

^{270}Hs

Dvorak et al. described the first observation of ^{270}Hs in the 2006 paper “Doubly magic nucleus $^{270}_{108}\text{Hs}_{162}$ ” (2006Dv01). A ^{248}Cm target was bombarded with 185 and 193 MeV ^{26}Mg beams from the GSI UNILAC accelerator forming ^{270}Hs in the (4n) fusion-evaporation reaction. Alpha-particles and spontaneous fission events were detected with 2×32 PIPS detectors following rapid chemical separation of hassium. Four chains originating in ^{270}Hs were observed: “Three out of four chains were detected at the lower beam energy at the expected maximum of the 4n evaporation channel. Therefore, we assign these four chains to the decay of the new isotope ^{270}Hs and its daughter ^{266}Sg .” Previously two events had tentatively been assigned to the decay of ^{270}Hs (2002Du21, 2003Tu05), however, this assignment was based on decay properties of ^{266}Sg (1994La22, 1998Tu01) which were not confirmed.

Adapted from reference (2013Th02)

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