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CAPTURE CROSS SECTIONS FOR HEAVY-ION REACTIONS PRODUCING COMPOUND SYSTEM WITH $\rm Z=120$

The fusion cross sections for reactions ${}^{50}\text{Ti} + {}^{249}\text{Cf}$, ${}^{54}\text{Cr} + {}^{248}\text{Cm}$, ${}^{58}\text{Fe} + {}^{244}\text{Pu}$ and ${}^{64}\text{Ni} + {}^{238}\text{U}$ are evaluated in the framework of simple barrier-penetration model, which takes into account quadrupole and hexadecapole surface deformations of nuclei.

Keywords: capture cross sections, synthesis of superheavy elements, transuranium elements, subbarrier tunneling, deformed nucleus, hexadecapole deformation.