

Spontaneous fission of $^{252,254}\text{No}$ isotopes

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Several experiments aimed to investigate properties of short-lived SF nobelium isotopes we carried out in FLNR. The neutron-deficient isotopes of nobelium were produced in fusion-evaporation reactions using $^{206,208}\text{Pb}$ target and an intensive beam of ^{48}Ca . Fusion-evaporation residues were separated by the SHELS separator and implanted into a large-area double-sided 48×48 strip silicon detector surrounded by 54 ^3He -counters of neutrons. The half-life and decay branching ratio for $^{252,254}\text{No}$ is measured. The average number of neutrons per spontaneous fission of ^{254}No is determined for the first time.

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