

第九卷 1989 年总目录

第一期

- 利用由非线性光学过程产生的光量子进行的新型爱因斯坦-泡道尔斯基-洛森实验 Y. H. Shih et al. (1)
激光场缓饰的原子的自发辐射特性-谱的瞬时行为, Aulter-Townes 双重线的选择性激发 李世芳等 (10)
三能级原子同单模腔场作用下的光子统计分布 彭跃南等 (18)
非对称补偿条形复合腔半导体激光器列阵 王政等 (23)
用表面二次谐波检测 L-B 单分子膜层的聚合 俞公达等 (28)
多模液芯光纤干涉的实验研究 里佐威等 (34)
脊形波导中导模传输与损耗的分析与计算 马春生等 (38)
颜色可调假彩色化新方法 周英等 (43)
用多色菲涅耳全息滤波器作彩色图像特征识别 母国光等 (50)
从像上提取非旋转对称系统的传递函数制作解卷空间滤波器 沈晓庆等 (55)
用数字滤波消除散斑条纹图噪声 胡逸群 (61)
双散射光合成场动态散斑的统计性质 彭翔等 (68)
双层光学薄膜参数的多人射角椭偏分析方法 张瑞智等 (75)
利用相位共轭技术补偿光纤中色散效应的条件 宁继平等 (81)
一种新型集成光学微位移传感器的研究 蔡伯荣等 (88)
宽温低损耗单模光纤定向耦合器 陈善达等 (93)

第二期

- 产生于介质倍组的渡越辐射微分谱的理论计算 屈卫星等 (97)
有序混合光束和迷宫式多次反射光学系统 陈守华等 (104)
一种适用于同轴放电环形增益区的多光程谐振腔 程兆谷等 (113)
任意截面介质波导模的叠代矩量法分析 余守宪 (120)
多频声光互作用的研究 赵启大 (128)
二次多项式折射率分布平面光波导的模式 范俊清 (135)
钡准分子光谱及其对钡原子跃迁线之贡献 徐雷等 (140)
双轴晶体和频效应的相位匹配拓扑分析 任红文等 (145)
 $\text{Xe}(5p^56p)$ 态在某些气体中的淬灭速率常数 徐捷 (151)
色觉的译码模型及其验证 鲁晨光 (158)
 ZrO_2 薄膜微观结构和光学性能的研究 钟钦等 (164)
磷酸盐玻璃激光器中的自锁模现象 张国轩等 (170)
改进的光波导标量近似有限之分析 赵安平等 (175)
光纤折射率剖面的折射近场法测量的研究 殷爱斌等 (181)
超高真空中银表面垂直谐波电流的实验测量 郑万泉等 (186)
二次电位分布静电双棱镜 马健等 (190)

第三期

- 染料溶液中微微秒超荧光光谱的动力学研究 刘一先等 (193)
类氛 $\text{RbXXVIII}, \text{SrXXXIX}$ 和 $\text{YXXX} 2p^53l - 2p^54l^1$ 跃迁波长和能级的相对论多组态 Dirac-Fock 计算 梁爱华等 (200)
 XeCl 准分子激光在铅蒸气中的高效率受激电子喇曼散射 楼祺洪等 (206)
激光等离子体细丝的场分布和共振吸收 顾敏等 (211)
双波长输出 $\text{He}-\text{Ne}$ 激光器测量氦等离子体中电子密度时空分布 黄元冈等 (219)
导引场下电磁泵浦自由电子激光的非线性理论 钱宝良等 (225)
拍摄二步彩虹全息的新方法 单启鳌等 (232)
用于多参数同时测量的散斑干涉仪 严跃 (236)
含非球面光学系统多功能光学设计程序 王永仲 (241)

用等光程法设计非球面	王书泽等	(246)
方波调制时的光热光束偏转理论	李放成等	(252)
相位梯度条纹假彩色化的色度研究	刘立人	(261)
矩形槽光栅的矢量模式理论	杨宝成等	(270)
用双透镜 Joint 变换实现多特征识别	刘文山等	(278)
不等频两步激发 Li 蒸汽产生红外受激辐射特性研究	李永放等	(285)

第四期

金属表面在反射方向产生光学二次谐振波的研究(I)	郑万泉等	(289)
双原子系统共振荧光的反聚束效应	顾 敏等	(296)
用缠绕原子法研究强激光场驱动下的共振荧光	李世芳等	(302)
XeO* 和 XeS* 的紫外发射谱	徐 捷	(310)
碘原子共振多光子电离光谱研究	朱 鸽等	(317)
光学系统杂光测量与计算程序间的联系	王海明等	(321)
远紫外及真空紫外反射率测量的研究	庄大奎等	(327)
剪切散斑干涉术的统计分析	陈家壁等	(333)
离散变分 x_α 的双电子计算及 MgF ₂ :Ni ²⁺ 的晶场能级	张 冰等	(341)
氯分子激光照射增大了 LiF:F ₃ ⁺ 心浓度	顾洪恩等	(346)
干涉法测量晶体电光系数实验装置的改进	尹 鑫	(353)
用改进的共轭斜量迭代法重建三维折射率场	高益庆等	(357)
似狭缝合成一步彩虹全息术的实验研究	张申如等	(364)
对象散全息元件产生的正交象散特性的研究	杨雪玲	(370)
利用分支比法作真空紫外单色仪灵敏度的绝对校准	魏乐汉等	(375)
高增益 LiNbO ₃ 光参量振荡器	黄卫平等	(380)

