.86	$\frac{5}{2}^+$	1	
8.28	$\frac{3}{2}^+$	0	$\frac{1}{2}^-$	$53.8 \pm 0.25$	$\Gamma$ (eV) $0.531^m$
		5.24	$\frac{5}{2}^+$	$42.7 \pm 0.5$	0.405
		6.18	$\frac{3}{2}^-$	$2.2 \pm 0.6$	0.021
		6.86	$\frac{5}{2}^+$	$1.2 \pm 0.3$	0.011
8.74	$\frac{1}{2}^+$	5.18	$\frac{1}{2}^+$	67	0.32
		6.18	$\frac{3}{2}^-$	33	0.16
8.922 <sup>h</sup>	$\frac{5}{2}^+$	0	$\frac{1}{2}^-$	$9 \pm 4$	
		5.18	$\frac{1}{2}^+$	$39 \pm 3$	
		6.18	$\frac{3}{2}^-$	$24 \pm 3$	
		6.86	$\frac{5}{2}^+$	$28 \pm 3$	
8.922 <sup>h</sup>	$\frac{1}{2}^-$	0	$\frac{1}{2}^-$	$50 \pm 25$	
		5.18	$\frac{1}{2}^+$	$20 \pm 10$	
		6.18	$\frac{3}{2}^-$	$20 \pm 10$	
		6.86	$\frac{5}{2}^+$	$(10 \pm 10)$	
8.982 <sup>i</sup>	$(\frac{3}{2})^-$	0	$\frac{1}{2}^-$	$94 \pm 1$	
		5.18	$\frac{1}{2}^+$	$6 \pm 1$	
9.49	$\frac{5}{2}^-$	0	$\frac{1}{2}^-$	86	2.1
		5.24	$\frac{5}{2}^+$	6.5	0.15
		6.18	$\frac{3}{2}^-$	0.7	0.22

Table 15.18 from (1986AJ01): Radiative decays in  $^{15}\text{O}$  <sup>a</sup> (continued)

$E_i$ (MeV)	$J_i^\pi$	$E_f$ (MeV)	$J_f^\pi$	Branch (%)	$\delta^b$		
9.50 <sup>j</sup>	$\frac{3}{2}^+(\frac{1}{2}^+)$	6.86	$\frac{5}{2}^+$	3.4	0.08		
		7.28	$\frac{7}{2}^+$	5.1	0.11		
		0	$\frac{1}{2}^-$	$\approx 100$			
		9.61	$\frac{3}{2}^-$	0	$\frac{1}{2}^-$	79	4.0
				5.24	$\frac{5}{2}^+$	19	1.0
10.46	$(\frac{9}{2}^+)$	6.18	$\frac{3}{2}^-$	2	0.1		
		5.24	$\frac{5}{2}^+$	$62 \pm 6$	$18 \pm 6^{\text{n}}$		
		6.86	$\frac{5}{2}^+$	$< 4$	$< 1.5$		
		7.28	$\frac{7}{2}^+$	$38 \pm 6$	$11 \pm 4^{\text{n}}$		
10.48	$(\frac{3}{2})^-$	0	$\frac{1}{2}^-$	$60 \pm 8$	$0.21 \pm 0.07^{\text{n}}$		
		5.24	$\frac{5}{2}^+$	$40 \pm 6$	$0.14 \pm 0.01^{\text{n}}$		
		6.18	$\frac{3}{2}^-$	$< 4$	$< 0.02$		
		9.79	$\frac{3}{2}^+$	$< 4$	$< 0.02$		
		10.94	$\frac{1}{2}^+$	0	$\frac{1}{2}^-$	$44 \pm 8$	$14 \pm 4$
5.18	$\frac{1}{2}^+$	$34 \pm 3$		$11 \pm 2$			
6.18	$\frac{3}{2}^-$	$22 \pm 8$		$7 \pm 2$			
6.79	$\frac{3}{2}^+$	$< 8$		$< 3$			
11.03 <sup>a</sup>	$\frac{1}{2}^-$	0	$\frac{1}{2}^-$	100	$1.4 \pm 0.4$		
11.22	$\frac{3}{2}^+$	0	$\frac{1}{2}^-$	$74 \pm 5$	$5.5 \pm 0.5$		
		5.18	$\frac{1}{2}^+$	$14 \pm 5$	$1.0 \pm 0.2$		
		5.24	$\frac{5}{2}^+$	$12 \pm 5$	$0.9 \pm 0.2$		
		6.79	$\frac{3}{2}^+$	$< 4$	$< 0.4$		
11.57	$\frac{5}{2}^-$	0	$\frac{1}{2}^-$	$18 \pm 9$	$0.3 \pm 0.2$		
		5.24	$\frac{5}{2}^+$	$63 \pm 9$	$1.2 \pm 0.1$		
		6.18	$\frac{3}{2}^-$	$20 \pm 9$	$0.4 \pm 0.2$		
		6.79	$\frac{3}{2}^+$	$< 3$	$< 0.1$		
11.75 <sup>a</sup>	$\frac{5}{2}^+$	5.24	$\frac{5}{2}^+$	$47 \pm 7$	$5 \pm 1$		
6.18		$\frac{3}{2}^-$	$53 \pm 7$	$5 \pm 1$			
11.85 <sup>a</sup>	$\frac{5}{2}^-$	5.24	$\frac{5}{2}^+$	100	$1.4 \pm 0.6$		

- <sup>a</sup> For references and other comments see [Table 15.19 in \(1981AJ01\)](#).
- <sup>b</sup>  $\delta$  = multipole mixing ratio.
- <sup>c</sup> Branches to  $^{15}\text{O}^*(5.18, 5.24)$  are < 2.5% each.
- <sup>d</sup> Branches to  $^{15}\text{O}^*(5.18, 5.24, 6.18)$  are < 3%, < 3% and < 7%, respectively.
- <sup>e</sup> Branches to  $^{15}\text{O}^*(0, 5.18, 6.18)$  are < 10%, < 4% and < 0.4%, respectively.
- <sup>f</sup> Branches to  $^{15}\text{O}^*(5.18, 6.18)$  are < 4% and < 2%, respectively.
- <sup>g</sup> Branchings shown to  $^{15}\text{O}^*(5.18, 6.18, 6.79)$  are weighted means of values shown in [Table 15.19 of \(1981AJ01\)](#), recalculated to sum to 100% for all the transitions.
- <sup>h</sup> See, however, the comments in [reaction 14 of \(1981AJ01\)](#).
- <sup>i</sup> Branchings to  $^{15}\text{O}^*(6.18, 6.86)$  are < 1% each.
- <sup>j</sup> Unresolved doublet: see [Table 15.21](#), and [Table 15.23 in \(1981AJ01\)](#).
- <sup>k</sup> Weighted mean of values shown in [Table 15.19 of \(1981AJ01\)](#).
- <sup>l</sup> Intensity < 25% of transition to  $^{15}\text{O}^*(6.79)$ .
- <sup>m</sup> Sum is 0.97 eV, but see [Table 15.21](#) [ $\Gamma_\gamma = 1.4$  eV].
- <sup>n</sup>  $\Gamma_\gamma$  values assume  $J$ -values in column 2.