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The study of the spontaneous fission of heavy and superheavy nuclei

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As a result of a recent experimental series on SHELS separator (FLNR JINR), new experimental data about spontaneous fission was obtained for a range of heavy nuclei. The isotopes of interest were synthesized in complete fusion reactions (244,246Fm, 250,252,254No, 256Rf, 260Sg) and multi-nucleon transfer reactions (Am isomers). The modern SFiNx system and planned SHE Fission TPC detector aimed to investigate the SF properties of short-lived superheavy nuclei on a GRAND gas-filled separator (SHE Factory) will be discussed.

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