22(6)

EXISTENCE OF POSITIVE SOLUTIONS TO FOURTH ORDER QUASILINEAR BOUNDARY VALUE PROBLEMS

白占兵(1)，葛渭高(2)

(1)山东科技大学信息科学与工程学院; (2)北京理工大学数学系

摘要
关键词   fourth-order boundary value problem   fixed point theorem   positive solution

分类号 34B15

EXISTENCE OF POSITIVE SOLUTIONS TO FOURTH ORDER QUASILINEAR BOUNDARY VALUE PROBLEMS

Zhan Bing BAI(1), Wei Gao GE(2) ,

(1)Department of Applied Mathematics, University of Petroleum, Dongying 257061, People's Republic of China; (2)Department of Applied Mathematics, Beijing Institute of Technology, Beijing 100081, P. R. China

Abstract In this paper, we generalize the fixed point theorem of cone expansion and compression of norm type to the theorem of functional type. As an application, the existence of positive solutions for some fourth-order beam equation boundary value problems is obtained. The emphasis is put on that the nonlinear term is dependent on all lower order derivatives.

Key words   fourth-order boundary value problem   fixed point theorem   positive solution

通讯作者 白占兵 zhanbingbai@163.com

扩展功能

本文信息

- Supporting info
- PDF(0KB)
- [HTML全文](0KB)
- 参考文献

服务与反馈

- 把本文推荐给朋友
- 加入我的书架
- 加入引用管理器
- 复制索引
- Email Alert
- 文章反馈
- 浏览反馈信息

相关信息

- 本刊中 包含"fourth-order boundary value problem"的 相关文章
- 本文作者相关文章
- 白占兵
- 葛渭高