^{269}Hs

In the 1996 paper "The new element 112", Hofmann et al. reported the identification of ^{269}Hs (1996Ho13). A 344 MeV ^{70}Zn beam from the GSI UNILAC bombarded enriched ^{208}Pb targets and ^{277}Cn was populated in the single neutron fusion-evaporation reaction. ^{269}Hs was populated by subsequent α-decays. Reaction residues were separated with the velocity filter SHIP and the α decays were recorded in a position sensitive silicon detector. "Therefore, the observed chain must be assigned to the isotope with mass number A = 277 of element Z = 112, produced by fusion of ^{70}Zn and ^{208}Pb and emission of one neutron." Two chains were observed, however, the first chain was later retracted (2002Ho11). Within the second chain ^{269}Hs decayed with an α energy of 9.23 MeV within 19.7 s. Earlier, Lazarev et al. had reported the observation of several decay chains beginning at ^{273}Ds, however, only one included values for the decay of ^{269}Hs and in the text ^{269}Hs is always referred to as an "unknown nucleus" (1996La12).

Adapted from reference (2013Th02)

1996Ho13 S. Hofmann, V. Ninov, F. P. Hessberger, P. Armbruster *et al.*, Z. Phys. A **354**, 229 (1996).

1996La12 Yu. A. Lazarev, Yu. V. Lobanov, Yu. Ts. Oganessian, V. K. Utyonkov *et al.*, Phys. Rev. C **54**, 620 (1996).

2002Ho11 S. Hofmann, F. P. Hessberger, D. Ackermann, G. Munzenberg *et al.*, Eur. Phys. J. A **14**, 147 (2002).

2013Th02 M. Thoennessen, At. Data Nucl. Data Tables **99**, 312 (2013).

Please cite this abstract as: "FRIB Nuclear Data Group, *Discovery of Nuclides Project*, Isotope Database, doi:10.11578/frib/2279152"