

ISSN 1672-6944
CN 32-1675/TN



全民阅读 原创

中国核心期刊（遴选）期刊
江苏省一级期刊
中国学术期刊网络出版总库（中国知网）全文收录
万方数据-数字化期刊群全文收录
中文科技期刊数据库（维普网）全文收录

无线互联科技

WIRELESS INTERNET TECHNOLOGY

2017 10

ISSN 1672-6944



主管：江苏省科学技术厅 主办：江苏省科学技术情报研究所

万方数据

2004年创刊
2017年第10期
(总第110期)
半月刊
2017年5月25日

主 管: 江苏省科学技术厅

主 办: 江苏省科学技术情报研究所

编辑出版: 《无线互联科技》杂志社

社 长: 孙 斌

副社长: 金福兰

主 编: 严文强

副主编: 汤 溟

执行主编: 刘 鉴

编辑部主任: 姚 鑫

主任编辑: 顾培培

编 委: (按姓氏笔画为序)

王志功 王文鼎

陈如山 钱学荣

徐平平 黄风义

目 次

通信观察

- | | |
|----------------------------|-----------------|
| 1 广东联通ERP系统中的项目沟通管理 | 张 垒 |
| 3 光伏电源PQ控制策略及小信号稳定性研究 | 罗继东 刘润泽 邹梦丽 王建平 |
| 6 一种使用滤波器实现射频功放输出口ESD防护的方法 | 马永华 |
| 9 海岸电台DSC通信系统功能分析 | 陈泽忠 李钰庚 |

无线天地

- | | |
|------------------------------|---------|
| 11 基于RSSI和遗传算法的无线定位方法及其实现 | 孙建领 张宏钦 |
| 16 基于无线网技术的塔机集群动态防撞系统 | 刘海龙 张敏三 |
| 18 基于ZigBee的火箭发动机试验台无线监控系统设计 | 刘岳鹏 蔡 睿 |
| 21 关于大数据时代的无线电监测分析 | 刘亚秋 |

网络地带

- | | |
|----------------------------|---------|
| 23 互联网+食品安全策略研究 | 谢从晋 |
| 25 基于深度学习的自然语言处理 | 竺宝宝 张 娜 |
| 27 我国物联网技术发展及应用途径研究 | 李 磊 |
| 29 智能配电网技术在配电网规划中的实践探析 | 陈英华 |
| 31 高职院校大学生使用腾讯QQ的现状及安全对策研究 | 王 宾 |
| 34 企业云平台防火墙部署研究 | 董 牧 |

软件透视

- | | |
|-------------------------------------|---------------------|
| 36 FluidSIM仿真软件在“机电设备安装与调试”课程教学中的应用 | 许 璐 |
| 38 预焙阳极块预热系统的研究 | 吴德广 |
| 40 智能健康终端系统设计 | 王宇航 黄岑宇 尹悦悦 |
| 42 变电站设备管理系统设计与开发 | 牟元恩 张 营 |
| 44 基于单片机的甲烷浓度检测系统设计 | 赵亚丽 |
| 46 基于用户体验的智能公交系统优化设计 | 王 旭 杨哲恒 杨紫荆 杨瑞琪 鲁红雷 |
| 48 国产操作系统自动化测试平台技术研究 | 王 晖 |

设计分析

- | | |
|----------------------------|-----------------|
| 52 某旋转式布袋除尘器压差高现象的分析及处理 | 吴志红 |
| 54 LED智能照明控制系统设计与实现 | 李 岩 于会山 张珍军 方 雨 |
| 56 基于三维多孔纳米材料构建的电化学传感器应用研究 | 张 琦 |
| 58 新型高分辨率感应线圈系的设计与分析 | 熊长华 熊长伟 张俊国 李少华 |
| 60 软件开发中的需求分析及变更管理研究 | 李俊炜 |
| 63 110 kV高压电缆施工技术难点和解决措施研究 | 余炜旭 |
| 65 高速传送生产线产品传送速度在线校准研究 | 蔡政国 |
| 67 手势切换音响系统的设计与实现 | 徐操喜 杨小英 沈超航 周健梅 |
| 69 基于STM32的PIC单片机程序烧录器设计 | 郑洁霁 秦国栋 |

数字教育

71	高频实验教学改革与探索	汪正进 武风波 朱代先
73	自主学习在中职C语言教学中的创新与实践	张月芬
75	“互联网+”时代高校计算机专业课程教学体系的优化分析	姜学东 王昊欣
77	基于灰色理论高等院校人力资源激励因素研究	元 建
79	混合式教学在“仪表安装与调试”教学中的应用	孟 冉
81	中职学校数字化教学资源建设和应用研究	唐雪涛
83	高职院校项目化教学与信息技术整合研究	张 波 袁红萍
85	以就业为导向的计算机专业建设研究	谢小静 张锡建
87	“电工电子技术”课程改革策略探讨	向 凡
89	基于智慧教育背景下高职教师信息化教学能力的提升策略	张东霞 付 宁

