

^{179}Tl

In the 1983 paper “Alpha decay of new neutron deficient gold, mercury and thallium isotopes” Schneider et al. reported the discovery of ^{179}Tl (1983Sc24). An yttrium target was bombarded with 4.50–5.40 MeV/u ^{92}Mo beams from the GSI UNILAC producing ^{179}Tl in the (2n) fusion-evaporation reactions. Reaction products were separated with the velocity filter SHIP and implanted in an array of seven position sensitive silicon surface barrier detectors which also measured subsequent α decays. “The decays of the new isotopes ^{173}Au , $^{175,176}\text{Hg}$, and ^{179}Tl could be correlated to the known α decays of their daughters.” The measured half-life was 0.16^{+9}_{-4} s. In addition, the decay of an isomeric state with a half-life of 1.4(5) ms was reported.

Adapted from reference (2013Fr04)

1983Sc24 J. R. H. Schneider, S. Hofmann, F. P. Hessberger, G. Munzenberg *et al.*, *Z. Phys. A* **312**, 21 (1983).

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

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