第五期

辐射场的压缩的混沌态

I. 特征函数和压缩性质	黎永清等	(385)
II. 超聚束效应和状态的时间演变	黎永清等	(390)
小颗粒金属表面吸附原子的荧光和共振荧光	李孝申等	(394)
BBO 晶体的五倍频	尤晨华等	(401)
铅原子非共振多光子电离过程的研究	金明星等	(407)
宽频带聚焦泵浦准稳态受激电子喇曼散射的增益因子和能量转换效率	莫春松等	(412)
同时辐射六种可见波长的 CW-氦氖激光器的稳频及其输出的 650nm CW 氦氖受激 Raman 辐射	赵克功等	(419)
固溶态染料激光物质的研究	汪河洲等	(424)
指数型非均匀薄膜中驻波电场	孙守瑞等	(429)
随机粗糙表面上相关点的散射	金亚秋	(434)
LiNbO ₃ 交叉型波导光触发器	明 海等	(441)
高斯-斯克尔模型光束经过光学系统的传输	蒲继雄等	(447)
激光偏振取向与光栅能量吸收及破坏阈值的关系	果九卿等	(453)
电子 XOR 奎尔等高术及产生微分和旋转剖面效应的研究	张 鸿等	(460)
用等值宽度法测量 fs 脉冲宽度	龚正烈等	(467)
晶体 CsMnBr ₃ 的自旋极化 MS-X _α 计算	邱元武等	(473)
一种产生亚波长光场的可能途径	顾 樊等	(478)

第六期

高压氢激发态之间的受激喇曼散射	楼祺洪等	(481)
金属表面在反射方向产生光学二次谐振波的研究(II)	郑万泉等	(487)
内腔二次谐波过程中光场强度自脉冲振荡的增强	靳少征等	(493)

有横向分布为 TEM_{10} 模的信号注入的环形腔激光器的双稳性	樊锡君等	(501)
窄禁带半导体的非线性极化率和光学双稳性	欧发等	(507)
光学空间相干度双稳态	董孝义等	(513)
线性三原子分子转动-振动能谱的李群处理方法	易希璋等	(521)
一种新的消色像全息术	范诚等	(527)
全息滤波光学图像相减	许浩瀚等	(533)
光学多通投影相关矩阵-矢量乘法器	黄洪欣等	(537)
复物体的恢复	张月等	(544)
针孔透射式光栅光谱仪衍射效率的理论模拟	李跃林等	(550)
紫外至近红外积分球辐射定标系统	金中海等	(556)
记录薄膜 Te-In-Sb 光学性质的研究	王秦等	(562)
机械转镜隔离器的光束位置复原特性研究	周峰等	(568)
离散汉克尔变换及其在高效激光整形中的应用	李永平等	(573)

第七期

MOOC 染料单分子层薄膜聚集体的吸收光谱研究	张伟清等	(577)
$^{39}K_2$ 分子 $C^1\pi_u \sim X^1\Sigma_g^+(J'=105)Q$ 支激光诱导荧光光谱及电偶极跃迁矩变化率研究	张立敏等	(585)
XeO* 和 XeS* 紫外荧光的某些特性	徐捷	(591)
BaTiO ₃ 自泵浦相位共轭镜	张治国等	(598)
光合色素分子吸附膜的非线性增强效应	立群等	(608)
光学调速管的研究	王明常等	(608)
用互补向量修正阈值的光电混合联想存储器模型	边少平等	(618)
X 光编码孔径成像和处理技术	胡家陞等	(623)
多层介质膜的体吸收与界面吸收研究	吴周令等	(630)
光学薄膜界面互相关特性的确定	战元龄等	(635)
TeSnIn 相变记录薄膜的微观特性研究	范正修等	(640)
超短光脉冲在光纤中传输计算机模拟计算的研究	章若冰等	(646)
一种间接测量相位型全息记录介质折射率调制度的方法	恽钢等	(653)
六种激光染料紫外辐照光解 ESR 研究	傅文标等	(658)
相位共轭多模光纤传像偏振特性及对像传输的影响	林旦等	(662)
0.86 μm 激光扫描二维成像的实验研究	王蔚然等	(666)
三维物体 360° 面形自动测量方法	苏显渝等	(670)
广告		(673)

