^{197}Tl

The discovery of ^{196}Tl was announced in 1955 by Andersson et al. in "Neutron deficient isotopes of Pb and Tl-III: mass numbers below 200" (1955An01). A thallium target was bombarded with protons from the Uppsala synchrocyclotron. Activities were measured in a two-directional focusing β-spectrometer. "^{197}Tl.−The 134 kev γ-ray found in the decay of ^{197}Tl is undoubtedly identical with the γ-ray of the same energy emitted in the decay of ^{197m}Hg." The reported half-life of 2.8(4) h corresponds to the ground state of ^{197}Tl. An earlier observation of a 0.54(1) s isomeric state was only reported in a conference abstract (1953He57).

Adapted from reference (2013Fr04)

1953He57 A. Henrikson, S. W. Breckon, and J. S. Foster, Proc. Roy. Soc. (Canada) **47**, 127 (1953).

1955An01 G. Andersson, E. Arbman, I. Bergstrom, and A. H. Wapstra, Phil. Mag. **46**, 70 (1955).

2013Fr04 C. Fry and M. Thoennessen, At. Data Nucl. Data Tables **99**, 365 (2013).

Please cite this abstract as: "FRIB Nuclear Data Group, *Discovery of Nuclides Project*, Isotope Database, doi:10.11578/frib/2279152"