

[Volkov, V. T.](#); [Nefedov, N. N.](#)

Development of the asymptotic method of differential inequalities for investigation of periodic contrast structures in reaction-diffusion equations. (Russian, English) [Zbl 1210.35155](#)
[Zh. Vychisl. Mat. Mat. Fiz. 46, No. 4, 615-623 \(2006\)](#); translation in [Comput. Math. Math. Phys. 46, No. 4, 585-593 \(2006\)](#).

Summary: The asymptotical method of differential inequalities is developed for a new class of periodic problems of reaction-diffusion type. The problem of the existence and Lyapunov stability of periodic solutions with internal transient layers in the case of balanced nonlinearity is studied.

MSC:

[35K57](#) Reaction-diffusion equations

Cited in **12** Documents

Keywords:

[singular perturbations](#); [reaction-diffusion](#); [contrasting structure](#); [internal layer](#)

Full Text: [Link](#)