

Table 15.18 from (1976AJ04): Energy levels of ^{15}O ^a

E_x in ^{15}O (MeV \pm keV)	$J^\pi; T$	τ or $\Gamma_{\text{c.m.}}$ (keV)	Decay	Reactions
0	$\frac{1}{2}^-; \frac{1}{2}$	$\tau_{1/2} = 122.24 \pm 0.16$ sec	β^+	1, 2, 3, 4, 6, 7, 10, 11, 12, 14, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34
5.183 \pm 1	$\frac{1}{2}^+$	< 0.1 psec	γ	3, 7, 10, 12, 14, 22, 25, 26, 28, 29, 34
5.2409 \pm 0.3	$\frac{5}{2}^+$	3.2 ± 0.5 psec	γ	3, 7, 8, 10, 12, 13, 14, 21, 22, 24, 25, 26, 28, 29, 34
6.1763 \pm 1.7	$\frac{3}{2}^-$	< 47 fsec	γ	3, 7, 12, 14, 21, 22, 25, 26, 27, 28, 29, 32, 34
6.7931 \pm 1.7	$\frac{3}{2}^+$	< 28 fsec	γ	3, 7, 12, 21, 22, 25, 29
6.8594 \pm 0.9	$\frac{5}{2}^+$	0.10 ± 0.06 psec	γ	3, 7, 12, 14, 21, 22, 25, 26, 29
7.2759 \pm 0.6	$\frac{7}{2}^+$		γ	7, 8, 9, 10, 12, 13, 21, 22, 25, 29
7.5568 \pm 0.8	$\frac{1}{2}^+$	$\Gamma = 1.6 \pm 0.5$ keV	γ, p	14, 21, 22, 25, 29
8.2843 \pm 0.9	$\frac{3}{2}^+$	3.6 ± 0.7	γ, p	7, 12, 14, 21, 22, 25, 29
8.743 \pm 6	$\frac{1}{2}^+$	32	γ, p	12, 14, 29
8.922 \pm 2	$(\frac{5}{2}^+)$	≈ 4	γ, p	7, 12, 14, 15, 25, 29
8.927 \pm 2	$(\frac{1}{2}^-)$	≈ 4	γ, p	14, 15, 25, 29
8.9824 \pm 1.7	$(\frac{1}{2})^-$	3.9 ± 0.4	γ, p	7, 12, 14, 25, 29
9.487 \pm 3	$\frac{5}{2}^-$	10.1 ± 0.5	γ, p	7, 12, 14, 25, 29
9.527 \pm 17	$(\frac{1}{2})^+$	280 ± 25	γ, p	12, 14, 29
9.610 \pm 2	$\frac{3}{2}^-$	8.8 ± 0.5	γ, p	7, 8, 12, 14, 25, 28, 29
9.662 \pm 3	$(\frac{7}{2}, \frac{9}{2})^-$	2 ± 1	p	7, 8, 12, 15, 25, 29
9.72 \pm 50	$(\frac{1}{2}, \frac{3}{2})^+$	1185 ± 50	γ, p	7, 14, 29
10.291 ^b	$(\frac{5}{2})^-$	3 ± 1	$(\gamma), \text{p}$	7, 12, 15, 25, 29
10.296 ^b	$\frac{5}{2}^+$	11 ± 2	$(\gamma), \text{p}$	7, 15, 25
10.478 ^b	$(\frac{3}{2})^-$	25 ± 5	γ, p	7, 8, 9, 12, 14, 15, 25, 28, 29

Table 15.18 from (1976AJ04): Energy levels of ^{15}O ^a (continued)

E_x in ^{15}O (MeV \pm keV)	$J^\pi; T$	τ or $\Gamma_{\text{c.m.}}$ (keV)	Decay	Reactions
10.506 ^b	$(\frac{3}{2})^+$	140 ± 40	γ, p	14, 15, 25, 28
10.917 ± 12	$\frac{7}{2}^+$	90	p	15, 29
10.938 ± 3	$\frac{1}{2}^+$	99 ± 5	γ, p	14, 15, 25, 29
11.025 ± 3	$\frac{1}{2}^-$	25 ± 2	γ, p	14, 15, 25, 29
11.151 ± 7		< 10	p	7, 15, 29
11.218 ± 3	$\frac{3}{2}^+$	40 ± 4	γ, p	14, 15, 25, 29
11.565 ± 15		< 10	p	7, 15, 29
11.569 ± 15	$\frac{5}{2}^-$	20 ± 15	γ, p	14, 15, 29
11.616 ± 15	$(\frac{3}{2}, \frac{1}{2})^-$	80 ± 50	γ, p	14, 15
11.719 ± 8		< 10	p	7, 15, 25
11.748 ± 3	$\frac{5}{2}^+$	99 ± 5	γ, p	14, 15, 29
11.846 ± 3	$\frac{5}{2}^-$	65 ± 3	γ, p	14, 15
11.980 ± 10	$\frac{5}{2}^-$	20 ± 5	p	7, 15, 29
12.129 ± 15	$\frac{5}{2}^+$	200 ± 50	p	15
12.222 ± 20		100 ± 50	p	15
12.295 ± 10				7, 25
12.471 ± 3	$\frac{5}{2}^- (\frac{3}{2}^-)$	77 ± 4	p	15
12.60 ± 10				7
12.80		≈ 250	γ, p	14
12.835 ± 3	$(\frac{1}{2}^-)$	16 ± 1	p	7, 8, 9, 10, 15
13.008 ± 3		215 ± 30	p, ^3He	5, 8, 9, 15
13.025 ± 3		40 ± 30	p, (^3He)	5, 15
13.45	$(\frac{1}{2}, \frac{3}{2})^+$	≈ 1000	$\gamma, \text{p}, (\alpha)$	14, 15, 20
13.49	$(\frac{3}{2}^+)$		p	7, 15
13.60	$\frac{5}{2}^+$		p, α	7, 20
13.70	$\frac{3}{2}^-$		p	7, 15
13.79	$\frac{3}{2}^-$		n, p, $^3\text{He}, \alpha$	5, 7, 15, 20, 25
13.87		≈ 150	γ, p	14
14.03 ± 40	$(\frac{1}{2}^-, \frac{3}{2}^-)$	160 ± 20	n, p, ^3He	5
14.17	$\frac{5}{2}^-$		p, α	20