第八期

强激光场诱导自电离理论	姚关华等	(673)
激光产生的铝、硅、氧、铜、硒等离子体 X 光谱	冯贤平等	(680)
单延迟三阶、四阶相关函数确定超短光脉冲形状	张包铮等	(685)
光解产生的铅原子中受激喇曼散射和共振激光辐射	张杰等	(693)
一种猫眼列阵像相位共轭镜的研究	张福振等	(699)
乙炔 $(2v_5 - v_6) \sim (v_4 + v_6) - v_4$ 和 $(2v_4 + v_5) - 2v_4 Q$ 支高分辨二极管激光光谱	徐文刚等	(706)
激光诱导 Fe ⁺ 和 Fe(CO) ₆ 离子分子反应机制的实验和理论研究	李书涛等	(714)
计算全息图产生的锥面波在激光准直中的应用	郑刚等	(720)
用环形横向剪切干涉法精密测定透镜的折射率和色散	向才新等	(726)
直角刻槽反射光栅的后向衍射特性	王效敬	(732)
光学薄膜吸收损耗的研究	吴周令等	(741)
对称膜堆定值监控的反射率圆图技术	郭屏等	(746)
氮化铝薄膜的红外吸收光谱和喇曼光谱的研究	刘付德等	(752)
光电探测器相对光谱灵敏度测试方法的研究	吴继宗等	(758)

非均匀光纤中梯度项对模式的影响	苏科峰 (763)
中国光学学会第三届理事会在沪召开	乙 民 (765)
中国光学学会第三届理事会理事名单	(740)

第九期

激光产生的 CuXXII 离子 X 光谱线辨认	郑丹青等 (769)
半导体激光器线宽压窄及其特性研究	柴燕杰等 (775)
1.19 米相互作用长度的喇曼自由电子激光器实验	陆载通等 (780)
光纤环形外腔半导体激光器频偏特性研究	张建平等 (787)
银分子中电荷转移效应及其对喇曼信号的增强研究	苗润才等 (792)
光纤放大器的半经典分析	张明德等 (797)
多模光纤 Fabry-Perot 干涉仪的分析	战元龄等 (803)
可调抛光型光纤耦合器对位公差的分析	严 方等 (810)
ZnS 和 MgF ₂ 薄膜的离子辅助淀积	顾培夫等 (815)
测量液体和气体折射率的集成光学技术单侧和双侧漏模法	高福斌等 (823)
膜系结构对激光损伤阈值的影响	吴周令等 (830)
球面端面的锥形梯度折射率透镜的近轴成像特性	廖廷伟等 (836)
用投影法实现符号代换	薛 唯等 (842)
关于高速摄影系统的信噪量	李德熊 (848)
用电光相位调制器显示超声行波波前	易 明等 (853)
混合型大电流光纤传感器的研究	陈锡坤等 (860)
'89 国际光学薄膜会议在上海举行	乙 民 (802)

第十期

磷玻璃宽带调 Q 激光器	何伟明等 (865)
高重复率 XeCl 准分子激光器的放电特性	王华胜等 (871)
电负反馈半导体激光器中网络截止频率的影响及改进方案	张建平等 (875)
多元件共焦型非稳腔的特征	吕百达等 (880)
线状聚焦激光与金属作用的离子速度分布	孙 岚等 (888)
Ar 气对 ⁸⁹ K ₂ 分子 C ¹ P ₁ → X ¹ S ₀ LiF 光谱的碰撞猝灭效应	张立敏等 (893)
双频光场在二能级 Dressed 原子介质中的稳态传播	李彬学等 (898)
金原子的放大自发辐射脉冲的驰豫振荡	汪永江 (905)
钙原子的双电子激发自电离光谱	张 森等 (909)
无透镜夫琅和费型计算机彩虹全息图	谢敬辉等 (914)
Ronchi 光栅光密度的一种测试方法	丁培军等 (921)
磁光型光盘存储介质记录特性的研究	姜 奇等 (925)
Hg _{0.8} Cd _{0.2} 光电二极管的外差量子效率的研究	戴永江等 (932)
Si ₃ N ₄ 波导上的费涅尔透镜	蔡德水等 (938)
正交偏振 180° 旋转剪切干涉仪及其应用	朱智敏等 (944)
具有 4B 倒相结构的热光定向耦合器	陈 靖等 (951)
正负复全合景象全息术	傅声乔等 (955)

第十一期

极性染料溶液的微微秒动态荧光光谱移位	I. M. Gulis et al. (961)
采用光热辐射计量术测量固体材料的光谱吸收系数	崔 岩等 (968)
四苯基卟啉-锌化合物的微微秒瞬态吸收和荧光动力学研究	李伟良等 (972)
SC ₂ 分子激发态的紫外多光子电离——双色激光单共振离化的功率密度关系	范俊颖等 (978)
BILED/BILD 组合回路的光学逻辑运算	刘树田等 (983)
反馈调谐 CO ₂ 激光器的静态与动态行为	陈厉学等 (989)

非线性单模光纤中源啁啾孤子相互作用.....	杨祥林等	(995)
染料激光瞬态过程中的噪声.....	朱士群	(1002)
全金属结构铜空心阴极激光器的研究.....	薛焕然等	(1008)
非相干光实现的二维复数离散傅里叶变换.....	张莉等	(1013)
利用色散补偿白光相关器及高通滤波技术检测粒子大小.....	蔡履中	(1020)
漫反射物的实时互相关运算.....	王天及等	(1028)
双轴晶衬底上双轴晶单晶薄膜的椭偏测量.....	施路平等	(1033)
离子注入 SiO_2 玻璃的光吸收研究	冯述平等	(1037)
非水体系中哌啶在银电极表面的表面增强喇曼散射	顾仁教等	(1041)
正交光栅干涉仪对二维分立点物体成像.....	吴建宏等	(1047)
沿流动方向折叠腔的优越性.....	吴中祥	(1053)

