

Table 15.22 from (1981AJ01):  
Levels of  $^{15}\text{O}$  from  $^{13}\text{C}(^3\text{He}, n)^{15}\text{O}$

$E_x^a$ (MeV)	$J^\pi^a$	$L^b$	$S^e$
g.s.	$\frac{1}{2}^-$	0	1 <sup>g</sup>
5.18 <sup>c</sup>	$\frac{1}{2}^+$	1	0.15
5.24 <sup>c</sup>	$\frac{5}{2}^+$	3	0.17
6.180 ± 4 <sup>f</sup>	$\frac{3}{2}^-$	2	0.10 <sup>h</sup>
6.79 <sup>c</sup>	$\frac{3}{2}^+$	1	0.12
6.857 ± 3.2 <sup>f</sup>	$\frac{5}{2}^+$	3	0.29
7.284 ± 7 <sup>f</sup>	$\frac{7}{2}^+$	3	(< 0.03)
7.56	$\frac{1}{2}^+$	1	0.02
8.28	$\frac{3}{2}^+$	1	(0.38)
8.74	$\frac{1}{2}^+$	1	
8.92 <sup>l</sup>		1	0.55 <sup>i</sup>
8.98	$(\frac{1}{2})^-$	0	0.44 <sup>j</sup>
9.49	$\frac{5}{2}^-$	2	
9.53	$(\frac{1}{2})^+$	1	
9.61	$\frac{3}{2}^-$	2	1.05 <sup>j</sup>
9.66	$(\frac{7}{2}, \frac{9}{2})^-$	0 <sup>k</sup>	
10.29 <sup>l</sup>		≥ 3 <sup>d</sup>	
10.48 <sup>l</sup>		0 <sup>c</sup> , 2 <sup>d</sup>	

<sup>a</sup> Nominal energies and known  $J^\pi$ : see Table 15.18, except where uncertainties are shown.

<sup>b</sup> (1971ET1A, 1972ET01):  $E(^3\text{He}) = 5.5$  and  $6.2$  MeV; used codes DWUCK and MANDY.

<sup>c</sup> These states were unresolved.

<sup>d</sup> (1972GE02):  $E(^3\text{He}) = 6$  MeV.

<sup>e</sup> (1971HI04); see also (1972GE02).

<sup>f</sup> From  $\gamma$ -ray measurements: see Table 15.19 (1965WA16).

<sup>g</sup>  $(p_{1/2})^2$ .

<sup>h</sup>  $(p_{3/2}, p_{1/2})$ .

<sup>i</sup>  $(p_{1/2}, d_{3/2})$ .

<sup>j</sup>  $(d_{5/2})^2$ .

<sup>k</sup> (1971HI04) report  $L = 4$ .

<sup>l</sup> Known to be a doublet: see Table 15.19.