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广义Logistic时滞微分方程零解的3/2-全局吸引性

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The 3/2-Global Attractivity of the Zero Solution of the General Logistic Delay Differential Equation

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- 摘要
- 参考文献
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摘要 本文考虑广义时滞Logistic方程

$$x'(t) + (1+x(t))F(t, x_t^a) = 0, \quad t \geq 0$$

零解的全局吸引性, 运用一些分析方法和技巧, 得到方程零解是3/2-全局吸引的一个充分条件, 结果推广并改进了现有文献中的相关结论.

关键词: 广义logistic时滞微分方程 全局吸引性 振动 非振动

Abstract: The general Logistic delay differential equation

$$x'(t) + (1+x(t))F(t, x_t^a) = 0, \quad t \geq 0$$

is considered. By using some analysis methods and techniques, a sufficient condition is obtained for the 3/2-global attractivity of the zero solution of (*), which generalized and improved the related results in the literature.

Key words: general logistic delay differential equation   the 3/2-Global attractivity   oscillation   nonoscillation

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