

²⁷⁴Mt

Oganessian et al. reported the observation of ²⁷⁴Mt in 2007 in “Synthesis of the isotope ²⁸²113 in the ²³⁷Np+⁴⁸Ca fusion reaction” ([2007Og02](#)). A 244 MeV ⁴⁸Ca beam from the Dubna U400 cyclotron bombarded a ²³⁷Np target and ²⁸²113 was populated in the (3n) fusion evaporation reaction. ²⁷⁴Mt 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 eight detectors arranged in a box configuration around the implantation detector. ²⁷⁴Mt is not specifically mentioned in the text but a figure of the two decay chains shows that ²⁷⁴Mt decayed within 87.98 s and 97.02 s with α decay energies of 8.93(8) MeV and 8.52(10) MeV.

Adapted from reference ([2013Th02](#))

[2007Og02](#) Yu. Ts. Oganessian, V. K. Utyonkov, Yu. V. Lobanov, F. Sh. Abdullin *et al.*, Phys. Rev. C **76**, 011601 (2007).

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

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