

动力学与控制学报

2019 年 10 月

第 17 卷第 5 期

目 次

关于分析力学的基础与展望	郭永新 刘世兴(391)
有多余坐标的可控完整力学系统的自由运动与初始运动	陈菊 郭永新 梅凤翔(408)
基于 LuGre 模型非光滑柱铰链平面多体系统动力学的建模和数值方法	邢航 郑旭东 王琪(413)
含弱阻尼空间结构的耦合动力学保结构分析	宋明哲 邓子辰 赵云平 余大宏 胡伟鹏(419)
二维分布式陀螺结构带隙特性研究	李夏临 杨晓东 张伟(425)
分数阶动力学的分析力学方法及其应用	罗绍凯(432)
Lagrange 子流形理论在约束力学系统正则变换和勒让德变换中的应用...	刘畅 王聪 刘世兴 郭永新(439)
广义分数阶受迫 Birkhoff 方程	宋传静(446)
分析力学研究应当重视物理意义的讨论	丁光涛 陶松涛(453)
基于广义分数阶算子 Birkhoff 系统 Noether 定理	张宏彬(458)
一类强非线性二阶微分方程的多模态近似解析解研究	楼智美 王元斌 俞立先(463)
非定常完整约束系统的线性映射方法	王勇 吴兴达 曹会英(467)
弹性细杆弯扭度有突变时的 Lagrange 方程	薛纭 王鹏(473)
Lagrange 原著与广义动能原理.....	龙运佳(478)
时间尺度上约束 Birkhoff 系统的 Noether 对称性与守恒量	张毅(482)
非保守非线性刚-热-弹耦合动力学的 Lagrange 方程	梁立孚 郭庆勇(487)

责任编辑 康厚军 外文编审 周加喜

JOURNAL OF DYNAMICS AND CONTROL

Oct.2019

Vol.17 No.5

CONTENTS

The foundation and prospect of analytical mechanics	Guo Yongxin,Liu Shixing(391)
Free motion and initial motion of controllable holonomic system with redundant coordinates	Chen Ju,Guo Yongxin, Mei Fengxiang(408)
Modeling and simulation of planar multibody systems with frictional revolute joints based on LuGre friction model	Xing Hang,Zheng Xudong,Wang Qi(413)
Coupling dynamic structure-persevering analysis of spatial structure with weak damping	Song Mingzhe,Deng Zichen,Zhao Yunping,Yu Dahong,Hu Weipeng(419)
Band characteristics of 2-D gyroscope phononic crystal	Li Xialin,Yang Xiaodong,Zhang Wei(425)
Analytical mechanics method of fractional dynamics and its applications	Luo Shaokai(432)
Application of Lagrange submanifold theory in the canonical transformation and Legendre transformation of constrained mechanical systems	Liu Chang,Wang Cong,Liu Shixing,Guo Yongxin(439)
Generalized fractional forced Birkhoff equations	Song Chuanjing(446)
Attention should be paid to physical significance in study of analytical mechanics	Ding Guangtao,Tao Songtao(453)
Noether's theorem of Birkhoffian systems with generalized fractional operators	Zhang Hongbin(458)
Study on multimode approximate analytical solution of a class of strongly nonlinear second order differential equations	Lou Zhimei,Wang Yuanbin,Yu Lixian(463)
Linear mapping method for holonomic rheonomic systems	Wang Yong,Wu Xingda,Cao Huiying(467)
Lagrange equations of thin elastic rod with mutation of curvature-twisting vector	Xue Yun,Wang Peng(473)
Lagrange original & generalized principle of kinetic energy	Long Yunjia(478)
Noether symmetries and conserved quantities of constrained Birkhoffian systems on time scales	Zhang Yi(482)
The Lagrange equation of non-conservative non-linear rigid-thermos-elastic coupling dynamics	Liang Lifu,Guo Qingyong(487)