

$^{66}\text{Zn}(\text{d}, ^3\text{He})$ 1978Ze04

<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

1978Ze04: E=23.3 MeV deuteron beam was produced from the ANL 60-inch cyclotron. Target was >98% enriched ^{66}Zn with a thickness of about $150 \mu\text{g}/\text{cm}^2$ on a $10 \mu\text{g}/\text{cm}^2$ carbon backing. Reaction products were detected with a $\Delta\text{E-E}$ surface-barrier detector telescope (FWHM<50 keV). Measured $\sigma(\text{E}(^3\text{He}), \theta)$, $\theta_{\text{cm}}=12^\circ-30^\circ$. Deduced levels, L-transfers, spectroscopic factors from DWBA analysis.

Other: 1961Yn03.

 ^{65}Cu Levels

Spectroscopic factor is obtained by using $d\sigma/d\Omega(\text{exp})=N \times C^2 S \times d\sigma/d\Omega(\text{DWBA})$, where N is the normalization factor.

<u>E(level)[†]</u>	<u>L[‡]</u>	<u>C²S[‡]</u>
0	1	1.7
770	1	0.44
1114	3	0.55
1481	3	1.2
1623	3	0.39
2093	3	1.5
2278	3	0.73
2651	3	1.8

[†] From 1978Ze04.

[‡] From DWBA analysis of measured $\sigma(\theta)$ in 1978Ze04.