

^{130}I

In 1938, Livingood and Seaborg identified ^{130}I in “Radioactive Isotopes of Iodine” (1938Li05). Tellurium targets were bombarded with 8 MeV deuterons from the Berkeley cyclotron forming ^{130}I in the reactions $^{130}\text{Te}(d,2n)$ and $^{128}\text{Te}(d,\gamma)$. Reaction products were chemically separated and the resulting activities were then observed with a Lauritsen-type quartz-fiber electroscope. “We have not been able to find any trace of this 13-hour period growing in deuteron-activated tellurium, nor do we find it after neutron bombardments of tellurium. We therefore feel confident that it must be assigned to I^{130} .” The experimental half-life was 12.6(10) h.

Adapted from reference (2013Ka01)

- 1938Li05 J. J. Livingood and G. T. Seaborg, Phys. Rev. **54**, 775 (1938).
2013Ka01 J. Kathawa, C. Fry, and M. Thoennessen, At. Data Nucl. Data Tables **99**, 22 (2013).

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