

发光学报

第四十卷

第五期

二〇一九年五月

科学出版社



EI 中文核心期刊



ISSN 1000-7032

CN 22-1116/O4

CODEN FAXUEW

发光学報

CHINESE JOURNAL OF LUMINESCENCE

第 40 卷
Vol. 40

2019

第 5 期
No. 5



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
发光学及应用国家重点实验室
科学出版社 出版

发光学报

FAGUANG XUEBAO

第40卷 第5期 2019年5月

目 次

· 特邀报告 ·

氮掺杂碳点的合成与应用 曲松楠, 孙铭鸿, 田震, 鲍鑫, 周正杰, 周鼎, 李迪 (557)

· 材料合成及性能 ·

$\text{BaGd}_2(\text{MoO}_4)_4:\text{Tb}^{3+},\text{Eu}^{3+}$ 荧光粉的发光特性与能量传递机理

..... 赵旺, 周薇薇, 刘淑河, 平兆艳, 郑庆华 (581)

Er^{3+} 单掺、 $\text{Er}^{3+}/\text{Yb}^{3+}$ 共掺杂 $\text{Ca}_{12}\text{Al}_{14}\text{O}_{32}\text{F}_2$ 的制备及上转换发光性质

..... 刘秀玲, 郭艳艳, 米晓云, 张希艳 (589)

溶胶-凝胶法合成 $\text{Sr}_3\text{MgSi}_2\text{O}_8:\text{Eu}^{3+}$ 红色荧光粉及其发光性能 贺江凡, 舒庆 (595)

立方纳米结构 ZnGa_2O_4 的制备及光催化性质 姜雁博, 矫淑杰, 高世勇, 王东博, 王金忠 (602)

新型 $\text{Ba}_3\text{SiO}_5:\text{Eu}$ 荧光粉的合成及光谱性质 吴梅虹, 罗岚, 郭锐, 张远博, 孙传耀 (610)

· 器件制备及器件物理 ·

等温等效替代热压印法成型超薄导光板的工艺分析

..... 李楷, 吴大鸣, 刘颖, 曹亚楠, 许红, 赵中里, 孙靖尧 (616)

Au/Bi 共掺二氧化硅薄膜的制备及近红外光谱调控

..... 陈若望, 汪鹏君, 张晓伟, 张跃军, 张会红, 束俊鹏 (623)

高温稳定 25 Gbit/s 850 nm 垂直腔面发射激光器 周广正, 兰天, 李颖, 王智勇 (630)

多波段 LED 太阳模拟器及其测试系统的研制

..... 李超, 邵剑波, 席曦, 朱益清, 刘桂林, 王晓, 钱维莹, 陈如龙, 朱华新, 李果华 (635)

有机异质结连接层 $\text{C}_{60}/\text{CuPc}$ 电荷产生能力研究

..... 路飞平, 邓艳红, 师应龙, 赵玉祥, 刘晓斌, 张明霞 (643)

· 发光学应用及交叉前沿 ·

非共振耗散腔耦合系统的发射光谱 张杨, 吕树臣 (650)

沙尘信道下激光通信系统的性能分析 曹明华, 姚宇, 宋梨花, 王惠琴 (659)

β -环糊精修饰 Mn-ZnS 量子点荧光探针用于检测血液中对乙酰氨基酚

..... 曾燕艳, 王玥婷, 梁志辉, 焦哲, 范洪波 (666)

油墨组分比例预测模型与方法 李婵, 万晓霞, 吕伟 (673)

基于 FDTD 算法研究超短脉冲与二能级原子系统的相互作用

..... 孙龙, 吴博, 冯大政, 王石语, 邢孟道 (680)

CHINESE JOURNAL OF LUMINESCENCE

Vol. 40 No. 5 May 2019

CONTENTS

· Invited Paper ·

Synthesis and Application of Nitrogen-doped Carbon Dots

..... QU Song-nan, SUN Ming-hong, TIAN Zhen, BAO Xin, ZHOU Zheng-jie, ZHOU Ding, LI Di (557)

· Synthesis and Properties of Materials ·

Luminescent Characters and Energy Transfer Mechanisms of BaGd₂(MoO₄)₄: Tb³⁺, Eu³⁺ Phosphors

..... ZHAO Wang, ZHOU Wei-wei, LIU Shu-he, PING Zhao-yan, ZHENG Qing-hua (581)

Synthesis and Luminescence Properties of Er³⁺ Doped and Er³⁺-Yb³⁺ Co-doped Ca₁₂Al₁₄O₃₂F₂

..... LIU Xiu-ling, GUO Yan-yan, MI Xiao-yun, ZHANG Xi-yan (589)

Synthesis of Sr₃MgSi₂O₈: Eu³⁺ Red Phosphor by Sol-gel Method and Its Luminescence Properties

..... HE Jiang-fan, SHU Qing (595)

Synthesis and Photocatalytic Activity of ZnGa₂O₄ Nanocubes

..... JIANG Yan-bo, JIAO Shu-jie, GAO Shi-yong, WANG Dong-bo, WANG Jin-zhong (602)

Synthesis and Photoluminescent Properties of Ba₃SiO₅: Eu Phosphor

..... WU Mei-hong, LUO Lan, GUO Rui, ZHANG Yuan-bo, SUN Chuan-yao (610)

· Device Fabrication and Physics ·

Analyses on Forming Process of Ultrathin Light Guide Plate by Isothermal Equivalent Substitution Hot Embossing

..... LI Kai, WU Da-ming, LIU Ying, CAO Ya-nan, XU Hong, ZHAO Zhong-li, SUN Jing-yao (616)

Fabrication and Near-infrared Spectral Modulation of Au/Bi Ions Co-doped Silica Thin Films

..... CHEN Ruo-wang, WANG Peng-jun, ZHANG Xiao-wei, ZHANG Yue-jun, ZHANG Hui-hong, SHU Jun-peng (623)

High Temperature-stable 25 Gbit/s 850 nm Vertical-cavity Surface-emitting Lasers

..... ZHOU Guang-zheng, LAN Tian, LI Ying, WANG Zhi-yong (630)

Development of LED Solar Simulator and Solar Cell Test System

..... LI Chao, SHAO Jian-bo, XI Xi, ZHU Yi-qing, LIU Gui-lin, WANG Xiao, QIAN Wei-ying, CHEN Ru-long, ZHU Hua-xin, LI Guo-hua (635)

Charge Generation Ability of C₆₀/CuPc Organic Heterojunction Connector Layer

..... LU Fei-ping, DENG Yan-hong, SHI Ying-long, ZHAO Yu-xiang, LIU Xiao-bin, ZHANG Ming-xia (643)

· Luminescence Applications and Interdisciplinary Fields ·

Emission Spectrum of Off-resonant Dissipative Cavity Coupled System ZHANG Yang, LYU Shu-chen (650)

Performance Analysis of Laser Communication System Under Sand-dust Channel

..... CAO Ming-hua, YAO Yu, SONG Li-hua, WANG Hui-qin (659)

β-cyclodextrin Functionalized Mn-ZnS Quantum Dots as Sensors for Determination of Acetaminophen in The Blood

..... ZENG Yan-yan, WANG Yue-ting, LIANG Zhi-hui, JIAO Zhe, FAN Hong-bo (666)

Model and Method of Ink Components Proportion Prediction LI Chan, WAN Xiao-xia, LYU Wei (673)

Interaction between Ultrashort Pulses and Two-level Atomic System Based on FDTD Algorithm

..... SUN Long, WU Bo, FENG Da-zheng, WANG Shi-yu, XING Meng-dao (680)

Editorial Board of Chinese Journal of Luminescence

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