

²⁶⁶Mt

The first identification of ²⁶⁶Mt was reported in 1982 in “Observation of one correlated α -decay in the reaction ^{58}Fe on $^{209}\text{Bi} \rightarrow ^{267}109$ ” ([1982Mu15](#)). A 5.15 MeV/nucleon ^{58}Fe beam from the GSI UNILAC heavy ion accelerator bombarded a bismuth target. ²⁶⁶Mt was produced in the (1n) fusion-evaporation reaction and separated with the velocity filter SHIP. The residues and subsequent α and spontaneous fission decays were recorded in seven position sensitive surface barrier detectors. “In an irradiation of ^{209}Bi targets with accelerated ^{58}Fe ions we found a decay chain consisting of two consecutive alpha disintegrations followed by fission. This decay chain most probably originates from the isotope $^{266}109$.” The time between the implantation and the decay of the daughter ^{262}Bh was 5.0 ms.

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

[1982Mu15](#) G. Munzenberg, P. Armbruster, F. P. Hessberger, S. Hofmann *et al.*, *Z. Phys. A* **309**, 89 (1982).

[2013Th02](#) M. Thoennessen, *At. Data Nucl. Data Tables* **99**, 312 (2013).

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