

¹⁴⁶Ce

¹⁴⁶Ce was identified in 1953 by Caretto and Katcoff, at Brookhaven National Laboratory in the paper entitled “Short-Lived Cerium Isotopes from Uranium Fission” (1953Ca10). ¹⁴⁶Ce was produced from irradiation of uranyl nitrate and decay curves were measured with an end-window Geiger tube. The measured half-life was 13.9(6) min. Caretto and Katcoff did not consider their measurement a discovery: “¹⁴⁶Ce and ¹⁴⁶Pr were briefly reinvestigated.” They quote two unpublished classified reports of the Fission Studies by Schuman (CN-2799 and CN-2929) reporting a half-life of 14.6(8) min. They also mention the measurement by H. Götte (1946Go08) who observed an 11 min half-life of cerium but did not make a mass assignment.

Adapted from reference (2009Gi07)

- 1946Go08 H. Gotte, Z. Naturforsch. **1**, 377 (1946).
1953Ca10 A. A. Caretto Jr. and S. Katcoff, Phys. Rev. **89**, 1267 (1953).
2009Gi07 J. Q. Ginepro, J. Snyder, and M. Thoennessen, At. Data Nucl. Data Tables **95**, 805 (2009).

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