

²⁵⁵Rf

In the 1975 paper “Experiments on the synthesis of neutron-deficient isotopes of kurchatovium in reactions with accelerated ⁵⁰Ti ions” Oganessian et al. described the observation of ²⁵⁵Rf ([1975Og04](#)). ⁵⁰Ti beams with energies up to 260 MeV from the Dubna 310 cm cyclotron bombarded ²⁰⁷Pb targets forming ²⁵⁵Rf in (2n) fusion-evaporation reactions. Spontaneous fission fragments were measured with mica track detectors located around a rotating target. “The long-lived emitter with half-life about 4 sec, in all probability, is the isotope ²⁵⁵Ku, which is formed with a maximum cross section in the reaction ²⁰⁷Pb(⁵⁰Ti,2n), and with lower probability in the reaction ²⁰⁸Pb(⁵⁰Ti,3n), and is absent in the reaction ²⁰⁶Pb(⁵⁰Ti,1n).” The same results were submitted to a different journal less than a month later ([1975Og01](#)).

Adapted from reference ([2013Th02](#))

- [1975Og01](#) Y. T. Oganessian, A. G. Demin, A. S. Iljinov, S. P. Tretyakova *et al.*, Nucl. Phys. A **239**, 157 (1975).
[1975Og04](#) Y. T. Oganessian, A. G. Demin, A. S. Ilinov, S. P. Tretyakova *et al.*, Sov. At. Energy **38**, 492 (1975).
[2013Th02](#) M. Thoennessen, At. Data Nucl. Data Tables **99**, 312 (2013).

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)”