

目 次

评述

数据中心跨层能效优化研究进展和发展趋势	1
王继业, 周碧玉, 刘万涛, 虎嵩林	
大数据安全技术研究进展	25
陈性元, 高元照, 唐慧林, 杜学绘	
自旋波逻辑门的关键器件研究进展	67
张子康, 金立川, 文天龙, 廖宇龙, 唐晓莉, 张怀武, 钟智勇	

特约论文

中国深空测控网现状与展望	87
吴伟仁, 李海涛, 李赞, 王广利, 唐玉华	

论文

基于语义特征提取的砂岩薄片图像颗粒分割方法	109
姜枫, 顾庆, 郝慧珍, 李娜, 胡修棉	
学习时空一致性相关滤波的视觉跟踪	128
朱建章, 王栋, 卢湖川	
Ir(ppy) ₃ 调控 Rubrene 激子分裂和发光过程的微观机制研究	151
屈芬兰, 汤仙童, 朱洪强, 许静, 段谋正, 赵茜, 熊祖洪	

封面图片来自“中国深空测控网现状与展望”(见 87-108 页).

Volume 50 Number 1 January 2020

Contents

REVIEW

- Research progress and development trend of cross-layer energy efficiency optimization in data centers 1
- Jiye WANG, Biyu ZHOU, Wantao LIU & Songlin HU
- Research progress on big data security technology 25
- Xingyuan CHEN, Yuanzhao GAO, Huilin TANG & Xuehui DU
- Recent advances in key elements of spin-wave logic gates 67
- Zikang ZHANG, Lichuan JIN, Tianlong WEN, Yulong LIAO, Xiaoli TANG,
Huaiwu ZHANG & Zhiyong ZHONG

INVITED PAPER

- Status and prospect of China's deep space TT&C network 87
- Weiren WU, Haitao LI, Zan LI, Guangli WANG & Yuhua TANG

RESEARCH PAPER

- Grain segmentation of sandstone thin section images based on semantic feature extraction 109
- Feng JIANG, Qing GU, Huizhen HAO, Na LI & Xiumian HU
- Learning temporal-spatial consistency correlation filter for visual tracking 128
- Jianzhang ZHU, Dong WANG & Huchuan LU
- Study of the microscopic mechanism of Ir(ppy)₃ regulating exciton splitting and luminescence process in Rubrene 151
- Fenlan QU, Xiantong TANG, Hongqiang ZHU, Jing XU, Mouzheng DUAN,
Xi ZHAO & Zuhong XIONG

COVER IMAGE This image comes from "Status and prospect of China's deep space TT&C network" (See pages 87–108).