目 次
CONTENTS

机械制造与自动化
MACHINE BUILDING & AUTOMATION
2011 年第 3 期（总第 214 期）
No.3 2011 (Total Issue No.214)

综述与展望 / Summaries of Special Topics

1 异步电动机软起动技术的发展与现状 ■王宏华
Development of Soft Starting Technologies for Asynchronous Motor

机械制造与研究 / Machine Manufacture and Research

6 脱泡器双螺旋叶片结构动力特性分析 ■金鑫 李普
Dynamic Characteristic Analysis for the Double Helical-Ribbon Blades of Desecration Stirrer
10 基于形态学算法分割铁谱图像研究 ■金路 王静秋
Technical Research on Ferrography Division of Morphology
14 基于有限元分析的镜片磨边机底座静动态设计 ■杜晓军
FEM-Based Static & Dynamic Design of Lens-edger
16 介电弹性体摆动驱动器的分析与实现 ■李响 王化明 吴孟
Analysis and Development of Dielectric Elastomer Swinging Actuator
19 高速立式加工中心立柱结构动态设计 ■蒋书满
Dynamic Optimum Design for Column of High Speed Vertical Machining Center
22 基于PMAC的钣料渐进成形机数控系统设计与开发 ■王石莉
Design and Development of CNC System of Sheet Metal Incremental Forming Based on PMAC
25 二维不规则冲裁件排样算法研究 ■淡平 周建华
Two-dimensional Irregular Blanking Layout Algorithm
28 直线振动细筛设计 ■郑润娜 陈仕彬
Design of Linear Vibration Fine Screen
31 基于并行设计的工业产品测试设备设计过程的重构 ■章佳 刘苏
Reengineering of Industry Product Test Equipment Development Process Based on Concurrent Design
34 航空铝7050高速铣削表面粗糙度试验研究 ■杨济森 郭宏伟 李洪涛
Experimental Research on Surface Roughness of 7050 Alloy Under High Speed Milling
36 基于ALE算法的空心薄壁铝型材模具结构优化 ■李群松 谭海林
Hollow Thin-walled Aluminum Profile Die Structure Optimization Based on ALE Algorithm
39 H1000包装机小透喷码系统的研发 ■刘春林
Research on Print System for H1000 Cigarette Packer
42 数控车床车削梯形螺纹加工方法探讨 ■朱志勇 骆号 陈建松
Discussion of Processing Methods for Trapezoidal Thread Based on CNC Lathe
45 细长轴加工中刀具几何参数的选择 ■周宇
Geometrical Parameter Selection of Slender Shaft Processing
47 基于振动幅域参数指标的滚动轴承故障诊断 ■张玉
Fault Diagnosis for Rolling Element Bearing Based on Time Domain Parameter Targets
52 声频测量系统在数控辊环磨削工艺中的应用 ■王立民
Application of AE System in Roll Ring Grinding Control of CNC Machines
54 铣削颤振理论在钛合金结构件加工中的应用 ■路远东 刘长毅
Application of Stability Prediction Theory in Manufacturing T-alloy Structure Part
57 气缸盖气门导管孔加工精度改进 ■刘振锋
Improvement of Machining Accuracy of Diesel Engine Cylinder Head Valve Catheter Hole
60 机床制造业的节能减排 ■陈亚宁
Energy Saving and Emission Reduction in the Machine Tool Industry
62 省煤器磨损及防磨措施的研究 ■张咏琴 孙兰萍 韩会林
Study of Wear and Anti-wear Measures for Economizer
66 锅炉烟气余热利用的改造 ■蔡应春 徐晓昂 徐明亮 杨欣
Reforming Boiler for Smoke Residual-heat Utilization
68 湿式中压细水雾灭火系统设计及应用 ■曹旭
Design and Application of Wet Medium-pressure Water Mist Fire Extinguishing System
73 机械设计课程案例教学的研究与实践 ■金晓怡
Research and Practice on Case Teaching for Course of Mechanical Design
77 TRIZ理论在高校创新能力培养中的探索 ■杨兰玉 陈艳
Exploration of TRIZ Theory Applied to Innovative Ability Cultivating for Applied Undergraduate Universities
80 在《机械设计基础》教学中应用信息技术的探索 ■丁梅芳
Explorations of Information Technology Application in Basic of Mechanical Designing Teaching

信息技术 / Information Technology

82 基于STEP-NC标准的智能数控系统建模分析 ■刘广领 周来水
Modeling Analysis of the Intelligent CNC Based on STEP-NC Standard
85 基于Abaqus的谐波齿轮环形柔轮变形仿真分析 ■彭宝林 王华坤 柳胜
Simulative Analysis about Deformation of Ring-flexspline Harmonic Gear Based on Abaqus

