

◎ 中文核心期刊

◎ 中国科技核心期刊

RCCSE中国核心学术期刊(A)

◎ 主办：陕西电子杂志社

陕西省电子技术研究所

Modern Electronics Technique

现代电子技术[®]

<http://www.xddz.com.cn>

◆ 中国电子学会重点支持期刊



ISSN 1004-373X



9 771004 373193

2019

第42卷

Vol.42 No.09

09

目 次

通信与信息工程

- 多通道甚高频超外差式接收机的设计钱梦园, 杨国斌, 张援农, 姜春华 (1)
- 基于多信道协作负载均衡的WSN路由徐晓旭, 图雅 (5)
- 基于3×3核矩阵的极化码性能分析叶铭, 李晖 (11)
- OFDMA系统降低PAPR的DCT-ACE算法梁燕楠, 李艳萍, 韩硕 (14)

信号分析与图像处理

- 基于字典学习的土壤地球化学数据稀疏重构吴琳, 魏友华, 洪姗 (18)
- 改进的HHT变换在光纤振动模式识别中的应用王艳歌, 程丹, 刘继红 (22)
- 基于奇异值分解的自混合干涉信号降噪方法郭晴, 叶会英 (26)
- 图像相似度计算算法分析王朝卿, 沈小林, 李磊 (31)
- 基于优化ORB算法的遥感图像精确配准技术黄涛, 武卫东 (35)
- 基于自适应雾浓度系数的暗通道先验法能见度测量陈钟荣, 张炎, 张瑶 (39)
- 基于相机标定和最大连通区域算法的指针式仪表读数识别徐遵义, 韩绍超 (46)

网络与信息安全

- 网络入侵节点的盲取证技术研究及仿真王莉莉, 张建军 (51)
- 基于随机检测算法的网络拥塞控制系统设计李新炜 (55)
- 面向恶意网址检测的广谱特征选择与评估张慧, 钱丽萍, 汪立东, 袁辰, 张婷 (60)
- 云环境下基于群智能算法的大数据聚类挖掘技术刘云恒 (65)

能源与环境科学

- 太阳能主流乘用车动力总成建模及仿真郝成, 陈赛, 张怡, 宋文超 (68)
- 功率分流式混合动力系统整车高速工况经济性研究吕康辉, 廖萍, 王晨, 程辉军, 周文太 (72)
- 微网逆变器并网/孤岛无缝切换控制研究刘玥好, 赵艳雷, 刘伟, 刘韩琦 (76)

测控与自动化技术

- 移相全桥鲁棒性变增益控制策略的研究宗振祥, 廖冬初, 蔡华锋, 孟文靖 (81)
- 基于VRML的虚拟三维室内设计及人物漫游技术徐超, 李秀霞 (86)

- 一种基于稀疏分段的协同过滤推荐算法 贺怀清, 计瑜, 惠康华, 刘浩翰 (90)
- 基于CCD的循迹机器人小车模糊控制方法研究与实现 刘汉忠, 俞鹏, 谢秦韬 (95)
- 基于需求预测的服务业排班系统开发与设计 盛强, 张堃, 申亮 (98)
- 基于Jerk值限制的三阶匀加速运动轨迹设计 杨旭东, 王淞 (103)
- 基于 α 阶逆解耦的多变量内模控制系统研究 施丹, 许必熙 (107)
- 基于真实感的虚拟现实关键技术研究 魏晓光, 唐潇, 张倩 (111)
- 虚拟现实在风景园林规划设计的运用及层次细节优化 苏宁 (115)
- 面向非均衡数据类的朴素贝叶斯改进算法 谭志, 侯涛文 (118)

智能交通与导航

- 自然场景下的交通标志识别系统 范思宇, 谢刚, 续欣莹, 谢新林 (123)

