^{161}Re

"Alpha decay studies of very neutron deficient isotopes of Hf, Ta, W, and Re" was published in 1979 by Hofmann et al. describing the observation of ^{161}Re (1979Ho10). Targets of ^{103}Rh, ^{nat,108,110}Pd, and ^{107,109}Ag were bombarded with beams of ^{58}Ni from the GSI UNILAC linear accelerator. Evaporation residues were separated with the high-velocity SHIP separator. "In the investigated reactions the eleven new isotopes $^{161-164}$Re, ^{160}W, $^{157-161}$Ta, and ^{156}Hf could be identified." The measured half-life for ^{161}Re of 10^{+15}_{-5} ms corresponds to an isomeric state and the ground state half-life of 0.37(4) ms was reported eighteen years later by Irvine et al. (1997Ir01).

Adapted from reference (2012Ro36)

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