^{270}Bh

Oganessian et al. reported the observation of ^{270}Bh in 2007 in "Synthesis of the isotope ^{282}113 in the ^{237}Np+^{48}Ca fusion reaction" (2007Og02). A 244 MeV ^{48}Ca beam from the Dubna U400 cyclotron bombarded a ^{237}Np target and ^{282}113 was populated in the (3n) fusion evaporation reaction. ^{270}Bh 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. Only one of the two decay chains included the decay of ^{270}Bh: "For the last α decay observed in the first decay chain of ^{282}113, the α-particle energy as well as half-life are in agreement with those expected for ^{270}Bh (E_α = 8.93±0.08 MeV, $T_{1/2} = 61^{+292}_{-28}$ s, T_{calc} = 5 s)."

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).

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