电子技术及应用

- 基于多协议物联中间件的产线设备融合管控系统的设计与实现 刘焯, 陈端迎, 王刚, 张国政 (127)
- 基于STM32和FPGA的远程宽带幅频特性测试系统 谢桂辉, 郑旭初, 赵天明, 刘子绪, 赵娟 (132)
- 三分量阵列感应实验装置研究 张妙瑜, 王凯, 郭宝龙, 邢德键 (137)
- 虚拟现实技术下的工业产品设计CAD三维造型系统 胡铭, 王荻 (142)
- 多通道电离层斜向探测系统的接收通道设计与实现 周超, 张援农, 杨国斌 (145)
- 第一汽车制造厂历史街区三维虚拟平台研究 孙巍, 徐学东 (149)
- 虚拟现实环境下的工业造型设计复杂问题求解优化 姜晓波, 涂康玮 (155)
- 基于自组织网络的智能电网配电方案设计 冯伟夏, 孟安波, 何双伯 (158)
- 基于贝塞尔曲线的无人车局部避障应用 高嵩, 张金炜, 戎辉, 王文扬, 郭蓬, 何佳 (163)
- 面向视觉残疾者的室内空间无障碍助行系统设计 孙媛媛, 王志亮 (167)
- 一种振动能量采集器的匹配电路研究 李志, 宋科, 练利锋, 裴军芳 (172)
- 进化算法在工业产品造型设计中的运用 李秋雯 (177)
- 增强现实应用中的三维场景模型优化处理技术研究 刘晓, 郭建龙, 郝腾飞, 冯伟夏 (180)
- 基于人工智能的智慧教室平台设计与实现 陈芳 (183)

声 明

本刊已许可国内外相关数据库和中国知网在其系列数据库产品中以数字化方式复制、汇编、发行、信息网络传播本刊全文。该社著作权使用费与本刊稿酬一并支付(相关稿酬不再另行支付)。作者向本刊提交文章发表的行为即视为同意我社上述声明。

Contents

Design of multi-channel VHF superheterodyne receiver	QIAN Mengyuan, YANG Guobin, ZHANG Yuannong, JIANG Chunhua (1)
Multichannel collaborative load balancing-based routing protocol used in wireless sensor networks	XU Xiaoxu, TU Ya (5)
Performance analysis of polar codes based on 3×3 kernel matrix	YE Ming, LI Hui (11)
DCT-ACE algorithm for PAPR reduction in OFDMA system	LIANG Yannan, LI Yanping, HAN Shuo (14)
Pedogeochemistry data sparse reconstruction based on dictionary learning.....	WU Lin, WEI Youhua, HONG Shan (18)
Application of modified Hilbert-Huang transform in fiber-optic vibration pattern recognition	WANG Yange, CHENG Dan, LIU Jihong (22)
Singular value decomposition based denoising method of self-mixing interference signal	GUO Qing, YE Huiying (26)
Analysis on image similarity calculation algorithm	WANG Chaoqing, SHEN Xiaolin, LI Lei (31)
Optimized ORB algorithm based precise registration technology for remote sensing images	HUANG Tao, WU Weidong (35)
Visibility measurement using dark channel prior method based on adaptive fog concentration coefficient	CHEN Zhongrong, ZHANG Yan, ZHANG Yao (39)
Pointer instrument reading recognition based on camera calibration and maximum connected region algorithm	XU Zunyi, HAN Shaoshao (46)
Research and simulation of blind forensics technology for network intrusion node	WANG Lili, ZHANG Jianjun (51)
Design of network congestion control system based on random detection algorithm	LI Xinwei (55)
Broad-spectrum feature selection and evaluation for malicious URLs detection	ZHANG Hui, QIAN Liping, WANG Lidong, YUAN Chen, ZHANG Ting (60)
Cloud environment big data clustering mining technology based on swarm intelligence algorithm	LIU Yunheng (65)
Modeling and simulation of power assembly for solar energy mainstream passenger vehicle	HAO Cheng, CHEN Sai, ZHANG Yi, SONG Wenchao (68)
Research on fuel consumption of vehicle's power split hybrid powertrain at high-speed operation	LÜ Kanghui, LIAO Ping, WANG Chen, CHENG Huijun, ZHOU Wentai (72)
Study on grid-connected/islanding seamless switching control of microgrid inverter	LIU Yueyu, ZHAO Yanlei, LIU Wei, LIU Hanqi (76)
Research on robust variable gain control strategy for phase-shifted full-bridge converter	ZONG Zhenxiang, LIAO Dongchu, CAI Huafeng, MENG Wenjing (81)
Virtual 3D interior design and character roaming technology based on VRML	XU Chao, LI Xiuxia (86)
A collaborative filtering recommendation method based on sparseness segmentation	HE Huaqing, JI Yu, HUI Kanghua, LIU Haohan (90)
Research and realization of CCD camera based fuzzy control method for tracking robot car	LIU Hanzhong, YU Peng, XIE Qintao (95)
Development and design of service industry scheduling system based on demand forecasting	SHENG Qiang, ZHANG Kun, SHEN Liang (98)
Design of third-order uniform acceleration and deceleration motion trajectory based on Jerk value limitation	YANG Xudong, WANG Song (103)
Research on multivariable internal model control system based on α th-order inverse decoupling	SHI Dan, XU Bixi (107)

