

${}^{58}\text{Ni}({}^{12}\text{C}, {}^8\text{Be})$  1976Ma12

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh, Huang Xiaolong, and Wang Xianghan		NDS 204,1 (2025)	30-Jun-2023

1976Ma12: E=55 MeV. Measured  $2\alpha$  from  ${}^8\text{Be}$  in coincidence using particle detectors, FWHM  $\approx$  500 keV at Munich MP tandem accelerator. DWBA analysis.

Alpha cluster transfer reaction.

 ${}^{62}\text{Zn}$  Levels

E(level)	L	$S^\dagger$	Comments
0	0	0.20	$[S({}^{12}\text{C})][S(\alpha)]=0.106$ .
950	2	0.070	$[S({}^{12}\text{C})][S(\alpha)]=0.038$ .
$2.20 \times 10^3$	15		
$3.20 \times 10^3$	15		
$4.00 \times 10^3$	15		
$5.00 \times 10^3$	15		
$7.00 \times 10^3$	15		

$^\dagger$  Spectroscopic factor for  $({}^{58}\text{Ni}+\alpha)$ , if  $S({}^8\text{Be}+\alpha)=0.542$ .