

^{123}La

The discovery of the isotopes ^{123}La 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 a Ge(Li) spectrometer and a plastic counter, respectively. Half-lives were determined from the X-ray decay curves. “Seven isotopes $^{123-125}\text{La}$ and $^{124-127}\text{Ce}$ have been first observed and their half-lives and low-energy γ -ray data are reported.” The observed half-life of ^{123}La was 17(3) s.

Adapted from reference (2012Ma48)

1978Bo32 D. D. Bogdanov, A. V. Demyanov, V. A. Karnaukhov, M. Nowicki *et al.*, Nucl. Phys. A **307**, 421 (1978).

2012Ma48 E. May and M. Thoennessen, At. Data Nucl. Data Tables **98**, 960 (2012).

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