

## $^{121}\text{Xe}$

Dropesky and Wiig reported the first observation of  $^{121}\text{Xe}$  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  $^{121}\text{Xe}$  in spallation reactions. Activities were measured with a NaI(Tl) phosphor and a halogen filled GM tube following chemical separation. “From the yields of  $\text{I}^{121}$  and  $\text{I}^{123}$  versus the time of parent-daughter separations the half-lives of  $\text{Xe}^{121}$  and  $\text{Xe}^{123}$  were determined to be  $40(\pm 2)$  minutes and  $1.7(\pm 0.2)$  hours, respectively. The yields of  $\text{I}^{122}$  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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