

^{174}Hg

Uusitalo et al. published the discovery of ^{174}Hg in “Alpha decay of the new isotope ^{174}Hg ” (1997Uu01) in 1997. ^{174}Hg was produced in the fusion-evaporation reaction $^{144}\text{Sm}(^{36}\text{Ar},6n)$ with beam energy between 180 and 230 MeV at the University of Jyväskylä in Finland. The isotopes were separated by the gas-filled recoil separator RITU, and implanted into a position sensitive silicon strip detector. “The measured decay properties of the daughter activity are compatible with those of ^{170}Pt for which $T_{1/2} = 6_{-2}^{+5}$ ms and $E_{\alpha} = 6545 \pm 8$ keV were reported. The mother activity can then be assigned to the new mercury isotope ^{174}Hg .”

Adapted from reference (2011Me01)

- 1997Uu01 J. Uusitalo, M. Leino, R. G. Allatt, T. Enqvist *et al.*, *Z. Phys. A* **358**, 375 (1997).
2011Me01 D. Meierfrankenfeld, A. Bury, and M. Thoennessen, *At. Data Nucl. Data Tables* **97**, 134 (2011).

Please cite this abstract as: “FRIB Nuclear Data Group, *Discovery of Nuclides Project*, Isotope Database, doi:[10.11578/frib/2279152](https://doi.org/10.11578/frib/2279152)”