Table 19.15 from (1987AJ02): Resonances in ^{18}O(p, γ)^{19}F [a]

E_p (keV)	Γ_{lab} (keV)	$\omega\gamma$ (eV)	J^π	E_x (MeV)
151 ± 2	< 0.3	$(1.1 \pm 0.1) \times 10^{-3}$ [j]	$\frac{1}{2}^+$	8.137 [e]
216 ± 1	< 1	$> 0.8 \times 10^{-5}$		8.199
274 ± 3	< 1.5	$(3.7 \pm 0.5) \times 10^{-5}$	$< \frac{7}{2}$	8.254
334 ± 2	< 1	$(0.95 \pm 0.08) \times 10^{-3}$	$\frac{5}{2}^+$	8.310 [f]
622 ± 2	< 0.5	$(10 \pm 2) \times 10^{-3}$	$\frac{5}{2}^+$	8.583
629.6 ± 0.3	2.0 ± 0.3	0.10 ± 0.02	$\frac{3}{2}^-$	8.5904 [g]
≈ 680	300		$\frac{3}{2}$	8.638
841 ± 2	48 ± 2	1.4 ± 0.2	$\frac{1}{2}^+$ [b] $T = \frac{3}{2}$	8.791 [h]
977 ± 2	10 ± 2	$(1.5 \pm 0.2) \times 10^{-2}$	$\frac{3}{2}$	8.919
1166.5 ± 0.4		0.29 ± 0.03 [j]	$\frac{7}{2}^-$	9.0988 [i]
1398 ± 2	3.6 ± 0.8	0.08 ± 0.01	$\frac{3}{2}^+$	9.318
1630 ± 2 [c]	7 ± 2	0.025 ± 0.005	$\frac{5}{2}^+$	9.538
1660 ± 3	27 ± 3	0.041 ± 0.010	$\frac{3}{2}^-$	9.566
1670 ± 4	70 ± 3	0.06 ± 0.01	$\frac{3}{2}^-$	9.576
1684 ± 4	8 ± 2	0.025 ± 0.004	$\frac{7}{2}$	9.589
1768 ± 1.4	3.8 ± 0.4	1.2 ± 0.2	$\frac{3}{2}^+$	9.668
1928.4 ± 0.6 [d]	0.3 ± 0.05	2.8 ± 0.7	$\frac{5}{2}$	9.820
1986 ± 2	< 1.5	0.13 ± 0.04	$\frac{11}{2}^-$	9.875
1996 ± 4	26 ± 2	0.14 ± 0.05	$\frac{1}{2}^+$	9.884
2263.0 ± 0.7	5.0 ± 1.0		$\frac{3}{2}^-$	10.137
> 2300 [d]				

[a] For references see Tables 19.15 in (1978AJ03) and 19.16 in (1983AJ01). See also Tables 19.7 and 19.14.

[b] Supported by direct capture into this state with a $\sin^2\ \theta$ distribution of the d.c. γ-rays and by interference patterns near the resonance.

[c] Decays partly (see Table 19.7) via a state at 8015 ± 2 keV with $J^\pi = \frac{5}{2}^+$.

[d] See Table 19.15 in (1978AJ03).

[e] $\Gamma_p = 0.17$ eV, $\Gamma_\alpha = 220$ eV, $\Gamma_\gamma = 1.3$ eV.

[f] $\Gamma_\gamma = 0.71 \pm 0.17$ eV, $\Gamma_p = 0.019 \pm 0.009$ eV, $\Gamma_\alpha = 46 \pm 19$ eV, $\Gamma_{total} = 47 \pm 19$ eV.

[g] $\Gamma_\gamma = 0.85 \pm 0.17$ eV, $\Gamma_p = 224 \pm 43$ eV, $\Gamma_\alpha = 3410 \pm 1220$ eV.

[h] The strength of the transition to ^{19}F*(7.262) [see Table 19.7] limits J to $\frac{1}{2}$ or $\frac{3}{2}$ for that state.

[i] The angular distribution of the γ-ray from this state to ^{19}F*(5.62) and branching ratio arguments lead to $J = \frac{5}{2}$ for that state.

[j] (1982BE29).