

目次

强激光物理与技术

- 光纤啁啾脉冲时域相干合成技术研究新进展 刘必达, 黄智蒙, 张帆, 等 111001 (16)
- 大功率780 nm单管连续输出16 W和巴条连续输出180 W半导体激光器 李弋, 王浩森, 张亮, 等 111002 (6)
- 基于随机位相分布的液晶退偏器件设计与分析 张雨琪, 汪玉琴, 陈丹, 等 111003 (7)
- 基于激光诱导击穿光谱的基体效应 姚胤旭, 邱荣, 万情, 等 111004 (6)
- 有机氟酸蚀刻提高熔石英的抗激光损伤性能 匙芳廷, 李啸宇, 李园利, 等 111005 (7)

惯性约束聚变物理与技术

- X光弯晶成像金属薄膜面密度测量技术 司昊轩, 许昊, 杜慧瑶, 等 112001 (7)
- 基于机器视觉方法的诊断设备自动瞄准技术 夏立琼, 陈铭, 王鹏, 等 112002 (6)

高功率微波技术

- S波段径向注同轴槽振荡器(英) 王战亮, 王环宇, 何子远, 等 113001 (4)
- 空间行波管热电子电流的周期性波动 李延威, 尚新文, 肖刘, 等 113002 (10)

离子束科学技术及其应用·专栏主编:赵永涛、任洁茹、肖国青、赵红卫

- CRAFT负离子源中性束注入系统400 keV加速器束流光学特性分析 崔庆龙, 韦江龙, 谢亚红, 等 114001 (7)
- 相干渡越辐射束团纵向分布重建方法 袁肖肖, 李佳, 闫文兵, 等 114002 (8)

粒子束及加速器技术

- 高能同步辐射光源地面网测量方案及数据处理 闫皓月, 董岚, 王铜, 等 114003 (11)
- 中国散裂中子源工程材料中子衍射谱仪尖嘴型中子准直光阑的研制 王怀宝, 周良, 胡春明, 等 114004 (7)
- 基于机器学习的束团横向相空间测量 韩雨涛, 李任恺, 万唯实 114005 (11)

脉冲功率技术

- 空心脉冲发电机剩磁能量回收方法 张鹏, 李海涛, 胡长勇, 等 115001 (8)

核科学与工程

- 微管壳式换热器在能量转换循环中的应用 高娇, 丁文杰, 黄洪文, 等 116001 (10)
- 小型氦氙冷却移动式反应堆堆芯设计优化分析 刘欣悦, 管超然, 邓蛟龙, 等 116002 (9)
- 压水堆不同燃耗完整和破损棒燃料芯块氧化特征拉曼光谱研究 王华才, 程焕林, 宋武林, 等 116003 (5)
- 取消次级中子源对压水堆氙源项的影响分析 王奇 116004 (6)

前沿技术与交叉科学

- 甲基胺溴化铅晶体粉末的温度依赖光致发光 于海龙, 吴文智 119001 (5)
- 脉冲中子闪烁探测器的工程可靠性设计与提升 马烈华, 陈爽, 李洪涛, 等 119002 (6)

简讯

- 《强激光与粒子束》首次入选中国精品科技期刊 《强》刊编辑部 114001-7

CONTENTS

• High Power Laser Physics and Technology •

- Recent progress of temporal coherent combination of chirped pulses in fiber lasers Liu Bida, Huang Zhimeng, Zhang Fan, et al. 111001(16)
- High power semiconductor lasers with output power over 16 W for single emitter and 180 W for bar operation at 780 nm under CW operation Li Yi, Wang Haomiao, Zhang Liang, et al. 111002(6)
- Design and analysis of the liquid crystal depolarizer based on random phase distribution Zhang Yuqi, Wang Yuqin, Chen Dan, et al. 111003(7)
- Matrix effect based on laser-induced breakdown spectroscopy Yao Yinxu, Qiu Rong, Wan Qing, et al. 111004(6)
- Improving laser damage resistance of fused silica by organic fluoric acid etching Chi Fangting, Li Xiaoyu, Li Yuanli, et al. 111005(7)

• Inertial Confinement Fusion Physics and Technology •

- Areal density measurement technology of metal foils based on X-ray bent crystal imaging Si Haoxuan, Xu Hao, Du Huiyao, et al. 112001(7)
- Machine vision aided method for the autonomic diagnostic alignments Xia Liqiong, Chen Ming, Wang Peng, et al. 112002(6)

• High Power Microwave Technology •

- S band radial beam coaxial grating backward wave oscillator Wang Zhanliang, Wang Huanyu, He Ziyuan, et al. 113001(4)
- Periodic fluctuation of heater currents in space traveling wave tubes Li Yanwei, Shang Xinwen, Xiao Liu, et al. 113002(10)

• Special Column on Ion Beam Science and Technology and Its Applications •

- Beamlet optics analysis of 400 keV accelerator for CRAFT negative ion based neutral beam injection system Cui Qinglong, Wei Jianglong, Xie Yahong, et al. 114001(7)
- Reconstruction algorithm for bunch longitudinal distribution of coherent transition radiation Yuan Xiaoxiao, Li Jia, Yan Wenbing, et al. 114002(8)

• Particle Beams and Accelerator Technology •

- Surface network survey scheme and data processing at High Energy Photon Source Yan Haoyue, Dong Lan, Wang Tong, et al. 114003(11)
- Development of pointed-mouth slit for neutron engineering material diffractometer at China Spallation Neutron Source Wang Huaibao, Zhou Liang, Hu Chunming, et al. 114004(7)
- Measurement of transverse phase space based on machine learning Han Yutao, Li Renkai, Wan Weishi 114005(11)

• Pulsed Power Technology •

- Remanent magnetic energy recovery method for air-core pulse alternator Zhang Peng, Li Haitao, Hu Changyong, et al. 115001(8)

• Nuclear Science and Engineering •

- Investigation on the application of microtube and shell heat exchanger in energy conversion cycle Gao Jiao, Ding Wenjie, Huang Hongwen, et al. 116001(10)
- Optimal core design analysis of a small mobile helium xenon cooled solid reactor Liu Xinyue, Guan Chaoran, Deng Jiaolong, et al. 116002(9)
- Raman characteristic analysis of the oxidation of fuel pellets for intact and leaked PWR fuel rods with different burnup Wang Huacai, Cheng Huanlin, Song Wulin, et al. 116003(5)
- Analysis of the influence of canceling secondary neutron sources on tritium source terms in pressurized water reactors Wang Qi 116004(6)

• Advanced Interdisciplinary Science •

- Temperature-dependent photoluminescence of $\text{CH}_3\text{NH}_3\text{PbBr}_3$ crystal powder Yu Hailong, Wu Wenzhi 119001(5)
- Engineering reliability design and improvement for pulsed neutron scintillation detector Ma Liehua, Chen Shuang, Li Hongtao, et al. 119002(6)