

机械工程学报

JIXIE GONGCHENG XUEBAO

2011年第47卷第11期 6月5日出版

目次

机械学

机构学及机器人

- 双偏心质量块驱动球形机器人的直线运动控制.....赵勃 王鹏飞 孙立宁等(1)
- 面向任务的并联结构六维力传感器设计.....王航 姚建涛 侯雨雷等(7)
- 基于双四杆机构的蟑螂机器人设计与分析.....任冠佼 陈伟海 陈斌等(14)
- 基于有限元法的螺旋锥齿轮啮合刚度计算.....唐进元 蒲太平(23)
- 基于改进快速搜索随机树法的机械手路径优化.....周芳 朱齐丹 赵国良(30)
- 新型过约束并联机构 2RPU+UPU 动力学模型.....胡波 路懿 许佳音等(36)

机械动力学

- 摩擦诱发极限环的分析与自适应主动控制.....王永富 王殿辉 柴天佑(44)
- 以广义力传递率为目标的动力总成隔振悬置系统优化设计方法.....王亚楠 吕振华(52)
- 面向机身颤振模型结构设计的拓扑优化方法.....杨睿 刘琦 钱卫等(59)
- 基于矢双谱的智能故障诊断方法.....李凌均 韩捷 李朋勇等(64)
- 磁流变弹性体隔振器的设计与振动特性分析.....魏克湘 孟光 夏平等(69)

摩擦学

- 表面纳米化预处理对 1Cr18Ni9Ti 不锈钢渗硫层摩擦学性能的影响.....马国政 徐滨士 王海斗等(75)
- 普通离子液体润滑剂的润滑成膜性能研究.....解国新 维建斌 郭丹等(82)
- 弹塑性粗糙体/刚体平面滑动摩擦过程热力耦合分析.....黄健萌 高诚辉(87)
- 表面粗糙度对硬盘超低飞高气膜静态特性的影响.....史宝军 季家东 杨廷毅(93)

制造科学与技术

数字化设计与制造

- 机械重大装备寿命预测综述.....张小丽 陈雪峰 李兵等(100)
- 基于热误差神经网络预测模型的机床重点热刚度辨识方法研究.....阳红 方辉 刘立新等(117)
- 基于响应面法的立式加工中心动静态多目标优化.....姜衡 管贻生 邱志成等(125)
- 考虑俯仰角的消防水炮射流轨迹理论模型.....闵永林 陈晓阳 陈池等(134)
- 基于设备空闲事件驱动的综合调度算法.....谢志强 辛宇 杨静(139)

制造工艺与装备

- 基于平底刀端铣的叶轮流道底面精铣算法研究.....樊宏周 席光(148)
- 拓扑修形齿轮附加径向运动成形磨削中的砂轮廓形优化方法.....李国龙 李光广 刘飞等(155)
- 高速面铣刀气动噪声及其频谱分析.....刘战强 吉春辉 刘鲁宁等(163)
- 工程陶瓷高速深磨磨削力模型的研究.....谢桂芝 尚振涛 盛晓敏等(169)
- 非球面数控研抛力—位—姿解耦控制研究.....史永杰 郑堤 詹建明等(177)
- 光刻机工作台超精密运动与同步控制.....滕伟 柳亦兵 穆海华(185)
- 基于初期磨损统计规律的铣刀快速筛选.....张辉 陈五一(191)

- 其他.....(176)