万方数据

89 基于matlab的纯电动汽车建模及动力特性仿真分析 ■杨三英 周永军 马渊
Simulation and Analysis of model and dynamic characteristics for electric vehicle based on matlab
93 基于DEFORM-3D的镍基合金钢的车削加工仿真 ■陈立 张智栋 衡婷 等
FEM Simulation of Nickel-based Alloy of Turning Based on DEFORM-3D
97 基于MATLAB/Simulink 高速滚珠丝杠进给系统机械模型的仿真与分析 ■姜鑫 王均旭
Simulation and Experimental Analysis of High-Speed Ball Screw Feeder Drive System Mechanical Model Based on MATLAB/Simulink
101 基于粒子群优化算法的航天器惯性参数辨识 ■完备 张震亚 乔兵 等
Identification of Spacecraft Inertia Parameters Based on Particle Swarm Optimization Algorithm
105 《齿轮计算2011.04》实用程序研究 ■邓时俊
Brief Introductions on A Utility Programmer《Gear Calculating 2011.04》
108 基于虚拟仪器的燃气用具检测设备嵌入式软件 ■杨明军
Embedded Software Design of Virtual Instrument for Gas Appliance
110 基于模糊神经网络的中频感应加热电源的研究 ■吴延华 姜丽丽 索红亮
Fuzzy Neural Network Based on Medium Frequency Induction Heating Power Supply
113 基于ANSYS的数控车床主轴模态分析 ■唐宗军 印楠
Model Analysis of Spindle of Numeral Turning Machine Based on ANSYS
115 基于ANSYS的油压机有限元分析 ■刘科 郭世永
Finite Element Analysis of Oil Hydraulic Press Based on ANSYS
118 基于Ansys的工字型拼条数值模拟及优化 ■张蜀红
Numerical Simulation and Optimization Based on Ansys
121 虚拟样机技术在数控机床设计中的应用 ■陈海霞 刘霞
Modern Design Method of NC Machine Based on Concept of Virtual Prototype Technology
123 基于CAD/CAM软件的股骨模型三维重建及数控加工 ■陈海峰 刘浩
3d Reconstruction and CNC Processing of Femoral Model Based on CAD/CAM Software
127 基于NTP的装备管理信息系统时钟同步技术研究 ■张蕉蕉 孙家根 杨小强 等
Research on Clock Synchronization Technology of Equipment Management Information System Based on NTP
130 基于AVR单片机的走坐标小车控制设计 ■文方 梅江为
Control Design Taking Coordinates Car Based on AVR Microcontroller

电气技术与自动化 / Electric Technology and Automation

132 履带式救援机器人行走系统设计 ■荣杰 钱瑞明 刘庆龙
Locomotive System Design of Tracked Rescue Robot
135 管道机器人智能电缆绞盘研究 ■郭超 郝静如 刘相权 等
Sduty of Intelligent Cable Winch of Pipeline Robot
138 基于太阳能水下机器人的优化设计 ■续长明 张禹 徐培武
Optimization Design of Horizontal Wing Contour Based on Solar Autonomous Underwater Vehicle
141 新型轮腿配合式排水管道检测机器人控制系统设计 ■高宏 黄民 李天剑 等
Control System Design of New Kind of Water-pipe Robot with Legs and Wheels
145 磁流变恒矩器密封机制研究 ■李钢 孙宇
Study of Sealing Mechanism of Magneto-rheological Torque Converter
148 磁悬浮球形磁阻电动机转子位姿描述与检测研究 ■杨军 曾励 刘静
Description of Rotor's Position of Magnetic Suspension Spherical Reluctance Motor and Detection Research
153 3MW风力发电机机舱底盘的静强度及模态分析 ■刘东博 段振云
Analyzing Static Strength and Mode of 3MW Wind Turbine Nacelle Chassis with Finite Element Method
156 浅谈电极的修整 ■王娜 李志国
Trimming of Electrode
158 谐波的危害与治理 ■刘庆伟 刘向东
Harm of Harmonic Wave and Its Suppression
161 电液伺服比例综合实验台阀控液压马达控制系统研究 ■王野牧 杨智超 何松
Study of Hydraulic Valve-controlled Motor System in Electro-hydraulic Proportional and Servo Integrated Tester
164 民用建筑物与太阳能热水器的有机结合 ■李公民
Civil Buildings and the Organic Combination of Solar Water Heaters
167 太阳能挂坠充电器的设计与研究 ■李世林 王家珂
Design and Research on Solar Charger
169 基于模块设计的快餐盘自动清洗干燥收集设备 ■张业放 方建江 钟帅 等
Equipment of Automatic Cleaning,Drying and Collecting Fast Food Plates Based on Modular Design
172 常用梯形图程序设计方法在PLC实验中的应用 ■张还
Discussion on the LAD Design Method in PLC Experiment
175 基于PID算法的直流电动机调速系统的设计 ■樊学能
DC Motor Speed Control System Based on PID Algorithm
179 模糊PID在PLC中的应用方法研究 ■蒋纯谷
Study of the Application of Fuzzy PID in PLC
182 地源热泵的工作原理及技术经济性分析 ■孙士辛 凌武
Working Principle and Technical and Economic Analysis of Earth Source Heat Pump
187 陶瓷球磨机变频调速改造的探讨 ■李敏
Discussion of Transformation of Frequency for Ceramic Ball Mill
189 S7-200 PLC在除湿机控制系统中的应用 ■罗锋华 刘建春
Application of S7-200 Programmable Logic Controller in Control of Dehumidifier

消息与动态

关于变更刊物邮寄地址的通知 61

万方数据