^{198}Pb

The discovery of ^{198}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. "^{199}Tl and and ^{198}Tl.−The γ-rays found in the decay of these nuclides confirm earlier measurements. As to ^{198m}Tl the γ-rays reported by Bergstrom et al. (1953Be79) and Passel et al. (1954Pa19) were not observed. One possible explanation is that the isomeric state of ^{198}Pb has not the half-life ≈25 minutes as suggested by Passel et al. but is so short-lived that it decays considerably before the chemical separation of Pb from the Tl target." The half-life for ^{198}Pb was listed in a table as 2.3(2) h. Earlier assignments of a 25 min half-life to ^{198}Pb (1950Na09, 1951Ka03) were incorrect.

Adapted from reference (2013Fr04)

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