

^{263}Hs

^{263}Hs was discovered by Dragojević et al. in 2009 as described in “New isotope ^{263}Hs [1]. A 280 MeV ^{56}Fe beam from the Berkeley 88-in. cyclotron bombarded an enriched ^{208}Pb target and ^{263}Hs was formed in the (1n) fusion-evaporation reaction. Recoil products were separated with the Berkeley gas-filled separator (BGS) and implanted into a Si-strip focal plane detector array which also recorded the subsequent α -decay and spontaneous fission. “ ^{263}Hs was identified by observing an ‘EVR-like event’ followed by a ‘ ^{263}Hs -like event’ within 10 ms, and then by (i) at least two of the ^{259}Sg , ^{255}Rf , and ^{251}No daughters... within 15 s, or (ii) SF ($E > 90$ MeV), within 10 s.” Six decay chains from ^{263}Hs were observed. In 1984 Oganessian et al. reported evidence for the formation of ^{263}Hs by identifying the decay of daughter nuclei, however, no direct evidence for the observation of ^{263}Hs was measured [2].

[1] I. Dragojevic *et al.*, Phys. Rev. C 79 (2009) 011602.

[2] Yu. Ts. Oganessian *et al.*, Z. Phys. A 319 (1984) 215.

Adapted from M. Thoennessen, At. Data Nucl. Data Tables **99** (2013) 312