

Chinese Optics Letters

Volume 11
Number 9
September 10, 2013
www.col.org.cn

Atmospheric and Oceanic Optics

- Scintillation discriminator improves free-space quantum key distribution *Feng Tang and Bing Zhu* 090101

Fiber Optics and Optical Communications

- Experimental validation of domain-level gradient-based and hierarchical PCE-based routing and control in heterogeneous optical networks *Rui Lu, Xiaoping Zheng, Nan Hua, Wangyang Liu, and Xiaohui Chen* 090601
- Theoretical analysis of the performance of a single side band multicarrier source based on a re-circulating frequency shifter influenced by an optical bandpass filter *Wan Meng, Lixia Xi, Xiaoguang Zhang, Jiachuan Lin, Feng Tian, Hao Tu, and Xia Zhang* 090602
- Effective SNR improvement using a high-power pulsed pump in an ytterbium-doped fiber amplifier *Jing Liu, Lixin Xu, Anting Wang, Chun Gu, Qing Liu, Ankun Wei, Teng Xu, and Hai Ming* 090603
- Calibrating an optical fiber humidity sensor and applying it in real-time monitoring of relative humidity in fresh concrete *Xiaokang Zhang, Zhuyong Deng, and Hanlang Xu* 090604

Geometric Optics

- Self-trapping and oscillation of quadruple beams in high band gap of 2D photonic lattices *Shiqiang Xia, Daohong Song, Liqin Tang, Cibo Lou, and Yigang Li* 090801
- Glass homogeneity effect on wavefront aberration in lithography projection lens *Hongbo Shang, Wei Huang, Chunlai Liu, Weicai Xu, and Wang Yang* 090802

Holography

- Resolution enhancement in digital holographic microscopy with structured illumination *Jun Ma, Caojin Yuan, Guohai Situ, Giancarlo Pedrini, and Wolfgang Osten* 090901

Instrumentation, Measurement, and Metrology

- Compact cylindrical multipass cell for laser absorption spectroscopy *Chao Shen, Yujun Zhang, and Jiazheng Ni* 091201
- Fast and accurate measurement of large optical surfaces before polishing using a laser tracker *Jie Li and Shibin Wu* 091202

Contents continued

- Piece-wise transition detection algorithm for a self-mixing displacement sensor *Zhen Huang, Chengwei Li, and Xiaogang Sun* 091203
- Feasibility analysis of junction temperature measurement for GaN-based high-power white LEDs by the peak-shift method *Jingjing Zhang, Tao Zhang, Shishen Liu, Shidong Yuan, Yafang Jin, and Sheng Yang* 091204

Lasers and Laser Optics

- High efficiency beam combination of 4.6- μ m quantum cascade lasers *Hao Wu, Lijun Wang, Fengqi Liu, Hangyu Peng, Jun Zhang, Cunzhu Tong, Yongqiang Ning, and Lijun Wang* 091401
- All-fiber, high-average-power nanosecond laser based on core-diameter adjustment *Songtao Du, Ziwei Wang, Zhaokun Wang, Jing He, Jun Zhou, and Qihong Lou* 091402
- Simulation of cross-correlation method for temporal characterization of VUV free-electron-lasers *Wenbin Li, Xiaoying Ma, Xiaoyue Yang, and Zhanshan Wang* 091403
- High-power high-brightness 2- μ m continuous wave laser with a double-end diffusion-bonded Tm, Ho:YVO₄ crystal *Gang Li, Yuqiu Gu, Baoquan Yao, Lianqiang Shan, and Yuezhu Wang* 091404

Materials

- Watt-level Yb-doped silica glass fiber laser with a core made by sol-gel method *Wentao Li, Qinling Zhou, Lei Zhang, Shikai Wang, Meng Wang, Chunlei Yu, Suya Feng, Danping Chen, and Lili Hu* 091601

Editorial Board

- Design of an optical device with three functions based on coordinate transformation *Tinghua Li, Ming Huang, Jingjing Yang, Yun Feng, and Yan Liang* 091602
- Photoluminescence and thermoluminescence properties of SnO₂ nanoparticles embedded in Li₂O-K₂O-B₂O₃ with Cu-doping *Haydar Aboud, H. Wagiran, R. Hussin, Saad Saber, and M. A. Saeed* 091603

Medical Optics and Biotechnology

- Using optical tweezers to investigate the specific single-interaction between apoA-I molecule and ABCA1 on living cells *Jie Yu, Xunliang Tong, Chengbin Li, Yining Huang, and Anpei Ye* 091701
- Measurement of the binding force between RAS protein and a pathologic BRAF mutant using optical tweezers *Cheng Wen and Anpei Ye* 091702

Optical Divces

- Efficiency of terahertz detection in electro-optic polymer sensors with interdigitated coplanar electrodes *Qiang Jiang, Xuan Wang, Yue Wang, and Zhiyuan Li* 092301

Quantum Optics

- Experimentally achieve two photon entanglement on various emitting angle *Anning Zhang, Min Li, and Yahui Feng* 092701

Spectroscopy

- Nonlinear and saturable absorption properties of PbS nanocrystalline thin films *Mustafa Yükses, Hüseyin Ertap, Mevlüt Karabulut, and Gasan M. Mamedov* 093001

Ultrafast Optics

- Ion dynamics in ultrafast laser ablation of copper target *Xiaochang Ni, Anoop K.K., Mario Bianco, Salvatore Amoruso, Xuan Wang, Tong Li, Minglie Hu, and Zhenming Song* 093201