

ISSN 1007-7162
CN 44-1428/T
CODEN GDAXFR



JOURNAL OF GUANGDONG UNIVERSITY OF TECHNOLOGY

广东工业大学学报



NO.

双月刊

中国七家
GUANGZHOU CHINA



目 次

· 可拓学与创新方法 ·

- 基于可拓本体蕴含系的产品方案可拓设计模型 王体春, 华 洋, 秦家祺 (1)
- 国内 TRIZ 理论及方法的研究热点及发展趋势 林 琳, 李小涛, 徐永利 (10)
- 基于可拓学与 CAI 技术的无尘黑板专利规避设计 李千静, 成思源, 陈晓菁, 杨雪荣, 陈 斌 (20)

· 综合研究 ·

- 基于消费者行为流视域的产品竞争市场结构分析 刘洪伟, 詹明君, 高鸿铭, 朱 慧, 梁周扬 (26)
- 基于 DPoS 扩展的量子加密区块链 陈冰儿, 王帮海, 劳南新 (34)
- 考虑限制性卖空的多期模糊投资组合优化模型 陈思豆, 黄卓铨, 杨兴雨 (39)
- 无人机测图的像控点布设优化及精度提升措施 孟 瑞, 廖开怀, 吴希文, 徐永明 (48)
- 基于 Landsat 的广州市热岛效应时空变化分析 陈炳杰, 陈佩敏, 黄泽鹏, 吴希文, 王 华 (53)
- 一个具有 Robin 自由边界的双曲肿瘤生长模型解的定性分析 周 云, 卫雪梅 (60)
- 镧系掺杂 ZnO 的电子结构和光学性质 白玲玲, 林志萍, 董华锋, 吴福根 (66)
- 骨植入聚醚醚酮材料表面改性的研究进展 肖天华, 刘荣涛, 庞贻宇, 李 达, 刘 佳, 闵永刚 (73)
- 镓离子掺杂的 CsPbBr₃ 量子点的制备及其性能研究 周民华, 张文进, 潘春阳 (83)
- 丁香酚抗马拉色菌活性、细胞毒性及抑菌机制研究
..... 刘 迪, 郭清泉, 赵海山, 舒均中, 练英铎, 夏树敏 (88)
- 银耳多糖超声波提取工艺优化及抗 BV2 细胞炎症的作用研究 谢玲娜, 韩 萍, 杜志云 (94)
- AlCrSiN 涂层刀具干车削 Ti-6Al-4V 钛合金的切削性能研究 刘 杰, 朱水生, 肖晓兰, 邓 欣 (99)
- 基于 LCZ 的湿热地区典型城市局部空间格局特性研究 潘鑫沛, 刘丽孺, 刘 琳 (107)
- “全国第 17 届可拓学年会” 征文启事 封三

本期执行编辑与责任校对: 王威娜 本期英文审核: 熊荣斌

期刊基本参数: CN 44-1428/T * 1984 * b * A4 * 114 * zh * P * ¥ 10.00 * 1050 * 16 * 2021 - 03

JOURNAL OF GUANGDONG UNIVERSITY OF TECHNOLOGY

Volume 38 Number 2 March 2021

CONTENTS

Extenics and Innovation Methods

- An Extension Scheme Design Model of Complex Product Based on Extension Ontology Implication System
.....*Wang Ti-chun, Hua Yang, Qin Jia-qi* (1)
- Hot Spots and Development Trend of TRIZ Theory and Method in China*Lin Lin, Li Xiao-tao, Xu Yong-li* (10)
- A Patent Evasion Design of Dust-free Blackboard Based on Extension and CAI Technology
.....*Li Qian-jing, Cheng Si-yuan, Chen Xiao-jing, Yang Xue-rong, Chen Bin* (20)

Comprehensive Studies

- A Product Competitive Market Structure Analysis Based on Consumer Behavioral Stream
.....*Liu Hong-wei, Zhan Ming-jun, Gao Hong-ming, Zhu Hui, Liang Zhou-yang* (26)
- A Quantum-encrypted Blockchain Based on Delegated Proof of Stake (DPoS) Extension*Chen Bing-er, Wang Bang-hai, Lao Nan-xin* (34)
- A Multi-period Fuzzy Portfolio Optimization Model Considering Restricted Short Selling
.....*Chen Si-dou, Huang Zhuo-quan, Yang Xing-yu* (39)
- Optimization and Accuracy Improvement of Image Control Point Layout for UAV Mapping
.....*Meng Rui, Liao Kai-huai, Alex Hay-Man Ng, Xu Yong-ming* (48)
- A Spatiotemporal Analysis of Heat Island Effect in Guangzhou Based on Landsat
.....*Chen Bing-jie, Chen Pei-min, Huang Ze-peng, Ng Alex Hay-Man, Wang Hua* (53)
- A Qualitative Analysis of a Hyperbolic Tumor Growth Model with Robin Free Boundary *Zhou Yun, Wei Xue-mei* (60)
- Electronic Structure and Optical Properties of Lanthanide Doping ZnO*Bai Ling-ling, Lin Zhi-ping, Dong Hua-feng, Wu Fu-gen* (66)
- Progress on Bone Graft PEEK about Surface Modification *Xiao Tian-hua, Liu Rong-tao, Pang Yin-yu, Li Da, Liu Jia, Min Yong-gang* (73)
- Preparation and Properties of CsPbBr₃ Quantum Dots Doped with Gallium Ions *Zhou Min-hua, Zhang Wen-jin, Pan Chun-yang* (83)
- A Study of Eugenol Anti-*Malassezia* Activity, Cytotoxicity and Antifungal Mechanism
.....*Liu Di, Guo Qing-quan, Zhao Hai-Shan, Shu Jun-zhong, Lian Ying-duo, Xia Shu-min* (88)
- An Optimization of Ultrasonic Extraction Process of Tremella Polysaccharides and its Anti-inflammation Effect on BV2 cell
.....*Xie Ling-na, Hang Ping, Du Zhi-yun* (94)
- Cutting Performance of AlCrSiN Coated Tool in Dry Turning Ti-6Al-4V Titanium Alloy
.....*Liu Jie, Zhu Shui-sheng, Xiao Xiao-lan, Deng Xin* (99)
- An LCZ-based Spatial Pattern Characteristic Analysis of Typical Urban Local Areas in Hot-humid Regions
.....*Pan Xin-pei, Liu Li-ru, Liu Lin* (107)