第十二期

铂空心阴极放电灯的光谱特性研究.....	殷立峰等	(1057)
高吸收 ZnSe 多晶无镜光学双稳的实验观测	谢常德等	(1062)
窄线宽单纵模沟槽衬底平面条形(AlGaAs)激光器的研制及其线宽分析	胡衍芝等	(1066)
计算全息检测非球面干涉场的理论分析与实验结果.....	吴继宗等	(1072)
二维光学沃尔什-哈特曼变换	陈岩松	(1078)
光栅衍射效率与闪光光谱仪的输出.....	梁培	(1085)
微振动振幅的精密测量.....	汤俊雄等	(1092)
聚焦法测量梯度折射率透镜的折射率分布.....	彭汉俊等	(1098)
砷化镓半导体材料与器件中高频场分布研究的新方法——脉冲电光检测技术.....	朱祖华等	(1103)
TeSeIn 相变记录薄膜及其可逆光存储特性	薛松生等	(1109)
硅中浅杂质的激光感应光电导谱.....	张兵临等	(1115)
液滴微粒直径分布的激光散射法测量.....	胡柱国等	(1119)
梯度介质光学常数的反射起偏法测量.....	程希望等	(1126)
一种实现二进制加法符号替换规律的光逻辑系统.....	曹明翠等	(1129)
植物油颜色的识别方法.....	曾华等	(1133)

(上接第 1152 页)

Zhang Shichao 张世超 1028	Zhao Jinming 赵金敏 658	Zhou Jiulin 周九林 499
Zhang Shimin 张时明 596	Zhao Kegong 赵克功 419	Zhou Weizheng 周维桢 333
Zhang Tongfa 张同发 200	Zhao Lizen 赵理曾 693	Zhou Xuesong 周学松 270
Zhang Weiqing 张伟清 577	Zhao Mingxin 赵明信 218	Zhou Ying 周英 43
Zhang Xiaodong 张晓东 507	Zhao Qida 赵启大 128	Zhu Guangyin 朱广寅 871
Zhang Xingyu 张行愚 685	Zhao Yang 赵阳 995	Zhu Jiang 朱江 573
Zhang Yanzhen 张燕珍 888	Zhao Yeling 赵业玲 914	Zhu Ling 朱令 317
Zhang Yilong 张一龙 181	Zhao Youyuan 赵有源 140	Zhu Qiudong 朱冬秋 1098
Zhang Yimo 张以谋 699	Zhao Yuying 赵玉英 693	Zhu Shiqun 朱士群 1002
Zhang Yue 张月 544	Zheng Danqing 郑丹青 769	Zhu Shiyan 朱诗尧 394
Zhang Zheng 张拯 603	Zheng Gang 郑刚 720	Zhu Zhiming 朱智敏 944
Zhang Zhengquan 张正泉 769	Zheng Lemin 郑乐民 1092	Zhu Zhuhua 朱祖华 1103
Zhang Zhiguo 张治国 596	Zheng Shihai 郑师海 55	Zhu Jikang 祝继康 341, 473
Zhang Limin 章立民 556	Zheng Shuying 郑舒颖 746	Zhuang Dakui 庄大奎 327
Zhang Ruobin 章若冰 646	Zheng Wanquan 郑万泉 186, 289, 487	Zhuang Songlin 庄松林 270, 278, 544
Zhang Zhiming 章志鸣 28, 186, 289, 487, 944	Zhong Qin 钟钦 164	Zeng Weiyong 宗伟勇 860
Zhao Anping 赵安平 175	Zhou Bingkun 周炳琨 775	Zong Yaping 宗亚平 1041
Zhao Baoqing 赵宝庆 623	Zhou Feng 周烽 568	Zou Yirong 邹义榕 836
Zhao Dazun 赵达尊 914	Zhou Guosheng 周国生 453	

ACTA OPTICA SINICA, Vol. 9, 1989

CONTENTS

No. 1

A new type of EPR experiment using light quanta produced by a nonlinear optical process	Shih Yanhua et al. (1)
Photonemission-spectra from a laser dressed atom.....	Li Shifang et al. (10)
Photon statistics for the interaction of a three-level atom with single-mode cavity field.....	Peng Yuenan et al. (18)
Cross-coupled asymmetric offset strip composite cavity semiconductor laser array ...	Wang Zheng et al. (23)
Probing polymerization of L-B mono-molecular layers by surface second harmonic generation.....	Yu Gongda et al. (28)
A experimental study on interferometry of mal-timodal liquid-core opticalfiber.....	Li Zouwei et al. (34)
Analysis and computation on mode propagation and loss in ridge waveguide.....	Ma Chunsheng et al. (38)
A new adjustable pseudo-coloring method	Zhou Ying et al. (43)
Color pattern recognition with muti-wavelength FFIF.....	Mu Guoguang et al. (50)
Making spatial frequency filter for deconvolution by means of abstracting the transfer function from the image in an rotational asymmetrical system.....	Shen Xiaoqing et al. (55)
Noise reduction in speckle photography fringe pattern using digital filtering.....	Hu Yiqun (61)
Statical proerties of syntactically dynamic speckle via dual scattered light.....	Peng Xiang et al. (68)
A method for multiple angle of incidence ellipsometric analysis in determination of doublelayer optical thin film parameters	Zhang Ruishi et al. (75)
The conditions compensated for fiber dispersion by phase conjugation.....	Ning Jiping et al. (81)
Investigation of a novel integrated optics microdisplacement sensor	Cai Borong et al. (88)
Wide-temperature and low-loss single-mode directional coupler	Lu Shanda et al. (93)

