

第 50 卷 第 4 期 2021 年 4 月

目 次

· 纪念蒋民华先生逝世 10 周年 ·

编者按

- 十年沧桑忆宗师——纪念蒋民华院士逝世 10 周年 王继扬 (589)
- 研晶育人 一生无悔——深切缅怀蒋民华先生 陶绪堂, 黄柏标, 徐现刚, 赵 显 (595)
- 振兴民族光电 奋进为华争光——华光光电与蒋民华院士的光电子产业梦 肖成峰 (601)

综合评述

- 熔体法生长大尺寸有机晶体 蒋金科, 崔双月, 刘 阳, 陶绪堂 (603)
- 半绝缘碳化硅单晶衬底的研究进展 彭 燕, 陈秀芳, 谢雪健, 徐现刚, 胡小波, 杨祥龙, 于国建, 王焱浩 (619)
- 以晶体生长原理重塑蚕丝柔性材料世界的未来 邱 武, 刘向阳 (629)
- 无序激光晶体及其超快激光研究进展 于浩海, 潘忠奔, 张怀金, 王继扬 (648)
- 药物结晶中的经典与非经典结晶路径 宋舒虹, 姚昌林, 王 蕾, 曲亚倩, 陶绪堂 (669)
- 基于晶体学原理的高效光催化材料的设计与制备 王泽岩, 王 朋, 刘媛媛, 郑昭科, 程合锋, 黄柏标 (685)
- 信息时代的铈酸锂晶体: 进展与展望 刘 宏, 桑元华, 孙德辉, 王东周, 王继扬 (708)
- 铈酸锂单晶薄膜材料 李青云, 朱厚彬, 张洪湖, 张秀全, 胡 卉 (716)
- 超大尺寸 KDP/DKDP 晶体研究进展 张力元, 王圣来, 刘 慧, 徐龙云, 李祥琳, 孙 洵, 王 波 (724)

研究快报

- 高熔点稀土倍半氧化铪(Sc_2O_3)晶体的生长
..... 赵衡煜, 侯文涛, 薛艳艳, 王庆国, 董建树, 雷震霖, 徐晓东, 徐 军 (732)

研究论文

- 压电晶体 $\text{YbBa}_3(\text{PO}_4)_3$ 的生长与性质表征
..... 武广达, 樊梦迪, 杜月浩, 姚贵腾, 苗鸿臣, 程秀凤, 于法鹏, 赵 显 (735)

多片导模法蓝宝石晶体的缺陷研究

..... 陈伟超,罗平,王庆国,唐慧丽,薛艳艳,段金柱,王勤峰,雷震霖,徐军(741)

Er:Lu₂O₃单晶的导模法生长及性能表征 王贵吉,尹延如,贾志泰,陶绪堂(747)

晶格畸变检测仪研究碳化硅晶片中位错缺陷分布

..... 尹朋涛,于金英,杨祥龙,陈秀芳,谢雪健,彭燕,肖龙飞,胡小波,徐现刚(752)

高可靠性无铝有源层 808 nm 半导体激光器泵浦源 刘鹏,朱振,陈康,王荣堃,夏伟,徐现刚(757)

钛宝石晶体的泡生法生长和闪烁发光性能

..... 王庆国,刘波,罗平,唐慧丽,吴锋,康森,段金柱,王勤峰,徐军(762)

同质外延生长 ZnO 单晶结构及光电性能的研究 刘振华,樊龙,符亚军,王进,曹林洪,吴卫东(768)

InGaN/GaN 微米阵列结构的生长及发光性能研究 张利繁,贾伟,董海亮,李天保,贾志刚,许并社(776)

企业简介

广州南砂晶圆半导体技术有限公司 (628)

济南晶正电子科技有限公司 (715)

JOURNAL OF SYNTHETIC CRYSTALS

Vol. 50, No. 4 April 2021 (Series No. 270)

CONTENTS

• In Memory •

Editorials

- Memorizing Master Jiang in Ten Years of Vicissitudes WANG Jiyang(589)
- In Memories of Our Lifetime Mentor-Professor Minhua Jiang
..... TAO Xutang, HUANG Baibiao, XU Xiangang, ZHAO Xian(595)
- Optoelectronic Industrialization Dream of Academician Minhua Jiang XIAO Chengfeng(601)