实验研究

91	城市智能化增长评价模型探讨	刘耀明 梁照宾 尚 崇
93	基于h指数的电子商务商铺影响力评测探索 ——以天猫商城为例	李佳益
98	基于层次分析法的小区开放对道路通行的影响	冯小博 朱梦超 田 丽
100	总监理工程师胜任力与绩效关系研究	曹 起
102	一种改进的线性递减权值的粒子群优化算法	崔新于 田梓君
104	基于元胞自动机仿真的收费站ETC车道数量研究	柯正友
106	气象灾害预警发布平台在从化农村防雷中的应用	揣国权

科学管理

108	基于校园卡和摄像头的网络中控多媒体教室管理	蔡国荣
111	关于研发过程质量控制的讨论	王 蓬
113	输电线路建设工程全寿命周期管理策略研究	陈安宁
115	虹桥机场陆侧交通管控平台研究	石征华
118	电网基建工程项目问题及一体化建设管理策略研究	张开云
120	高校基于VMware的数据中心虚拟服务器常见故障分析	刘寒冰 罗 丹
123	区域性战略群竞争关系实证研究——来自北斗产业的实证研究	李健斌
125	10 kV配电运维风险及检修措施分析	郑毅辉
127	电网配电线路跳闸及对策的相关研究	黄添印
129	更换辅助功率模块过程中降低成本的方法研究	唐 超
131	高校教务管理系统信息化建设的现状分析	周 莹

技术应用

133	传感器技术在可穿戴设备中的应用	刘 欢 邱力军 范启富
135	基于物联网的泥沙淤积监测技术研究	陈 娟
137	人脸检测技术综述	游清清 湛海云 骆 俊 王小怡
141	基于真实感约束的VR虚拟人物图形生成方法改进研究	覃海宁
147	数控智能在机械制造中的应用分析	韦建宇

中国标准连 ISSN 1672-6944
续出版物号: CN 32-1675/TN

邮发代号: 28-473

发行范围: 公开

发 行: 江苏省报刊发行局
南京市建邺区善修文化传播中心

账 号: 10354000000560379

开 户 行: 华夏银行南京城西支行

印 刷: 南京百花彩色印刷广告
制作有限责任公司

定 价: 20.00元

《无线互联科技》杂志社

社 址: 江苏省南京市龙蟠路171号

电 话: (025)-85410367

(025)-85410361

邮 编: 210042

网 址: www.wxhlkj.net

邮 箱: hlkj@sti.js.cn

wxhlkj@163.com

咨 询 QQ: 171020757

户 名: 江苏省科学技术厅科技成果
档案馆

账 号: 4301012509002113436

开 户 行: 工商银行南京市板仓支行

WIRELESS INTERNET TECHNOLOGY

No.10 2017 (Total No.110)

CONTENTS

Project communication management in ERP system of Guangdong Unicom	Zhang Lei (1)
Research on PQ control strategy and small signal stability of photovoltaic power supply	Luo Jidong, Liu Runze, Zou Mengli, Wang Jianping (3)
Method for realizing ESD protection of radio frequency power amplifier output by using filter	Ma Yonghua (6)
Function analysis of coast radio station ' s DSC communication system	Chen Zezhong, Li Yugeng(9)
Implementation and method of wireless positioning based on RSSI and genetic algorithm	Sun Jianling, Zhang Hongqin (11)
Research on tower crane cluster dynamics anti-collision system based on wireless network technology...	Liu Hailong, Zhang Minsan(16)
Design of wireless monitoring system for rocket engine test bed based on ZigBee	Liu Yuepeng, Cai Rui(18)
Radio monitoring analysis in the era of big data	Liu Yaqiu (21)
Study on strategy of Internet plus food safety	Xie Congjin (23)
Natural language processing based on deep learning	Zhu Baobao, Zhang Na (25)
Research on the development and application of Internet of Things technology in China	Li Lei (27)
Practice of intelligent distribution network technology in distribution network planning	Chen Yinghua (29)
Research on current situation and security countermeasures of tencent QQ in higher vocational college students	Wang Bin (31)
Research on development of firewall in cloud platform of enterprise	Tong Mu(34)
Applications of FluidSIM simulation software for the “Mechatronics Equipment Installation and Debugging” course teaching	Xu Lu (36)
Study on preheating system of prebaked anode block	Wu Deguang(38)
Design of intelligent health terminal system	Wang Yuhang, Huang Cenyu, Yin Yueyue (40)
Design and development of substation equipment management system	Mu Yuanen, Zhang Ying(42)
Design of methane concentration detection system based on single chip microcomputer	Zhao Yali (44)
Optimal design of intelligent public transportation system based on user experience	Wang Xu, Yang Zheheng, Yang Zijing, Yang Ruiqi, Lu Honglei (46)
Research on technology of domestic operating system automatic test platform	Wang Hui(48)
Analysis and treatment of some rotary bag dust collector ' s high differential pressure phenomenon	Wu Zhihong(52)
Design and implementation of LED intelligent lighting control system	Li Yan, Yu Huishan, Zhang Zhenjun, Fang Yu(54)
Study on application of electrochemical sensor based on 3D porous nano materials	Zhang Qi (56)
Design and analysis of a new type of high resolution induction coil system	Xiong Changhua, Xiong Changwei, Zhang Junguo, Li Shaohua (58)
Research on software development demands analysis and change management	Li Junwei (60)
Research on 110 kV high-voltage cable construction technical difficulty and measures	Yu Weixu (63)
Research on online calibration of product transfer speed in high speed transmission line	Cai Zhengguo (65)
Design and implementation of the gesture switching sound system	Xu Caoxi, Yang Xiaoying, Shen Chaohang, Zhou Jianmei (67)

