
 $^{55}\text{Mn}(\text{p},\text{n})$ IAR [1978Vi03,1968La09,1967Co13](#)

<u>Type</u>	<u>Author</u>	<u>History Citation</u>	<u>Literature Cutoff Date</u>
Full Evaluation	Huo Junde	NDS 109, 787 (2008)	30-Apr-2007

[1978Vi03](#): E=1.35-5.42 MeV; natural target (100% ^{55}Mn , other metallic impurities $\approx$ 20 ppm); 4π geometry flat response neutron counter.

[1968La09](#): E=94 MeV; target thickness: 0.181 f/cm²; neutron spectrum measured using of facilities; measured $\sigma(\text{E}(\text{n}),\theta)$.

[1967Co13](#): E=13 MeV; target (100% ^{55}Mn , 0.8 mg/cm²); NE213 liquid scintillator; measured $\sigma(\text{E}(\text{n}))$.

Other: [1967Go14](#).

 ^{55}Fe Levels

<u>E(level)[†]</u>	<u>S</u>	<u>Comments</u>
10728.4 <i>II</i>	0.12	$\Gamma_{\text{p}}=7.6$ eV 2 (1978Vi03) E(level): E(p)=1543 (1978Vi03). S: from fig. 5 in 1978Vi03 , radius parameter=1.25 fm, diffuseness parameter=0.65 fm. $\Delta\text{E}(\text{Coul.})=8641$ keV 20 in ^{55}Mn - ^{55}Fe pair (1967Co13).

[†] Value is calculated by evaluator using $\text{E}(\text{level})=0.982\times\text{E}(\text{p})+\text{S}(\text{p})$, where E(p) is the proton energy at resonance and S(p)=9213.0 *II* from [2003Au03](#).