^{288}Mc

^{288}Mc was first observed by Oganessian et al. in 2004 as reported in "Experiments on the synthesis of element 115 in the reaction ^{243}Am(^{48}Ca,xn)$^{291-x}$115" (2004Og03). The Dubna U400 cyclotron was used to bombard an AmO_2 target enriched in 248 MeV ^{48}Ca beams to form ^{288}115 in (3n) 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}115 and ^{287}115, produced in the 3n- and 4n-evaporation channels with cross sections of about 3 pb and 1 pb, respectively." Three chains for ^{288}Mc were 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).

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