

¹⁶⁸Hf

The first observation of ¹⁶⁸Hf was described by Merz and Caretto in “Neutron-deficient nuclides of hafnium and lutetium” in 1961 ([1961Me05](#)). Tantalum, tungsten and Lu₂O₃ targets were irradiated with 300-400 MeV protons from the Carnegie Institute of Technology synchrocyclotron in Pittsburgh. After chemical separation γ -rays and positrons were measured with a NaI crystal and a magnetic spectrometer with an anthracene crystal, respectively. “The third hafnium isotope reported Hf¹⁶⁸ has a half-life of (22±2) min, measured directly and indirectly by milking its 7.0-min lutetium daughter at intervals of 30 min.”

Adapted from reference ([2012Gr19](#))

[1961Me05](#) E. R. Merz and A. A. Caretto Jr., Phys. Rev. **122**, 1558 (1961).
[2012Gr19](#) J. L. Gross and M. Thoennessen, At. Data Nucl. Data Tables **98**, 983 (2012).

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