JOURNAL OF MECHANICAL ENGINEERING

Vol.47 No.11 June 2011

CONTENTS

Linear Motion Control of Two-pendulums-driven Spherical Robot	ZHAO Bo WANG Pengfei SUN Lining et al (1)
Task-oriented Design of the Parallel Six-component Force Sensor	WANG Hang YAO Jiantao HOU Yulei et al (7)
Mechanism Design and Analysis of Cockroach Robot Based on Double Four-bar Linkage	REN Guanjiao CHEN Weihai CHEN Bin et al (14)
Spiral Bevel Gear Meshing Stiffness Calculations Based on the Finite Element Method	TANG Jinyuan PU Taiping (23)
Path Optimization of Manipulator Based on the Improved Rapidly-exploring Random Tree Algorithm	ZHOU Fang ZHU Qidan ZHAO Guoliang (30)
Solving Kinematics for a Novel Over-constrained 2UPR+UPU Parallel Manipulator	HU Bo LU Yi XU Jiayin et al (36)
Analysis and Adaptive Active Control of Friction-induced Limit Cycle	WANG Yongfu WANG Dianhui CHAI Tianyou (44)
Optimal Design Method of Power-train Mounting System for Generalized Force Transmissibility Reduction	WANG Yanan LÜ Zhenhua (52)
Topology Optimization for Structural Design of Fuselage Flutter Model	YANG Rui LIU Yang QIAN Wei et al (59)
Intelligent Fault Diagnosis Method Based on Vector-bispectrum	LI Lingjun HAN Jie LI Pengyong et al (64)
Design and Vibration Characteristics Analysis of Magnetorheological Elastomer Isolators	WEI Kexiang MENG Guang XIA Ping et al (69)
Effect of Surface Nanocrystallization Pretreatment on the Tribological Properties of Sulfide Layers of 1Cr18Ni9Ti Stainless Steel	MA Guozheng XU Binshi WANG Haidou et al (75)
Film Forming Characteristics of Common Ionic Liquid Lubricants	XIE Guoxin LUO Jianbin GUO Dan et al (82)
Thermo-mechanical Research on Frictional Sliding between Elasto-plastic Rough Solid and Rigid Flat	HUANG Jianmeng GAO Chenghui (87)
Effects of Surface Roughness on Static Characteristics of Air Bearing Films in Hard Disk Drives with Ultra-low Flying Heights	SHI Baojun JI Jiadong YANG Tingyi (93)
Review of Life Prediction for Mechanical Major Equipments	ZHANG Xiaoli CHEN Xuefeng LI Bing et al (100)
Method of Key Thermal Stiffness Identification on a Machine Tool Based on the Thermal Errors Neural Network Prediction Model	YANG Hong FANG Hui LIU Lixin et al (117)

(下转封三)

(上接第 II 页)

Dynamic and Static Multi-objective Optimization of a Vertical Machining Center Based on Response Surface Method	JIANG Heng GUAN Yisheng QIU Zhicheng et al (125)
Pitching Angle-based Theoretical Model for the Track Simulation of Water Jet out from Water Fire Monitors	MIN Yonglin CHEN Xiaoyang CHEN Chi et al (134)
Integrated Scheduling Algorithm Based on Event-driven by Machines' Idle	XIE Zhiqiang XIN Yu YANG Jing (139)
Algorithm Investigation for Numerical Control End Milling of Centrifugal Impeller Channels	FAN Hongzhou XI Guang (148)
Method of Profile Optimization of a Form Grinding Wheel for grinding with Additional Radial Motion of Topologically Modified Gear	LI Guolong LI Xianguang LIU Fei et al (155)
Spectra Analysis of Face Milling Cutter Aeroacoustic Noise	LIU Zhanqiang JI Chunhui LIU Luning et al (163)
Grinding Force Modeling for High-speed Deep Grinding of Engineering Ceramics	XIE Guizhi SHANG Zhentao SHENG Xiaomin et al (169)
Research on Force-position-posture Decoupling Control for NC Polishing of Aspheric Parts	SHI Yongjie ZHENG Di ZHAN Jianming et al (177)
Ultra-precision Motion Control and Synchronization Control for Stage of Lithography	TENG Wei LIU Yibing MU Haihua (185)
Milling Tool Rapid Selection Based on Statistical Law of Initial Wear	ZHANG Hui CHEN Wuyi (191)