

## <sup>256</sup>Rf

In the 1975 paper “Experiments on the synthesis of neutron-deficient isotopes of kurchatovium in reactions with accelerated <sup>50</sup>Ti ions” Oganessian et al. described the observation of <sup>255</sup>Rf ([1975Og04](#)). <sup>50</sup>Ti beams with energies up to 260 MeV from the Dubna 310 cm cyclotron bombarded <sup>208</sup>Pb targets forming <sup>256</sup>Rf in (2n) fusion-evaporation reactions. Spontaneous fission fragments were measured with mica track detectors located around a rotating target. “Thus, analyzing the experimental cross sections of the reactions and the properties of the known isotopes of kurchatovium and lighter elements, it can be assumed that the observed effect is due to decay of the isotope <sup>256</sup>Ku, which is formed in the reaction <sup>208</sup>Pb(<sup>50</sup>Ti,2n)<sup>256</sup>Ku.” 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).

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