

## 目 录

• 激光 •	
同步泵浦锁模染料激光器的理论.....	鲍晓毅等 (577)
激光-等离子体相互作用过程中离子发射的各向异性.....	孙 岚等 (584)
• 光谱 •	
NO 的多光子电离谱及跃迁通道的研究.....	施周政等 (590)
光泵 Ba/He 系统 582.8 nm 碰撞诱导荧光辐射及其弛豫振荡.....	莫春松等 (596)
BeAl <sub>6</sub> O <sub>10</sub> 晶体中单体铬和铬离子对的窄线发光.....	胡志伟等 (601)
• 信息处理和全息术 •	
任意周期性物体的扩展 Lau 效应: 基于部分相干传递函数的分析.....	吕迺光等 (604)
频闪散斑照相法.....	姜锦虎等 (612)
• 光学测试 •	
注入型共焦法布里-珀罗球面腔内微弱损耗的绝对测量.....	徐毓光等 (619)
用银靶 X 射线形貌术研究 Nd:YAG 晶体中位错的性质及运动.....	邓佩珍等 (625)
用准对称波导法测量薄膜参数.....	王宇明 (631)
• 光学材料 •	
暗视场及相衬显微术及其对 Nd:YAG 晶体中缺陷研究.....	邓佩珍等 (636)
• 薄膜光学 •	
光声光谱法研究光学薄膜的吸收特性.....	新 刚等 (643)
• 简讯 •	
简并参量下转换光场的统计性质.....	孙万钧 (648)
使用共振多程光声池的 CO <sub>2</sub> 和 SF <sub>6</sub> 的无多普勒饱和吸收光谱.....	蔡邦维等 (653)
非对称光学系统的 ABCD 定律.....	林 强等 (658)
高斯光束照射下的近似 Talbot 自成像效应及其两种新应用.....	吕洪君等 (663)
作为光学波片的费涅耳斜方体.....	丁大军等 (667)
干涉条纹分析的空间扫描方法.....	陈进楠等 (669)

## CONTENTS

### Laser

- Theory of synchronously pumped mode-locking dye lasers .....*Bao Xiaoyi et al.* (577)  
 Anisotropy of ion emission in the laser-plasma interaction .....*Sun Lan et al.* (584)

### Spectroscopy

- Multiphoton ionization spectroscopy of NO and study of transition channels .....  
 .....*Shi Zhouzheng et al.* (590)  
 582.8nm collisional induced fluorescence emission and its relaxational oscillations in optical  
 pumped Ba/He system.....*Mo Chunshong et al.* (596)  
 Fluorescence lines of single Cr and Cr pairs in  $\text{BeAl}_2\text{O}_7:\text{Cr}$  crystals.....*Hu Zhiwei et al.* (601)

### Information Processing

- Generalized Lau effect of arbitrary periodical objects: The analysis based on partial coherent  
 transfer function.....*Lü Naiguang et al.* (604)  
 Stroboscopic speckle photographic method .....*Jiang Jinhui et al.* (612)

### Optical Measurement

- Absolute measurement of intracavity weak loss for injection Feby-Perot spherical cavity .....  
 .....*Xu Yuguang et al.* (619)  
 Investigation of dislocation properties and motion in YAG by means of X-ray transmission  
 topography with  $\text{AgK}_\alpha$  radiation .....*Deng Peizhen et al.* (625)  
 Measurements of thin film parameters by quasi-symmetric waveguide method...*Wang Yuming* (631)

### Optical Material

- Study on defects in Nd:YAG crystals by darkfield and phase contrast microscopy .....  
 .....*Deng Peizheng et al.* (636)

### Thin Film Optics

- Photoacoustic study on spectral absorption of optical films .....*Jin Gang et al.* (643)

### Research Notes

- Statistical properties of light field at degenerate parametric down-conversion.....*Sun Wanjuan* (648)  
 Doppler-free saturated absorption spectroscopy of  $\text{CO}_2$  and  $\text{SF}_6$  molecules by using a resonant  
 optoacoustic multipass cell.....*Cai Bangwei et al.* (653)  
 ABCD law for nonsymmetric optical systems.....*Lin Qiang et al.* (658)  
 Approximate Talbot self-imaging effect for Gaussian beams and two new applications of  
 Talbot effect.....*Lu Hongjun et al.* (663)  
 Fresnel rhomb used as a optical wavelength plate .....*Ding Dajun et al.* (667)  
 Spatial fringe-scanning method for analyzing interference fringes .....*Chen Jinbang et al.* (669)