

Table 17.20 from (1982AJ01): Resonances in $^{16}\text{O}(p, \gamma)^{17}\text{F}$ ^a

E_p (MeV \pm keV)	Resonant ^b in	Γ_γ (eV)	Γ (keV)	E_x (MeV)	$J^\pi; T$	Refs.
2.66	γ_1	$(12 \pm 2) \times 10^{-3}$		3.11	$\frac{1}{2}^-; \frac{1}{2}$	A, (1973RO34) ^g
3.47	γ_0	0.11 ± 0.02	< 1.5	3.86	$\frac{5}{2}^-; \frac{1}{2}$	(1963SE14)
11.275 ± 6	γ_1	6.0 ± 2.5 ^c	≤ 1.6	11.204	$\frac{1}{2}^-; \frac{3}{2}$	(1975HA06)
12.707 ± 1	$\gamma_0 + \gamma_1$	11.3 ± 3.4 ^c	1.8 ± 0.5	12.550	$\frac{3}{2}^-; \frac{3}{2}$	(1975HA06, 1979KH03)
13.255 ± 6	$\gamma_0 + \gamma_1$	2.8 ± 1.8 ^c	5.0 ± 1.5	13.065	$\frac{5}{2}^-; \frac{3}{2}$	(1975HA06)
14.435 ± 10	γ_0	72 ± 37 ^{e,f}	41 ± 10	14.174	$\frac{3}{2}^-; \frac{3}{2}$	(1975HA06, 1979KH03)
14.583 ± 6 ^d	$\gamma_0 + \gamma_1$	13.4 ± 7.0 ^c	28 ± 5	14.313	$\frac{7}{2}^-; \frac{3}{2}$	(1975HA06)

A: See (1971AJ02).

^a See also Table 17.21.

^b γ_0 and γ_1 correspond to transitions to $^{17}\text{F}^*(0, 0.50)$, respectively.

^c These Γ_γ are based on J^π and Γ_{p0}/Γ determinations by (1974SK02) and R.G. Van Bree (unpublished) [quoted by (1975HA06)]. The $B(E1)$ values for these four states are 4.7 ± 2.0 , 5.4 ± 1.6 , 1.2 ± 0.8 and 4.4 ± 2.3 [$\times 10^{-3}$] $e^2 \cdot \text{fm}^2$.

^d See the text of reaction 12 for discussion of the observed pigmy and giant resonances (1975HA07).

^e See also Table 17.18 in (1977AJ02).

^f $\Gamma_{\gamma_1}/\Gamma_{\gamma_0} \leq 0.14$, $(2J+1)\Gamma_p\Gamma_\gamma/\Gamma = 11.4 \pm 2.6$ eV.

^g $C^2S = 0.90$ and 1.00 , respectively, for $^{17}\text{F}^*(0, 0.50)$.