^{197}Pb

The discovery of ^{197}Pb 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 by protons from the Uppsala synchrocyclotron. Conversion electrons were measured in a two-directional focusing β-spectrometer. "^{197}Pb.−There are indications that the 169 and 234 keV γ-rays are converted in Pb, suggesting an isomeric state which may have about the same half-life as the ground state" The half-life for ^{197}Pb was listed in a table as 42(3) m. In a subsequent paper Andersson et al. measured an internal transition (234 keV) populating the ground state after another (unobserved) 85 keV decay (1957An53). The ground state half-life (10(2) min) was first observed 24 years later by Rapaport et al. (1979Ra04).

Adapted from reference (2013Fr04)

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