

Table 16.12 from (1971AJ02): Radiative decays in ^{16}O ^a

E_i (MeV)	$J_i^\pi; T$	E_f (MeV)	$J_f^\pi; T$	Branch (%)	Γ_γ (eV)	Refs. ^c
6.05	$0^+; 0$	0	$0^+; 0$	100	3.66 ± 0.55 ^b	(1968ST31)
6.13	$3^-; 0$	0	$0^+; 0$	100	$(2.3 \pm 1.1) \times 10^{-5}$	(1968ST31)
6.92	$2^+; 0$	0	$0^+; 0$	> 99	$(80 \pm 7) \times 10^{-3}$	(1968EV03)
					$(93 \pm 10) \times 10^{-3}$	(1968ST04, 1968ST31)
					$(100 \pm 15) \times 10^{-3}$	(1967AR1A)
					$(110 \pm 5) \times 10^{-3}$	(1970SW03)
		6.05	$0^+; 0$	$(2.7 \pm 0.7) \times 10^{-2}$		(1965FU05)
				$(2.9 \pm 1.1) \times 10^{-2}$	$(1.6 \pm 0.6) \times 10^{-5}$	(1963GO31)
				$(2.3 \pm 0.5) \times 10^{-2}$	$(1.4 \pm 0.5) \times 10^{-5}$	(1966LO06)
				$(2.9 \pm 0.4) \times 10^{-2}$		(1967LO08)
				$(2.7 \pm 0.3) \times 10^{-2}$		mean
		6.13	$3^-; 0$	$< 4 \times 10^{-2}$	2.7×10^{-5}	(1963GO31)
				$\leq 4 \times 10^{-2}$		(1960PI04)
				$\leq 8 \times 10^{-3}$		(1968WI15)
7.12	$1^-; 0$	0	$0^+; 0$	> 99	$(47 \pm 6) \times 10^{-3}$	(1968EV03)
					$(62 \pm 5) \times 10^{-3}$	(1970SW03)
		6.05	$0^+; 0$	$\leq 3.5 \times 10^{-3}$	$\leq 3.0 \times 10^{-6}$	(1963GO31), B
				$< 6 \times 10^{-4}$		(1967LO08)
		6.13	$3^-; 0$	$(8 \pm 2) \times 10^{-2}$	$(5.3 \pm 2.1) \times 10^{-5}$	(1963GO31)
				$(7.0 \pm 1.4) \times 10^{-2}$		(1968WI15)
8.87 ^d	$2^-; 0$	0	$0^+; 0$	7 ± 2		(1957BE61)
				9 ± 4		(1957MC35)
				7.2 ± 0.8		(1968WI15)
					$(2.41 \pm 0.35) \times 10^{-4}$	(1967PI01)
		6.05	$0^+; 0$	0.112 ± 0.033	$(2.9 \pm 1.0) \times 10^{-6}$	(1963GO31, 1967PI01)
		6.13	$3^-; 0$	74		(1959BR68)
				76.0 ± 3.0		(1968WI15)
					$(1.70^{+0.35}_{-0.50}) \times 10^{-3}$ (E2)	(1967PI01)
					$(8.5^{+4.5}_{-2.5}) \times 10^{-4}$ (M1)	(1967PI01)
		6.92	$2^+; 0$	5		(1959BR68)
				4.2 ± 0.8		(1968WI15)
					$(1.72 \pm 0.25) \times 10^{-4}$	(1967PI01)
		7.12	$1^-; 0$	14		(1959BR68)
				12.6 ± 2.0	e	(1968WI15)
9.60	$1^-; 0$	0	$0^+; 0$	≈ 100	$(22 \pm 5) \times 10^{-3}$	(1964LA16)

Table 16.12 from (1971AJ02): Radiative decays in ^{16}O ^a (continued)

