Table 20.19 from (1987AJ02): States of ^{20}Ne from ^{16}O(^{6}Li, d), ^{16}O(^{7}Li, t) and ^{16}O(^{12}C, ^{8}Be) [a]

E_x (MeV ± keV)			$\Gamma_{c.m.}$ (keV)	Γ_{α_0}/Γ	S [b]	J^π
(^{6}Li, d)	(^{7}Li, t)	(^{12}C, ^{8}Be)				
0	0	0			1.00	0^+
1.63	1.63	1.63			0.41	2^+
4.25	4.25	4.25			0.22	4^+
4.97						2^-
5.62					0.06	3^-
5.79	5.79	5.79			0.54	1^-
6.73					0.56	0^+
7.00						4^-
7.16	7.16	7.16			0.26	3^-
7.43					0.13	2^+
8.46					0.04	5^-
8.78	8.78	8.78			0.20	6^+
10.3 ± 100	10.26	10.26	145 ± 40	1	0.15	5^-
10.7 ± 100						4^+
11.95	11.95	11.95		0.85 ± 0.15	0.51	8^+
12.14					0.05	6^+
12.6 ± 100	12.591 ± 10	12.59	110 ± 40	0.80 ± 0.10		6^+
13.9	13.904 ± 20		≈ 100			6^+
14.3	14.310 ± 20	14.3 [d]	< 100			6^+
15.35 ± 100	15.336 ± 15	15.34	380 ± 60	0.90 ± 0.10		7^-
15.9 ± 100		15.87	< 250			7^-
16.7 ± 100	16.63 ± 20	16.63	190 ± 40	0.90 ± 0.10		7^- [e]
17.35 ± 100	17.30 ± 20	17.30	220 ± 40	≥ 0.40 ± 0.10		8^+ [e]
18.7 ± 100						7^-
19.4 ± 100			400			7^-
19.9 ± 100			400			7^-
	20.67 ± 40	20.5 [d]				
20.8 ± 100						$7^-(6^+)$
	21.08 ± 30	21.08	100 ± 50	0.65 ± 0.15		9^-
21.3 ± 100			300			8^+
21.8 ± 100			300			8^+

Table 20.19 from (1987AJ02): States of ^{20}Ne from ^{16}O(^{6}Li, d), ^{16}O(^{7}Li, t) and ^{16}O(^{12}C, ^{8}Be) [a] (continued)

E_x (MeV ± keV)			$\Gamma_{c.m.}$ (keV)	Γ_{α_0}/Γ	S [b]	J^π
(^{6}Li, d)	(^{7}Li, t)	(^{12}C, ^{8}Be)				
22.3 ± 100			300			8^+
	22.87 ± 40	22.87	225 ± 40	0.90 ± 0.10		9^-
23.5 ± 100	23.70 ± 30		≤ 200			$9^-(8^+)$
	24.21 ± 25		≈ 500			
	25.10 ± 50		≤ 200			
	25.67 ± 50		≈ 500			
27.1 ± 100 [c]		27.0 [d]				9^-
28.1 ± 100 [c]						10^+
(29.4) [c]						(10^+)
((33.4))						$((10^+))$

[a] For complete references see Tables 20.24 in (1978AJ03) and 20.22 in (1983AJ01).

[b] Relative α-particle spectroscopic factors (DWBA). Other S_α values have also been reported.

[c] (1982AR20).

[d] (1983SH26).

[e] An admixture of 6^+ or 8^+ in the d-α angular correlation involving ^{20}Ne*(16.6) and a doublet $(8^+ + 7^-)$ at $E_x = 17.4$ MeV have been suggested. See also Table 20.18.