

## <sup>265</sup>Hs

Münzenberg et al. discovered <sup>265</sup>Hs in the 1984 paper “The identification of element 108” ([1984Mu17](#)). A 5.02 MeV/u <sup>58</sup>Fe beam from the GSI heavy ion accelerator UNILAC bombarded an enriched <sup>208</sup>Pb target and <sup>265</sup>Hs was formed in the (1n) fusion-evaporation reaction. Recoil products were separated with the velocity filter SHIP and implanted in an array of seven position sensitive surface barrier detectors which also measured the subsequent  $\alpha$ -decay and spontaneous fission. “Our interpretation that this first transition is due to the alpha decay of the isotope <sup>265</sup>108, rests primarily on the fact that the remaining four full-energy alpha signals can all be assigned to known transitions in nuclei belonging to the alpha decay chain that starts with the isotope <sup>265</sup>108.” Three decay chains were observed. In 1984, Oganessian et al. reported evidence for the formation of <sup>265</sup>Hs by identifying the decay of daughter nuclei, however, no direct evidence for the observation of <sup>265</sup>Hs was measured ([1984Og02](#)).

Adapted from reference ([2013Th02](#))

- [1984Mu17](#) G. Munzenberg, P. Armbruster, H. Folger, F. P. Hessberger *et al.*, *Z. Phys. A* **317**, 235 (1984).  
[1984Og02](#) Yu. Ts. Oganessian, A. G. Demin, M. Hussonnois, S. P. Tretyakova *et al.*, *Z. Phys. A* **319**, 215 (1984).  
[2013Th02](#) M. Thoennessen, *At. Data Nucl. Data Tables* **99**, 312 (2013).

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