^{170}Ta

In 1969, the discovery of ^{170}Ta 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 $HReO_4$ targets were bombarded with 660 MeV protons from the Dubna synchrocyclotron. Gamma-ray spectra were measured with a Ge(Li) detector following chemical separation. "To identify lighter tantalum isotopes we undertook four series of experiments with hafnium preparations separated at 4 to 6 min. intervals from the tantalum fraction of targets bombarded from 3 to 15 min. The results gave a half life of 7.0 ± 0.5 min for ^{170}Ta"

Adapted from reference (2012Ro36)

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

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