

⁵⁹Ni(n, α) E=thermal [1977As02](#)

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Huo Junde, Huo Su, Yang Dong		NDS 112, 1513 (2011)	29-Oct-2009

⁵⁹Ni: produced by irradiating ⁵⁸Ni(enriched to 99.9%) for 4 months in nuclear reactor.
Measured $\sigma(\alpha)$, a value of $\sigma(\alpha\gamma)\leq 13$ mb was obtained for the two-step ⁵⁹Ni(n, $\gamma\alpha$).
The authors noted that in spite of a large (n, α) cross section there is no positive indication for the existence of (n, $\gamma\alpha$) process.
Other: [1974Ei01](#).

⁵⁶Fe Levels

E(level)	$\sigma(E\alpha)$, b
0	1.31 <i>11</i>
847	0.188 <i>16</i>