

^{134}Cs

Kalbfell and Cooley published the observation of ^{134}Cs in their 1940 paper “Radioisotopes of Ba and Cs” (1940Ka07). Cesium was irradiated with deuterons or neutrons from the 37-inch Berkeley cyclotron. Beta- and γ -ray spectra were measured following chemical separation. “Cs bombarded with deuterons or neutrons consistently gave a 3-hour \pm 10-minute period rather than the previously reported period of 1.5 hours... A long period (20 \pm 1 month) isotope, chemically identified as Cs and apparently isomeric with the 3-hour Cs^{134} , was prepared by neutron or deuteron bombardment of Cs.” The quoted 1.5 h half-life refers to papers published in 1935 by Amaldi et al. (1.5 h) (1935Am01), McLennan et al. (75 min) (1935Mc08), and Latimer et al. (100 min) (1935La03). None of these papers cleanly identifies this half-life with ^{134}Cs . In addition, Alexeeva (1938Al05) reported a cesium activity with a lower limit of 1 year.

Adapted from reference (2012Ma48)

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