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NONLINEAR WAVES IN MICRONONEQUILIBRIUM POROUS MEDIUM AT TWO-PHASE SATURATION

Abstract

The evolution equation of the saturated porous medium is introduced at two-phase saturation by the method of slowly varying amplitude. The dispersion correlation is obtained in the first approximation, and in the second approximation the nonlinear equation of KdVD evolution is introduced. The influence of the parameters of a problem: a micrononequilibrium capillary pressure and interphase resistances on forming and distribution of front of perturbation at impulse action is investigated by the numerical-analytical method.