^{16}O(^{14}N,^{13}N) 1975Na15

History

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

1975Na15: ^{16}O(^{14}N,^{13}N), E=155 MeV; measured $\sigma(\theta)$. ^{17}O levels deduced S. Transitions were identified to the $5/2^+$ ground state and the $3/2^+$ 5.08-MeV state. In addition, there were peaks observed at E_x=7.5, 11.2, and 14.7 MeV. The first excited state at 0.871 MeV ($1/2^+$) was weakly excited and could not be clearly distinguished above the tail of the ground state peak. In the analog channel ^{16}O(^{14}N,^{13}C)^{17}F the ground state ($5/2^+$) and the 5.10 MeV ($3/2^+$) were identified together with several peaks at higher excitation energies as in the neutron stripping spectrum.

1976Mo03: ^{16}O(^{14}N,^{13}N), E=79 MeV; measured $\sigma(\theta)$. ^{17}O levels deduced S. The angular distribution for the transition to the $2s_{1/2}$ state in ^{17}O showed an anomaly similar to that already reported in studies of ^{12}C(^{14}N,^{13}N) and ^{12}C(^{10}B,^{9}Be).

1976Ku06: ^{16}O(^{14}N,^{13}N), E=79 MeV; analyzed anomalous $\sigma(\theta)$.

1976Na09: ^{16}O(^{14}N,^{13}N), E=155 MeV; calculated $\sigma(\theta)$.

^{17}O Levels

E(level)†	J^π†	Comments
0	$5/2^+$	
871	$1/2^+$	E(level): Weakly excited; poorly resolved above the tail of the ground-state peak.
5080	$3/2^+$	
7500		
11200		
14700		

† Reported in (1975Na15).