^{113}Sn

Livingood and Seaborg reported in 1939 the observation of ^{113}Sn in the article "New Periods of Radioactive Tin" (1939Li04). 5 MeV deuterons bombarded tin targets at the Berkeley Radiation Laboratory and radioactive decay curves were recorded. "The only unstable tin isotope common to the reactions (Sn,dp)Sn and Cd(α,n)Sn is Sn^{113}. A chemical separation of tin after activation of cadmium with 16-MeV helium ions does in fact give a precipitate which contains an activity with a half-life of about 70 days (sign unknown). This is additional evidence that Sn^{113} has this period and perhaps decays by K-electron capture to stable In^{113}." Only three months later Barns reported a half-life of 105 d for ^{113}Sn (1939Ba03).

Adapted from reference (2011Am01)

1939Ba03 S. W. Barnes, Phys. Rev. **56**, 414 (1939).
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Please cite this abstract as: "FRIB Nuclear Data Group, *Discovery of Nuclides Project*, Isotope Database, doi:10.11578/frib/2279152"