

$^{15}\text{N}(\alpha, \text{d})$ [1969Lu07](#)

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	C. G. Sheu, J. H. Kelley, J. Purcell	ENSDF	5-Aug-2021

[1969Lu07](#): α -particle beams at 45.4 MeV, provided by the Berkeley 88-inch cyclotron, bombarded a ^{15}N gas target (99.71% purity). The resulting deuteron energy spectrum was measured at $\theta_{\text{lab}}=13.2^\circ-82.2^\circ$. The energy resolution (FWHM) was about 150 keV. Ground state and excitation states of ^{17}O were deduced.
See also ([1968LuZY](#), [1968LuZZ](#); thesis).

 ^{17}O Levels

E(level) [†]	J^π [†]	Comments
0		
870 50		
3850 50		
4566 50		
5208 30		
5690 30		
7367 30		
7742 20	(11/2 ⁻)	T=1/2 E(level): See also 7.6 MeV 2 (1962Ha40). Dominant configuration: $(\text{d}_{5/2})^2_5\text{p}_{1/2}^{-1}$. See also (1966Ri04).
8147 30		
8459 30		
8890 30		
9137 30	(9/2 ⁻)	T=1/2 E(level): See also 9.0 MeV 2 (1962Ha40). Dominant configuration: $(\text{d}_{5/2})^2_5\text{p}_{1/2}^{-1}$. See also (1966Ri04).
9814 30		

[†] From ([1969Lu07](#)). See also ([1962Ha40](#)) for levels observed.