No. 2

Theoretical calculations for the differential spectrum of transition radiation from a stack of foils	Qu Weixing et al. (97)
Sequencing combined beam and mazy type multipass reflector.....	Chen Shouhua et al. (104)
Multipasses resonator suitable for a coaxial discharge laser with annular gain regions	Cheng Zhaogu et al. (113)
JMM Analysis of guided modes of dielectric waveguides with arbitrary cross-section.....	She Shouxian (120)
A study of multifrequency acoustooptic interaction.....	Zhao Qida (128)
Modes in planar optical waveguide with index profile of second order polynomial.....	Fan Junqing (135)
Spectrum of barium dimer and its contribution to transitions of barium atom	Xu Lei et al. (140)
Phase-matching topology of sum-frequency generation in biaxial crystals	Ren Hongwen et al. (145)
Total quenching rate constants of Xe($5p^66p$) states in some reagents.....	Xu Jie (151)
Decoding model of color vision and its verifications	Lu Chenguang (158)
Microstructures and optical properties of zirconia films.....	Zhong Qin et al. (164)
Self-mode-locking in phosphate glass laser	Zhang Guoxuan et al. (170)
Improved approximate scalar finite-element analysis of optical waveguides	Zhao Anping et al. (175)
Refracted near-field technique for the measurement of optical fiber refractive index profiles.....	Yin Aie et al. (181)

- Determination of mormal harmonic current at silver surface under ultrahigh vacuum conditon
.....Zheng Wanquan et al. (186)
Electrostatic biprism with quadratic potential distribution Ma Jian et al. (190)

No. 3

- Kinetic investigations of picosecond superfluorescence spectra in dye solutions Liu Yixian et al. (193)
Multiconfiguration Dirac-Fock calculations of Ne-like Rb XXVIII, Sr XXIX and Y XXX $2p^{5}3l-4l^1$
transition wavelengths and fine-structure energies Liang Aihuo et al. (200)
High efficiency Raman conversion of XeCl laser radiation in Rb vapor Lou Qihong et al. (206)
Field distributions and resonance absorption in a laser plasma filament Gu Min et al. (211)
Time and radial resolved electron density measurement in helium plasma by a double wavelength
He-Ne laser Huang Yuanwang et al. (219)
Nonlinear theory of an electronmagnetically pumped free-electron laser with a guide magnetic field
.....Qian Baoliang et al. (225)
A new method for fabricating two-step rainbow holograms Shan Qizhe et al. (228)
Multiple-quantity-simultaneously-determining speckle interferometer Yan Yue (236)
Multifunctional optical design program for the optical system incluiding aspherical surfaces
.....Wang Yongzhong (241)
Designing and aspheric surface with equioptical path method Wang Shuze et al. (246)
Theory of photothermal optical beam deflection at suuare-wave modulation Li Binchen et al. (252)
Colorimetry on pseudocolor-coded fringes of phase gradient Liu Liren (261)
A vector modal theory for rectangular-groove grating Yang Baocheng et al. (270)
Realization of multi-characteristic recognition via dual-lens Joint transform Liu Wenshan (278)
Characteristics of IR stimulated emission from two-step excitation of Li-vapor at different
frequencies Li Yongfang et al. (285)

No. 4

- Optical second-harmonic generation by reflection of incident beam at metal surfaces (I)
.....Zheng Wanquan et al. (289)
Antibunching effect of resonance fluorescence in a two-atom system Gu Min et al. (296)
Investigation of resonanece fluorescence in intense laser field via dressed atom approach
.....Li Shifang et al. (302)
UV emission spectrum of XeO^* and XeS^* Xu Jie (310)
Study on resonant multiphoton ionization spectrum of atomic iodine Zhu Ling et al. (317)
Relations between measurement and computer program of stray light in optical system
.....Wang Haiping et al. (321)
A study of reflectivity-measurement in far ultraviolet and vacuum ultraviolet Zhuang Dakui et al. (327)
Statistical analysis of shearing speckle interferometry Chen Jiabi et al. (333)
Two-electron properties of DV α_{α} and energy levels of $MgF_2:Ni^{2+}$ Zhang Bing et al. (341)
Enhancement of $LiF:F_3^+$ centers with N_2 laser irradiation Gu Hongen et al. (346)
Improvement of experimental setup of interferometric method for measuring electro-optic coefficients
of crystals Yin Xin (353)
Reconstruction of 3-D refractive index fields by an improved Conjugate-gradient iterative method
.....Gao Yiqing et al. (357)
Experimental study of one-step rainbow holography with synthesized slitlike Zhang Senru et al. (364)
Normal astigmatic character of astigmatic holographic element Yang Xueling (370)
A bsolute calibration of VUV intensity using branch ratio Wei Lehan et al. (375)
High-gain $LiNbO_3$ optical parametric oscillator Huang Weiping et al. (380)

