

# 激光

(月刊)

第七卷 第一期

(总第 37 期)

一九八〇年一月

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)

刊号: 4-201 定价: 0.33 元

## 目 录

中国激光 20 年概貌 (I).....	
.....本刊记者 纪 锺 本刊通讯员 群 荏 (1)	
钎玻璃非线性双光子吸收.....邱佩华等 (13)	
NdP <sub>5</sub> O <sub>14</sub> 晶体中 Nd <sup>3+</sup> 的 4F <sub>3/2</sub> 受激态上粒子数对荧光寿命的影响.....何慧娟 陆国贤 (18)	
固体激光器基模热稳腔的设计.....王廷福等 (23)	
长寿命重复频率 TEA CO <sub>2</sub> 激光器.....周岳亮等 (29)	
氮分子激光泵浦 POPOP 染料蒸气...傅克坚 宋 云 (33)	
激光对有机光色材料消色性的研究.....	
.....陈尚庸 翁文泉 唐春明 (36)	
棱镜-薄膜耦合器的耦合间隙对薄膜参数测量误差的影响.....李玉善 金 锋 (42)	
蒸气激光器的耐高温光胶石英窗口.....王联治 (46)	
用无极脉冲放电管泵浦兆瓦级碘原子激光放大器的建议.....张遵送 (49)	
碱金属蒸气泵浦灯.....	
.....于开义等 (52)	
自旋反转喇曼激光器.....曹洪如 (58)	

简 讯

国家科委召开全国常用激光器工作会议 (12) 全国晶体生长与材料学术会议在苏州召开 (17) 丰富多彩的激光科技成果展览 (23) 氦-氖激光器寿命超过万小时 (48) 铜离子空心阴极紫外 2600 Å 激光器研制成功 (51)

广 告

激光电源

(封四)

## Contents

A 20 years' survey of laser science and technology in China (I) .....	
..... <i>The correspondent Ji Zhong, The reporter Qun Li</i>	(1)
Nonlinear two-photon absorption in Nd glasses .....	<i>Qiu Peihua et al.</i> (13)
Effect of population of $4F_{3/2}$ excited state $Nd^{3+}$ on fluorescence lifetime in $NdP_5O_{14}$ crystals.....	
..... <i>He Huijuan, Lu Guoxian</i>	(18)
Design of solid state laser resonators for stable fundamental mode operation.....	<i>Wang Tingfu et al.</i> (23)
A repetition frequency TEA $CO_2$ laser with long life-time.....	<i>Zhou Yueliang et al.</i> (29)
POPOP dye vapor pumped by a molecular nitrogen laser .....	<i>Fu Kejian, Song Yun</i> (33)
Decoloration studies of organic photochromic materials by laser .....	
..... <i>Chen Shangyong, Weng Wenjuan, Tang Chunming</i>	(36)
Effect of coupling gap for prism-film couplers on the errors of film parameters.....	
..... <i>Li Yushan, Jin Feng</i>	(42)
High temperature quartz window with optical contact for vapor lasers.....	<i>Wang Lianzhi</i> (46)
Proposal for use of electrodeless discharges as optical pumping for an atomic iodine laser amplifier of TW order.....	<i>Chang Zunkui</i> (49)
Alkali metal vapor pumping lamps.....	<i>Yu Kaiyi et al.</i> (52)
Spin-flip Raman laser.....	<i>Cao Hongru</i> (58)

### LETTERS

National conferenced lasers in Common use held by the National science and Technology committee (12) National symposium on crystal growth and material science held in Suzhou (17) Rich and colourful exhibitions of achievement in laser science and technology (28) Life-time of He-Ne laser is over 10000 hrs (48) Copper ion hollow cathode laser at  $2600\text{\AA}$  developed (51)

### ADVERTISEMENTS

Laser power supply (Back)