^{62}Ni(α,t) 2013ScZZ

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Jun Chen	NDS 196,17 (2024)	30-Sep-2023

Adapted from the XUNDL dataset for 2013ScZZ compiled by E. Thiagalingam and B. Singh on May 12, 2013.

2013ScZZ: E=38 MeV α beam was produced from Yale tandem accelerator of WNSL facility. Target was 219 μg/cm^2 ^{62}Ni (96.5% enriched). Reaction products were momentum-analyzed with a split-pole Enge spectrograph (FWHM≈64 keV). Measured $\sigma(E_d,\theta)$. Deduced levels, J, π, spectroscopic factors from DWBA analysis. Comparison with shell-model calculations.

^{63}Cu Levels

E(level)†	dσ/dΩ (mb/sr)‡	E(level)†	dσ/dΩ (mb/sr)‡	E(level)†	dσ/dΩ (mb/sr)‡
0	3.66	1412	3.62	2336	0.68
670	1.21	1547	0.07	2405	0.36
962	2.94	2012	0.10	2505	5.76
1326	0.71	2062	0.24	3225	0.32

† Rounded values from Adopted Levels, unless otherwise noted.

‡ Measured $\sigma(\theta)$ at 5° from 2013ScZZ. The uncertainties are estimated to be ≈4% for σ>1 mb/sr, ≈7% for 0.1<σ< 1.0 mb/sr, and ≈18% for σ<0.1 mb/sr at their respective maxima. The uncertainties arising from possible contaminants or previously unidentified states for very weak transitions could be ≈0.02 mb/sr (2013ScZZ).