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Quantum diffusion description of multinucleon transfer in $^{48}\text{Ca}+^{238}\text{U}$, $^{58}\text{Ni}+^{60}\text{Ni}$ and $^{60}\text{Ni}+^{60}\text{Ni}$ collisions.

Multinucleon transfer is investigated by using a beyond mean-field approach called Stochastic mean-field (SMF) approach from which the nucleon transport coefficients are extracted. These coefficients are determined by the occupied single-particle wave functions of the time-dependent Hartree-Fock equations. As a result, the primary fragment mass and charge distribution functions are determined entirely in terms of the mean-field properties. The results of calculations are compared with the TDRPA calculations and the recent data of $^{58}\text{Ni}+^{60}\text{Ni}$. A good description of the data and a relatively good agreement with the TDRPA calculations are found.

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