

## Recent results and prospects on light nuclei and hypernuclei production in heavy-ion collisions at NICA energies

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### Abstract

The NICA (Nuclotron-based Ion Collider fAcility) accelerator complex for heavy ions and polarized particles is under construction at JINR (Dubna). The first collisions at the NICA collider, which are expected in 2025, will be registered by the MPD detector, while the first batch of experimental data from medium-heavy ion collisions is now available from the BM@N experiment. In this report, we will present and discuss recent BM@N results on the proton and light nuclei (d, t) production in Ar+A (A = C, Al, Cu, Sn, Pb) collisions at  $E/A = 3.2$  GeV. Also, the MPD detector performance for the study of the production of hypernuclei will be reported.

**Keywords:** heavy-ion collisions, NICA complex, hypernuclei