

Table 17.18 from (1977AJ02): 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 | $(12 \pm 2) \times 10^{-3}$ | | 3.10 | $\frac{1}{2}^-; \frac{1}{2}$ | A, (1973RO34) |
| 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) ^e |
| 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 | $\gamma_0 + \gamma_1$ | 81 ± 54 ^{c,f} | 41 ± 10 | 14.174 | $\frac{3}{2}^-; \frac{3}{2}$ | (1975HA06) |
| 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 17.19.

^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^c These Γ_γ are based on J^π and Γ_{p_0}/Γ determinations by (1974SK02) and R.G. Van Bree (unpublished) [quoted by (1975HA06)]. The $B(E1)$ values for these five states are 4.7 ± 2.0 , 5.4 ± 1.6 , 1.2 ± 0.8 , 27 ± 18 and $4.4 \pm 2.3 [\times 10^{-3}] e^2 \cdot \text{fm}^2$.

^d See the text of reaction 10 for discussion of the observed pigmy and giant resonances (1975HA07).

^e J. Lowe, private communication.

^f $\Gamma(\gamma_1)/\Gamma(\gamma_0) \leq 0.14$ (J. Lowe, private communication).