

⁵⁵Fe

Livingood and Seaborg observed ⁵⁵Fe in 1939 described in the paper “Long-Lived Radioactive Fe⁵⁵” (1939Li17). Iron samples bombarded with deuterons from the Berkeley cyclotron described in a previous publication (1938Li06) were measured for a period of 22 months. “These facts assure us that Fe⁵⁵ has been formed through Fe54(d,p)Fe⁵⁵ with the activity probably leading to stable Mn⁵⁵ either by positron emission or by K-electron capture.” The counting time was not sufficient to extract a reliable half-life measurement and only a lower limit of one year was determined.

Adapted from reference (2010Sc18)

- 1938Li06 J. J. Livingood and G. T. Seaborg, Phys. Rev. **54**, 51 (1938).
1939Li17 J. J. Livingood and G. T. Seaborg, Phys. Rev. **55**, 1268 (1939).
2010Sc18 A. Schuh, A. Fritsch, M. Heim, A. Shore, and M. Thoennessen, At. Data Nucl. Data Tables **96**, 817 (2010).

Please cite this abstract as: “FRIB Nuclear Data Group, *Discovery of Nuclides Project*, Isotope Database, doi:10.11578/frib/2279152”