

¹²³Sn

In the 1948 publication “Fission Products of U²³³” Grummitt and Wilkinson reported the discovery of ¹²³Sn (1948Gr01). Natural uranium and ²³³U targets were irradiated at Chalk River, Canada. “After irradiation, a chemical separation of each element lying between arsenic and praseodymium was made. Thirty-one active isotopes were found and identified by their half-lives and their β -, and γ -ray absorption characteristics.” In a table a half-life of 136 d was tentatively assigned to ¹²³Sn. A 130 d half-life had been assigned to either ¹²¹Sn or ¹²³Sn (1946PI01) referring to a paper of the Plutonium Project (1951LeZY) and a 136 d half-life was assigned to Sn^{>120} (1946Gr06). An isomeric state with a half-life of 41.5(5) min was reported later in the same year (1948Mo33). A 45(5) m half-life had previously been measured in either tin or indium (1936Li01), and 47 m (1937Po04) and 40 m (1939Li04) half-lives were attributed to tin, however, no mass assignments were made. Finally, a 40 m half-life was assigned to Sn^{<125} (1947Se33).

Adapted from reference (2011Am01)

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