系统科学与数学 2006 26 (5): 569-577 ISSN: 1000-0577 CN: 11-2019/O1

论文

BANACH空间中二阶脉冲积分-微分方程初值问题的解

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收稿日期 修回日期 网络版发布日期 2006-11-3 接受日期

摘要 在较弱的条件下, 我们研究了Banach空间中二阶脉冲积分-微分方程初值问题解的存在性, 建立了解的存在定理, 本质地改进了郭大钧的相关结果. 同时, 利用非紧性测度还给出了存在最大最小解的一个充分条件.

关键词 脉冲积分-微分方程 初值问题 比较结果 非紧性测度 不动点

分类号 45J05 34G20

Solutions of Initial Value Problems for Second Order Impulsive Integro-Diffential Equations in BANACH Spaces

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Abstract Under rather weak conditions, the existence of solutions to initial value problem is studied for the second order impulsive integro-differential equations in Banach spaces. Some existence theorems of solutions are established, and the related results by Guo Dajun are essentially improved. At the same time, one sufficient condition for the existence of minimal and maximal solutions is obtained through the Kuratowski measure of noncompactness.

Key words Impulsive integro-differential equation initial value problem comparison result measure of noncompactness fixed-point

DOI:

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