

^{282}Nh

Oganessian et al. reported the observation of ^{282}Nh in 2007 in “Synthesis of the isotope $^{282}113$ in the $^{237}\text{Np}+^{48}\text{Ca}$ fusion reaction” (2007Og02). A 244 MeV ^{48}Ca beam from the Dubna U400 cyclotron bombarded a ^{237}Np target and ^{282}Nh was populated in the (3n) fusion evaporation reaction. 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. Two decay chains were observed: “Based on the similar α -particle energies and decay times of the first three α transitions, we assign both decay chains to the same parent nucleus, namely $^{282}113$ produced in the $^{237}\text{Np}(^{48}\text{Ca},3n)$ reaction.”

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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