

ISSN 1004-373X

CN 61-1224/TN

◎ 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>



2021
第44卷
Vol.44 No.11

11

目 次

通信与信息工程

- 一种应用于海上浮标的相控阵卫星通信前端 谌德军, 梁显锋, 饶 浩, 安军社 (1)
- 一种双模式通信的低功耗有源RFID模组设计 王鹏程, 朱长青, 谷志峰, 刘 畅 (6)
- 基于改进模糊C均值的能量均衡LEACH算法 王宗山, 李 波, 保利勇, 李艾珊, 丁洪伟 (13)
- 400 MHz超窄带微波滤波器设计 刘子锐, 陈钟荣 (19)
- 基于天线对比测试法的MIMO-OFDM系统设计与分析 毛文杰, 朱其刚, 杨金梁, 任丙忠, 张帅帅 (23)
- 基于多协议的跨VLAN的异构多子网物理拓扑研究 马晓波, 苏依拉, 仁庆道尔吉 (27)

网络与信息安全

- 层次化通信网络备份数据库缓存子系统设计 张 健 (33)
- 基于混沌映射进行数据加密的安全电子邮件系统研究 李小明 (37)
- 基于数据挖掘技术的物联网流量建模与估计研究 张德宇 (42)
- 基于云边融合的车联网架构大数据安全集成算法 龙草芳, 江荣旺 (47)

信号分析与图像处理

- 一种改进Otsu与人工蜂群优化的图像分割算法 黄翠玲, 孔韦韦, 呼亚萍, 李 萌 (51)
- 一种改进的雾天图像增强算法 吕 东, 王 萍, 王宇航, 王智文, 张灿龙, 潘绍明 (56)
- 基于机器视觉技术的复杂运动姿态自动跟踪研究 张 炜, 陈 晨 (62)
- 基于改进SSD算法的安全驾驶行为识别方法研究 施冬梅 (67)
- 基于视觉识别的成熟苹果识别及采摘定位系统 任亚婧, 张宁宁, 徐媛媛, 张建鹏, 刘 栋 (73)
- 基于红外热成像的运动损伤恢复检测研究 范蒙蒙 (78)

能源与环境科学

- 基于改进果蝇算法的太阳辐射照度预测系统设计 孙翠清, 徐向阳 (83)
- 基于ISO26262的新能源汽车转矩监控策略研究 吴静波, 卢耀真, 李明明, 郭志军, 经博文 (87)

测控与自动化技术

- 基于点云聚类的垛型角点检测方法 张长勇, 冯 冰, 陈治华 (93)

- 基于数据挖掘技术的影视智能推荐算法王小青, 苏 锋, 蔡传根 (98)
- 带压缩因子的粒子群算法求解复杂遮阴 MPPT 问题张 震, 王延平 (102)
- 灰色关联度法和FCM算法的就业质量评价模型马 睿 (106)
- 基于神经滑模观测器的永磁同步电机无传感器矢量控制苗敬利, 秦王毓 (110)
- 基于群集智能优化算法的城市共享单车优化分布研究左倪娜 (115)
- 基于数据挖掘的高校学生心理危机状态识别研究徐长文 (120)
- 基于大数据分析技术的大学生创新能力测评研究吴 杰, 张 昊 (125)
- 数据挖掘的高校实验室管理水平评价模型陆爱武 (130)

智能交通与导航

- 车联网信息对驾驶员视觉注意的影响研究张 捷, 张晋崇 (135)
- 基于改进型 CenterNet 的车辆检测应用梁礼明, 熊 文, 钱艳群, 蓝智敏 (141)

电子技术及应用

- 基于VB的电气工程图学在线教学测练考评系统设计羊荣金, 沈孟锋, 陈敏捷, 张学良 (146)
- 基于K-均值聚类的典型场景配电网动态无功优化武晓朦, 刘欣雨, 苏成果, 吴 同 (151)
- 三维水下环境中的多AUV围捕路径规划算法蒋骁迪, 朱大奇, 陈铭治, 甘文洋 (155)
- 最值函数算法下MMC电容电压优化平衡控制策略马坤田, 李 华, 郝 悦, 徐 宇 (160)
- 基于数据挖掘的计算机实验教学效果评价研究孟祥光, 郭东伟 (164)
- 基于软件定义网络的智能辅助推车避障系统设计黄劲松, 黄馨莹 (168)
- 基于CNN-HMM和RNN的维吾尔语语音识别
.....穆凯代姆罕·伊敏江, 艾斯卡尔·艾木都拉, 米吉提·阿不里米提 (172)
- 云计算技术的高校心理健康在线服务平台设计郭永爱 (177)
- 基于Hadoop架构的高校科研数据存储系统设计谢 翌 (182)

