

Table 16.23 from (1971AJ02): States in ^{16}O from $^{15}\text{N}(\text{d}, \text{n})^{16}\text{O}$ and $^{15}\text{N}(^3\text{He}, \text{d})^{16}\text{O}$

^{16}O state at (MeV)	$J^\pi; T$	$l^{a,b}$	l^c	S^a	S^b	$S_{\text{rel.}}^d$
0	$0^+; 0$	1	1	2.60	3.52	3.5 ± 1.0
6.05	$0^+; 0$	1		0.09	0.16	
6.13	$3^-; 0$	2	2	0.72	0.63	$\equiv 1$
6.92	$2^+; 0$	1 + 3	not direct	0.02 ^f		< 0.18
7.12	$1^-; 0$	0 + 2	0	0.41 ^g	0.54	0.35 ± 0.10
8.87	$2^-; 0$	2	2	0.87	0.55	0.80 ± 0.10
9.60	$1^-; 0$	0		0.017		
9.85	$2^+; 0$	not direct	1			
10.34	$4^+; 0$	3		0.037		
10.95	$0^-; 0$	0	0	1.77	1.20	
11.08	$3^+; 0$	3	3	0.17		
11.26	$0^+; 0$	broad state				
12.44	$1^-; 0$	0	0 + 2	(0.75 ± 0.2)	0.25	
12.53	$2^-; 0$	2	2	(0.9 ± 0.2)	1.45	
12.80	$0^-; 1$	0	0	(2.8 ± 1)		
12.97	$2^-; 1$	2	2	(0.7 ± 0.2)	0.85	
13.10	$1^-; 1$	0		(0.7 ± 0.3)		
13.13 ^e	$3^-; 0$	2			0.96	
13.26	$3^-; 1$	2	2	(0.5 ± 0.2)		
17.14	$1^-; 1$				b	
17.17	2^+				b	

^a (1969BO13): ($^3\text{He}, \text{d}$).

^b (1969FU08): ($^3\text{He}, \text{d}$).

^c (1967FU07, 1970MU1H): (d, n).

^d (1967FU07); relative to $S(6.13) \equiv 1$.

^e $\Gamma = 128$ keV.

^f $l = 1$.

^g $l = 0$.