

^{287}Mc

^{287}Mc was first observed by Oganessian et al. in 2004 as reported in “Experiments on the synthesis of element 115 in the reaction $^{243}\text{Am}(^{48}\text{Ca},\text{xn})^{291-x}\text{115}$ ” (2004Og03). The Dubna U400 cyclotron was used to bombard an AmO_2 target enriched in ^{243}Am with 253 MeV beams to form $^{287}\text{115}$ (4n) fusion evaporation reactions. The residues were separated with a gas-filled recoil separator and implanted in a semiconductor detector array. Subsequent α particle decay and spontaneous fission events were recorded in this array and in eight detectors arranged in a box configuration around the implantation detector. “The decay properties of these synthesized nuclei are consistent with consecutive α decays originating from the parent isotopes of the new element 115, $^{288}\text{115}$ and $^{287}\text{115}$, produced in the 3n- and 4n-evaporation channels with cross sections of about 3 pb and 1 pb, respectively.” One decay chain for ^{287}Mc was observed.

Adapted from reference (2013Th02)

2004Og03 Yu. Ts. Oganessian, V. K. Utyonkov, Yu. V. Lobanov, F. Sh. Abdullin *et al.*, Phys. Rev. C **69**, 021601 (2004).

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)”