

¹⁶⁰Lu

Alkhazov et al. identified ¹⁶⁰Lu in the 1979 paper “New neutron deficient lutetium isotopes” (1979A116). Tungsten and tantalum targets were bombarded with 1 GeV protons from the Leningrad synchrocyclotron and ¹⁶⁰Lu was produced in spallation reactions. It was separated with the IRIS mass separator and subsequent decays were measured with a surface-barrier detector as well as X- and γ -ray detectors. “Isotopes ^{158,160,161,163}Lu have been identified for the first time... The identification of the new isotopes is based on the analysis of the characteristic K_{α} and K_{β} lines in the X-ray spectra, and the genetic relationship to the decay of the daughter well known nuclei, in addition to the unambiguous mass determination after mass separations.” The measured half-life (34.5(15) s) is listed only in a table.

Adapted from reference (2012Gr19)

1979A116 G. D. Alkhazov, L. K. Batist, E. Y. Berlovich, Y. S. Blinnikov *et al.*, *Z. Phys. A* **291**, 397 (1979).

2012Gr19 J. L. Gross and M. Thoennessen, *At. Data Nucl. Data Tables* **98**, 983 (2012).

Please cite this abstract as: “FRIB Nuclear Data Group, *Discovery of Nuclides Project*, Isotope Database, doi:[10.11578/frib/2279152](https://doi.org/10.11578/frib/2279152)”