

¹³¹Sn

In 1963, Greendale and Love reported the first observation of ¹³¹Sn in “A Rapid Radiochemical Procedure for Tin” (1963Gr13). The isotope was produced by thermal-neutron induced fission of ²³⁵U and identified by chemical separation and decay curve measurements at the U.S. Naval Radiological Defense Laboratory. “In the determination of the independent fission yield of a given tin isotope, the separated tin was allowed to decay to its known iodine descendent... It has been possible by the above technique to determine independent fission yields of the tin fission products in thermal neutron fission of uranium-235, tin half-lives, generic relationships, and also prominent gammaphotopeak energies from pulse-height distributions taken of the rapidly separated tin fractions.” The measured half-life of 65(10) s for ¹³¹Sn may correspond to either the ground state or the isomeric state. Previously reported half-life values for ¹³¹Sn (3.4(5) m (1956Pa20) and 1.6 h (1960A103)) could not be confirmed.

Adapted from reference (2011Am01)

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