

¹⁰³Sn

In 1981, the first observation of ¹⁰³Sn was described in “The New Beta-Delayed Proton Precursors ¹⁰³Sn and ¹⁰⁵Sn” by Tidemand-Petersson et al. (1981Ti03). The UNILAC at GSI Darmstadt was used to produce ¹⁰³Sn in fusion-evaporation reactions with a 290 MeV ⁵⁸Ni beam and separated with a FEBIAD ion source with a graphite catcher. “Using ⁵⁸Ni+⁵⁰Cr and ⁵⁸Ni+⁵⁴Fe reactions and on-line mass separation, the new isotopes ¹⁰³Sn and ¹⁰⁵Sn with half-lives of 7 ± 3 s and 31 ± 6 s, respectively, were identified via their beta-delayed proton decays.”

Adapted from reference (2011Am01)

1981Ti03 P. Tidemand-Petersson, R. Kirchner, O. Klepper, W. Kurcewicz *et al.*, *Z. Phys. A* **302**, 343 (1981).

2011Am01 S. Amos, J. L. Gross, and M. Thoennessen, *At. Data Nucl. Data Tables* **97**, 383 (2011).

Please cite this abstract as: “FRIB Nuclear Data Group, *Discovery of Nuclides Project*, Isotope Database, doi:[10.11578/frib/2279152](https://doi.org/10.11578/frib/2279152)”