

Isotopic effects in the emission of intermediate mass fragments in the $^{124}\text{Sn} + ^{64}\text{Ni}$ and $^{112}\text{Sn} + ^{58}\text{Ni}$ reactions at 35 MeV/nucleon

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Density of the overlapping region between two colliding nuclei is expected to decrease during the expansion stage of nucleus-nucleus collisions at intermediate energies. Therefore microscopic models of nuclear dynamics predict an effect of neutron enrichment of nuclear matter in this diluted neck region. This effect can be traced by studying intermediate mass fragments originating from the neck fragmentation processes. We present results of a new analysis of the experiment carried out by the REVERSE-ISOSPIN collaboration on two reactions of the neutron-rich and neutron-poor systems ($^{124}\text{Sn} + ^{64}\text{Ni}$ and $^{112}\text{Sn} + ^{58}\text{Ni}$, respectively) at the bombarding energy of 35 MeV/nucleon. The mass numbers of the intermediate mass fragments (isotopes of Li, Be, B and C) could be resolved in this experiment. Angular correlations of the neck fragmentation products with respect to the projectile-like and target-like fragments seem to be best isospin observables sensitive to parameters of the symmetry energy in the nuclear equation of state.