E_i (MeV)	$J_i^\pi; T$	E_f (MeV)	$J_f^\pi; T$	Branch (%)	Γ_γ (eV)	Refs. ^c
9.85	2 ⁺ ; 0	6.05	0 ⁺ ; 0	4.3 ± 1.4	(18 ± 4) × 10 ⁻³ (1.2 ± 0.4) × 10 ⁻³ < 0.6 × 10 ⁻³	A (1969BR1L), B
		6.13	3 ⁻ ; 0	≤ 5	≤ 1.4 × 10 ⁻³	A (1969BR1L), B
		0	0 ⁺ ; 0	61 ± 4	(10 ± 4) × 10 ⁻³	(1968ST04, 1968ST31), B
10.35	4 ⁺ ; 0				(6.3 ± 0.6) × 10 ⁻³ (20 ± 10) × 10 ⁻³ (5.9 ± 0.6) × 10 ⁻³	(1967GO08) (1960ME02) (1964LA16)
		6.05	0 ⁺ ; 0	18 ± 4	(6.1 ± 0.5) × 10 ⁻³ (1.89 ± 0.42) × 10 ⁻³	'best' value (1967GO08), B
		6.92	2 ⁺ ; 0	21 ± 4	(2.2 ± 0.4) × 10 ⁻³	(1969BR1L), B
		7.12	1 ⁻ ; 0	≤ 4.2		B
		6.13	3 ⁻ ; 0		< 1.0 × 10 ⁻³	(1963GO31)
10.95	0 ⁻ ; 0	6.92	2 ⁺ ; 0	≈ 100	(4.0 ± 0.8) × 10 ⁻² (4.6 ± 0.6) × 10 ⁻²	(1963GO31), B (1964LA16)
		0	0 ⁺ ; 0	< 5		(1957BE61)
11.08	3 ⁺ ; 0	6.05	0 ⁺ ; 0	< 1		(1957BE61)
		6.13	3 ⁻ ; 0	< 6		(1957BE61)
		6.92	2 ⁺ ; 0	< 20		(1957BE61)
		7.12 ^f	1 ⁻ ; 0	> 99		(1959BR68)
		8.87	2 ⁻ ; 0	< 40		(1957BE61)
		0	0 ⁺ ; 0	< 1		(1959BR68)
11.52	2 ⁺ ; 0	6.13	3 ⁻ ; 0	40		(1959BR68)
		6.92	2 ⁺ ; 0	44		(1959BR68)
		8.87	2 ⁻ ; 0	16		(1959BR68)
		8.87	2 ⁻ ; 0	16		(1959BR68)
		9.85	2 ⁺ ; 0	6		(BE69W)
12.44	1 ⁻ ; 0	0	0 ⁺ ; 0	91.7	0.66 ± 0.09 0.55 ± 0.07	(1964LA16), B (1968ST04, 1968ST31)
					0.52 ± 0.13 0.9 ± 0.2	(1967AR1A) (1960ME02)
		6.05	0 ⁺ ; 0	4.2 ± 0.7	(3.0 ± 0.7) × 10 ⁻² (29 ± 7) × 10 ⁻³	(HO66C), B (1969BR1L), B
		6.92	2 ⁺ ; 0	4.0 ± 1.0		B
		7.12	1 ⁻ ; 0	≤ 0.8		(1960HE02), B
		0	0 ⁺ ; 0	≈ 100	12.8 7 ± 1	(1964LA16)

Table 16.12 from (1971AJ02): Radiative decays in ^{16}O ^a (continued)

