

¹³⁰Ce

Gerschel et al. reported the first observation of ¹³⁰Ce in the 1965 paper “Nuclear Spectroscopy of Some Neutron-Deficient Even Barium Isotopes” (1965Ge03). The Cerium activities were produced by 100-150 MeV proton bombardment of lanthanum in (p,xn) reactions at Orsay, France. The assignment was based on γ -scintillation spectra of chemically separated samples. “The level structure of ¹³⁰Ba and ¹³²Ba has been investigated studying the decay of ¹³⁰Ce ($T_{1/2} = 30$ min), ¹³²Ce ($T_{1/2} = 4.2$ h) and ¹³²La ($T_{1/2} = 4.8$ hours).” The quoted half-life of 30 min for ¹³⁰Ce was probably taken from a quoted 1964 thesis. A few years earlier, a 30 min half-life had been attributed to ¹³¹Ce (1960Wa03) and it was only later pointed out (1966No05) in a published paper that it was most likely ¹³⁰Ce.

Adapted from reference (2009Gi07)

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