Design of PIC single-chip microcomputer programmer based on STM32	Zheng Jieji, Qin Guodong (69)
Reform and exploration of high frequency experiment teaching	Wang Zhengjin, Wu Fengbo, Zhu Daixian (71)
Innovation and practice of autonomous learning of C language teaching in secondary vocational schools	Zhang Yuefen (73)
Analysis on the optimization of the teaching system of computer professional courses in colleges and universities in the “Internet +” age	Jiang Xuedong, Wang Haoxin (75)
Research on human resources incentive factors in colleges and universities based on Grey theory	Yuan Jian (77)
Application of mixed teaching in “Instrument Installation and Debugging Teaching”	Meng Ran(79)
Research on the construction and application of digital teaching resources in secondary vocational schools	Tang Xuetao(81)
Research on integration of project teaching and information technology in higher vocational colleges	Zhang Bo, Yuan Hongping(83)
Analysis on the construction of computer specialty with employment as guidance	Xie Xiaojing, Zhang Xijian(85)
Discussion on “Electrical and Electronic Technology” course reform strategy	Xiang Fan (87)
Strategies for improving the informatization teaching ability of higher vocational college teachers in the background of wisdom education	Zhang Dongxia, Fu Ning (89)
Discussion on evaluation model of urban intelligent growth	Liu Yaoming, Liang Zhaobin, Shang Chong (91)
Research on the evaluation of the influence of e-commerce store based on h index: a case study of Tmall	Li Jiayi (93)
Influence of community opening on road traffic based on analytic hierarchy process	Feng Xiaobo, Zhu Mengchao, Tian Li (98)
Research on the relationship between competency and performance of chief supervision engineer	Cao Qi (100)
An improved linear decreasing weight for particle swarm optimization algorithm	Cui Xinyu, Tian Zijun (102)
Study on the number of ETC lanes in toll station based on cellular automaton simulation	Ke Zhengyou (104)
Application of meteorological disaster early warning release platform in rural lightning protection in Conghua	Chuai Guoquan (106)
Management of network control multimedia classrooms based on campus card and camera	Cai Guorong (108)
Discussion on quality control of research and development process	Wang Peng (111)
Study on the life cycle management of transmission line construction project	Chen An’ ning(113)
Study on the land traffic management and control platform of Hongqiao Airport	Shi Zhenghua (115)
Study on the problems of grid construction project and management strategy of the integrated construction	Zhang Kaiyun(118)
Analysis of ordinary malfunction in data center virtual server based on VMware in university	Liu Hanbing, Luo Dan(120)
Empirical study on regional strategic group competitive relationship:from the Beidou industry	Li Jianbin (123)
Analysis of 10 kV distribution operation risk and maintenance measures	Zheng Yihui (125)
Related research on power distribution line tripping and countermeasures	Huang Tianyin (127)
Research on the method of reducing the cost in the process of replacing the auxiliary power module	Tang Chao (129)
Analysis of the current situation of information construction in college and universities educational administration system	Zhou Ying (131)
Application of sensor technology in wearable devices	Liu Huan, Qiu Lijun, Fan Qifu (133)
Research on sediment deposition monitoring technology based on Internet of things	Chen Juan(135)
Summary of human face detection technology	You Qingqing, Chen Haiyun, Luo Jun, Wang Xiaoyi (137)
Study on improvement of VR virtual character graphics generation method based on realistic constraint	Qin Haining(141)
Application analysis of numerical control intelligence in mechanical manufacturing	Wei Jianyu(147)