Reviews

- Melt Growth of Bulk Organic Crystals JIANG Jinke, CUI Shuangyue, LIU Yang, TAO Xutang(603)
- Research Progress of Semi-Insulating Silicon Carbide Single Crystal Substrate
..... PENG Yan, CHEN Xiufang, XIE Xuejian, XU Xiangang, HU Xiaobo, YANG Xianglong, YU Guojian, WANG Yaohao(619)
- Applying Crystallization Theory to Reshape Future of Cocoon Silk Soft Materials QIU Wu, LIU Xiangyang(629)
- Development of Disordered Laser Crystals and Their Ultrafast Lasers
..... YU Haohai, PAN Zhongben, ZHANG Huaijin, WANG Jiyang(648)
- Classical and Non-Classical Crystallization Pathways in Pharmaceutical Crystallization
..... SONG Shuhong, YAO Changlin, WANG Lei, QU Yaqian, TAO Xutang(669)
- Design and Synthesis of Efficient Photocatalyst Based on the Principal of Crystallography
..... WANG Zeyan, WANG Peng, LIU Yuanyuan, ZHENG Zhaoke, CHENG Hefeng, HUANG Baibiao(685)
- Lithium Niobate Crystals in the Information Age: Progress and Prospect
..... LIU Hong, SANG Yuanhua, SUN Dehui, WANG Dongzhou, WANG Jiyang(708)
- Single-Crystal Lithium Niobate Thin Films LI Qingyun, ZHU Houbin, ZHANG Honghu, ZHANG Xiuquan, HU Hui(716)
- Research Progress of Oversized KDP/DKDP Crystals
..... ZHANG Liyuan, WANG Shenglai, LIU Hui, XU Longyun, LI Xianglin, SUN Xun, WANG Bo(724)

Research Letter

- Growth of High Melting Point Rare Earth Sesquioxide Scandium Oxide Crystal (Sc_2O_3)
..... ZHAO Hengyu, HOU Wentao, XUE Yanyan, WANG Qingguo, DONG Jianshu, LEI Zhenlin, XU Xiaodong, XU Jun(732)

Research Articles

Growth and Property Characterization of Novel Piezoelectric Crystal $\text{YbBa}_3(\text{PO}_4)_3$

..... WU Guangda, FAN Mengdi, DU Yuehao, YAO Guiteng, MIAO Hongchen, CHENG Xiufeng, YU Fapeng, ZHAO Xian(735)

Defects of Multi-Plate Sapphire Grown from EFG Technique

..... CHEN Weichao, LUO Ping, WANG Qingguo, TANG Huili, XUE Yanyan, DUAN Jinzhu, WANG Qinfeng, LEI Zhenlin, XU Jun(741)

Growth and Property Characterization of $\text{Er}:\text{Lu}_2\text{O}_3$ Single Crystals by EFG Method

..... WANG Guiji, YIN Yanru, JIA Zhitai, TAO Xutang(747)

Dislocation Distribution in SiC Wafers Studied by Lattice Distortion Detector

..... YIN Pengtao, YU Jinying, YANG Xianglong, CHEN Xiufang, XIE Xuejian, PENG Yan, XIAO Longfei, HU Xiaobo, XU Xiangang(752)

High Reliable Al-Free 808 nm Semiconductor Laser Diode Pump Source

..... LIU Peng, ZHU Zhen, CHEN Kang, WANG Rongkun, XIA Wei, XU Xiangang(757)

Crystal Growth and Scintillation Luminescence Properties of $\text{Ti}:\text{Al}_2\text{O}_3$ Crystals Grown with Kyropoulos Method

..... WANG Qingguo, LIU Bo, LUO Ping, TANG Huili, WU Feng, KANG Sen, DUAN Jinzhu, Wang Qinfeng, XU Jun(762)

Structure and Photoelectric Properties of ZnO Single Crystal Grown by Homoepitaxy

..... LIU Zhenhua, FAN Long, FU Yajun, WANG Jin, CAO Linhong, WU Weidong(768)

Growth and Luminescence Properties of InGaN/GaN Micro-Array

..... ZHANG Lifan, JIA Wei, DONG Hailiang, LI Tianbao, JIA Zhigang, XU Bingshe(776)