

Table 20.21 from (1987AJ02): Levels of ^{20}Ne from $^{19}\text{F}(p, p_0)$ ^a

E_p (keV)	Γ_{lab} (keV)	l	$J^\pi; T$	Γ_p/Γ	θ_p^2 (%)	$^{20}\text{Ne}^*$ (MeV)
340	2.9	0	1^+	0.016	3.8	13.171
483			1^+			13.307
598	37	1	2^-	0.0012	0.38	13.416
669	7.5	0	1^+	0.98	9.6	13.483
843	23	0	0^+	0.996	10.8	13.649
873	5.2	1	2^- ^b	0.21	1.5	13.677
935	8.0	0	1^+	0.17	0.44	13.736
1346	4.5	1	2^- ^b	0.067	0.07	14.126
1372	15	1	2^- ^b	0.17	0.52	14.151
1422	14.6	0	1^+	0.85	0.92	14.198
1710 ^c	90	0	0^+	0.8		14.472
1896 ^c	25	0	0^+	0.3		14.648
1943 ^c	40	0	(1^+)	0.5		14.693
2030 ^c	70	1	(1^-)	0.75		14.776
2.763 ^c		2				15.472
2.970 ^c		2				15.668
4094 ± 3	2.1 ± 0.5	0	$0^+; 2$	0.062 ± 0.004		16.735
5879 ± 7 ^d	10 ± 3	2	$2^+; 2$	≈ 0.2		18.430

^a For references see [Table 20.27 in \(1978AJ03\)](#). For θ^2 see [Table 20.28 in \(1978AJ03\)](#).

^b 1^- not excluded by elastic scattering alone.

^c ([1985OU01](#), [1986OU01](#); *R*-matrix analysis). Weak resonances at $E_p = 1.75$ and 1.78 MeV are also suggested.

^d Resonance also observed in p_1 , p_3 , p_4 and p_5 yields.