Table 19.22 from (1978AJ03): States of ^{19}F from ^{19}F(α, α') [a]

E_x (MeV $\pm$ keV) [b]	L [c]	$\lvert\beta_L\rvert$	J^π [d]	$\lvert M\rvert^2 \downarrow$ (W.u.)
0				
0.11	1			
0.20	2	(≈ 0.3)		(≈ 2.9)
1.35	3	0.242		1.93
1.46	1			
1.55	2	0.359		4.16
2.783 ± 20	4	0.175		1.07
3.91	2	0.081	$\frac{3}{2}^+$	0.21
4.00	(3)			
4.03	(5)			
4.398 ± 20	4	0.068		0.16
4.551 ± 20	2	0.149		0.71
4.56				
4.647 ± 20	(6)			
4.677 ± 20	(3)			
5.113 ± 20	3	0.126	$\frac{5}{2}^-$	0.52
5.349 ± 20				
5.431 ± 20	3	0.325		3.48
5.482 ± 20	4	0.122		0.052
5.494 ± 20	2	0.075		0.024
5.555 ± 20	2	0.072	$\frac{5}{2}^+$	0.017
5.630 ± 20	3	0.267	$\frac{5}{2}^-$	2.36

[a] (1973KR20): $E_\alpha = 25$ MeV.

[b] Energies are nominal unless uncertainty is indicated. Authors state accuracy of E_x is in range $\pm 8 \rightarrow 20$ keV.

[c] If L is in parentheses, fit DWBA was not possible: value of L shown is that implied by the selection rules for one-step excitation.

[d] Only those J^π determined by (1973KR20).