

Table 20.35 from (1978AJ03): States of ^{20}Ne from $^{19}\text{F}(^3\text{He}, d)^{20}\text{Ne}$

E_x^a (MeV \pm keV)	Γ^a (keV)	$nlj^{a,b,c}$	$J^\pi; T^{a,b}$	K^π^d	$(2J+1)C^2S$		
					(1975BE02) ^e	(1976SE10) ^f	(1973OB04) ^f
0 ^b		2s _{1/2}	0 ⁺	0 ₁ ⁺		0.30	0.43
1.6353 \pm 1.8 ^h		1d _{5/2}	2 ⁺	0 ₁ ⁺		1.43	1.90
4.249 \pm 2.5 ^h		n.s.	4 ⁺	0 ₁ ⁺		0.08	0.0
4.968 \pm 3 ^h		1p _{3/2}	2 ⁻	2 ⁻	(0.03)	0.021	0.040
5.623 \pm 3 ^h		1f _{7/2}	3 ⁻	2 ⁻	(0.09)	0.10	0.028
5.785 \pm 3		2p _{3/2}	1 ⁻	0 ⁻	0.16	0.10	0.12
6.722 \pm 3		2s _{1/2}	0 ⁺	0 ₂ ⁺	0.52	0.39	0.22
7.00 ^b		1f _{7/2}	4 ⁻	2 ⁻		0.12	0.11
7.156 \pm 8		1f _{7/2}	3 ⁻	0 ⁻	0.42	0.12	
7.422 \pm 3		1d _{5/2}	2 ⁺	0 ₂ ⁺	0.79	0.39	0.60
7.829 \pm 10		1d _{5/2}	2 ⁺	0 ₃ ⁺	0.06	0.046	0.045
\approx 8.3	\approx 800	2s _{1/2}	0 ⁺	0 ₄ ⁺	0.13		
8.45 ^b		n.s.	5 ⁻	2 ⁻			
8.70 ^b		n.s.	1 ⁻				
8.769 \pm 10		n.s.	6 ⁺	0 ₁ ⁺			
8.8 ^g	broad	1d _{5/2}	2 ⁺		0.21 ^g		
8.841 \pm 10		2p _{3/2}	1 ⁻		(0.01)		
9.03 ^b		n.s.	4 ⁺	0 ₃ ⁺			
9.12 ^b		n.s.	3 ⁻				
9.305 \pm 10		1d _{5/2}	(1, 2, 3) ⁺		0.04		
9.469 \pm 10		1d _{5/2}	2 ⁺		0.03		
9.859 \pm 3		1d _{5/2}	3 ⁺ ⁱ		2.37		
9.92 ^b		n.s.	(1 ⁺)				
9.99 ^b		n.s.	4 ⁺	0 ₂ ⁺			
10.257 \pm 15		1d _{5/2}	2 ⁺ ; 1		0.07		
10.40 ^b							
10.55 ^b							
10.568 \pm 15	27	1d _{5/2}	2 ⁺		0.05		
10.815 \pm 15	12	1d _{5/2}	2 ⁺		0.05		
10.860 \pm 15		1d _{5/2}	3 ⁺ ; 1 ⁱ		2.82		

Table 20.35 from (1978AJ03): States of ^{20}Ne from $^{19}\text{F}(^3\text{He}, d)^{20}\text{Ne}$ (continued)

E_x^a (MeV \pm keV)	Γ^a (keV)	$nlj^{a,b,c}$	$J^\pi; T^{a,b}$	K^π^d	$(2J+1)C^2S$		
					(1975BE02) ^e	(1976SE10) ^f	(1973OB04) ^f
10.951 \pm 15							
11.067 \pm 15		n.s.	(4 ⁺ ; 1)				
11.239 \pm 15					see ^a		
11.27 \pm 15	73	n.s.					
11.549 \pm 15		1d _{5/2}	3 ⁺ ⁱ		1.00		
11.83 \pm 15	81	1d _{5/2}			0.10		
11.992 \pm 15		n.s.	(8 ⁺)	0 ₁ ⁺			
12.082 \pm 15		1d _{5/2}			0.35		
12.190 \pm 15	< 0.1 ⁱ	1d _{5/2}	(1, 2, 3) ⁱ		2.10		
12.367 \pm 15 ^j	< 200 ⁱ		3 ⁻ ⁱ		see ^{a,i}		
12.423 \pm 15	160	1d _{5/2}	(2 ⁺)		0.19		
12.503 \pm 15		1d _{5/2}			0.02		
12.823 \pm 15		2s _{1/2}			0.15		
13.037 \pm 15		1d _{5/2}					
13.135 \pm 15							
13.270 \pm 15							

n.s. = not stripping.

^a (1975BE02): $E(^3\text{He}) = 18$ MeV. The E_x measured by (1975BE02) appear to be systematically low by 14 – 30 keV: see (1977MA07).

^b (1976SE10): $E(^3\text{He}) = 16$ MeV.

^c Orbital for direct transfer.

^d (1973OB04): $E(^3\text{He}) = 21$ MeV.

^e DWBA.

^f CCBA.

^g (1976FO05): $E(^3\text{He}) = 18$ MeV.

^h Gamma-ray measurements (1969AN08).

ⁱ Gamma-ray measurements (1977MA07): $E_x = 9.88 \pm 0.03, 10.89 \pm 0.03, 11.59 \pm 0.03, 12.22, 12.40 \pm 0.04$ MeV.

^j α -decays to $^{16}\text{O}^*(6.13)$ (1977MA07).