No. 5

Squeezed chaotic states of the radiation field

- I. Characteristic function and squeezing *Li Yongqing et al.* (385)
 II. Super-bunching effect and time-evolution of the states *Li Yongqing et al.* (390)
 Fluorescence and energy resonance fluorescence of an adatom near surface of a small metal particle
 *Li Xiaoshen et al.* (394)
 Fifth harmonic generation using BBO crystal *You Chenhua et al.* (401)
 Investigation of nonresonant multiphoton ionization process of lead atoms *Jin Mingxing et al.* (407)
 The gain factor and conversion efficiency quasi-stationary stimulated electronic Raman scattering with
 focnsed broad-band pump lasers *Mo Chunsheng et al.* (412)
 CW He-Ne laser with simultaneous emission of six visible wavelengths, its frequency stabilization and
 650nm He-Ne stimulated Raman emission *Zhao Kegong et al.* (419)
 Study of laser dye in solid solutions *Wang Heshou et al.* (424)
 Standing-wave electric field in inhomogeneous film with exponential index profile *Shun Shouyao et al.* (429)
 On scattering from correlated points of a randomly rough surface *Jin Yaqiu* (434)
 Optical flip-flop made by LiNbO₃ intersection waveguide *Ming Hai* (441)
 Propagation of Gaussian Schell-Mode beams through optical system *Pu Jixiong et al.* (447)
 Orientational dependence of absorption and laser induced damage in wire grid polarizers
 *Liang Jiuling et al.* (453)
 Study of electronic XOR logic Moire technique and effect of differential equiorder surfaces rotation
 *Zhang Hong et al.* (460)
 Measurement of femtosecond pulselwidth with interference correlation *Gong Zhenglie et al.* (467)
 Spin-polarized MS-X_a calculation of the CsMnBr₃ crystal *Qiu Yuanwu et al.* (473)
 A possible way for generating sub-poissonian field *Gu Qiao et al.* (478)

No. 6

- Stimulated Raman scattering between excited atates of hydrogen at high gas pressure
 *Lou Qihong et al.* (481)
 The research of reflected second harmonic generation from metal surface (II) *Zheng Wanquan et al.* (487)
 Enhancement of intensity self pulsing oscillation in intracavity second harmonic generation process
 *Jin Shaysheng et al.* (493)
 The bistability of the ring cavity laser with a injected signal having a transverse distribution of the
 TEM₁₀ mode *Fan Xijun et al.* (501)
 The nonlinear susceptibility and optical bistability of narrow gap semiconductors *Ou Fa et al.* (507)
 Optical spatial coherence degree bistability *Dong Xiaoyi et al.* (513)
 Lie Groups approach to the rotation-vibration energy levels for a linear triatomic molecule
 *Yi Xizhang et al.* (521)
 A new achromatic image holography *Fan Cheng et al.* (527)
 Optical image subtraction with holographic filtering *Xu Haohan et al.* (533)
 Optical matrix-vector multiplication using multichannel shadow-casting correlator
 *Huang Hongxin et al.* (537)
 Reconstruction of a complex-valued object function *Zhang Yue et al.* (544)
 Theoretical simulations of diffraction efficiencies of a pinhole transmission grating spectrometer
 *Li Yaolin et al.* (550)
 Integrating sphere radiation calibration system for UV to near IR *Jin Zhonghai et al.* (556)
 The optical properties of Te-In-Sb recording thin film *Wang Hao et al.* (562)
 Investigation of optical restoration characteristics of mechanical rotating mirror isolator
 *Zhou Feng et al.* (568)

Discrete Hankel transform and its application to laser shaping in high efficiency.....*Li Yongping et al.* (573)

No. 7

- Investigation on absorption spectra of aggregates of MOC dye monolayers.....*Zhang Weiqing et al.* (577)
 LIF spectrum of Q-branch ($J'=105$) and Changing Ratio of electronic dipole transition moment of $C^1\Pi_u - X^1\Sigma_g^+$ for dimer $^{39}K_2$*Zhang Limin et al.* (585)
 Some characteristics of UV fluorescence from XeO^* and XeS^**Xu Jie* (591)
 A self-pumped phase conjugate mirror (SPPCM) with $BaTiO_3$*Zhang Zhiguo et al.* (598)
 Nonlinear enhancement effect of adsorbed layers of photosynthetic pigment molecules.....*Li Qun et al.* (603)
 Study on optical klystron.....*Wang Mingchang et al.* (608)
 Optical electric hybrid associative memory model with threshlod modification using complementary vector.....*Bian Shaoping et al.* (618)
 Imaging and processing techniques of X-ray coded aperture.....*Hu Jiasheng et al.* (623)
 Measurement of bulk and interface absorption in multilayer coatings.....*Wu Zhouling et al.* (630)
 Determination of interface cross-correlation properties of optical coatings.....*Zhan Yuanling et al.* (635)
 Investigation on the micro-characteristics of TeSeIn thin film*Fan Zhangxiu et al.* (640)
 Analogue calculation for propagation of ultrashort optical pulse in fiber.....*Zhang Ruobing et al.* (646)
 A method of measuring the modulation of refractive index of phase holographic reading medium.....*Yu Gang et al.* (653)
 ESR study of photolytic process in six laser dyes under action of UV irradiation.....*Fu Wenbiao et al.* (658)
 The property of light polarization in single multimode optical fiber and its effect on the image transmitted using phase conjugation.....*Lin Dan et al.* (662)
 0.86 μm laser two-dimension-scanning imaging experimental research.....*Wang Weiran et al.* (666)
 An automated method for 360° surface measurement of 3D objects.....*Su Xianyu et al.* (670)

