^{167}Hf

^{167}Hf was observed by Arlt et al. as reported in the 1969 paper "The new neutron-deficient isotopes ^{169}Hf, ^{167}Hf, ^{166}Hf, and ^{166}Lu and the decay scheme of ^{169}Hf" (1969Ar23). Protons were accelerated to 660 MeV by the Dubna JINR synchrocyclotron and bombarded Ta_2O_5 targets to form hafnium isotopes in the Ta(p,2pxn) reaction which subsequently decayed to lutetium isotopes. Gamma-ray spectra were measured with NaI(Tl) and Ge(Li) detectors in singles and coincidences following chemical separation. "The half-life was evaluated more accurately by extrapolating the decay curves isolated after equal accumulation intervals. The best conditions were provided by a 3-min irradiation, an accumulation time of 2 min, and separation of four Lu sources. The resulting half-life for ^{167}Hf was 1.9±0.2 min." A previously reported half-life of ∼10 min (1961Me05) was incorrect.

Adapted from reference (2012Gr19)

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