^{155}Hf

In the 1981 paper "New neutron deficient isotopes in the range of elements Tm to Pt" Hofmann et al. reported the first observation of ^{155}Hf (1981Ho10). Neutron deficient isotopes of elements from molybdenum to tin and vanadium to nickel targets were bombarded with ^{58}Ni and ^{107}Ag at the GSI linear accelerator UNILAC. Reaction products were separated by the SHIP velocity filter and implanted into silicon detectors. "A correlation showed as daughter activity an α line at 5656 keV decaying with $T_{1/2}$ = 890 ms. At this energy no other α line is known in this area except that of ^{155}Lu with $T_{1/2}$ = 70 ms. This is short compared to the measured 890 ms decay. Therefore, our observations can easily be described within the frame of the decay chain ^{159}W $\xrightarrow{\alpha}$ ^{155}Hf $\xrightarrow{\beta}$ ^{155}Lu $\xrightarrow{\alpha}$ ^{151}Tm."

Adapted from reference (2012Gr19)

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

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