Table 18.2 from (1983AJ01): Energy levels of ^{18}O [a]

E_x (MeV ± keV)	J^π; T	τ_m [b] or $\Gamma_{c.m.}$ (keV)	Decay	Reactions
0	0^+; 1		stable	3, 4, 5, 6, 7, 8, 10, 11, 12, 16, 19, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56
1.98207 ± 0.09	2^+	$\tau_m = 2.80 \pm 0.07$ psec [c] $g = -0.287 \pm 0.015$	γ	3, 5, 6, 7, 8, 10, 11, 16, 18, 23, 24, 25, 28, 29, 30, 31, 32, 34, 35, 40, 41, 43, 47, 48, 50, 51, 54, 56
3.55484 ± 0.40	4^+	$\tau_m = 24.8 \pm 1.2$ psec $g = -0.62 \pm 0.10$	γ	3, 5, 6, 8, 10, 11, 16, 17, 18, 23, 24, 25, 28, 31, 35, 40, 41, 48, 51, 54
3.63376 ± 0.11	0^+	$\tau_m = 1.38 \pm 0.16$ psec	γ	3, 5, 8, 10, 11, 16, 23, 25, 28, 31, 35, 40, 41, 47, 48, 50, 51
3.92044 ± 0.14	2^+	26.5 ± 2.9 fsec [d]	γ	3, 5, 8, 10, 11, 16, 23, 25, 28, 31, 35, 40, 51
4.45554 ± 0.10	1^-	65 ± 15 fsec	γ	3, 8, 10, 11, 16, 23, 25, 31, 35, 40, 41, 50, 51
5.09778 ± 0.54	3^-	62 ± 25 fsec	γ	3, 10, 11, 16, 23, 25, 28, 29, 30, 31, 35, 40, 41, 51, 54
5.2604 ± 1.2	2^+	10.1 ± 0.5 fsec [e]	γ	3, 8, 10, 11, 16, 18, 23, 28, 31, 35, 50, 51
5.3364 ± 0.6	0^+	200 ± 40 fsec	γ	3, 8, 10, 16, 23, 28, 35, 50, 51
5.3778 ± 1.2	3^+	< 30 fsec	γ	3, 16, 23, 51
5.53024 ± 0.29	2^-	< 25 fsec	γ	3, 16, 25, 31, 35, 51
6.19822 ± 0.40	1^-	(3.7 ± 0.6) fsec	γ	3, 10, 16, 23, 25, 27, 35, 50, 51

Table 18.2 from (1983AJ01): Energy levels of ^{18}O [a] (continued)

E_x (MeV ± keV)	$J^\pi; T$	τ_m [b] or $\Gamma_{c.m.}$ (keV)	Decay	Reactions
6.3513 ± 0.6	(2^-)	< 35 fsec	γ	3, 16, 23, 25, 35, 51
6.4044 ± 1.2	3^-	30 ± 15 fsec	γ	3, 16, 35, 51, 54
6.88045 ± 0.27	0^-	< 25 fsec	γ	3, 16, 25, 35, 50, 51
7.1169 ± 1.2	4^+	< 25 fsec	γ, α	3, 8, 10, 11, 16, 18, 23, 28, 31, 35, 40, 41, 51
7.618 ± 4	1^-	$\Gamma < 2.5$	γ, α	3, 8, 10, 16, 35, 50, 51
7.77107 ± 0.50	2^-		γ	3, 16, 25, 50, 51
7.860 ± 4	(4^+)		γ	3, 8, 10, 11, 16, 23, 28, 35, 51
7.977 ± 4	$(3^+, 4^-)$		γ	3, 16, 23, 51
8.038 ± 3	1^-	< 2.5	γ, α	3, 8, 16, 51
8.126 ± 3	5^-		γ, α	3, 8, 10, 11, 16, 51
8.216 ± 3	2^+	1.0 ± 0.8	γ, n, α	3, 8, 9, 16, 35, 51
8.287 ± 3	3^-	8 ± 1	γ, n, α	3, 8, 9, 10, 11, 16, 18, 35, 51
8.411 ± 8		8 ± 6	n, α	9, 16, 51
8.521 ± 6				16, 51
8.660 ± 6				16, 51
8.817 ± 12		70 ± 12	n, α	8, 9, 35
8.956 ± 4		43 ± 3	n, α	8, 9, 35
(9.03)				8, 35
(9.10)				8, 35
9.362 ± 6		27 ± 15	n, α	8, 9, 11, 16, 35
9.414 ± 18		≈ 120	n, α	8, 9, 11, 16, 35
9.48 ± 24		≈ 65	n, α	8, 9, 16
9.673 ± 7		60 ± 30	n, α	8, 9, 16, 35
9.713 ± 7				16, 35, 50
9.890 ± 11		≈ 150	n, α	8, 9, 16, 35
10.119 ± 10	3^-	16 ± 4	n, α	8, 9, 10, 16, 35
10.295 ± 14	4^+		n, α	8, 9, 10, 11, 16, 17, 35
10.396 ± 9	3^-		n, α	8, 9, 16, 35

Table 18.2 from (1983AJ01): Energy levels of ^{18}O [a] (continued)

E_x (MeV $\pm$ keV)	$J^\pi; T$	τ_m [b] or $\Gamma_{c.m.}$ (keV)	Decay	Reactions
10.595 ± 15			n, α	8, 9, 16
10.82 ± 20			n, α	8, 9
10.91 ± 20			n, α	8, 9, 11
10.99 ± 20			n, α	8, 9, 15
11.13 ± 20			n, α	8, 9, 11, 15, 50
11.39 ± 20	(2^+)		n, α	8, 9, 10
11.41 ± 20	(4^+)		n, α	8, 9, 10
11.62 ± 20	5^-		n, α	8, 9, 10, 11, 35
11.69 ± 20	6^+		n, α	8, 9, 10, 11, 35
11.82 ± 20	(3^-)		n, α	8, 9, 15
12.04 ± 20	(2^+)		n, α	8, 9, 10
12.25 ± 20	(1^-)		n, α	8, 9, 10, 50
12.33 ± 20	5^-		n, α	8, 9, 10, 11
12.50 ± 20	4^+		n, α	8, 9
12.53 ± 20	6^+		n, α	8, 9, 10, 11
13.1	1^-	700	γ, n	26
13.8	1^-	600	γ, n	26
14.7	1^-	800	γ, n	26
15.8	1^-	700	γ, n	26
16.38 ± 10	$T = 2$	≤ 30	γ	28
17.3	$1^-, (T = 2)$	600	γ, n, p	26
18.86 ± 10	$T = 2$	≤ 60	γ	28
19.4	$1^-, (T = 2)$	900	γ, p	26
21.1	$1^-, (T = 1)$		γ, n, p	26
22.7	1^-		γ, n, p	26
23.7	$1^-, (T = 1)$	1600	γ, n, p	26, 28
27	$1^-, (T = 2)$		γ, n, p	26
30			γ, n	26
36			γ	26

[a] See also Table 18.3.

[b] See Table 18.4 in (1978AJ03) for a display of $\tau_{\rm m}$ measurements.

[c] (1982BA06) [see also for discussion of other values]. See also reaction 28.

[d] From reaction 28.

[e] From B(E2) determined in ^{18}O(e, e′) (reaction 28) and Table 18.3. The earlier result of (1973OL02) is withdrawn (E.K. Warburton and M. Gai, private communications).