

目 录

· 激光光谱 ·	
三能级系统同位素相干选择激发·····	匡一中 (769)
用激光感生荧光技术研究 Ne $1s_2-2p$ 反常光电流信号的机理·····	胡企铨等 (779)
Nd:Y _{1-x} PO ₄ 晶体中激发能量的传递和离子-离子相互作用·····	陈述春 (785)
· 激光器 ·	
对撞脉冲锁模 Nd:YAG 激光器的研究·····	林 星等 (794)
· 非线性光学 ·	
K ₂ H(IO ₃) ₂ Cl 单晶的喇曼光谱研究·····	杨华光等 (799)
· 量子光学 ·	
压缩算符的新形式与压缩态的各种表示和性质·····	范洪义等 (804)
· 信息处理 ·	
镶嵌面阵传像特性的基本理论模型·····	张保民 (812)
· 光传输与光纤通讯 ·	
椭圆芯单模阶跃光纤中孤立波偏振特性分析·····	周国生 (819)
· 测试 ·	
计算干涉图补偿法检验非球面·····	姜子龙等 (825)
· 光学材料 ·	
掺 Er ³⁺ 离子玻璃作为室温激光工作物质的分析·····	郑海兴等 (833)
· 简讯 ·	
低压氖瞬态射频光电流效应·····	朱祝彪等 (841)
固体表面单个光电子的检测·····	张在宣等 (846)
砷化镓晶体在连续 CO ₂ 激光作用下的三阶非线性系数·····	李再光等 (850)
多程喇曼增益室及其腔镜反射率的测定·····	蔡邦维等 (855)
非均匀媒质的变换矩阵和流图结构·····	马 建等 (859)
· 会议报道 ·	
第四届全国激光基本问题讨论会在江苏省吴县召开·····	乙 民 (778)
全国化合物半导体发光外延技术学术讨论会在北京市平谷县召开·····	黎 凤 (784)

编辑者	中国光学学会 《光学学报》编辑委员会 (上海 8211 邮政信箱) (邮政编码 201849)	国内发行	上海市报刊发行处
出版者	上海科学技术出版社	国内订阅	全国各地邮局
印刷者	上海商务印刷厂	国外总发行	中国国际图书贸易总公司 (中国国际书店) (北京 2820 信箱)

CONTENTS

Laser Spectroscopy	
Isotope coherent selective excitation in three-level systems	<i>Kuang Yizhong</i> (769)
Study on the mechanism of Ne $1s_2$ - $2p$ anomalous POGS in HCD using LIF technique	<i>Hu Qiquan et al.</i> (779)
Excitation energy transfer and ion-ion interaction in $Nd_xY_{1-x}PO_4$ crystals	<i>Chen Shuchun</i> (785)
Laser	
Investigation of a colliding pulse mode-locked Nd:YAG laser	<i>Lin Xing et al.</i> (794)
Nonlinear Optics	
Raman spectra of $K_2H(IO_3)_2Cl$ crystals	<i>Yang Huaquang et al.</i> (799)
Quantum Optics	
A new formalism of the squeeze operator and various representations and properties of the squeezed state	<i>Fan Hongyi et al.</i> (804)
Information Processing	
A basic theoretical model for image transfer characteristics of mosaic area arrays	<i>Zhang Baomin</i> (812)
Transmission & Optical Fiber	
Polarization properties of solitons in an elliptical-core single-mode step-index fiber	<i>Zhou Guosheng</i> (819)
Optical Measurement	
A compensating method for testing aspherics with computer-generated interferograms	<i>Jiang Zilong et al.</i> (825)
Optical Material	
Investigation of glasses doped with Er^{3+} ions used as laser materials	<i>Zheng Hairong et al.</i> (833)
Research Notes	
Transient rf optogalvanic effect of Ne at low pressure	<i>Zhu Zhubiao et al.</i> (841)
Detection of single photoelectron on solid surface	<i>Zhang Zaixuan et al.</i> (846)
The third-order nonlinear susceptibility of gallium arsenide under irradiation of a CW CO_2 laser	<i>Li Zaiquang et al.</i> (850)
Multiple-pass Raman gain cell and reflectivity measurement of resonator mirrors	<i>Cai Bangwei et al.</i> (855)
Augmented transfer matrices and flow graph structures for inhomogeneous media	<i>Ma Jian et al.</i> (859)
Meeting Reports	
The 4th National Symposium on Some Fundamental Problems of Lasers held in Wuxian	<i>Yimin</i> (778)
National Symposium on Epitaxy Techniques of Compound Semiconductor Luminophors held in Pinggu County, Beijing	<i>Li Feng</i> (784)

THE OPTICAL SOCIETY OF CHINA

Editorial Board of Acta Optica Sinica

(P. O. Box 8211, Shanghai, China)

Distributed by China International Book Trading Corporation

(Distributed by Guoji Shudian)

(P. O. Box 2820, Beijing, China)