^{278}Mt

In the 2010 paper "Synthesis of a new element with atomic number Z = 117", Oganessian et al. reported the first observation of ^{278}Mt (2010Og01). A ^{249}Bk target was bombarded with a 252 MeV ^{48}Ca beam from the Dubna U400 cyclotron to form ^{294}117 in the (3n) evaporation reaction. ^{278}Mt was populated by subsequent α-decay. 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 eight detectors arranged in a box configuration around the implantation detector. ^{278}Mt is not specifically mentioned in the text but an α-energy of 9.00(10) MeV with a lifetime of 11.0 s is quoted in the figure displaying the single observed decay chain.

Adapted from reference (2013Th02)

2010Og01 Yu. Ts. Oganessian, F. Sh. Abdullin, P. D. Bailey, D. E. Benker *et al.*, Phys. Rev. Lett. **104**, 142502 (2010).

2013Th02 M. Thoennessen, At. Data Nucl. Data Tables **99**, 312 (2013).

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