

^{135}Ce

^{135}Ce was discovered by Chubbuck and Perlman at Berkeley in the 1948 published paper “Neutron Deficient Isotopes of Cerium and Lanthanum” ([1948Ch03](#)). 60 MeV deuterons bombarded a La_2O_3 target to produce ^{135}Ce in the reaction $^{139}\text{La}(d,6n)$. It was created by bombarding La_2O_3 with 60 MeV deuterons. Decay curves were measured with a beta-ray spectrometer and the assignment was based on the absence of the newly observed activity at lower bombarding energies: “The activity is assigned to ^{135}Ce because it had not appeared in bombardments at lower energies, and 19.5-hour ^{135}La could be shown to grow into the cerium fraction at a rate corresponding to a half-life for its parent of about 16h.”

Adapted from reference ([2009Gi07](#))

[1948Ch03](#) J. B. Chubbuck and I. Perlman, Phys. Rev. **74**, 982 (1948).
[2009Gi07](#) J. Q. Ginepro, J. Snyder, and M. Thoennessen, At. Data Nucl. Data Tables **95**, 805 (2009).

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