

Table 16.15 from (1977AJ02): Radiative decays in  $^{16}\text{O}$  <sup>a</sup>

$E_i$ (MeV)	$J_i^\pi; T$	$E_f$ (MeV)	$J_f^\pi; T$	Branch (%)	$\Gamma_{\text{rad}}$ (eV)	Refs.
6.05	$0^+; 0$	0	$0^+; 0$	100	$3.55 \pm 0.21$ <sup>b</sup>	(1975MI08)
6.13	$3^-; 0$	0	$0^+; 0$	100	$(2.60 \pm 0.13) \times 10^{-5}$	(1975MI08)
6.92	$2^+; 0$	0	$0^+; 0$	> 99	$0.130 \pm 0.009$	(1973BE49)
					$0.100 \pm 0.004$	(1975MI08)
		6.05	$0^+; 0$	$(2.7 \pm 0.3) \times 10^{-2}$	$(3.0 \pm 0.5) \times 10^{-5}$	mean <sup>a,d</sup>
		6.13	$3^-; 0$	$\leq 8 \times 10^{-3}$		(1968WI15)
7.12	$1^-; 0$	0	$0^+; 0$	> 99	$(55 \pm 5) \times 10^{-3}$	best <sup>a</sup>
		6.05	$0^+; 0$	$< 6 \times 10^{-4}$		(1967LO08)
		6.13	$3^-; 0$	$(7.0 \pm 1.4) \times 10^{-2}$		(1968WI15)
8.87	$2^-; 0$	0	$0^+; 0$	$7.2 \pm 0.8$	$(2.4 \pm 0.4) \times 10^{-4}$	(1967PI01, 1968WI15)
		6.05	$0^+; 0$	$0.122 \pm 0.033$	$(2.9 \pm 1.0) \times 10^{-6}$	(1963GO31, 1967PI01)
		6.13	$3^-; 0$	$76.0 \pm 3.0$		(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	$2^+; 0$	$4.2 \pm 0.8$	$(1.72 \pm 0.25) \times 10^{-4}$	(1967PI01, 1968WI15)
		7.12	$1^-; 0$	$12.6 \pm 2.0$		(1968WI15)
9.63	$1^-; 0$	0	$0^+; 0$	$\approx 100$	$(23 \pm 3) \times 10^{-3}$	Table 16.12
9.85	$2^+; 0$	0	$0^+; 0$	$61 \pm 4$	$(6.1 \pm 0.5) \times 10^{-3}$	best <sup>a</sup>
					$(5.9 \pm 0.6) \times 10^{-3}$	Table 16.12
		6.05	$0^+; 0$	$18 \pm 4$	$(1.9 \pm 0.4) \times 10^{-3}$	(1967GO08)
		6.92	$2^+; 0$	$21 \pm 4$	$(2.2 \pm 0.4) \times 10^{-3}$	Table 16.12
10.35	$4^+; 0$	0	$0^+; 0$		$(5.6 \pm 2.0) \times 10^{-8}$	(1973BE49)
		6.13	$3^-; 0$		$< 1.0 \times 10^{-3}$	(1963GO31)
		6.92	$2^+; 0$	$\approx 100$	$(5.8 \pm 0.7) \times 10^{-3}$	Table 16.12
10.95	$0^-; 0$	7.12	$1^-; 0$	> 99	$(0.08 \pm 0.05) \times 10^{-2}$	(1959BR68; Table 16.12)
11.095 <sup>a</sup>	$4^+; 0$	6.13	$3^-; 0$	<sup>a</sup>	$(3.1 \pm 1.3) \times 10^{-3}$	Table 16.12
		6.92	$2^+; 0$	<sup>a</sup>	$(2.5 \pm 0.6) \times 10^{-3}$	Table 16.12
11.52	$2^+; 0$	0	$0^+; 0$	91.7	$0.61 \pm 0.02$	(1973BE50)
					$0.65 \pm 0.08$	Table 16.12
		6.05	$0^+; 0$	$4.2 \pm 0.7$	<sup>a</sup>	
		6.92	$2^+; 0$	$4.0 \pm 1.0$	$(29 \pm 7) \times 10^{-3}$	Table 16.12
		7.12	$1^-; 0$	$\leq 0.8$		
12.05	$0^+; 0$	0	$0^+; 0$		$4.03 \pm 0.09$ <sup>b</sup>	(1973BE50)
12.44	$1^-; 0$	0	$0^+; 0$	$\approx 100$	$9.5 \pm 1.7$	(1973BR19)
					$12 \pm 2$	(1974RO37)
		6.05	$0^+; 0$	$1.2 \pm 0.4$ <sup>a</sup>	$0.12 \pm 0.06$	Table 16.12
					$0.12 \pm 0.04$	Table 16.19

Table 16.15 from (1977AJ02): Radiative decays in  $^{16}\text{O}$  <sup>a</sup> (continued)

$E_i$ (MeV)	$J_i^\pi; T$	$E_f$ (MeV)	$J_f^\pi; T$	Branch (%)	$\Gamma_{\text{rad}}$ (eV)	Refs.
12.53	$2^-; 0$	0	$0^+; 0$		$(21 \pm 6) \times 10^{-3}$	(1968ST31)
					$(108 \pm 15) \times 10^{-3}$	(1970KI02)
		6.13	$3^-; 0$	$60 \pm 6$	$2.1 \pm 0.2$	(1968GO07)
		6.92	$2^+; 0$	$< 10$	$\leq 0.34$	(1968GO07)
		7.12	$1^-; 0$	$15 \pm 3$	$0.5 \pm 0.1$	(1968GO07)
12.80 <sup>a</sup>	$0^-; 1$	8.87	$2^-; 0$	$25 \pm 3$	$0.9 \pm 0.1$	(1968GO07)
		7.12	$1^-; 0$	$\approx 100$	$2.5 \pm 0.2$	(1968GO07)
12.97 <sup>a</sup>	$2^-; 1$	0	$0^+; 0$		$(71 \pm 2) \times 10^{-3}$	(1970KI02)
		6.13	$3^-; 0$	$63 \pm 6$	$2.3 \pm 0.2$	(1968GO07)
		7.12	$1^-; 0$	$12 \pm 3$	$0.44 \pm 0.10$	(1968GO07)
		8.87	$2^-; 0$	$25 \pm 3$	$0.90 \pm 0.10$	(1968GO07)
13.09 <sup>a</sup>	$1^-; 1$	0	$0^+; 0$	$\approx 100$	$32 \pm 5$	(1974RO37)
					$44 \pm 8$	(1973BR19)
		6.05	$0^+; 0$	$0.58 \pm 0.12$		(1968WI15)
		7.12	$1^-; 0$	$3.1 \pm 0.8$	$1.4 \pm 0.4$	(1973BR19)
13.26 <sup>a</sup> <sub>c</sub>	$3^-; 1$	6.13	$3^-; 0$	$> 85$	$9.2 \pm 1.5$	(1968GO07)

<sup>a</sup> See Table 16.12 in (1971AJ02) for the earlier work.

<sup>b</sup> Monopole matrix element in  $\text{fm}^2$ .

<sup>c</sup> For the radiative decays of higher states see Tables 16.12, 16.19 and 16.24.

<sup>d</sup> Mean for branch.  $\Gamma_\gamma$  for this state based on  $\Gamma_\gamma = 0.11 \pm 0.01$  for  $6.92 \rightarrow 0$  transition.