

${}^{18}\text{O}({}^7\text{Li}, {}^7\text{Be})$ 1983Pu01

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	R. Spitzer, J. H. Kelley		ENSDF	30-Jun-2021

1983Pu01: The ${}^{18}\text{O}({}^7\text{Li}, {}^7\text{Be})$ reaction was measured using the Australian National University Pelletron accelerator. A beam of ${}^7\text{Li}$ ions impinged on a $140 \mu\text{g}/\text{cm}^2$ 99.2% enriched NiO^{18} target and reactions products were momentum analyzed using an Enge spectrometer at $\theta=4.5^\circ, 8.5^\circ, 10^\circ$ and 15° . The lowest peak is resolved as a doublet where the ground state is found with $\Delta M=13116 \text{ keV } 20$. Additional peaks shown in the spectrum correspond to $E_x=121 \text{ keV } 10$ and $747 \text{ keV } 10$. Additional groups associated with ${}^{18}\text{N}$, not shown in the article, are found at $E_x=2.21$ and 2.42 MeV .

 ${}^{18}\text{N}$ Levels

E(level)	Comments
0	E(level): $\Delta M=13116 \text{ keV } 20$. E(level): The strength of this state is 7% of the strength of the 121 keV state.
121 10	
747 10	
2.21×10^3	
2.42×10^3	