

${}^{62}\text{Ni}({}^7\text{Li}, {}^6\text{He})$ 1974Wh08

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

1974Wh08 (also 1974Wh04): E=28.1, 30.1, 32.1 MeV ${}^7\text{Li}$ beams were produced from the Florida State University super FN tandem Van de Graaff accelerator. Target was 80-100 $\mu\text{g}/\text{cm}^2$ 98.75% enriched ${}^{62}\text{Ni}$ on a thin carbon backing. Reaction products were detected with a $\Delta\text{E-E}$ solid-state counter telescope. Measured $\sigma(\theta)$. Deduced levels, J, π , L-transfers, spectroscopic factors from DWBA analysis.

 ${}^{63}\text{Cu}$ Levels

<u>E(level)[†]</u>	<u>Jπ[#]</u>	<u>C²S[‡]</u>
0	3/2 ⁻	2.4
670	1/2 ⁻	1.4
960	5/2 ⁻	2.8
1330	7/2 ⁻	0.80
1410	5/2 ⁻	3.5
2060	1/2 ⁻	0.60
2350	5/2 ⁻	0.78
2510	9/2 ⁺	5.2

[†] From 1974Wh08.

[‡] From DWBA analysis of measured $\sigma(\theta)$ in 1974Wh08. The quoted values of C²S here are the original values in 1974Wh08 multiplied by $(2J_f+1)/(2J_i+1)$ to keep consistent with the standard definition of C²S for stripping reaction in DWBA analysis.

[#] Values assumed by the authors of 1974Wh08 for the extraction of C²S.