

目 次

特约专题: 新型太赫兹辐射调控及其应用

- 基于超材料的太赫兹波辐射特性与增强研究 徐新龙, 史明坚, 黄媛媛, 刘慧彪, 熊永臻(1)
双层空竹超表面中基于 BIC 的局域太赫兹磁场增强的研究
..... 阎晓娜, 高新卓, 刘馨怡, 金钻明(9)
方兴未艾的太赫兹生物医学传感器 赵振宇, 张雪莲(18)

测试技术

- 光电编码器检测装置的安装偏角对检测精度的影响 唐宁宁, 李志斌, 李映铮(32)
肝功能储备分析仪(ICG)质量控制的探讨 金鑫, 吴路平, 朱婷婷(40)

应用技术

- 纯克尔非线性动力学在光学神经元中的应用研究
..... 龙洪亮, 沈微宏, SCHOENHARDT Steffen, 张启明(45)
6-氨基异喹啉的荧光增强及在白光膜中的应用 刘颖, 蔡斌(51)

设计与研究

- 双色激光产生太赫兹辐射的调控机理研究 葛委南, 赵佳宇(58)
钨镍共掺杂 V_2O_5 薄膜的光电特性研究 王兴萍, 李毅, 庄嘉庆, 闫俊屹, 梅金城(65)
基于 ZYNQ 的水下双目实时图像采集与处理系统设计
..... 张崇丙, 李晓伟, 魏柠阳, 成月, 李锦(73)

仪器与装置

- 基于合光技术的可变焦激光探照灯设计 王轩宇, 杨一涵, 石悦言, 李阳, 黄俐皓, 隋国荣(80)
腔外旋转泵浦的 Nd : YAG 固体激光器研究
..... 张波, 李月飞, 曹蔚琳, 黄晓杰, 张大伟, 李建郎(87)

CONTENTS

SPECIAL COLUMN: TERAHERTZ GENERATION, MANIPULATION AND SENSING TECHNOLOGY

- Terahertz wave radiation characteristics and enhancement based on metamaterials
..... *XU Xinlong, SHI Mingjian, HUANG Yuanyuan, LIU Huibiao, XIONG Yongzhen* (1)
- Research of BIC-based localized terahertz magnetic enhancement in double-layered diabolite metasurface
..... *YAN Xiaona, GAO Xinzhuo, LIU Xinyi, JIN Zuanming* (9)
- Terahertz medical biosensors in the ascendance *ZHAO Zhenyu, ZHANG Xuelian* (18)

TESTING TECHNOLOGY

- Effect of installation angular deviation on accuracy for photoelectric encoder detection device
..... *TANG Ningning, LI Zhibin, LI Yingzheng* (32)
- Discussion on quality control of liver function reserve analyzer (ICG) *JIN Xin, WU Luping, ZHU Tingting* (40)

APPLICATION TECHNOLOGY

- Research on the application of pure Kerr nonlinear dynamics in optical neurons
..... *LONG Hongliang, SHEN Weihong, SCHOENHARDT Steffen, ZHANG Qiming* (45)
- Fluorescence enhancement of 6-aminoisoquinoline and its application in white light film *LIU Ying, CAI Bin* (51)

DESIGN AND RESEARCH

- Regulation mechanism study of terahertz radiation generated from two-color laser field *GE Weinan, ZHAO Jiayu* (58)
- Preparation of tungsten-nickel co-doped V_2O_5 films by sol-gel method and photoelectric properties of thermally induced phase transition *WANG Xingping, LI Yi, ZHUANG Jiaqing, YAN Junyi, MEI Jincheng* (65)
- Design of a real-time underwater binocular image acquisition and processing system based on ZYNQ
..... *ZHANG Chongbing, LI Xiaowei, WEI Ningyang, CHENG Yue, LI Jin* (73)

INSTRUMENTS

- Design of zoomable laser searchlight based on photoluminescence technology
..... *WANG Xuanyu, YANG Yihan, SHI Yueyan, LI Yang, HUANG Lihao, SUI Guorong* (80)
- Research on Nd : YAG solid-state laser with extracavity rotatory pumping
..... *ZHANG Bo, LI Yuefei, CAO Weilin, HUANG Xiaojie, ZHANG Dawei, LI Jianlang* (87)