E_i (MeV)	$J_i^\pi; T$	E_f (MeV)	$J_f^\pi; T$	Branch (%)	Γ_γ (eV)	Refs. ^c
12.53 ^g	$2^-; 0$	6.05	$0^+; 0$	1.2 ± 0.4	$(87 \pm 29) \times 10^{-3}$	B
		0	$0^+; 0$		$(21 \pm 6) \times 10^{-3}$	(1968ST31)
		6.13	$3^-; 0$	60 ± 5.7	2.1 ± 0.2	(1968GO07), B
		6.92	$2^+; 0$	≤ 9.7	≤ 0.34	(1968GO07), B
		7.12	$1^-; 0$	15 ± 2.9	0.51 ± 0.10	(1968GO07), B
12.80	$0^-; 1$	8.87	$2^-; 0$	25 ± 2.9	0.86 ± 0.10	(1968GO07), B
		6.13	$3^-; 0$		≤ 0.1	(1968GO07)
		6.92	$2^+; 0$		≤ 0.1	(1968GO07)
		7.12	$1^-; 0$	≈ 100	2.5 ± 0.2	(1968GO07), B
		8.87	$2^-; 0$		≤ 0.06	(1968GO07)
12.97	$2^-; 1$	9.60	$1^-; 0$		$\leq 2 \times 10^{-4}$	(1969BR1L)
		0	$0^+; 0$		$(78 \pm 16) \times 10^{-3}$	(1968ST31)
					$(72 \pm 15) \times 10^{-3}$	B
		6.13	$3^-; 0$	63 ± 5.5	2.3 ± 0.2	(1968GO07), B
		6.92	$2^+; 0$	≤ 2.7	≤ 0.1	(1968GO07), B
13.09	$1^-; 1$	7.12	$1^-; 0$	12 ± 2.7	0.44 ± 0.10	(1968GO07), B
		8.87	$2^-; 0$	25 ± 2.7	0.90 ± 0.10	(1968GO07), B
		9.60	$1^-; 0$		$\leq 7.2 \times 10^{-3}$	(1969BR1L)
		0	$0^+; 0$	≈ 100		(1968WI15)
					88	(1960HE02)
13.25	$3^-; 1$				31 ± 8	(1966VA02, 1968ST31)
					44 ± 7	B, C
		6.05	$0^+; 0$	0.58 ± 0.12		(1968WI15)
				0.8 ± 0.2		(1963GO22)
					0.7 ± 0.2	(1963GO31)
		6.13	$3^-; 0$		≤ 0.2	(1966GO1H)
		6.92	$2^+; 0$		≤ 2.0	(1966GO1H)
		7.12	$1^-; 0$	3.1 ± 0.8	1.4 ± 0.4	(1969BR1L), B
					≤ 1.0	(1966GO1H)
		8.87	$2^-; 0$		≤ 0.1	(1966GO1H)
16.22	$1^+; 1$	9.60	$1^-; 0$		$\leq 2 \times 10^{-2}$	(1969BR1L)
		6.13	$3^-; 0$	> 85	9.2 ± 1.5	(1968GO07)
		6.92	$2^+; 0$		< 0.5	(1968GO07)
		7.12	$1^-; 0$		< 1.4	(1968GO07)
		8.87	$2^-; 0$		≤ 0.3	(1968GO07)
16.22	$0^+; 0$		86.2	5.1 ± 0.8	(1970ST06)	

Table 16.12 from (1971AJ02): Radiative decays in ^{16}O ^a (continued)

E_i (MeV)	$J_i^\pi; T$	E_f (MeV)	$J_f^\pi; T$	Branch (%)	Γ_γ (eV)	Refs. ^c
17.14	$1^-; 1$	6.05	$0^+; 0$	13.8 ± 4.3		(1963GO22), B
17.30	$1^-; 1$	6.05	$0^+; 0$	13.8 ± 4.3		(1963GO22), B
		6.05	$0^+; 0$	≤ 1.3		(1963GO22)

A: J. Lowe, O. Karban and P.M. Rolph, private communication.

B: I am indebted to Dr. P. Chevallier for pointing out errors and omissions in this table.

C: D. Disdier, Thesis, Strasbourg, 1968.

^a See also Tables 16.19, 16.21, and 16.26.

^b Monopole matrix element in fm^2 .

^c See also (1962GO07, 1962GO15, 1963GO22, 1967GI07).

^d $\Gamma_{\text{total}} = 34 \times 10^{-4}$ eV (1967PI01). See also (1957WA1B).

^e See also (1967PI01).

^f 4.3×10^{-2} W.u. (BE69W).

^g $\Gamma \leq 0.5$ keV (P. Chevallier, private communication; preliminary results).