No. 8

- Theory of intense laser-field induced autoionization.....*Yao Guanhua et al.* (673)
 X-ray spectrum of Al, Si, O, Cu, Se from laser plasma.....*Feng Xianping et al.* (680)
 Determination of ultrashort light pulse shape by single-delay 3rd-and 4th-order intensity correlations*Zhang Baozheng et al.* (685)
 Stimulated Raman scattering and resonant laser radiation in photodissociated Pb.....*Zhang Jie et al.* (693)
 Study on a pseudo PPCM of cat's eye array.....*Zhang Fugen et al.* (699)
 ($2v_5 - v_6$), ($v_4 + v_5$) - v_4 and ($2v_4 + v_5$)₁ - $2v_4Q$ branches of high resolution diode laser spectra of acetylene.....*Xu Wengang et al.* (706)
 Experimental and theoretical studies of laser induced ion-molecule reaction between Fe^+ and $Fe(OO)_5$*Li Shutao et al.* (714)
 Application of cone wave generated by CGH in laser alignment.....*Zheng Gang et al.* (720)
 Precise measurement of refraction index and dispersion of lens by encircling lateral shearing interferometer*Xiang Caixin et al.* (726)
 Retrodiffraction properties of reflecting grating with right angle grooves.....*Wang Xiaojing* (732)
 Absorption losses in single layer optical coatings.....*Wu Zhouling et al.* (741)
 Reflectance diagram technique in level monitoring of symmetric stacks.....*Guo Ping et al.* (746)
 The investigation of infrared absorption spectrum and Raman spectrum of AlN thin Films.....*Liu Fude et al.* (752)
 A measuring method of relative spectral sensitivity distributions of photoelectric detectors*Wu Jizong et al.* (758)
 The effect of gradient term on the modes of inhomogeneous optical fiber.....*Su Kefeng* (763)
 The third Council Meeting of Chinese Optical Society held in Shanghai.....*Yi Ming* (705)

No. 9

- Classification of Cu XXII X-ray spectra in laser-produced plasma.....*Zhen Danqin et al.* (769)
 Linewidth reduction of semiconductor lasers and study of linewidth property*Chai Yanjie et al.* (775)
 Experimental study of a Raman freeelectron laser with 1.19 m interaction longth.....*Lu Zaitong et al.* (780)
 Study of chirping properties of semiconductor laser with optical fiber ring feedback
*Zhang Jianping et al.* (787)
 Charge-transfer and its enhancement for Raman signal in Ag-molecule system*Miao Rencai et al.* (792)
 Semiclassical analysis of optical fiber amplifiers.....*Zhang Mingde et al.* (797)
 Theoretical analysis of multimode fiber Fabry-Perot interferometer.....*Zhan Yuanling et al.* (803)
 Analysis for countorpoint tolerances of tunable polishing optical-fiber couplers.....*Yan Fang et al.* (810)
 Ion-assisted deposition of ZnS and MgF₂ films.....*Gu Peifu et al.* (815)
 A integrated optics technique for measuring the refractive indices of liquid and gas one and two-side leaky mode method.....*Gao Fubin et al.* (823)
 Damago threshold dependonce of multilayer laser mirror on coating design.....*Wu Zhouling et al.* (830)
 Paraxial imaging characteristics of a conical GRIN rod lens with spherical end surface
*Liao Tingdi et al.* (836)
 Symbolic substitution using shadow-casting.....*Xue Wei et al.* (843)
 Amount of information of high-speed photographic systems.....*Li Dexiong* (848)
 A novel temporal correlator-display ultrasonic traveling wavefront by electrooptic modulator.....
*Yi Ming et al.* (853)
 Studies on hybrid large current fiber sensor.....*Chen Xikun et al.* (860)
 The' 89 International Symposium on Optical Coatings held in Shanghai, China.....*Yi Min* (862)

