

目 次

状态监测传感技术专刊

硅基与石墨烯基谐振式压力传感器研究进展.....	刘冠军 徐方松 刘瑛等 (1)
基于有限元模拟的薄膜热流计结构设计及优化.....	张梅菊 郭林琪 黄漫国等 (11)
MEMS惯性开关的原理及研究进展.....	任超 刘峰华 付博等 (16)
基于生理信号的警觉度检测研究综述.....	张飞杨 樊尚春 郑德智 (33)
石墨烯柔性压力/应变传感器的研究进展	王燕山 张梅菊 刘德峰 (39)
铂薄膜电阻温度传感器封装研究.....	庞雅文 张从春 雷鹏等 (48)
SiC晶须和SU-8复合增强的MEMS惯性开关研究	郑玮 李亚辉 刘扬等 (57)
液力耦合器监测系统的设计和实现.....	谢云鹏 张帆 李孟秋 (64)
基于导波能量特征PCA的结冰定量检测方法研究.....	周世圆 赵明华 胡晓丹等 (70)
基于LSTM和多种异常定义的卫星异常检测方法.....	范潇杰 陈振安 (78)
含裂纹转轴系统的动态特性与实验研究.....	徐帖 钟剑锋 钟舜聪等 (88)
薄厚度有机防护涂层的太赫兹无损检测与多元回归分析.....	涂婉丽 钟舜聪 罗曼婷等 (96)
多级平行轴齿轮传动系统动力学仿真.....	王鹏 李建荣 (102)
飞机强度试验中结构健康监测采集控制系统.....	陈霞 杨宇 杜振华等 (108)
发动机气路故障模拟试验台碰摩故障实验研究.....	黄漫国 刘艺 刘太丽等 (113)
太赫兹成像技术的应用研究.....	王彪 刘伟 于淼等 (118)
磨粒形态对滑油屑末监测器输出特性的影响.....	黄炎 马静 张梅菊等 (125)
GA-BP算法预测滚动轴承退化趋势.....	杨乐 王景霖 李胜男等 (131)
基于PCA-LSTM的轴承退化趋势预测.....	邵辰彤 王景霖 徐智等 (138)
基于阈值的直升机飞行状态划分.....	李胜男 王景霖 杨乐等 (144)
机载燃油流量电磁转动测量方法研究.....	徐伟 林波 刘兆强等 (150)
科技动态信息报道.....	(157)

CONTENTS

Special Issue of Condition Monitoring Sensing Technology

Research Progress of Resonant Pressure Sensors Based on Silicon and Graphene ······	LIU Guan-jun, XU Fang-song, LIU Ying, et al (1)
Structural Design and Optimization of Thin-Film Heat Flux Sensor Based on Finite Element Method ······	ZHANG Mei-ju, GUO Lin-qi, HUANG Man-guo, et al (11)
Principle and Recent Progress of MEMS Inertial Switch ······	REN Chao, LIU Feng-hua, FU Bo, et al (16)
Survey on Physiological Signal-Based Vigilance Detection ······	ZHANG Fei-yang, FAN Shang-chun, ZHENG De-zhi (33)
Research Program of Graphene Flexible Pressure/Strain Sensors ······	WANG Yan-shan, ZHANG Mei-ju, LIU De-feng (39)
Package of Pt Thin Film Resistance Temperature Detector ······	PANG Ya-wen, ZHANG Cong-chun, LEI Peng, et al (48)
MEMS Inertial Switch with SiC Whisker Reinforced SU-8 Composite Structure ······	ZHENG Wei, LI Ya-hui, LIU Yang, et al (57)
Hydraulic Coupler Monitoring System ······	XIE Yun-peng, ZHANG Fan, LI Meng-qiu (64)
Icing Quantitative Detection Method Based on PCA of Guided Wave Energy Characteristics ······	ZHOU Shi-yuan, ZHAO Ming-hua, HU Xiao-dan, et al (70)
Satellite Anomaly Detection System Based on LSTM and Various Anomaly Definitions ······	FAN Xiao-jie, CHEN Zhen-an (78)
Dynamic Characteristics and Experimental Research of Cracked Shaft System ······	XU Tie, ZHONG Jian-feng, ZHONG Shun-cong, et al (88)
Regression Analysis in Terahertz Quantitative Nondestructive Evaluation of Thinner Organic Protective Coatings ······	TU Wan-li, ZHONG Shun-cong, LUO Man-ting, et al (96)
Dynamic Simulation of Multistage Parallel Shaft Gear Transmission System ······	WANG Peng, LI Jian-rong (102)
Structural Health Monitoring Acquisition Control System for Aircraft Strength Test ······	CHEN Xia, YANG Yu, DU Zhen-hua, et al (108)
Blade-Casing Rubbing Fault Experiments of Gas Path Fault Simulation Test Platform for Engine ······	HUANG Man-guo, LIU Yi, LIU Tai-li, et al (113)
Application Research of Terahertz Imaging Technology ······	WANG Biao, LIU Wei, YU Miao, et al (118)
Influence of Debris Morphology on Output Characteristics of Oil Debris Monitor ······	HUANG Yan, MA Jing, ZHANG Mei-ju, et al (125)
Prediction of Rolling Bearing Degradation Trend by GA-BP Algorithm ······	YANG Le, WANG Jing-lin, LI Sheng-nan, et al (131)
Prediction of Bearing Degradation Trend Based on PCA-LSTM ······	SHAO Chen-tong, WANG Jing-lin, XU Zhi, et al (138)
Flight State Division Based on Threshold ······	LI Sheng-nan, WANG Jing-lin, YANG Le, et al (144)
Electromagnetic Rotation Measurement Method of Airborne Fuel Flow ······	XU Wei, LIN Bo, LIU Zhao-qiang, et al (150)
Science and Technology News Report ······	(157)



公众号ID
cekongjishu

扫描左边二维码关注
测控技术

欢迎访问测控在线
www.mct.com.cn

本期责任编辑：黎 媚