

## <sup>62</sup>Cu

Heyn published his discovery of <sup>62</sup>Cu in the 1936 paper “Evidence for the Expulsion of Two Neutrons from Copper and Zinc by One Fast Neutron” ([1936He03](#)). Fast neutrons produced in the Li + <sup>2</sup>H reaction bombarded a copper target at the X-Ray Research Laboratory in Eindhoven, Netherlands. Decay curves were measured following chemical separation. “An investigation of the particles emitted by copper (10.5-minute period) by means of magnetic deflection in vacuo and a Geiger-Müller counter proved these to be positrons... From these data we may infer that the following reactions take place with fast neutrons:  $^{63}\text{Cu} + ^1_0\text{n} \rightarrow ^{62}\text{Cu} + 2\ ^1_0\text{n}$ ,  $^{62}\text{Cu} \rightarrow ^{62}\text{Ni} + \text{e}^+$ .” A previous report of a stable <sup>62</sup>Cu isotope ([1923De01](#)) was incorrect.

Adapted from reference ([2012Ga06](#))

- [1923De01](#) A. J. Dempster, *Nature* **112**, 7 (1923).  
[1936He03](#) F. A. Heyn, *Nature* **138**, 723 (1936).  
[2012Ga06](#) K. Garofali, R. Robinson, and M. Thoennessen, *At. Data Nucl. Data Tables* **98**, 356 (2012).

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