

Table 18.2 from (1978AJ03): Energy levels of ^{18}O ^a

E_x (MeV \pm keV)	$J^\pi; T$	τ_m (psec) or $\Gamma_{c.m.}$ (keV)	Decay	Reactions
0	$0^+; 1$		stable	2, 3, 4, 5, 8, 9, 11, 12, 19, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45
1.98216 ± 0.20	2^+	$\tau_m = 2.9 \pm 0.1$ $g = -0.287 \pm 0.015$	γ	2, 3, 4, 5, 8, 11, 12, 19, 21, 24, 25, 26, 27, 30, 33, 34, 35, 38, 39, 41, 42
3.55507 ± 0.45	4^+	$\tau_m = 24.8 \pm 1.2$ $g = -0.62 \pm 0.10$	γ	3, 5, 8, 11, 12, 13, 14, 19, 24, 25, 26, 27, 30, 34, 35, 39, 42
3.63450 ± 0.40	0^+	$\tau_m = 1.38 \pm 0.16$	γ	3, 5, 8, 12, 19, 21, 24, 25, 26, 27, 30, 34, 35, 38, 39, 41, 42
3.9206 ± 0.4	2^+	0.024 ± 0.010	γ	5, 8, 12, 19, 24, 25, 26, 27, 30, 34, 38, 42
4.4561 ± 0.5	1^-	0.065 ± 0.015	γ	8, 11, 12, 19, 21, 26, 27, 30, 34, 36, 38, 41, 42
5.0985 ± 1.2	3^-	0.062 ± 0.025	γ	8, 11, 12, 19, 24, 25, 26, 27, 30, 34, 36, 42
5.2604 ± 1.2	2^+	0.12 ± 0.03	γ	5, 8, 12, 19, 24, 25, 26, 30, 41, 42
5.3364 ± 0.6	0^+	0.20 ± 0.04	γ	12, 19, 24, 25, 27, 30, 41, 42
5.3778 ± 1.2	3^+	< 0.03	γ	12, 19, 25, 27, 42
5.5305 ± 0.6	2^-	< 0.025	γ	11, 12, 25, 26, 30, 42
6.201 ± 2	1^-	$(3.2 \pm 0.6) \times 10^{-3}$	γ	11, 12, 19, 23, 30, 42
6.3513 ± 0.6	1, 2	< 0.035	γ	11, 12, 19, 30, 42
6.4044 ± 1.2	3^-	0.03 ± 0.015	γ	12, 30, 42
6.8816 ± 1.2	(0^-)	< 0.025	γ	30, 38, 41, 42

Table 18.2 from (1978AJ03): Energy levels of ^{18}O ^a (continued)

E_x (MeV \pm keV)	$J^\pi; T$	τ_m (psec) or $\Gamma_{\text{c.m.}}$ (keV)	Decay	Reactions
7.1169 ± 1.2	4^+	< 0.025	γ, α	5, 8, 11, 19, 26, 30, 34, 36, 42
7.620 ± 2	1^-	$\Gamma < 2.5$	γ, α	5, 30, 42
7.75 ± 20	$1 \rightarrow 4$		γ	42
7.848 ± 14				8, 11, 19, 30, 42
7.96 ± 20	$(3^+, 4^-)$		γ	19, 42
8.040 ± 2	1^-	< 2.5	γ, α	5, 7, 42
8.122 ± 10	5^-		γ, α	5, 8, 11, 42
8.214 ± 4	2^+	1.0 ± 0.8	n, α	6, 7, 30, 42
8.283 ± 3	3^-	8 ± 1	n, α	6, 7, 8, 30, 42
8.405 ± 7		8 ± 6	n, α	6, 42
8.48 ± 20				11, 42
8.64 ± 20				42
8.817 ± 12		70 ± 12	n, α	6, 7, 30
8.956 ± 4		43 ± 3	n, α	6, 7, 30
(9.03)				7, 30
(9.10)				7, 30
9.362 ± 15		27 ± 15	n, α	6, 7, 8, 11, 30
9.39 ± 40		≈ 120	n, α	6, 7, 8, 30
9.47 ± 40		≈ 65	n, α	6, 7
9.676 ± 10		60 ± 30	n, α	6, 7, 30
(9.72 \pm 30)				30
9.88 ± 40		≈ 150	n, α	6, 7, 30
10.119 ± 10	3^-	16 ± 4	n, α	6, 7, 30
10.29 ± 20	4^+		n, α	6, 7, 8, 30
10.38 ± 20	3^-		n, α	6, 7, 30
10.58 ± 20			n, α	6, 7, 11
10.82 ± 20			n, α	6, 7
10.91 ± 20			n, α	6, 7, 8
10.99 ± 20			n, α	6, 7

Table 18.2 from (1978AJ03): Energy levels of ^{18}O ^a (continued)

E_x (MeV \pm keV)	$J^\pi; T$	τ_m (psec) or $\Gamma_{c.m.}$ (keV)	Decay	Reactions
11.13 \pm 20			n, α	6, 7, 8, 11, 41
11.39 \pm 20	(2 ⁺)		n, α	6, 7
11.41 \pm 20	(4 ⁺)		n, α	6, 7
11.62 \pm 20	5 ⁻		n, α	6, 7, 8, 30
11.69 \pm 20	6 ⁺		n, α	6, 7, 8, 11, 30
11.82 \pm 20	(3 ⁻)		n, α	6, 7
12.04 \pm 20	(2 ⁺)		n, α	6, 7
12.25 \pm 20	(1 ⁻)		n, α	6, 7, 41
12.33 \pm 20	5 ⁻		n, α	6, 7, 8
12.50 \pm 20	4 ⁺		n, α	6, 7
12.53 \pm 20	6 ⁺		n, α	6, 7, 8, 11
12.9			γ , n	22
13.8			γ , n	11, 22
14.6 \pm 100			γ , n	11, 22, 41
15.6			γ , n	22
(15.95)				11
(16.40 \pm 30)	$T = 2$	≤ 50		26
(17.02 \pm 30)	$T = 2$	≤ 50		11, 26
(19.0)				11
23.4 ^b			γ , n, p	22

^a See also [Tables 18.3](#) and [18.4](#).

^b Giant resonance ([1976FA1F](#)).