

Table 17.24 from (1993TI07): Resonances in  $^{16}\text{O}(p, \gamma)^{17}\text{F}$  <sup>a</sup>

$E_p$ (MeV $\pm$ keV)	Resonant in <sup>b</sup>	$\Gamma_\gamma$ (eV)	$\Gamma$ (keV)	$E_x$ (MeV)	$J^\pi; T$
2.66	$\gamma_1$	$(12 \pm 2) \times 10^{-3}$		3.11	$\frac{1}{2}^-; \frac{1}{2}$
3.47	$\gamma_0$	$0.11 \pm 0.02$	$< 1.5$	3.86	$\frac{5}{2}^-; \frac{1}{2}$
$11.275 \pm 6$	$\gamma_1$	$6.0 \pm 2.5$ <sup>c</sup>	$\leq 1.6$	11.204	$\frac{1}{2}^-; \frac{3}{2}$
$12.707 \pm 1$	$\gamma_0 + \gamma_1$	$11.3 \pm 3.4$ <sup>c</sup>	$1.8 \pm 0.5$	12.550	$\frac{3}{2}^-; \frac{3}{2}$
$13.255 \pm 6$	$\gamma_0 + \gamma_1$	$2.8 \pm 1.8$ <sup>c</sup>	$5.0 \pm 1.5$	13.065	$\frac{5}{2}^-; \frac{3}{2}$
$14.435 \pm 10$	$\gamma_0$	$72 \pm 37$ <sup>e</sup>	$41 \pm 10$	14.174	$\frac{3}{2}^-; \frac{3}{2}$
$14.583 \pm 6$ <sup>d</sup>	$\gamma_0 + \gamma_1$	$13.4 \pm 7.0$ <sup>c</sup>	$28 \pm 5$	14.313	$\frac{7}{2}^-; \frac{3}{2}$

<sup>a</sup> See also [Table 17.25](#) and [Table 17.20 in \(1982AJ01\)](#).

<sup>b</sup>  $\gamma_0$  and  $\gamma_1$  correspond to transitions to  $^{17}\text{F}^*(0, 0.50)$ , respectively.

<sup>c</sup> These  $\Gamma_\gamma$  are based on  $J^\pi$  and  $\Gamma_{p_0}/\Gamma$  determinations quoted by (1975HA06). The  $B(E1)$  values for these four states are  $4.7 \pm 2.0$ ,  $5.4 \pm 1.6$ ,  $1.2 \pm 0.8$  and  $4.4 \pm 2.3$  [ $\times 10^{-3}$ ]  $e^2 \cdot \text{fm}^2$ .

<sup>d</sup> See the text of [reaction 7](#) for discussion of the observed pigmy and giant resonances (1975HA07).

<sup>e</sup> See also [Table 17.18 in \(1977AJ02\)](#).