^{261}Bh

In 1989, Münzenberg et al. identified ^{261}Bh in the paper "Element 107" (1989Mu09). A ^{209}Bi target was bombarded with ^{54}Cr beams with energies between 4.87 and 5.07 MeV/u from the GSI UNILAC accelerator forming ^{261}Bh in (2n) fusion-evaporation reactions. Recoil products were separated with the velocity filter SHIP and implanted in seven position sensitive silicon surface-barrier detectors which also detected the subsequent α-decay and spontaneous fission. "We deduce from 10 events observed for decay of ^{261}107, and no fission event with t $<$ 100 ms that the fission branching ratio is smaller than about 10%, corresponding to a half-life for spontaneous fission of larger than 0.12 s." An earlier observation of spontaneous fission of ^{261}Bh (1976Og02) could not be confirmed.

Adapted from reference (2013Th02)

1976Og02 Y. T. Oganessian, A. G. Demin, N. A. Danilov, G. N. Flerov *et al.*, Nucl. Phys. A **273**, 505 (1976).

1989Mu09 G. Munzenberg, P. Armbruster, S. Hofmann, F. P. Hessberger *et al.*, Z. Phys. A **333**, 163 (1989).

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"