^{249}No

In 2021, ^{249}No was discovered by Khuyagbaatar et al. in "Spontaneous fission instability of the neutron-deficient No and Rf isotopes: The new isotope ^{249}No" (2021Kh07). A 234.3 MeV ^{50}Ti beam from the Universal Linear Accelerator UNILAC at GSI, Darmstadt, Germany, impinged on a 0.6 mg/cm^2 thick enriched ^{204}PbS target. Fusion-evaporation residues and their correlated subsequent α decays were analyzed with the gas-filled transActinide Separator and Chemistry Apparatus (TASCA). "For the fission and α-decaying state in ^{253}Rf a partial α-decay half-life (T_α) of $\sim$100 ms was deduced with its $\sim$12.5% α branching. The state populated in the new isotope ^{249}No decays by α-particle emission with an energy of 9.06(3) MeV and a half-life of 15^{+74}_{-7} ms." Less than 2-months later Svirikhin et al. independently submitted their result of ^{249}No reporting an α decay energy of 9129 keV and the half-life of 38.1 $\pm$ 2.5 ms (2021Sv02).

Adapted from reference (2023Th03)

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