

^{158}W

In 1981, Hofmann et al. discovered ^{158}W at the Gesellschaft für Schwerionenforschung (GSI) in Darmstadt, Germany, as reported in their paper “New Neutron Deficient Isotopes in the Range of Elements Tm to Pt” ([1981Ho10](#)). Using a 4.4 A·MeV nickel beam the isotopes were made in the fusion-evaporation process $^{106}\text{Cd}(^{58}\text{Ni},2p4n)^{158}\text{W}$. ^{158}W was identified by reconstructing its α decay into ^{154}Hf : “We explain these observations by the decay chain $^{158}\text{W} \xrightarrow{\alpha} ^{154}\text{Hf} \xrightarrow{\beta} ^{154}\text{Lu} \xrightarrow{\beta} ^{154}\text{Yb} \xrightarrow{\alpha} ^{150}\text{Er}$.”

Adapted from reference ([2010Fr08](#))

[1981Ho10](#) S. Hofmann, G. Munzenberg, F. Hessberger, W. Reisdorf *et al.*, *Z. Phys. A* **299**, 281 (1981).

[2010Fr08](#) A. Fritsch, J. Q. Ginepro, M. Heim, A. Schuh *et al.*, *At. Data Nucl. Data Tables* **96**, 315 (2010).

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)”