

目 录

- 用透镜阵聚焦实现均匀辐照的计算机分析..... 陈泽尊 梁向春 邓锡铭 (65)
- 产生高阶相干喇曼辐射的两种不同物理机制的研究
..... 赫光生 周福新 刘 盾 刘颂豪 (71)
- 显含谐振腔几何参数的四能级速率方程..... 顾 樵 (76)
- Smith-Purcell 型自由电子激光器的增益特性..... 张大可 (80)
- 层状位相光栅的衍射效应及其在测试技术中的应用..... 王宝成 (86)
- 用 HCD 灯作金属原子蒸气源的激光光谱研究
..... 胡企铨 殷立峰 张延平 景春阳 张桂燕 林福成 (91)
- 用互相关法测定锁模 Ar⁺ 激光脉冲的形状与宽度..... 关信安 袁树忠 吕福云 (96)
- 反射、透射谱的快速测定装置..... 王炳奎 李伟德 章志鸣 李瑞镛 盛虞琴 (99)
- 具有负调整镜的激光准直系统的分析..... 王立新 (104)
- 磁光石榴石薄膜的光吸收系数..... 刘公强 虞志强 刘湘林 (108)
- 大电流脉冲方波激光电源..... 薛 彬 汪永一 姚建铨 (112)

科学札记

- 连续 LiF:F₂ 色心激光器..... 宋哲民 孙 军 曹文治 宋林峰 (116)
- 二氯乙烷的受激喇曼效应..... 孟绍贤 张伟清 康玉英 (118)
- 用单块瓷体制作大气压氮分子激光器..... 张育川等 (119)
- 关于光电流光谱分析的条件选择..... 归振兴 王裕民 张顺怡 (121)
- LS-II 型氩离子激光稳功率仪..... 袁海林等 (124)
- 一台高准确度的激光波长计..... 韦占凯等 (126)

简 讯

- 我国钕玻璃激光淬火工艺首次正式用于生产..... 郭大浩等 (70)
- 激光扫描输液微粒测定仪研制成功..... 于 杰 (79)
- 全国光电子技术交流会及展览会在武汉举行..... 吉 禾 (85)
- 一种提高激光功率稳定性的仪器..... 纪 钟 (95)
- “激光针灸新方法”通过鉴定..... 田道正 (95)

CONTENTS

Computer analysis by lens array for uniform illumination..... *Chen Zezun, Liang Xiangchun, Deng Ximing* (65)

Study on two physical mechanisms for high order coherent Raman radiation *He Guangsheng, Zhou Fuxin, Liu Dun, Liu Songhao* (71)

Rate equation of four-level systems depending evidently on geometric parameters of cavity *Gu Qiao* (76)

Gain characteristics of free-electron lasers using Smith-Purcell effect *Zhang Dake* (80)

Diffraction of layered phase grating and its application in measurement and test *Wang Baocheng* (86)

Laser spectroscopic study on HCD lamps as a metal atomic vapor source *Hu Qiquan, Yin Lifeng, Zhang Yanping, Zhang Guiyan, Jing Chunyang, Lin Fucheng* (91)

Measurement of shape and width of mode-locked Ar⁺ laser pulses by cross-correlation method *Guan Xinan, Yuan Shuzhong, Lü Fuyun* (96)

Instrumentation for rapid determination of reflective and transmissive spectra *Wang Binghui, Li Weide, Zhang Zhiming, Li Ruiyong, Sheng Yuchin* (99)

Analysis of laser collimating system with a negative adjustment lens *Wang Lixing* (104)

Optical absorption coefficient of magneto-optic garnet films *Liu Gongqiang, Yu Zhiqiang, Liu Xianglin* (108)

Large current rectangular pulsed laser power supply *Xue Bin, Wang Yongyi, Yao Jianquan* (112)

SCIENCE NOTES

A CW LiF:F₂ color center laser.....*Song Zheming, Sun Jun, Cao Wenzhi, Song Lingfeng* (116)

Stimulated Raman effect of dichloroethane..... *Meng Shaoxian, Zhang Weiqing, Kang Yuying* (118)

Atmospheric nitrogen laser with a single block of ceramics..... *Zhang Yuchuan et al.* (119)

Selection of conditions for optogalvanic spectral analysis..... *Gui Zhenxing, Wang Yumin, Zhang Shunyi* (121)

LS-II argon ion gas laser stabilized power meter *Yuan Hailing et al.* (124)

High accuracy laser wavemeter *Feng Taikai et al.* (126)

LETTERS

Nd: glass laser hardening technique used for the first time in instrument manufacture *Guo Dahao et al.* (70)

A detector for particles of laser scanning transfusion developed *Yu Jie* (79)

National symposium on opto-electronics held in Wuhan *Ji He* (85)

An instrument for improving laser output power stability *Ji Zhong* (95)

"Novel laser acupuncture treatment" expertized *Tian Daozheng* (95)