^{163}Lu

Alkhazov et al. identified ^{163}Lu in the 1979 paper "New neutron deficient lutetium isotopes" (1979Al16). Tungsten and tantalum targets were bombarded with 1 GeV protons from the Leningrad synchrocyclotron and ^{163}Lu 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 (246(12) s) is listed only in a table.

Adapted from reference (2012Gr19)

1979Al16 G. D. Alkhazov, L. K. Batist, E. Y. Berlovich, Y. S. Blinnikov *et al.*, Z. Phys. A **291**, 397 (1979).

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