THE KINETICS OF PROCESSES OCCURRING IN GRANULAR MATERIALS IN THE FIELD OF VIBROACCELERATIONS

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Summary

We study the kinetics of compaction and segregation of granular materials in the field of vibroaccelerations or in contact with other external sources of energy. In the vicinity of quasistationary states, the relaxation of the field of the order parameter is described with the use of simple obvious models of inelastically colliding particles, the kinetic model of free volume, and the Landau—Ginzburg and Cahn—Hilliard approaches. The obtained results are in good agreement with experimental data.