Table 20.26 from (1978AJ03): Resonances in ^{19}F(p, γ)^{20}Ne [a]

E_p (keV)	Γ_{lab} (keV)	Γ_{γ_0} (eV)	Γ_{γ_1} (eV)	^{20}Ne* (MeV)	$J^\pi; T$	Refs.
340		< 0.07	0.28 ± 0.06	13.168		(1962KE03)
484		≈ 0.05	0.42	13.304		(1963BE19)
597 ± 1	30 ± 3	< 0.6	12	13.412		(1963BE19)
671 ± 1	6.0 ± 0.7	1.0×10^{-2}	2.2 [b]	13.482	1^+ [d]	A
874				13.675		(1955FA1A)
935				13.733		(1955FA1A)
980				13.775		(1955FA1A)
1091	0.8			13.881	2^- [e]	A, (1975SU1E)
1280				14.060		(1955FA1A)
1320 [b]	4.0			14.098		A
1350				14.127		(1955FA1A)
1370				14.146		(1955FA1A)
1420	15.7			14.193		A
4090 ± 5 [e]		$\Gamma_\gamma \approx 5$ eV [c]		16.728	$0^+; 2$	(1967KU06, 1976MA01)
5879 ± 7 [d]	10 ± 3	$\Gamma_\gamma \approx 0.3$ eV [c]		18.427	$2^+; 2$	(1972KU24, 1976MA01)

A: See references listed for this state in (1972AJ02) and in Table 20.13 of (1959AJ76) [see (1955HU1A)].

[a] See also Table 20.19.

[b] Γ_γ to ^{20}Ne*(4.97) = 0.12 eV (1961GO21), 0.24 eV (1960KA18).

[c] See text of reaction 34.

[d] Decays predominantly to ^{20}Ne*(1.63) via an M1 transition: see Table 20.19.

[e] Based on non-isotropic distribution of γ-rays from $13.88 \rightarrow 4.97$ transition, which leads to odd parity for ^{20}Ne*(13.88) assuming p-wave protons (1975SU1E; preliminary).