

^{112}Ag

The radioactive isotope ^{112}Ag was first produced by Pool in 1938 and reported in the article “Radioactivity in Silver Produced by Fast Neutrons” (1938Po03). Metallic cadmium and indium targets were bombarded with fast neutrons from the $\text{Li}+\text{H}^2$ reaction at the University of Michigan cyclotron. Following chemical separation, the activity was measured with a Wulf string electrometer equipped with an ionization chamber. “Since this period can be obtained only from indium and cadmium, it seems most probable that silver, ^{112}Ag , is the carrier of the activity and the reaction equations are as follows: $_{49}\text{In}^{115} + {}_0\text{n}^1 \rightarrow {}_{47}\text{Ag}^{112} + 2\alpha^4$, and $_{48}\text{Cd}^{112} + {}_0\text{n}^1 \rightarrow {}_{47}\text{Ag}^{112} + {}_1\text{p}^1$.” The observed half-life was 3.2(2) h.

Adapted from reference (2010Sc10)

1938Po03 M. L. Pool, Phys. Rev. **53**, 116 (1938).

2010Sc10 A. Schuh, A. Fritsch, J. Q. Ginepro, M. Heim *et al.*, At. Data Nucl. Data Tables **96**, 531 (2010).

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