- Research on virtual reality key technologies based on true senseWEI Xiaoguang, TANG Xiao, ZHANG Qian (111)
- Application of virtual reality technology in landscape architecture planning design and levels of detail optimization
.....SU Yu (115)
- An improved naive Bayesian algorithm for unbalanced data classesTAN Zhi, HOU Taowen (118)
- Traffic signs recognition system used in natural scene.....FAN Siyu, XIE Gang, XU Xinying, XIE Xinlin (123)
- Design and implementation of multiprotocol IoT middleware based management and control system for production
line equipments integrationLIU Ye, CHEN Duanying, WANG Gang, ZHANG Guozheng (127)
- A long-range wide-band amplitude-frequency characteristics test system based on STM32 and FPGA
.....XIE Guihui, ZHENG Xuchu, ZHAO Tianming, LIU Zixu, ZHAO Juan (132)
- Study on tri-axial array induction experimental device
.....ZHANG Miaoyu, WANG Kai, GUO Baolong, XING Dejian (137)
- Virtual reality technology based CAD three-dimensional modeling system of mechanical industry product
.....HU Ming, WANG Di (142)
- Design and implementation of receiving channel of multi-channel ionospheric oblique detection system
.....ZHOU Chao, ZHANG Yuannong, YANG Guobin (145)
- Research on 3D virtual platform of FAW Historic Conservation DistrictSUN Wei, XU Xuedong (149)
- Optimization of complex problems solving of industrial modeling design in virtual reality environment
.....JIANG Xiaobo, TU Kangwei (155)
- Design of smart grid power distribution scheme based on self-organizing network
.....FENG Weixia, MENG Anbo, HE Shuangbo (158)
- Application of unmanned vehicle local obstacle avoidance method based on Bezier curve
.....GAO Song, ZHANG Jinwei, RONG Hui, WANG Wenyang, GUO Peng, HE Jia (163)
- Design of barrier-free walking-aided system for visually-impaired person in interior space
.....SUN Yuanyuan, WANG Zhiliang (167)
- Study on matching circuit of vibration energy harvesterLI Zhi, SONG Ke, LIAN Lifeng, PEI Junfang (172)
- Application of improved differential evolution algorithm in industrial product modeling design system
.....LI Qiuwen (177)
- Research on optimal processing technology of 3D scene model in augmented reality application
.....LIU Xiao, GUO Jianlong, HAO Tengfei, FENG Weixia (180)
- Design and implementation of intelligent classroom platform based on artificial intelligenceCHEN Fang (183)

本刊主要荣誉

中文核心期刊
中国科技核心期刊
RCCSE 中国核心学术期刊(A)
中国学术期刊影响因子年报统计源期刊
中国新闻出版总署资料库收藏期刊
中文科技期刊数据库全文收录期刊
中国学术期刊(光盘版)期刊
陕西省精品科技期刊
中国期刊全文数据库收录期刊
中国学术期刊综合评价数据库来源期刊
中国科技论文统计与分析用刊
美国《乌利希期刊指南》收录期刊

声明

1. 《现代电子技术》编辑部系陕西电子杂志社下辖《现代电子技术》杂志的唯一编辑、征稿部门,编辑部在社外无任何形式的组稿代理、外聘编辑等;

2. 作者投稿唯一通道为《现代电子技术》官方网站采编系统,且要求所有文章的通信作者为文章主要署名作者,不接受非署名作者投稿。