

激光

(月刊)

第七卷 第十一期

(总第 47 期)

一九八〇年十一月

编 辑 《激光》编辑委员会
(上海 8211 邮政信箱)
(邮政编码: 201849)

出 版 上海科学技术出版社
印 刷 上海商务印刷厂
国内发行 上海市报刊发行处
国内订阅 全国各地邮局
国外发行 中国国际书店
(北京 399 信箱)

代号: 国内 4-201 定价: 0.33 元
国外 M159

目 录

- 充气聚爆靶的简化物理模型 王润文 谭维翰 (1)
波导纤维中光线延迟的计算 殷宗敏 (5)
增益及密度同时作随机起伏对流动型气体激光器光束
质量的影响 褚成 (8)
激光除锈的研究与试验 阮国强 (11)
高能激光衰减器——圆孔光栅 邹海兴 [冯大任] (16)
无腔内扩束器和标准具的窄谱线脉冲染料激光器
..... 张培林 赵朔嫣 (21)
使用不同染料的锁模磷酸盐钕玻璃激光器的输出性能
..... 衣佩霞 唐贵琛 支婷婷 (25)
TEA CO₂ 激光光电转换效应研究 楼祺洪 (29)
封离型 CO₂ 波导激光器 南英子 张利春 吴树才 (32)
染料激光的双折射滤光片调谐 李郁芬 金耀根 (35)
连续 1.06 微米红外激光在空气中引起的可见光散射
..... 赫先生 叶碧青 刘颂豪 (39)
PTM Q 突变技术研究 王福贵 张新国 (41)
测量 CO₂ 激光功率用的积分球高温涂层的研制
..... 张亚奇等 (44)
高功率 CO₂ 激光器的增透膜
..... 张宝仁 吴礼明 刘贵萍 (48)
激光浓缩硫同位素(52) 棒状激光放大器增益分布
的精密测量(53) 稳定单模连续 YAG 激光器(55)
布鲁斯电极的氮分子激光器(56) 装配式同轴闪光
灯激励的高效染料激光器(57) 高纯 CO 气体对
CO 激光器输出功率和寿命的影响(58) 条形 DH-
GaAs 激光器与多模光纤间光耦合的实验结果(59) 粗糙金
属漫反射面积分球测量 CO₂ 激光功率(60) 中小功率 CO₂
激光器输出反射镜的材料选择(61) 调频 TEA CO₂ 激光器(61)
LEM-1 型激光能量计(62) He-Ne 激光配合光纤治疗慢
性咽炎(63) 激光治疗过敏性鼻炎 100 例(64) 氦-氖激光
穴位针刺(64)

科
学
札
记

6328 埃低噪声 He-Ne 激光管(15)
1980 年上海激光产品展览会(47)

Contents

Simplified physical model of implosive fusion pellet filled with gas.....	Wang Runwen, Tan Weihan	(1)
Calculations of ray delay in waveguide optical fibre	Yin Zongmin	(5)
Influence of simultaneous random fluctuations of gain and density on beam quality of flow-type gas lasers.....	Chu Cheng	(8)
Study and test of sweeping away rust by laser.....	Buan Guoqing	(11)
High energy laser attenuator—circular aperture grating	Zou Haixen, Feng Daren	(16)
Spectrally narrow pulsed dye laser without intracavity beam expander and etalon.....	Zhang Peilin, Zhao Shuoyan	(21)
Output properties of mode-locked Nd ³⁺ phosphate glass laser with various dyes.....	Qiu Peixia, Tang Guisheng, Zhi Tingting	(25)
Research on the conversion effect of TEA CO ₂ laser radiation to electric power.....	Lou Qihung	(29)
Sealed-off CO ₂ waveguide lasers.....	Nan Yingzi, Zhang Lichun, Wu Shuchai	(32)
Tuning of a dye laser with birefringent filters	Li Yufeng, Jin Yuegen	(35)
Visible scattering in air induced by a CW laser beam at 1.06μm.....	He Guangsheng, Ye Biqing, Liu Songhao	(39)
Study of PTM Q-switching technique	Wang Fugui, Zhang Xinnan	(41)
Development of high temperature integrating coating for power CO ₂ laser measurement	Zhang Yaqi et al.	(44)
Anti-reflective coatings for high power CO ₂ laser systems.....	Zhang Baoren, Wu Liming, Liu Guiping	(48)

SCIENCE NOTES

Laser enrichment of sulfur isotopes (52) Precise measurement of gain distribution in a rod laser amplifier (53) Stable, monomode CW YAG laser (55) Molecular nitrogen laser with Bruce electrodes (56) Efficient dye laser pumped by co-axial flash lamp (57) Effects of high purity CO gas on output power and lifetime of CO laser (58) Experimental results on coupling between multimode optical fibre and strip DH-GaAs laser (59) CO₂ laser power measurement by integrating sphere with rough metal surface (60) Selection of reflector materials for CO₂ lasers with medium and low output power (61) FM TEA CO₂ laser(61) Model-1 LEM laser calorimeter (62) Therapy of chronic pharyngitis by optic-fiber with the aid of He-Ne laser (63) Laser treatment of 100 cases of allergic rhinitis (64) A acupuncture treatment by He-Ne laser (64)

LETTERS

Low noise 6328 Å He-Ne laser tube (15) 1980 exhibition on laser products in Shanghai (47)