^{160}Hf

The first observation of ^{160}Hf was reported in the 1973 paper "Study of hafnium α emitters: New isotopes ^{159}Hf, ^{160}Hf, and ^{161}Hf" by Toth et al. (1973To02). Enriched ^{144}Sm and ^{147}Sm targets were bombarded with 80−153 MeV and 121−153 MeV ^{20}Ne beams from the Oak Ridge isochronous cyclotron, respectively. Recoil products were swept into a collecting surface with helium gas where α particles were measured with a Si(Au) detector. "The decay characteristics and mass assignments (made on the basis of yield curve measurements, cross bombardments, and parent-daughter relationships) of the three new α emitters are as follows: (1) ^{159}Hf, E_α = 5.09±0.01 MeV, $T_{1/2}$ = 5.6±0.5 sec; (2) ^{160}Hf, E_α=4.77±0.02 MeV, $T_{1/2} \sim$ 12 sec; and (3) ^{161}Hf, E_α = 4.60±0.01 MeV, $T_{1/2}$ = 17±2 sec."

Adapted from reference (2012Gr19)

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