FORCED PERIODIC OSCILLATIONS IN NONLINEAR AUTOMATIC SYSTEMS

Perov A. I., Polyakova L. A.

Using Perov generalized principle of contracting mappings, it is refined and generalized one periodic solution existence theorem of some nonlinear automatic control system proposed by A.M. Krasnosel'skii. The generalization is implied dependence of nonlinearity on desired solutions and its derivatives. Periodic solution estimation is proposed. It is shown uniqueness conditions and. It given an error estimation of the successive approximations method.