^{133}Ce

Stover reported the discovery of the new isotope ^{133}Ce in "New Neutron-Deficient Radioactive Isotopes of the Light Rare-Earth Region" in 1951 at the University of California at Berkeley (1951St03). Lanthanum oxide was bombarded with 60 to 80 MeV protons and ^{133}Ce was produced in the reaction ^{139}La(p,7n). It was identified by absorption curve and magnetic counter methods. "The 4.0-hr ^{133}La, which has been run on the mass spectrograph, was shown to grow in only during the decay of the 6.3-hr activity which must then be ^{133}Ce." The observed half-life of 6.3(1)h corresponds most likely to the decay of the $9/2^-$ isomer. The ground state half-life of 97(4) min was reported sixteen years later by Gerschel and Albouy (1967Ge08).

Adapted from reference (2009Gi07)

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