TARGET DEPENDENCE OF THE ISOTOPE DISTRIBUTIONS IN HEAVY-ION REACTIONS AT FERMI ENERGIES

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Heavy-ion reactions at Fermi energies are a tool to produce new isotopes far from stability line. Previous experiments show that the production of neutron-reach isotopes is enhanced when the heavy target is used instead of the light one. In this report we compare isotope distributions calculated in transport-statistical approach BNV-SMM with the three frequently used models: empirical EPAX , geometrical-macroscopic Abrasion-Ablation and phenomenological HIPSE, and experimental data obtained in collisions of ^{18}O projectile on ^{181}Ta and ^{9}Be targets at 35 MeV per nucleon obtained at COMBAS set-up in FLNR, JINR. The experimental ratio of cross-sections obtained in the reactions on heavy ^{181}Ta and light ^{9}Be target in the collision with the same projectile and the same ratio obtained as model predictions is discussed. Some explanations of the observed features are presented.