Table 15.18 from (1976AJ04): Energy levels of ^{15}O ^a (continued)

E_x in ^{15}O (MeV \pm keV)	$J^\pi; T$	τ or $\Gamma_{\text{c.m.}}$ (keV)	Decay	Reactions
14.27 \pm 10	$\frac{1}{2}^+$	340 \pm 30	n, p, ^3He , α	5, 7, 15, 16, 19, 20
14.34	$\frac{5}{2}^+$	(240)	p, (^3He), α	5, 20
14.465 \pm 10	$\frac{3}{2}^+, \frac{5}{2}^+$	100 \pm 10	n, p, ^3He , α	5, 15, 16, 20
14.70 \pm 40		170 \pm 35	n, p, ^3He	5, 16
14.95 \pm 40		400 \pm 25	n, p, ^3He , α	5, 15, 16, 19, 20
15.05 \pm 10	$((\frac{13}{2}^+))$			7, 9, 10
15.1	$(\frac{1}{2}, \frac{3}{2})^+$	\approx 1000	γ , p	14
15.45 \pm 30		70 \pm 20	p, ^3He , α	5, 7, 8
15.54 \pm 10			(p, ^3He , α)	5, 7
15.60 \pm 10			(p, ^3He , α)	5, 7
15.65 \pm 10				7
15.80 \pm 10			n, p, ^3He	5, 7, 8, 16
15.90 \pm 5	$\frac{1}{2}^-, \frac{3}{2}^-$	350	^3He , α	5
16.05 \pm 20		\approx 185	n, p, ^3He , α	5, 15, 16, 20
16.10 \pm 20			(n) ^3He , α	5
16.21 \pm 20		\approx 140	(n), p, ^3He , α	5, 15, 19, 20
16.43 \pm 50	$\frac{1}{2}^+$	560 \pm 100	^3He , α	5, 15, 16, 19
16.75 \pm 50			n, ^3He	5
16.9	$(\frac{1}{2}, \frac{3}{2})^+$	\approx 1000	γ , p	14
17.2			p, α	8, 15, 20
17.46 \pm 20				7
17.51 \pm 20	$\frac{1}{2}^-, \frac{3}{2}^-$	600	n, ^3He , α	5, 7
17.99 \pm 50	$\frac{1}{2}^-, \frac{3}{2}^-$	200	^3He	5
18.23 \pm 50			n, p, ^3He	5
18.4	$(\frac{1}{2}, \frac{3}{2})^+$	\approx 1000	γ , p	14
19.03 \pm 50			n, ^3He	5
19.91 \pm 50			n, ^3He	5
20.5	$(\frac{1}{2}, \frac{3}{2})^+$	\approx 2000	γ , p, ^3He	5, 14
22.0	$(\frac{1}{2}, \frac{3}{2})^+$	\approx 2000	γ , p	14
(26.0)	$(\frac{13}{2}^-)$	\approx 600	^3He	5

Table 15.18 from (1976AJ04): Energy levels of ^{15}O ^a (continued)

E_x in ^{15}O (MeV \pm keV)	$J^\pi; T$	τ or $\Gamma_{\text{c.m.}}$ (keV)	Decay	Reactions
(28.0)	$(\frac{9}{2}^-, \frac{11}{2}^-)$	≈ 2500	^3He	5
(29.0)		≈ 2500	^3He	5

^a See also [Table 15.26 in \(1970AJ04\)](#) and [Table 15.19](#) here.

^b It is not excluded that (10.29 + 10.30) and (10.47 + 10.51) each correspond to a single state: see [Table 15.24 in \(1970AJ04\)](#) and [Tables 15.22](#) and [15.25](#) here.