No. 10

- Wideband phospha Nd glass Q-switched laser.....*He Weiming et al.* (865)
 Discharge claacteristics of XeCl excimer laser with high repetition rate.....*Wang Huasheng et al.* (871)
 Effect of cutoff frequency and proposals for improvement in negetive electrical feedback semiconductor laser.....*Zhang Jianping et al.* (875)
 Characteristics of multielement confocal unstable resonators*Lu Baida et al.* (880)
 Ion velocity distribution stdy of line-focused laser irradiation on foils.....*Sun Lan et al.* (888)
 Quenching effect of LIF spectrum for dimer ³⁹K₂(C ¹H₄-X ¹ Σ_g^+) by collision of buffer gas Ar.....
*Zhang Limin et al.* (893)
 The propagation of two-frequency fields in a two-level dressed atom system*Li Binxue et al.* (898)
 Relaxation oscillation in the light Pulse of amplified spontaneous emission from gold atom.....
*Wang Yongjiang et al.* (905)
 Doubly excited autoionization spectrum of Ca atom*Zhang Sen et al.* (909)
 Lens-less Fraunhofer computer generated rainbow hologram.....*Xie Jinghui et al.* (914)
 Real-time non-destructive testing of Ronchi grating.....*Ding Peijun et al.* (921)
 Recording characteristics of storage media for magneto-optic disks.....*Jiang Qi et al.* (925)
 Distribution function of heterodyne quantum efficiency of Hg_{0.8}Cd_{0.2}Te photo-electrical diode
*Dai Yongjiang et al.* (932)
 Fresnel lensesin silicon nitride waveguides.....*Cai Deshui et al.* (938)
 Orthogonally polarizing 180° rotational shearing interferometer and its application
*Zhu Zhiming et al.* (944)
 Thermo-optics switched directional coupler with reversed.....*Chen Zheng et al.* (951)
 Compound panoramic holography of orthoscopic and pseudoscopic image.....*Fu Shengqido* (955)

No. 11

- Picosecond study of time-dependent spectral shift in polar dye solutions *I. M. Gulis et al.* (961)
 Measurement of absorption coefficient for solid material by photothermal radiometry *Cui Yan et al.* (968)
 Picosecond time-resolved transient absorption and fluorescence study of tetraphenylporphyrin-Zn
 *Li Weiliang et al.* (972)
 UV multiphoton ionization of excited state of CS₂ molecule—Intensity dependence of two-color laser ...
 single resonance ionization *Fan Junying et al.* (978)
 Optical logic implementation in composite BILED/BILD circuits *Liu Shuiyan et al.* (983)
 Stability and dynamical behavior of a CO₂ laser with feedback control of the detuning *Chen Lixue et al.* (989)
 Soliton interaction with chirp from optical source in nonlinear monomode optical fibers
 *Yang Xianglin et al.* (995)
 Noise in dye laser transients *Zhu Shiqun* (1002)
 A study of the copper hollow cathode laser with all metal conduction *Xue Huanran et al.* (1008)
 Incoherent optical implementation of 2-D complex discrete Fourier transform *Zhang Li et al.* (1013)
 Particle sizing using dispersion-compensated white light correlation and high pass filtering
 *Cai Lushang* (1020)
 Real time cross correlating operation on diffuse object *Wang Tianji et al.* (1028)
 Ellipsometric measurement of biaxial single crystal films on biaxial crystal substrats *Shi Luping et al.* (1033)
 Optical absorption study of Ag⁺ implanted SiO₂ glass *Feng Yiping* (1037)
 The surface enhanced Raman scattering of piperidine adsorbed on silver electrode surface in nonaqueous media *Gu Renao et al.* (1041)
 Imaging two-dimensional objects composed of discrete points with a crossgrating-interferometer
 *Wu Jianhong et al.* (1047)
 The superiority of laser cavity folded along flow direction *Wu Zhongxiang* (1053)

No. 12

- Investigation of the spectral characteristics of U HCD lamp *Yin Lifeng et al.* (1057)
 Experimental observation of mirrorless optical bistability in poly-crystalline ZnSe with high
 absorption *Xie Changde et al.* (1062)
 Research of single longitudinal mode CSP (AlGa) As laser diodes with narrow linewidth and the
 analysis of linewidth *Hu Yanzhi et al.* (1066)
 Theoretical analysis and experimental result of interference field in testing aspheric surface with CGH
 *Wu Jizong et al.* (1072)
 2-Dimensional optical Walsh-Hadamard transform *Chen Yansong* (1078)
 Grating relative diffraction efficiency and the output of flash spectrograph *Liang Pei* (1085)
 Precise measurement of micro-vibration amplitude *Tang Junxiong et al.* (1092)
 Focusing method for measurement of refractive-index profiles in gradient-index lens *Peng Hanjun et al.* (1098)
 A new method—pulse electro-optic probing for studying the distribution of high frequency electric
 field in GaAs material and devices *Zhu Zuhua* (1103)
 TeSeIn phase-change recording thin film and its reversible recording property *Xue Songsong et al.* (1109)
 Laser-induced photoconductivity spectroscopy from shallow acceptor impurities in silicon
 *Zhang Binglin et al.* (1115)
 Measurement of droplet diameter distribution by laser scattering method *Hu Zhuguo et al.* (1119)
 Optical constant measurement in gradient media using method of polarizing reflection
 *Cheng Xiwang et al.* (1126)
 A simple optical logic system to implement symbolic substitution rules of binary addition
 *Cao Mingcui et al.* (1129)
 A method of spectral recognition for vegetable oil colour inspection *Zen Hua et al.* (1133)