^{124}Ce

The discovery of the isotope ^{124}Ce was first presented in the 1978 paper "New Neutron-Deficient Isotopes of Lanthanum and Cerium" by Bogdanov et al. (1978Bo32). A 190 MeV ^{36}S beam accelerated by the U-300 heavy-ion cyclotron of the Joint Institute for Nuclear Research (JINR) facility at Dubna, bombarded targets of ^{96}Ru and ^{98}Ru. The fusion-evaporation residues were mass separated with the on-line BEMS-2 facility and their X-ray and β emission was detected with e Ge(Li) spectrometer and a plastic counter, respectively. Half-lives were determined from the X-ray decay curves. "Seven isotopes $^{123-125}$La and $^{124-127}$Ce have been first observed and their half-lives and low-energy γ-ray data are reported." The measured half-life was 6(2) s.

Adapted from reference (2009Gi07)

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