

^{289}Lv

^{289}Lv was first reported in 2025 by Oganessian et al. in “Investigation of reactions with ^{50}Ti and ^{54}Cr for the synthesis of new elements” (). A 267.7 MeV ^{50}Ti beam from the DC280 cyclotron at the SHE Factory at the Flerov Laboratory for Nuclear Reactions (FLNR) of the Joint Institute for Nuclear Research (JINR) in Dubna, Russia impinged on rotating 0.73 mg/cm^2 ^{242}Pu targets. Evaporation residues from the reaction $^{242}\text{Pu}(^{50}\text{Ti},3n)$ were separated with the gas filled separator DGFRS-2 and identified by their correlated α -particle emissions and subsequent fission in two double-sided strip detectors. “In addition to the two ^{288}Lv chains, we obtained three decay chains of the new isotope ^{289}Lv (Fig. 4). The mother nucleus ^{289}Lv is reliably identified by the method of genetic correlations with α decay and spontaneous fission of known nuclei from ^{285}Fl to ^{265}Rf .”

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