

$^{64}\text{Ni}(^{12}\text{C},^{11}\text{B}),(^{16}\text{O},^{15}\text{N})$  **1974Cu02**

<u>Type</u>	<u>Author</u>	<u>History Citation</u>	<u>Literature Cutoff Date</u>
Full Evaluation	Jun Chen	NDS 202,59 (2025)	25-Feb-2025

**1974Cu02** (also **1974Le20**): E=48 MeV  $^{12}\text{C}$  and E=56 MeV  $^{16}\text{O}$  beams were produced from the Saclay FN tandem Van de Graaff.

Target was  $100 \mu\text{g}/\text{cm}^2$  99% enriched  $^{64}\text{Ni}$  on a  $20 \mu\text{g}/\text{cm}^2$  carbon backing. Reaction products were detected with two  $\Delta\text{E-E}$  counter telescopes each consisting of two surface-barrier silicon detectors (FWHM=250 keV for  $^{15}\text{N}$  and 200 keV for  $^{11}\text{B}$ ).

Measured  $\sigma(\text{E},\theta)$ ,  $\theta_{\text{cm}}=15^\circ-65^\circ$ . Deduced levels, L-transfers, spectroscopic factors from DWBA analysis.

See **1974Cu02** for full discussion of DWBA analyses and spectroscopic values.

**1973Be12**: ( $^{16}\text{O},^{15}\text{N}$ ) E=60 MeV from the Niels Bohr Institute tandem. Measured  $\sigma(\text{E},\theta)$ .

**1973Ko01**: E=48 MeV beam from the Argonne FN tandem. Measured  $\sigma(\text{E},\theta)$ .

 $^{65}\text{Cu}$  Levels

<u>E(level)<sup>†</sup></u>	<u>Comments</u>
0	
770	
1110	
1480	
1620	
2510	E(level): other: 2540 ( <b>1973Ko01</b> ).

<sup>†</sup> From **1974Cu02**.