

电子科技大学
学报

第五十季
第一期



Ei Compendex 收录期刊
中文核心期刊

ISSN 1001-0548
CN 51-1207/T
CODEN DKDAEM

电子科技大学 学报

JOURNAL OF UNIVERSITY
OF ELECTRONIC SCIENCE AND
TECHNOLOGY OF CHINA

第50卷 第1期 Vol. 50 No.1



ISSN 1001-0548



01>
9 771001 054217

2021
中国 成都 CHENGDU CHINA

主 编：周 涛
副 主 编：蒋 晓
责任 编辑：叶 芳

电子科技大学学报

第 50 卷 第 1 期 2021 年 1 月

目 次

· 通信与信息工程 ·

- NOMA 系统中最大化能量效率的功率分配 田心记, 黄玉霞, 李晓静 (1)
纹理感知多模式编码的帧存有损压缩算法研究 罗瑜 (8)
含窄带噪声和白噪声的复杂染噪局部放电信号提取及应用 孙抗, 李万建, 张静 (14)

· 物理电子学 ·

- 重离子治癌装置中 γ - γ 符合时间测量系统设计 颜俊伟,
柯凌云, 陈金达, 张秀玲, 杜成名, 杨海波, 王长鑫, 吴俊达, 苏弘, 千奕, 余乾顺, 赵红赟, 蒲天磊, 孔洁 (24)
用于深空粒子探测系统的自动标定装置研制 孙志朋,
千奕, 孔洁, 杨海波, 余乾顺, 赵红赟, 苏弘, 余玉洪, 唐述文, 张永杰, 方芳, 蒲天磊, 颜俊伟, 柯凌云 (30)

· 计算机工程与应用 ·

- 面向可穿戴生理信号的压缩感知实时重构 程云飞, 叶娅兰, 侯孟书, 何文文, 李云霞 (36)
面向低质量数据的 3D 人脸识别 龚勋, 周炀 (43)
高适应性激光雷达 SLAM 黄瑞, 张轶 (52)
一种增强人脸识别模型训练稳定性的损失函数 周书田, 颜信, 谢镇汕 (59)
一种低分辨率视频实例分割算法的研究 达婷, 杨靓 (63)
支持直接撤销的固长密文策略属性基加密方案 朱国斌, 谢鑫, 张星, 赵洋, 熊虎 (76)
基于 FP 序列树的法文词语提取方法研究 于娟, 吴晓鹏, 廖晓, 刘建国 (84)
一类具比例时滞脉冲递归神经网络的全局多项式稳定性 周立群, 宋协慧 (91)
区间值信息系统的熵度量 冯琴荣, 温玮华 (101)

· 复杂性科学 ·

- 多层网络的结构与功能研究进展 吴宗柠, 狄增如, 樊瑛 (106)
基于邻层传播的相对重要节点挖掘方法 赵娜, 李杰, 王剑, 彭西阳, 景铭, 聂永杰, 郁湧 (121)
基于拓扑有效连通路径的有向网络链路预测方法 李治成, 吉立新, 刘树新, 李星, 李劲松 (127)
基于流网络的“一带一路”贸易效应分析 黄果, 樊瑛 (138)

· 机械电子工程 ·

- CSP 焊点焊后残余应力分析与预测 黄春跃, 赵胜军, 梁颖, 匡兵, 唐香琼 (148)
基于环形抽样代理模型的结构可靠性分析方法 周成宁, 肖宁聪, 李兴国, 张军 (155)

期刊基本参数: CN51-1207/T*1959*b*16*160*zh*P*25.00*1500*20*2021-01

JOURNAL OF UNIVERSITY OF ELECTRONIC SCIENCE AND TECHNOLOGY OF CHINA

Vol.50 No.1 Jan. 2021

CONTENTS

• Communication and Information Engineering •

Power Allocation with Maximizing Energy Efficiency for NOMA System	TIAN Xin-ji, HUANG Yu-xia, and LI Xiao-jing	(1)
A Research on Frame Memory Lossy Compression Algorithm Using Texture Perception Multimode Coding	LUO Yu	(8)
Denoising of Complex Noisy Partial Discharge Pulses with Narrowband Interference and White Noise	SUN Kang, LI Wan-jian, and ZHANG Jing	(14)

• Physical Electronics •

Design of γ - γ Coincident Time Measurement System in Heavy-Ion Cancer Therapy Device	YAN Jun-wei, KE Ling-yun, CHEN Jin-da, ZHANG Xiu-ling, DU Cheng-ming, YANG Hai-bo, WANG Chang-xin, WU Jun-da, SU Hong, QIAN Yi, SHE Qian-shun, ZHAO Hong-yun, PU Tian-lei, and KONG Jie	(24)
Development of an Automatic Calibration Circuit for a Particle Detection System Used in Deep Space	SUN Zhi-peng, QIAN Yi, KONG Jie, YANG Hai-bo, SHE Qian-shun, ZHAO Hong-yun, SU Hong, YU Yu-hong, TANG Shu-wen, ZHANG Yong-jie, FANG Fang, PU Tian-lei, YAN Jun-wei, and KE Ling-yun	(30)

• Computer Engineering and Applications •

Real-Time Compressed Sensing Reconstruction for Wearable Physiological Signals	CHENG Yun-fei, YE Ya-lan, HOU Meng-shu, HE Wen-wen, and LI Yun-xia	(36)
3D Face Recognition for Low Quality Data	GONG Xun and ZHOU Yang	(43)
High Adaptive Lidar Simultaneous Localization and Mapping	HUANG Rui and ZHANG Yi	(52)
New Loss Function to Enhance the Training Stability of Face Recognition Model	ZHOU Shu-tian, YAN Xin, and XIE Zhen-shan	(59)
An Algorithm for Instance Segmentation in Low-Resolution Video Sequence	DA Ting and YANG Liang	(63)
Direct Revocable Ciphertext Policy Attribute-Based Encryption Scheme with Constant-Size Ciphertext	ZHU Guo-bin, XIE Xin, ZHANG Xing, ZHAO Yang, and XIONG Hu	(76)
Extracting Terms Form French Corpora with FP Sequence Tree	YU Juan, WU Xiao-peng, LIAO Xiao, and LIU Jian-guo	(84)
Global Polynomial Stability of a Class of Impulsive Recurrent Neural Networks with Proportional Delays	ZHOU Li-qun and SONG Xie-hui	(91)
Entropy Measurement for Interval-Valued Information Systems	FENG Qin-rong and WEN Wei-hua	(101)

• Complexity Sciences •

The Structure and Function of Multilayer Networks: Progress and Prospects	WU Zong-ning, DI Zeng-ru, and FAN Ying	(106)
Relatively Important Nodes Mining Method Based on Neighbor Layer Diffuse	ZHAO Na, LI Jie, WANG Jian, PENG Xi-ying, JING Ming, NIE Yong-jie, and YU Yong	(121)
A Method of Link Prediction in Directed Network Based on Effective Connectivity Path	LI Zhi-cheng, JI Li-xin, LIU Shu-xin, LI Xing, and LI Jin-son	(127)
Analysis of the Trade Effect of “Belt and Road” Based on Flow Network	HUANG Guo and FAN Ying	(138)

• Mechatronic Engineering •

Analysis and Prediction of Residual Stress after Reflow Soldering of CSP Solder Joints	HUANG Chun-yue, ZHAO Sheng-jun, LIANG Ying, KUANG Bing, and TANG Xiang-qiong	(148)
Structural Reliability Analysis Using Circular Sampling Surrogate Models	ZHOU Cheng-ning, XIAO Ning-cong, LI Xing-guo, and ZHANG Jun	(155)