^{164}Hf

Bruchertseifer and Eichler reported the observation of ^{164}Hf in the 1981 paper "Untersuchung der Produkte der Reaktion ^{147}Sm + ^{22}Ne" (1981Br30). Enriched ^{147}Sm targets were bombarded with 110 MeV and 136 MeV ^{22}Ne beams from the Dubna U300 accelerator and ^{164}Hf was produced in (5n) fusion-evaporation reactions. X-ray and γ-ray spectra were measured following chemical separation. "Das Auftreten von ^{165}Lu sowie ^{164}Lu neben bekannten Hafniumisotopen nach der hocheffektiven Abtrennung (Trenneffekt $\geq 10^3$) der Lanthanide belegt, dass die Hafniumfraktion die Isotope ^{164}Hf und ^{165}Hf enthält." [The appearance of ^{165}Lu as well as ^{164}Lu next to known hafnium isotopes following the highly effective separation (separation efficiency $\geq 10^3$) of the lanthanides proves that the hafnium fraction contains the isotopes ^{164}Hf and ^{165}Hf.] The reported half-life was 2.8(2) min for ^{164}Hf .

Adapted from reference (2012Gr19)

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