

¹⁶⁸Ta

In 1969, the discovery of ¹⁶⁸Ta was announced in “New neutron-deficient isotopes of tantalum with mass numbers from 167 to 171, and the systematics of the half lives of deformed neutron-deficient nuclei with $150 < A < 190$ ” by Arlt et al. (1969Ar22). HgO and HReO₄ targets were bombarded with 660 MeV protons from the Dubna synchrocyclotron. Gamma-ray spectra were measured with a Ge(Li) detector following chemical separation. “ We observed the 239 keV ¹⁶⁷Lu γ rays and the 106, 113 and 176 keV ¹⁶⁷Yb ones, and from their intensities from hafnium preparations separated at 4 min intervals we obtained the half life of ¹⁶⁸Ta as 2.9 ± 1.5 min.”

Adapted from reference (2012Ro36)

1969Ar22 R. Arlt, Z. Malek, G. Muziol, and H. Strusny, Bull. Acad. Sci. USSR, Phys. Ser. **33**, 1144 (1970).

2012Ro36 R. Robinson and M. Thoennessen, At. Data Nucl. Data Tables **98**, 911 (2012).

Please cite this abstract as: “FRIB Nuclear Data Group, *Discovery of Nuclides Project*, Isotope Database, doi:[10.11578/frib/2279152](https://doi.org/10.11578/frib/2279152)”