

Table 20.12 from (1987AJ02): States in ^{20}F from $^{19}\text{F}(\text{d}, \text{p})^{20}\text{F}$ ^a

E_x (keV) ^b	l_n ^c	J^π	$(2J + 1)S$	n, l, j ^c
0	2	2^+	0.054	$1\text{d}_{5/2}$
655.9 ± 0.2	2	3^+	2.32	$1\text{d}_{5/2}$
823.0 ± 0.3	d	4^+	0.32	$1\text{g}_{9/2}$
983.9 ± 0.3	d	1^-	0.014	$1\text{p}_{1/2}$
1057.0 ± 0.2	$0 + 2$	1^+	0.013	$2\text{s}_{1/2}$
1309.3 ± 0.2	d	2^-	0.017	$1\text{p}_{3/2}$
1820 ± 10	d	(5^+)	0.35	$1\text{g}_{9/2}$
1843.5 ± 0.7	d	2^-	0.007	$2\text{p}_{3/2}$
1970 ± 10	d	(3^-)	0.038	$1\text{f}_{7/2}$
2043.7 ± 0.5	2	2^+	2.32	$1\text{d}_{5/2}$
2194.5 ± 0.6	2	3^+	0.55	$1\text{d}_{5/2}$
2863.7 ± 1.6	d		0.044	$1\text{f}_{7/2}$
2966.8 ± 0.6	2	3^+	0.38	$1\text{d}_{3/2}$
3175.6 ± 1.3	d		0.019	$1\text{d}_{5/2}$
3488.5 ± 0.3	0	1^+	1.20^e	$2\text{s}_{1/2}$
3525.9 ± 0.5	0	0^+	0.28^e	$2\text{s}_{1/2}$
3586.5 ± 0.6	2	$\pi = +$	0.038	$1\text{d}_{3/2}$
3681.0 ± 2.5	2	$\pi = +$	0.031	$1\text{d}_{5/2}$
3760.8 ± 2.7	d		c	
3964.5 ± 2.5	2	$\pi = +$	0.036	$1\text{d}_{5/2}$
4082.5 ± 0.8	$0 + 2$	$\pi = +$	0.13	$1\text{s}_{1/2}$
4198.9 ± 2.7	d		0.083	$1\text{d}_{3/2}$
4207.7 ± 2.6				
4279.0 ± 2.0	2	$\pi = +$	0.087	$1\text{d}_{5/2}$
4315.4 ± 2.0	0	$(0, 1)^+$	0.20	$2\text{s}_{1/2}$
4374.5 ± 2.0				
4509.5 ± 3.0				
4583.8 ± 3.0			0.02	$2\text{p}_{3/2}$
	1	$(0 - 2)^-$		
4592.2 ± 2.9			(< 0.05)	$(1\text{f}_{7/2})$
4730.2 ± 2.9	2, 3			

Table 20.12 from (1987AJ02): States in ^{20}F from $^{19}\text{F}(\text{d}, \text{p})^{20}\text{F}$ ^a (continued)

E_x (keV) ^b	l_n ^c	J^π	$(2J + 1)S$	n, l, j ^c
4763.8 ± 2.7	2, 3			
4891.6 ± 2.8				
4898.2 ± 2.8				
5048.7 ± 1.5				
5069.0 ± 3	2	(1, 2, 3) ⁺	0.09	1d _{5/2}
5132.4 ± 3.5				
5225.0 ± 3	1, 3		0.09	2p _{3/2}
5284.0 ± 3	0	(1, 0) ⁺	0.34	2s _{1/2}
5318.0 ± 3	2 or 1 + 3	(1, 2, 3) ⁺ or 2 ⁻	0.10	1d _{5/2}
5349.0 ± 4	2	(1, 2, 3) ⁺	0.06	1d _{5/2}
5408.2 ± 2.5				
5450.3 ± 3.8				
5455.4 ± 3.2				
5463.0 ± 3	2	(1, 2, 3) ⁺	0.27	1d _{5/2}
5562.9 ± 2.0	1	(0, 1, 2) ⁻	0.03	2p _{3/2}
5588.1 ± 1.5				
5620.0 ± 3	d			
5710.8 ± 6.0	d			
5764.0 ± 3	2	(1, 2, 3) ⁺	0.15	1d _{5/2}
5810.0 ± 3	0 + 2, or 1 + 3	(2 ⁻ , 1 ⁺)		
5935.0 ± 3	1(+3)	(1 ⁻ , 2 ⁻)	0.43	2p _{3/2}
6015.0 ± 3.8	1 + 3	(2 ⁻)	0.68	2p _{3/2}
			1.40	1f _{7/2}
6043.3 ± 3.7				

^a For complete references see [Table 20.15 in \(1978AJ03\)](#) and see also [Table 20.14 in \(1983AJ01\)](#).

^b Best values.

^c Assumed in analysis; $E_d = 12$ MeV.

^d Weak groups.

^e At $E_d = 16$ MeV.