

目 次

测试技术

水凝胶波导探针的制备及对罗丹明 B 的超高灵敏检测 罗洪, 蔡斌(1)

应用技术

异质微环谐振腔双稳态及全光存储器应用 王婷, 沈微宏, SCHOENHARDT Steffen, 张启明(7)

三维培养结肠癌细胞的微流控芯片荧光成像研究 蔡书祺, 郑璐璐, 张大伟(14)

基于水凝胶聚合物波导传感器检测盐酸吡啶黄 倪天成, 蔡斌(20)

Smith 预估模糊 PID 控制算法及其在粉末定量称重中的应用 陈奇, 袁旭军, 张荣福, 郑阳(28)

体布拉格光栅外腔倍频半导体激光器研究 刘荣战(36)

光学系统

高分辨率旋转光栅光谱仪的设计 申佳琪, 杨照清, 傅伟, 王兴宇, 郭汉明(46)

设计与研究

插片式可穿戴眼球追踪系统 李广林, 金涛(54)

磁控溅射制备碳化硼薄膜的结构与成分分析

..... 朱京涛, 刘扬, 周健荣, 周晓娟, 孙志嘉, 崔明启(63)

二氧化硅平面波导集成光开关器件研究 郭松, 袁硕, 陈益姝, 玄洪文, 冯吉军(69)

基于光学衍射神经网络的拉盖尔-高斯光束识别 贺瑜, 陈龙, 胡晓楠, 栾海涛(77)

锰掺杂二维钙钛矿 (PMA)₂PbBr₄ 中的发光性质及能量转移机制 王梓屹, 徐公杰(86)

CONTENTS

TESTING TECHNOLOGY

Preparation of hydrogel waveguide probe and ultrasensitive detection of rhodamine B LUO Hong, CAI Bin (1)

APPLICATION TECHNOLOGY

Bistability in hybrid micro-ring resonator for all-optical memory
..... WANG Ting, SHEN Weihong, SCHOENHARDT Steffen, ZHANG Qiming (7)

Investigation of fluorescence imaging in microfluidic chip for three-dimensional cultivation of colon cancer cells
..... CAI Shuqi, ZHENG Lulu, ZHANG Dawei (14)

Detection of acriflavine hydrochloride based on hydrogel polymer waveguide sensor NI Tiancheng, CAI Bin (20)

Smith predictive fuzzy PID control algorithm and its application in powder quantitative weighing
..... CHEN Qi, YUAN Xujun, ZHANG Rongfu, ZHENG Yang (28)

Study on volume Bragg grating external cavity second harmonic generation semiconductor laser LIU Rongzhan (36)

OPTICAL SYSTEM

Design of a high-resolution rotating grating spectrometer
..... SHEN Jiaqi, YANG Zhaoqing, FU Wei, WANG Xingyu, GUO Hanming (46)

DESIGN AND RESEARCH

Plug-in wearable eye-tracking system LI Guanglin, JIN Tao (54)

Structural and component analysis of boron carbide films prepared by magnetron sputtering
..... ZHU Jingtao, LIU Yang, ZHOU Jianrong, ZHOU Xiaojuan, SUN Zhijia, CUI Mingqi (63)

Research on silicon dioxide planar waveguide integrated optical switch devices
..... GUO Song, YUAN Shuo, CHEN Yishu, XUAN Hongwen, FENG Jijun (69)

Laguerre-Gaussian beam recognition based on optical diffractive neural network
..... HE Yu, CHEN Long, HU Xiaonan, LUAN Haitao (77)

Luminescence properties and energy transfer mechanism in Mn-doped two-dimensional perovskite (PMA)₂PbBr₄
..... WANG Ziyi, XU Gongjie (86)