

Decay properties of the ^{260}Sg isotope

An experiment on the study of the ^{260}Sg decay properties was conducted using the SHELS separator. The isotope was synthesized in the complete fusion reaction of ^{54}Cr beam ions and ^{207}Pb target nuclei.

The alpha-spectrum was investigated and its fine structure was discovered.

The neutron multiplicities of ^{260}Sg spontaneous fission ($\nu = 4,66 \pm 0,14$) were obtained for the first time using the SFiNx detector system. The multiplicity distribution of emitted prompt neutrons was restored using the Tikhonov method of statistical regularisation.

Section

Nuclear structure: theory and experiment

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