^{277}Mt

Oganessian et al. reported the discovery of ^{277}Mt in the 2013 paper "Experimental studies of the ^{249}Bk + ^{48}Ca reaction including decay properties and excitation function for isotopes of element 117, and discovery of the new isotope ^{277}Mt" (2013Og04). The Dubna U400 cyclotron was used to bombard ^{249}Bk targets produced in the Oak Ridge High Flux Isotope Reactor (HFIR) with ^{48}Ca beams to form ^{293}117 in (4n) fusion evaporation reactions. ^{277}Mt was populated by subsequent α-decays. The residues were separated with a gas-filled recoil separator and implanted in a semiconductor detector array. Alpha particle decay and spontaneous fission events were recorded in this array and in six detectors placed around two implantation detectors. "An α-decay branch of ^{281}Rg leading to the new SF nucleus, ^{277}Mt, was observed for the first time."

Adapted from reference (2014Th03)

2013Og04 Yu. Ts. Oganessian, F. Sh. Abdullin, C. Alexander, J. Binder *et al.*, Phys. Rev. C **87**, 054621 (2013).

2014Th03 M. Thoennessen, Int. J. Mod. Phys. E **23**, 1430002 (2014).

Please cite this abstract as: "FRIB Nuclear Data Group, *Discovery of Nuclides Project*, Isotope Database, doi:10.11578/frib/2279152"