

^{122}Xe

Dropesky and Wiig reported the first observation of ^{122}Xe in the 1952 article “Three new neutron deficient xenon isotopes” ([1952Dr18](#)). Anhydrous lithium iodide was irradiated with 240 MeV protons in the Rochester cyclotron forming ^{122}Xe in spallation reactions. Activities were measured with a NaI(Tl) phosphor and a halogen filled GM tube following chemical separation. “From the yields of I^{121} and I^{123} versus the time of parent-daughter separations the half-lives of Xe^{121} and Xe^{123} were determined to be $40(\pm 2)$ minutes and $1.7(\pm 0.2)$ hours, respectively. The yields of I^{122} proved to be completely compatible with the half-life of $20(\pm 1)$ hours found with a GM tube for the xenon in the last trap of the series.”

Adapted from reference ([2013Ka01](#))

- [1952Dr18](#) B. Dropesky and E. O. Wiig, Phys. Rev. **88**, 683 (1952).
[2013Ka01](#) J. Kathawa, C. Fry, and M. Thoennessen, At. Data Nucl. Data Tables **99**, 22 (2013).

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