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

Phased array satellite communication front-end for maritime buoys	CHEN Dejun, LIANG Xianfeng, RAO Hao, AN Junshe (1)
Design of low-power consumption active RFID module for dual-mode communication	WANG Pengcheng, ZHU Changqing, GU Zhifeng, LIU Chang (6)
Energy-equalized LEACH algorithm based on improved fuzzy C-means	WANG Zongshan, LI Bo, BAO Liyong, LI Aishan, DING Hongwei (13)
Design of 400 MHz ultra-narrowband microwave filter	LIU Zirui, CHEN Zhongrong (19)
Design and analysis of MIMO-OFDM system based on antenna comparison testing method	MAO Wenjie, ZHU Qigang, YANG Jinliang, REN Bingzhong, ZHANG Shuaishuai (23)
Research of multi-protocol based physical topology in heterogeneous multi-subnet over VLAN	MA Xiaobo, SU Yila, REN Qingdaoerji (27)
Design of buffer memory subsystem for hierarchical communication network backup database	ZHANG Jian (33)
Research on secure E-mail system for data encryption based on chaotic mapping	LI Xiaoming (37)
Research on IoT traffic modeling and estimation based on data mining technology	ZHANG Deyu (42)
IoV architecture's big data security integration algorithm based on cloud-edge fusion	LONG Caofang, JIANG Rongwang (47)
Image segmentation algorithm based on improved Otsu and artificial bee colony optimization	HUANG Cuiling, KONG Weiwei, HU Yaping, LI Meng (51)
An improved image enhancement algorithm in foggy days	LÜ Dong, WANG Ping, WANG Yuhang, WANG Zhiwen, ZHANG Canlong, PAN Shaoming (56)
Complex motion attitude automatic tracking based on machine vision technology	ZHANG Wei, CHEN Chen (62)
Research on safe driving behavior recognition method based on improved SSD algorithm	SHI Dongmei (67)
Mature apple recognition and picking positioning system based on visual recognition	REN Yajing, ZHANG Ningning, XU Yuanyuan, ZHANG Jianpeng, LIU Dong (73)
Research on sports injury recovery detection based on infrared thermal imaging	FAN Mengmeng (78)
Design of solar radiation illumination prediction system based on improved fruit fly algorithm	SUN Cuiqing, XU Xiangyang (83)
Research on torque monitoring strategy of electric vehicles based on ISO26262	WU Jingbo, LU Yaozhen, LI Mingming, GUO Zhijun, JING Bowen (87)
Stacking type corner point detection method based on point cloud clustering	ZHANG Changyong, FENG Bing, CHEN Zhihua (93)
Movie intelligent recommendation algorithm based on data mining technology	WANG Xiaoqing, SU Feng, CAI Chuangen (98)
Particle swarm optimization algorithm with compression factor for complex shading MPPT problem	ZHANG Zhen, WANG Yanping (102)

- Employment quality evaluation model based on grey correlation degree method and FCM algorithmMA Rui (106)
- PMSM sensorless vector control based on neural sliding mode observerMIAO Jingli, QIN Wangyu (110)
- Study on urban sharing bike optimization distribution based on swarm intelligent optimization algorithm
.....ZUO Nina (115)
- Research on college students' psychological crisis state identification based on data miningXU Changwen (120)
- Research on university students' innovation ability evaluation based on big data analysis ...WU Jie, ZHANG Hao (125)
- University laboratory management level evaluation model based on data miningLU Aiwu (130)
- Research on influence of IoV information on drivers' visual attentionZHANG Jie, ZHANG Jinchong (135)
- Application of vehicle detection based on improved CenterNet
.....LIANG Liming, XIONG Wen, QIAN Yanqun, LAN Zhimin (141)
- Design of VB-based online teaching test and evaluation system for electrical engineering graphics
.....YANG Rongjin, SHEN Mengfeng, CHEN Minjie, ZHANG Xueliang (146)
- Typical scenario power distribution network's dynamic reactive power optimization based on K-means clustering
.....WU Xiaomeng, LIU Xinyu, SU Chengguo, WU Tong (151)
- Multi-AUV hunting path planning in 3D underwater environment
.....JIANG Xiaodi, ZHU Daqi, CHEN Mingzhi, GAN Wenyang (155)
- Optimized balance control for capacitor voltage of MMC under max-min function algorithm
.....MA Kuntian, LI Hua, HAO Yue, XU Yu (160)
- Research on computer experimental teaching effect evaluation based on data mining
.....MENG Xiangguang, GUO Dongwei (164)
- Design of intelligent aided cart avoidance system based on software-defined network
.....HUANG Jinsong, HUANG Xinying (168)
- Uyghur speech recognition based on CNN-HMM and RNN
.....IMINJAN Mukaddam, HAMDULLA Askar, ABLIMIT Mijit (172)
- Design of college mental health online service platform based on cloud computing technologyGUO Yong'ai (177)
- Design of university scientific research data storage system based on Hadoop architectureXIE Yi (182)

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

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。