^{166}Hf

In the 1965 paper "Rotational states produced in heavy-ion nuclear reactions" Stephens et al. described the observation of ^{166}Hf (1965St03). The Berkeley Hilac accelerator was used to bombard self-supporting ^{159}Tb targets with 117 MeV ^{14}N beams and ^{166}Hf was populated in the (7n) evaporation reaction. Conversion electron spectra were measured with a single wedge-gap electron spectrometer and γ-ray spectra with NaI(Tl) and Ge detectors. "The de-excitation of the ground state rotational band in nine deformed even nuclei has been observed following heavy-ion nuclear reactions. The transitions from the states up to spin 16 (on the average) were observed and their energies were measured with an accuracy of $\pm$0.3%." The rotational band in ^{166}Hf was measured up to spin 14. Four years later Arlt et al. reported the first observation of the ^{166}Hf ground state (1969Ar23).

Adapted from reference (2012Gr19)

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