

²⁵⁹Sg

²⁵⁹Sg was identified in “The isotopes ²⁵⁹106, ²⁶⁰106, and ²⁶¹106” by Münzenberg et al. in 1985 ([1985Mu11](#)). ²⁰⁷Pb targets were bombarded with a 262 MeV ⁵⁴Cr beam from the GSI UNILAC heavy-ion accelerator forming ²⁵⁹Sg in the (2n) fusion-evaporation reaction. Recoil products were separated with the velocity filter SHIP and implanted in an array of position sensitive surface barrier detectors which also measured subsequent α decay and spontaneous fission. “In an irradiation of ²⁰⁷Pb with ⁵⁴Cr at 4.90 MeV/u, the optimum energy for the 2n channel, we produced the isotope ²⁵⁹106.” Seven α -decay events of ²⁵⁹Sg were observed. In 1974, Oganessian et al. had assumed that spontaneous fission events produced in reactions of ⁵⁴Cr on ²⁰⁷Pb and ²⁰⁸Pb originated from ²⁵⁹Sg ([1974Og04](#)).

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

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