
 $^{48}\text{Ca}(^{18}\text{O}, ^{19}\text{N})$ **1983Ho08**

Type	History		Citation	Literature Cutoff Date
	Author			
Full Evaluation	G. C. Sheu, J. H. Kelley		ENSDF	06-Nov-2018

1983Ho08: Two measurements have been performed at the Australian National University 14UD Pelletron accelerator, where either an $E(^{18}\text{O})=117$ MeV beam impinged on a $50\text{ }\mu\text{g}/\text{cm}^2$ ^{48}Ca target or an $E(^{18}\text{O})=119$ MeV beam impinged on an $85\text{ }\mu\text{g}/\text{cm}^2$ ^{48}Ca target. Reaction products were momentum analyzed using an Enge split-pole spectrometer with a mean reaction angle of $\theta_{\text{lab}}=6^\circ$ or 5° , respectively. The $\Delta\Omega=3.4$ msr in both measurements. The differential cross sections for ^{19}N production is $\sigma=47\text{ }\mu\text{b}/\text{sr}$ ($E(^{18}\text{O})=119$ MeV). The ground state $Q(\beta^-)$ values deduced from the reactions are in good agreement and resulted in $\Delta M(^{19}\text{N})=15.872$ MeV 20.

 ^{19}N Levels

<u>E(level)</u>	<u>Comments</u>
0	$\Delta M=15.872$ MeV 20 was deduced.