

# 工程设计学报

Gongcheng Sheji Xuebao

第 17 卷 第 5 期

2010 年 10 月

## 目 次

### 「工程设计理论、方法与技术」

- 基于 SDT 的平面尺寸公差模型研究及应用 ..... 茅 健, 张 恒, 曹衍龙(321)  
机构设计中的空间分离方法 ..... 赵存有, 史冬岩, 吴卫东(325)  
组合式阴极的设计及其齿形优化 ..... 沈建强, 范植坚(329)  
基于 ADAMS 的着陆器软着陆稳定性仿真分析 ..... 龙铝波, 卿启湘, 文桂林, 姜 圣(334)  
基于 20-sim 的减振器试验台液压系统键合图建模与动态仿真分析 ..... 陈 婷, 唐进元(339)  
雪崩光电二极管高精度三维微调架结构设计与分析 ..... 秦少伟, 高云国, 司丽娜, 于 萍, 聂晓倩(345)  
气动人工肌肉特性实验与数学模型研究 ..... 藏克江, 郭艳玲, 马 岩, 牛政科, 郭书立(350)  
开槽填充黏弹性材料对圆锯片振动的影响分析 ..... 姚 涛, 段国林, 蔡 瑾, 张家谔(355)  
利用欠阻尼二阶线性随机共振抑噪的模型设计及实现 ..... 孙万麟, 黄玉划, 山拜·达拉拜(360)  
双层网壳结构动力响应分析的修正反应谱法 ..... 孙建梅, 张其林(365)

### 「机电一体化和智能化系统设计理论、方法与技术」

- 基于超声波电机的移动焊接机器人焊枪精密定位控制系统研制  
..... 吴 晓, 华 亮, 顾菊平, 王胜锋, 张 齐, 倪 玲(372)  
基于单片机的熏蒸温度微分先行控制器 ..... 赵爱玲, 张海峰, 侯 君(377)  
四面体构架式可展天线展开过程控制及测试 ..... 关富玲, 刘 亮(381)  
基于多值关联矩阵扩展的诊断策略设计 ..... 王成刚, 苏学军, 杨智勇(388)

### 「机电产品工程设计」

- 新型古币形超宽带分形印刷天线的设计 ..... 曾宪峰, 张晨新, 曾会勇, 谢 聰(392)  
新型高精度二维微调反射镜结构设计 ..... 聂晓倩, 高云国, 邵 帅, 秦少伟, 司丽娜(396)

推荐订阅 2011 年度《工业工程与管理》杂志 ..... (封三)

期刊基本参数:CN 33-1288/TH \* 1994 \* b \* A4 \* 80 \* zh \* P \* ¥7.00 \* 2000 \* 16 \* 2010-10

# Journal of Engineering Design

Volume 17 Number 5

October 2010

## Contents

### [The Theory, Method and Technology of Engineering Design]

Research and application on model of size tolerance for plane based on SDT

..... MAO Jian, ZHANG Heng, CAO Yan-long(321)

Space-separating method of mechanism design

..... ZHAO Cun-you, SHI Dong-yan, WU Wei-dong(325)

Design of combined cathode and optimization for tooth profile

..... SHEN Jian-qiang, FAN Zhi-jian(329)

Simulation analysis of lander soft landing's stability based on ADAMS

..... LONG Lü-bo, QING Qi-xiang, WEN Gui-lin, JIANG Sheng(334)

Bond graph modeling and dynamic simulation of damper test-bed's hydraulic system based on 20-sim software

..... CHEN Chang, TANG Jin-yuan(339)

Design and analysis of high precision three-dimensional fine-tuning frame for avalanche photodiode

..... QIN Shao-wei, GAO Yun-guo, SI Li-na, YU Ping, NIE Xiao-qian(345)

Study on characteristic experiments and mathematical model of the pneumatic artificial muscle

..... ZANG Ke-jiang, GUO Yan-ling, MA Yan, NIU Zheng-ke, GUO Shu-li(350)

Influence of slots and filling viscoelastic materials on vibration of circular saw

..... YAO Tao, DUAN Guo-lin, CAI Jin, ZHANG Jia-e(355)

Model design and realization about stochastic resonance of the under-damped second-order linear system represses noise

..... SUN Wan-lin, HUANG Yu-hua, SENBAI Dalabaev(360)

The modified response spectrum method for double lay long span space reticulate shells

..... SUN Jian-mei, ZHANG Qi-ling(365)

### [The Theory, Method and Technology of the Mechatronics System Design and Intellectualization System Design]

Research on welding torch precision positioning control system for welding mobile robot using ultrasonic motors

..... WU Xiao, HUA Liang, GU Ju-ping, WANG Shen-feng, ZHANG Qi, NI Ling(372)

Differential preceding PID controller based on single chip microcomputer for fumigation temperature control

..... ZHAO Ai-ling, ZHANG Hai-feng, HOU Jun(377)

Deployment control and test of deployable tetrahedral truss antenna

..... GUAN Fu-ling, LIU Liang(381)

Diagnosis strategy design based on extended multivalued dependency matrix

..... WANG Cheng-gang, SU Xue-jun, YANG Zhi-yong(388)

### [The Engineering Design of Mechatronics Products]

Design of a novel copper-cash-shaped ultrawideband fractal printed antenna

..... ZENG Xian-feng, ZHANG Chen-xin, ZENG Hui-yong, XIE Cong(392)

Structure design of a new type high precision adjusting reflector with two-dimension

..... NIE Xiao-qian, GAO Yun-guo, SHAO Shuai, QIN Shao-wei, SI Li-na(396)