

## 目 录

### 激光器件

- 台阶衬底半导体激光器.....孙成城 何淑芳 张培亮 郭奕理 (513)  
连续注入式 TEA CO<sub>2</sub> 激光器允许失谐频率特性分析.....叶东来 林太基 (553)

### 激光物理与激光化学

- Bragg 声光调制稳定激光零级衍射振幅环内的光学混沌.....廖世强 王育竹 (518)  
Na 蒸气中前向非共线简并四波参量放大.....李彬学 罗才雁 杜清 林福成 (523)  
受激喇曼散射光环形成的观察.....王月珠 王 骥 马祖光 (555)

### 激光材料

- 五磷酸锆晶体喇曼光谱的研究.....王继扬 李丽霞 刘耀岗 (528)  
光折晶体 Fe:LiNbO<sub>3</sub> 中的光致散射效应.....许克彬 徐海英 洪 晶 祝桂芝 (532)  
LiF:OH 单晶的光谱特性.....林远齐 杨宝成 李胜华 丁晶新 范福昌 (535)  
染料基态恢复时间的测量.....张包铮 张行愚 陈文驹 (538)  
Y<sub>2</sub>P<sub>5</sub>O<sub>14</sub>:Er<sup>3+</sup>, Tm<sup>3+</sup> 晶体的合成.....于亚勤 杨太礼 李 玫 (558)  
有机非线性光学晶体 POM 的研制.....李宋贤 陈建中 董美斌 王家和 吴柏昌 (560)  
新型吡喃类激光染料的研究.....程铸生 马海麟 (563)

### 全息技术与信息处理

- 与任意点扩散函数卷积的模糊图像的恢复.....陈林森 姜亚光 (541)  
计算全息用于激光显示艺术.....高文琦 丁剑平 周进 肖晓东 叶叔书 (546)  
激光全息无损检测中系统干涉条纹的控制.....孙俊勇 马 晶 姜铃珍 洪 晶 耿完楨 (566)  
激光大屏幕显示中图像点数的研究.....诸葛向彬 吴大元 傅银生 (569)

### 激光应用

- 三重斩波器与 Doppler-free 激光光声信号的检测.....谭冠荣等 (550)  
半导体激光剪切干涉仪.....明 海 李 明 陈 农 谢建平 (571)

### 激光医学

- 激光的相干偏振特性与激光针灸.....苏 豫 (574)

## CONTENTS

**• LASER DEVICES •**

- Fundamental transverse mode stabilized GaAlAs/GaAs terraced substrate lasers  
 ..... *Sun Chengcheng, He Shufang, Zhang Peiliang, Guo Yili* (513)
- Characteristics analysis of permissible detuning-frequency in a CW injection TEA CO<sub>2</sub> laser  
 ..... *Ye Donglai, Lin Taiji* (553)

**• LASER PHYSICS AND LASER CHEMISTRY •**

- Optical chaos in the zero-order amplitude stabilization ring of Bragg acousto-optic modulated  
 laser light ..... *Liao Shiqiang, Wang Yuzhu* (518)
- Forward nonlinear collinear degenerate four wave parametric amplification in Na vapour  
 ..... *Li Bingxue, Lu Caiyan, Du Qing, Lin Fucheng* (523)
- Observation of spot pattern of SRS in H<sub>2</sub> ..... *Wang Yuezhu, Wang Qi, Ma Zuguang* (555)

**• LASER MATERIALS •**

- Study on Raman spectra of praseodymium pentaphosphate crystals  
 ..... *Wang Jiyang, Li Lixia, Liu Yaogang* (528)
- Light-induced scattering in Fe-doped birefractive LiNbO<sub>3</sub> crystals  
 ..... *Xu Kebin, Xu Haiying, Hong Jing, Zhu Guizhi* (532)
- Spectral characteristics of LiF:OH<sup>-</sup> crystals  
 ..... *Lin Yuanqi, Yang Baocheng, Li Shenghua, Ding Jingxin, Fan Fuchang* (535)
- Determination of comparable ground state recovery time with pulse width on dye by pump-probe  
 method ..... *Zhang Baozheng, Zhang Xingyu, Chen Wenju* (538)
- Growth of YP<sub>5</sub>O<sub>14</sub>:Er, Tm crystals ..... *Yu Yaqin, Yang Taili, Li Mei* (558)
- Development of organic nonlinear optical crystal POM ..... *Li Songxian et al.* (560)
- Novel pyran lasing dyes ..... *Cheng Zhusheng, Ma Hailing* (563)

**• HOLOGRAPHY AND INFORMATION PROCESSING •**

- Restoration of blurred image by convolution of arbitrary point spread function  
 ..... *Chen Linsen, Jiang Yaguang* (541)
- Laser display using computer-generated holograms  
 ..... *Gao Wenqi, Ding Jianping, Zhou Jin, Xiao Xiaodong, Ye Quanshu* (546)
- Controlling system fringes in HNDT ..... *Sun Junyong et al.* (566)
- Study on image dots in laserlaser screen display ..... *Zhuge Xiangbin et al.* (569)

**• LASER APPLICATIONS •**

- Triple chopper and detection of Doppler-free laser opto-acoustic signals ..... *Tan Guanrong et al.* (550)
- Semiconductor laser shearing interferometer ..... *Ming Hai, Li Ming, Chen Nong, Xie Jianping* (571)

**• LASER MEDICINE •**

- Laser acupuncture and the coherence and polarization properties of laser light ..... *Su Jing* (574)