Table 20.15 from (1987AJ02): K^π assignments to states of ^{20}Ne [a]

K^π	J^π	E_x (MeV)	K^π	J^π	E_x (MeV)
0_1^+	0^+	0		6^+	(16.51)
	2^+	1.63		8^+	(18.62)
	4^+	4.25	0_7^+ [b]	0^+	12.43
	6^+	8.78		2^+	(12.96)
	8^+	11.95		6^+	(19.44)
0_2^+	0^+	6.73	0^-	1^-	5.79
	2^+	7.42		3^-	7.16
	4^+	9.99		5^-	10.26
	6^+	(12.59, 13.11)		7^-	13.69
0_3^+	0^+	7.20		9^-	(17.43)
	2^+	7.83	1^-	1^-	8.85
	4^+	9.03		3^-	10.41
	6^+	12.14		5^-	12.71
0_4^+	0^+	8.7		7^-	16.58
	2^+	8.8		9^-	(20.69, 21.06)
	4^+	10.80	2^-	2^-	4.97
	6^+ [c]	(12.59)		3^-	5.62
	8^+ [c]	(17.30)		4^-	7.00
0_5^+	0^+	10.97		5^-	8.46
	2^+ [d]	12.33		6^-	10.61
0_6^+ [b]	0^+	11.55		7^-	13.34
	4^+	(13.97)		8^-	(15.70) [e]
				9^-	17.43

[a] See Tables 20.19, 20.20, 20.21, 20.22 and 20.23 in (1983AJ01) and (1984RI01, 1984RI07, 1985MU14, 1986MA48). I am greatly indebted to Prof. H.T. Richards for his comments on this table.

[b] See also (1985LAZZ; prelim.).

[c] However (1987MI07) predict the $J^\pi = 6^+$, 8^+ and 10^+ members of the 0_4^+ band to be at $E_x \approx 14 - 15$ MeV [$\Gamma \approx 1 - 2$ MeV], ≈ 21 MeV [$\Gamma \approx 2$ MeV] and ≈ 29 MeV [$\Gamma \approx 29$ MeV], suggesting that the 0_4^+ band has a moment of inertia which is very similar to that of the 0^- band.

[d] For the location of higher J^π members of this band see (1984RI01).

[e] See (1970PA08) and (1984RI01).