

¹⁷⁰Hg

In 2019, Hilton et al. discovered ¹⁷⁰Hg in “ α -spectroscopy studies of the new nuclides ¹⁶⁵Pt and ¹⁷⁰Hg” (2019Hi06). ⁷⁸Kr beams from the University of Jyväskylä K130 cyclotron irradiated ⁹²Mo (at 418 MeV) and ⁹⁶Ru (at 390 MeV) targets to produce ¹⁶⁵Pt and ¹⁷⁰Hg in 5n and 4n fusion evaporation reactions, respectively. The mass analyzing recoil apparatus (MARA) was used to separate the residues which were then implanted in a double-sided silicon strip detector. The isotopes were identified from correlations with the subsequent radioactive decays. “For ¹⁷⁰Hg an α -particle energy of $E_\alpha = 7590(30)$ keV and half-life of $t_{1/2} = 0.08^{+0.40}_{-0.04}$ ms were deduced.”

Adapted from reference (2023Th03)

2019Hi06 J. Hilton, J. Uusitalo, J. Saren, R. D. Page *et al.*, Phys. Rev. C **100**, 014305 (2019).

2023Th03 M. Thoennessen, Int. J. Mod. Phys. E **32**, 2330001 (2023).

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)”