



EI 中文核心期刊



ISSN 1000-7032

CN 22-1116/O4

CODEN FAXUEW

发光学报

CHINESE JOURNAL OF LUMINESCENCE

第 41 卷

Vol. 41

2020

第 7 期

No. 7



中国科学院长春光学精密机械与物理研究所
中国物理学会发光分会

主办

科学出版社 出版

发 光 学 报

FAGUANG XUEBAO

第 41 卷 第 7 期 2020 年 7 月

目 次

· 特邀综述 ·

有机-无机杂化钙钛矿中的自旋输运和磁场效应

..... 潘睿亨, 汤仙童, 李金鹏, 于浩森, 胡 斌, 王 恺 (753)

· 创刊 40 周年特别专栏——青稞论道 ·

当稀土遇见分子笼: 新型发光超分子体系 孙庆福, 李小贞 (770)

· 材料合成及性能 ·

溶液法制备 CsPbBr₃ 钙钛矿薄膜微观结构控制与发光特性

..... 郑悦婷, 郑 鑫, 胡海龙, 郭太良, 林金堂, 李福山 (775)

碘化亚铜配位聚合物的单光子和双光子激发发光 尹少云, 莫钧婷, 潘 梅 (782)

基于亚甲基蓝的近红外荧光探针用于 HOCl 的特异性检测

..... 姚书帆, 尧雨斯, 郑武斌, 叶晨喆, 应 杰, 吕光磊, 李春霞 (791)

原料配比和助熔剂对高显色 LED 用红色荧光粉 (Sr_{0.96}, Eu_{0.04}) LiAl₃N₄ 性能的影响

..... 李璇璇, 王大伟, 杨志平, 李 旭, 王志军, 李盼来, 刘学千, 张 楠 (800)

新型双噻吩衍生物的合成、晶体结构及光谱性能 崔春雨, 仇晓阳, 齐 琪, 李 星 (809)

· 器件制备及器件物理 ·

796 nm 二极管泵浦连续波 1.88 W Tm: LYF 激光器

..... 丁本利, 周 雄, 夏海平, 张百涛, 陈宝玖 (819)

荧光过氧化氢酶纳米传感器的制备及性能 聂 方, 聂雅坤, 王小卉, 彭洪尚 (826)

发光窗口对 MOS 结构硅 LED 电光性能的影响

..... 吴克军, 黄兴发, 李则鹏, 易 波, 赵建明, 钱津超, 徐开凯 (834)

高功率掺 Tm³⁺ 光纤放大器热效应管理的泵浦方式优化理论研究

..... 张 轲, 延凤平, 韩文国, 冯 亭 (839)

铜钢镓硒薄膜光伏组件中电池与封装材料界面的光学特性对组件性能的影响

..... 林舒平, 单洪青, 庄大明 (849)

4-inch 蓝宝石图形衬底上 GaN 基白光 LED 制备及表征 朱友华, 刘 轩, 王美玉, 李 毅 (858)

· 发光学应用及交叉前沿 ·

荧光硅量子点作为叶面光肥提高生菜对光能利用率的机理研究

... 潘晓琴, 李常健, 张浩然, 郑胤建, 董日月, 李 唯, 宋世威, 杨 暹, 刘应亮, 雷炳富 (863)

激光能量对气体等离子体产生太赫兹波的影响 吴四清, 沈 波, 熊 钢, 刘江华 (873)

CHINESE JOURNAL OF LUMINESCENCE

Vol. 41 No. 7 July 2020

CONTENTS

• Invited Review •

Spin Transport and Magnetic Field Effects in Organic-inorganic Hybrid Perovskites
..... PAN Rui-heng, TANG Xian-tong, LI Jin-peng, YU Hao-miao, HU Bin, WANG Kai (753)

• 40th Anniversary Special Column—Young Scientist on The Road •

When Rare Earth Comes Across Metal-organic Cages: A New Luminescent Supramolecular System
..... SUN Qing-fu, LI Xiao-zhen (770)

• Synthesis and Properties of Materials •

Microstructure and Luminescence Characteristics of CsPbBr₃ Perovskite Films by Solution Process
..... ZHENG Yue-ting, ZHENG Xin, HU Hai-long, GUO Tai-liang, LIN Jin-tang, LI Fu-shan (775)

One- and Two-photon Excited Photoluminescence of Cuprous Iodide Coordination Polymer
..... YIN Shao-yun, MO Jun-ting, PAN Mei (782)

Near-infrared Fluorescent Probe Based on Methylene Blue for Specific Detection of Hypochlorous Acid
..... YAO Shu-fan, YAO Yu-si, ZHENG Wu-bin, YE Chen-zhe, YING Jie, LYU Guang-lei, LI Chun-xia (791)

Effect of Raw Material Ratio and Fluxes on (Sr_{0.96},Eu_{0.04})LiAl₃N₄ Red Phosphor
..... LI Xuan-xuan, WANG Da-wei, YANG Zhi-ping, LI Xu,
WANG Zhi-jun, LI Pan-lai, LIU Xue-qian, ZHANG Nan (800)

Synthesis, Crystal Structure and Spectroscopic Properties of Novel Bisthiophene Derivatives
..... CUI Chun-yu, QIU Xiao-yang, QI Qi, LI Xing (809)

• Device Fabrication and Physics •

796 nm Diode-pumped 1.88 W Continuous-wave Tm:LYF Laser
..... DING Ben-li, ZHOU Xiong, XIA Hai-ping, ZHANG Bai-tao, CHEN Bao-jiu (819)

Ratiometric Fluorescent Enzymatic Nanosensors for Intracellular Hydrogen Peroxide
..... NIE Fang, NIE Ya-kun, WANG Xiao-hui, PENG Hong-shang (826)

Effect of Light Window on MOS-like Silicon LED Electro-optic Properties
..... WU Ke-jun, HUANG Xing-fa, LI Ze-peng, YI Bo, ZHAO Jian-ming, QIAN Jin-chao, XU Kai-kai (834)

Theoretical Study of Pumping Method of High Power Tm³⁺-doped Fiber Amplifier for Thermal Effect Management
..... ZHANG Ke, YAN Feng-ping, HAN Wen-guo, FENG Ting (839)

Influence of Cell/Encapsulation Material Interface Optical Properties on Cu(InGa)Se₂ Solar Module Performance
..... LIN Shu-ping, SHAN Hong-qing, ZHUANG Da-ming (849)

Fabrication and Characterization of GaN-based White LED on 4-inch Patterned Sapphire Substrate
..... ZHU You-hua, LIU Xuan, WANG Mei-yu, LI Yi (858)

• Luminescence Applications and Interdisciplinary Fields •

Mechanism of Fluorescent Silicon Quantum Dot as Foliar Light Fertilizer to Improve Lettuce's Utilization of Light Energy
..... PAN Xiao-qin, LI Chang-jian, ZHANG Hao-ran, ZHENG Yin-jian,
DONG Ri-yue, LI Wei, SONG Shi-wei, YANG Xian, LIU Ying-liang, LEI Bing-fu (863)

Influence of Laser Energy on Terahertz Radiation from Gas Plasma
..... WU Si-qing, SHEN Bo, XIONG Gang, LIU Jiang-hua (873)

Editorial Board of Chinese Journal of Luminescence

(3888 Dongnanhu Rd., Changchun 130033, P. R. China)