^{185}Tl

In the 1976 paper "Observation of α-decay in thallium nuclei, including the new isotopes ^{184}Tl and ^{185}Tl" by Toth et al. reported first evidence of ^{185}Tl (1976To06). The Oak Ridge isochronous cyclotron accelerated ^{14}N to 168 MeV which then impinged on WO_3 targets enriched in ^{180}W. ^{185}Tl was produced in (9n) fusion-evaporation reactions, and identified in the UNISOR isotope separator facility. "The 5.97 MeV α-group seen at A = 185 is assigned to the new isotopes ^{185}Tl." The reported half-life was 1.7(2) s and corresponds to an isomeric state. Internal transitions to the ground state were measured a year later by Schmidt et al. (1977Sc03). At the time of the present summary, the ground state half-life of ^{185}Tl has only been reported in conference proceedings (1991BoZV, 1993BoZK).

Adapted from reference (2013Fr04)

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