

$^{58}\text{Ni}(^{12}\text{C}, ^{11}\text{B})$ **1987FeZV,1991HeZX**

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	M. Shamsuzzoha Basunia		NDS 151, 1 (2018)	1-Apr-2018

1991HeZX: $E(^{12}\text{C})=345$ MeV, $\text{FWHM}\approx 700$ keV, $\theta(\text{c.m.})=5^\circ-15^\circ$.

1987FeZV: $E(^{12}\text{C})=300$ MeV, $\text{FWHM}\approx 110$ keV, $\theta(\text{c.m.})\approx 2.5^\circ-5.5^\circ$, DWBA analysis of $\sigma(\theta)$ for g.s. and 4 excited states.

 ^{59}Cu Levels

<u>E(level)[†]</u>	<u>J^π[‡]</u>	<u>S[#]</u>	<u>E(level)[†]</u>	<u>E(level)[†]</u>	<u>E(level)[†]</u>
0.0	3/2 ⁻	0.37	3550	5660	7770 ^{&}
490	1/2 ⁻	0.15	4320	5920	7790 ^a
920	5/2 ⁻	0.32	4530	6030	8190
1400	7/2 ⁻	0.02	4820	6580	8260
2330			5080	≈ 6900 [@]	8550
3040	9/2 ⁺	0.21	5280	7490	9330

[†] From **1987FeZV**, except otherwise noted; ΔE not stated by authors.

[‡] From Adopted Levels; DWBA analysis of $\sigma(\theta)$ is consistent with these values (**1987FeZV**).

[#] From product of S(p) (for $^{12}\text{C}=^{11}\text{B}+p$) and S(t) (for $^{58}\text{Ni}+p=^{59}\text{Cu}$) assuming S(p)=2.85, normalization factor=1 and potential "A-1" of **1987FeZV**.

[@] From **1991HeZX** only; 6834+6903 levels (both 9/2⁺) not resolved.

[&] Unresolved from 7790 level.

^a Unresolved from 7770 level.