



ISSN 0577-6686
CODEN CHHKA2

中国机械工程学会主办

机械工程学报[®]

JOURNAL OF MECHANICAL ENGINEERING

纪念交通大学机械工程教育百年华诞专辑

半月刊 | 6 / 2013
第 49 卷

机械工程学报

JIXIE GONGCHENG XUEBAO

2013年第49卷第6期 3月20日出版

纪念交通大学机械工程教育百年华诞专辑

目 次

序 (1)

机械学

- 高速高加速度下的进给系统机电耦合 卢秉恒 赵万华 张俊等 (2)
双动人工半膝关节假体的设计及应用 斯忠民 连苓 王臻等 (12)
面向智能轮椅脑机导航的高频组合编码稳态视觉诱发电位技术研究 徐光华 张锋 王晶等 (21)
基于状态信息的航空发动机运行可靠性评估 孙闻 何正嘉 张周锁等 (30)
考虑涡动工况的高速滚动轴承打滑失效分析 陈渭 李军宁 张立波等 (38)
主轴转子系统动力学解析建模方法 赵万华 杜超 张俊等 (44)
基于导波的圆柱结构损伤识别方法 李富才 苗晓婷 孙学伟等 (52)
振动信号小波 leaders 多重分形特征提取及性能分析 李彦明 杜文辽 叶鹏飞等 (60)
FAST 反射面支承索网结构的初始状态求解 刘钰 高峰 (66)
摩擦激励下螺旋桨推进轴系弯扭耦合振动研究 张振果 张志谊 陈锋等 (74)
四足仿生机器人混联腿构型设计及比较 田兴华 高峰 陈先宝等 (81)
激励幅值及载荷对准零刚度隔振器特性的影响 刘兴天 黄修长 张志谊等 (89)
圆锥破碎机破碎质量的粒度和粒形数学建模 马彦军 范秀敏 何其昌等 (95)

制造科学与技术

- 复杂产品制造精度控制的数字化方法及其发展趋势 林忠钦 李新民 金隼等 (103)
基于状态空间模型的精密机床装配精度预测与调整工艺 洪军 郭俊康 刘志刚等 (114)
基于短脉冲激光束干涉的硅表面亚微米结构加工工艺 姚振强 胡永祥 (122)
增材制造：实现宏微观一体化制造 李涤尘 贺健康 田小永等 (129)
基于两阶段蚁群算法的带非等效并行机的作业车间调度 张洁 张朋 刘国宝 (136)
电驱动微纳米模塑技术的成形机理及工艺参数影响研究 丁玉成 田洪森 邵金友等 (145)
车身覆盖件冲压成形面畸变缺陷形成机理研究 李淑慧 沈洪庆 倪啸枫等 (153)
基于赋值型误差传递网络的多工序加工质量预测 江平宇 王岩 王焕发等 (160)
基于动力学响应的球头刀五轴铣削表面形貌仿真 梁鑫光 姚振强 (171)
微细辊对平板辊压成形工艺建模与尺度效应分析 高照阳 彭林法 易培云等 (179)

其他

- 特种微机电系统压力传感器 蒋庄德 田边 赵玉龙等 (187)
孔缝双桥结构高性能压阻式加速度传感器 赵玉龙 刘岩 孙禄等 (198)
电活性聚合物材料及其在驱动器中的应用研究 陈花玲 王永泉 盛俊杰等 (205)

JOURNAL OF MECHANICAL ENGINEERING

Vol.49 No.6 March 2013

CONTENTS

- Electromechanical Coupling in the Feed System with High Speed and High Acceleration LU Bingheng ZHAO Wanhuai ZHANG Jun et al (2)
- Custom-made Bipolar Hemi-knee Prosthesis Design and Clinical Application JIN Zhongmin LIAN Qin WANG Zhen et al (12)
- Research on Key Technology on Time Series Combination Coding-based High-frequency SSVEP in Intelligent Wheelchair BCI Navigation XU Guanghua ZHANG Feng WANG Jing et al (21)
- Operating Reliability Assessment for Aero-engine Based on Condition Monitoring Information SUN Chuang HE Zhengjia ZHANG Zhousuo et al (30)
- Skidding Analysis of High Speed Rolling Bearing Considering Whirling of Bearing CHEN Wei LI Junning ZHANG Libo et al (38)
- Analytical Modeling Method of Dynamics for the Spindle Rotor System ZHAO Wanhuai DU Chao ZHANG Jun et al (44)
- Damage Detection Method for Cylindrical Structure Using Guided Waves LI Fucui MIAO Xiaoting SUN Xuewei et al (52)
- Wavelet Leaders Multifractal Features Extraction and Performance Analysis for Vibration Signals LI Yanming DU Wenliao YE Pengfei et al (60)
- Study of the Initial Status of Cable-net Structure Reflector for the FAST LIU Yu GAO Feng (66)
- Research on the Coupling between Torsional and Lateral Vibrations in Propeller-shaft System with Friction ZHANG Zhenguo ZHANG Zhiyi CHEN Feng et al (74)
- Mechanism Design and Comparison for Quadruped Robot with Parallel-serial Leg TIAN Xinghua GAO Feng CHEN Xianbao et al (81)
- Influence of Excitation Amplitude and Load on the Characteristics of Quasi-zero Stiffness Isolator LIU Xingtian HUANG Xiuchang ZHANG Zhiyi et al (89)
- Mathematical Modeling of Particle Size and Particle Shape of Crushing Quality for Cone Crusher MA Yanjun FAN Xiumin HE Qichang et al (95)
- Digital Methods of Complex Product Manufacturing Precision Control and Its Development Trend LIN Zhongqin LAI Xinmin JIN Sun et al (103)
- Assembly Accuracy Prediction and Adjustment Process Modeling of Precision Machine Tool Based on State Space Model HONG Jun GUO Junkang LIU Zhigang et al (114)

(下转封三)

(上接第 II 页)

- Direct Fabrication of Sub-micron Sized Mirco-structure by Interfering Nanosecond Laser Beams YAO Zhenqiang HU Yongxiang (122)
- Additive Manufacturing: Integrated Fabrication of Macro/Microstructures LI Dichen HE Jiankang TIAN Xiaoyong et al (129)
- Two-stage Ant Colony Algorithm Based Job Shop Scheduling with Unrelated Parallel Machines ZHANG Jie ZHANG Peng LIU Guobao (136)
- Research on the Forming Mechanisms and Critical Process Parameters in Two Typical Electric Field Driven Micro-/nano-molding Methods DING Yucheng TIAN Hongmiao SHAO Jinyou et al (145)
- Mechanism of Surface Low during the Stamping Process of Automobile Exterior Panels LI Shuhui SHEN Hongqing NI Xiaofeng et al (153)
- Quality Prediction of Multistage Machining Processes Based on Assigned Error Propagation Network JIANG Pingyu WANG Yan WANG Huanfa et al (160)
- Dynamic-based Simulation for Machined Surface Topography in 5-axis Ball-end Milling LIANG Xinguang YAO Zhenqiang (171)
- Modeling and Size Effect Analysis of Micro/Meso Roll-to-plate Imprinting Process GAO Zhaoyang PENG Linfa YI Peiyun et al (179)
- Special Micro-electro-mechanical Systems Pressure Sensor JIANG Zhuangde TIAN Bian ZHAO Yulong et al (187)
- High-performance Piezoresistive Accelerometer with Slotted Quad-beam Structure ZHAO Yulong LIU Yan SUN Lu et al (198)
- Research of Electro-active Polymer and Its Application in Actuators CHEN Hualing WANG Yongquan SHENG Junjie et al (205)