Table 19.12 from (1978AJ03): States of ^{19}F from ^{16}O(α, p)^{19}F [a]

E_x [b] (MeV $\pm$ keV)	J^π [c]	S_{rel} [e]	E_x [b] (MeV $\pm$ keV)	J^π [c]	S_{rel} [e]
0 [d]	$\frac{1}{2}^+$	1.38	8.280 ± 7 [d]	$(\frac{13}{2}^-)$	
0.199 ± 2 [d]	$\frac{5}{2}^+$	1.22	8.601 ± 5 [d]	$\frac{3}{2}$	
1.353 ± 3 [d]	$\frac{5}{2}^-$		8.932 ± 8 [d]	$\frac{3}{2}^-$	
1.556 ± 2 [d]	$\frac{3}{2}^+$	1.06	9.313 ± 10	$\frac{1}{2}^+$	
2.7797 ± 0.4 [d]	$\frac{9}{2}^+$	1.00	9.702 ± 7 [d]		
4.027 ± 2 [d]	$\frac{7}{2}^- + \frac{9}{2}^-$		9.898 ± 2 [d]	$\frac{11}{2}^+$	1.11
4.371 ± 5 [d]	$\frac{7}{2}^+$	≤ 0.12	10.420 ± 2 [d]		1.23
4.6448 ± 1.3 [d]	$\frac{13}{2}^+$	1.49	10.742 ± 9		
5.456 ± 2 [d]	$\frac{7}{2}^+$	0.85	11.245 ± 7 [d]		
6.107 ± 5 [d]	$(\frac{3}{2}^-)$		11.430 ± 13		
6.286 ± 6 [d]	$\frac{5}{2}^+$		11.667 ± 6		
6.529 ± 6	$\frac{3}{2}^+$		11.989 ± 15		
6.582 ± 14	$\frac{9}{2}^+$		12.335 ± 7		
6.918 ± 3 [d]	$\frac{7}{2}^{(-)}$		12.802 ± 8 [d]		
7.243 ± 3 [d]			13.474 ± 6		
7.543 ± 9	$\frac{5}{2}^+; T = \frac{3}{2}$		13.797 ± 4 [d]		
7.723 ± 12	$\frac{3}{2}^-$		14.120 ± 3 [d]		
7.926 ± 3 [d]	$(\frac{7}{2}^+, \frac{9}{2})$	0.33	15.039 ± 8 [d]		
			15.571 ± 8		

[a] (1976VA26): $E_\alpha = 40$ MeV; compare with Table 19.6.

[b] Obtained by autofit program using several low-lying states of ^{19}F for calibration purposes: the actual energy resolution was 80–150 keV (1976VA26).

[c] From Table 19.6.

[d] Angular distribution obtained for this state.

[e] All values normalized to 1.00 for ^{19}F*(2.78).