

Table 19.10 from (1983AJ01): Levels of ^{19}F from $^{15}\text{N}(\alpha, p)$ and $^{15}\text{N}(\alpha, \alpha)$ ^a

E_α (MeV \pm keV)	Γ_{lab} (keV)	J^π	E_x (MeV \pm keV)
1.878 \pm 10	4	$\frac{3}{2}^+$	5.496
2.614 \pm 10	1.5	$\frac{5}{2}^+$	6.077
2.635 \pm 10	5	$\frac{5}{2}^-$	6.094
2.833 \pm 10	10	$\frac{1}{2}^+$	6.250
2.883 \pm 10	3	$\frac{5}{2}^+$	6.289
2.944 \pm 10	3	$\frac{7}{2}^+$	6.338
3.060 \pm 10	360	$\frac{1}{2}^-$	6.429 \pm 8
3.194 \pm 10	5	$\frac{1}{2}^+$	6.535
3.229 \pm 10	2	$\frac{5}{2}^+$	6.563
3.525 \pm 10	3	$\frac{3}{2}^-$	6.796
3.587 \pm 10	1.5	$(\frac{5}{2}, \frac{3}{2})^+$	6.845
3.648 \pm 10	35	$\frac{5}{2}^-$	6.893
3.705 \pm 10	3	$(\frac{9}{2}, \frac{7}{2})^-$	6.938
3.770 \pm 10	64	$\frac{1}{2}^-$	6.989 \pm 8
3.930 \pm 10	40	$\frac{7}{2}^+$	7.116 \pm 8
4.127 ^c	$\lesssim 8$		7.271
4.23	$\lesssim 82$	$\frac{7}{2}^+$	7.35
4.49	$\lesssim 110$	$\frac{7}{2}^+$	7.56
4.53	$\lesssim 50$	$\frac{5}{2}^+$	7.59
4.710	$\lesssim 40$	$\frac{1}{2}^-$	7.731
4.780	$\lesssim 8$		7.787
4.93	$\lesssim 260$		7.90
(5.005)	($\lesssim 8$)		(7.964)
(5.018)	($\lesssim 5$)		(7.974)
5.116	$\lesssim 8$		8.052
5.203	$\lesssim 8$		8.120
5.232	$\lesssim 6$		8.143
5.25	$\lesssim 65$		8.16
5.284	$\lesssim 10$		8.184
5.481	$\lesssim 10$		9.340
7.877 ^d	< 1	$\frac{1}{2}^+$	10.231 \pm 4

Table 19.10 from (1983AJ01): Levels of ^{19}F from $^{15}\text{N}(\alpha, p)$ and $^{15}\text{N}(\alpha, \alpha)$ ^a (continued)

E_α (MeV \pm keV)	Γ_{lab} (keV)	J^π	E_x (MeV \pm keV)
7.977 ^d		$\frac{3}{2}^+$	10.308 \pm 4
8.179 ^d	13.8 \pm 1.5		10.469 \pm 4
8.205 ^d	6.0 \pm 1.0		10.488 \pm 4
8.220	5.4 \pm 1.0	$\frac{3}{2}^+$	10.501 \pm 4
8.245	18 \pm 2		10.521 \pm 4
8.277	2.5 \pm 1		10.546 \pm 4
8.287 ^d	5.0 \pm 1.5	$\frac{3}{2}^+$	10.554 \pm 4
8.307 ^d	3.7 \pm 1		10.560 \pm 4

^a For references see [Table 19.9 in \(1978AJ03\)](#).

^b Resonances below $E_\alpha = 5.5$ MeV are observed in (α, α_0) ; resonances above that energy are observed in $(\alpha, p\gamma)$ and $(\alpha, \alpha'\gamma)$ (1978SY01).

^c I am indebted to Prof. C. Rolfs for his comments on the resonances with $4 < E_\alpha < 5.5$ MeV.

^d Value recalculated by reviewer from E_x .