

Chinese Optics Letters

Volume 11
Number 11
November 10, 2013
www.col.org.cn

Atmospheric and Oceanic Optics

Analysis and demonstration of PID algorithm based on arranging the transient process for adaptive optics *Zhaoying Zheng, Changwei Li, Bangming Li, and Sijiong Zhang* 110101

Temporal power spectral models of angle of arrival fluctuations for optical waves propagating through weak non-Kolmogorov turbulence *Linyan Cui, Bingdang Xue, Wenyue Zhu, Xiangzhi Bai, Xiaoguang Cao, and Fugen Zhou* 110102

Detectors

Calibration and Monte Carlo simulation of a single-photon counting charge-coupled device for single-shot X-ray spectrum measurements *Yonghong Yan, Lai Wei, Xianlun Wen, Yuchi Wu, Zongqing Zhao, Bo Zhang, Bin Zhu, Wei Hong, Leifeng Cao, Zeen Yao, and Yuqiu Gu* 110401

Fiber Optics and Optical Communications

Fiber-based optical parametric amplifier for 40-Gb/s NRZ-DPSK signal transmission system employing QC-LDPC codes *Jian Zheng, Hongxia Bie, Xuekun Zhang, Chunyang Lei, Ming Fang, Sha Li, and Zhe Kang* 110601

Miniature temperature sensor based on optical microfiber *Zhenglong Wei, Zhangqi Song, Xueliang Zhang, Yang Yu, and Zhou Meng* 110602

Fiber inline interferometric refractive index sensors fabricated by femtosecond laser and fusion splicing *Yingyu Yu, Lan Jiang, Benye Li, Zhitao Cao, and Sumei Wang* 110603

All-optical broadcast and multicast technologies based on PPLN waveguide *Lingyun Ye, Ju Wang, Hao Hu, Jinlong Yu, and Kaichen Song* 110604

All-optical network interface from backbone networks to local area networks based on semiconductor optical amplifiers *Yiyuan Xie and Zhu Yang* 110605

Flattened optical frequency-locked multi-carrier generation by cascading one directly modulated laser and one phase modulator *Jianguo Yu, Xinying Li, Jianjun Yu, and Nan Chi* 110606

D-shaped fiber optic SPR biosensors based on a metal-graphene structure *Dejun Feng, Guanxiu Liu, Maosen Zhang, and Dongfang Jia* 110607

Fourier Optics and Signal Processing

Self-accelerating and self-breathing Bessel-like beams along arbitrary trajectories *Juanying Zhao, Peng Zhang, Dongmei Deng, Cibo Lou, Daohong Song, Jingjiao Liu, and Zhigang Chen* 110701

Contents continued

Imaging Systems

- Computational imaging technology for high-sensitivity space-image acquisition *Jinqiu Sun, Haisen Li, Haichao Zhang, Yanning Zhang, and Desheng Wen* 111101
- Label-free biomolecular imaging using scanning spectral interferometry *Tongzhou Wang, Liping Xie, Haley Huang, Xin Li, Ruliang Wang, Guang Yang, Yanan Du, and Guoliang Huang* 111102

Lasers and Laser Optics

- Decreasing pores in a laser cladding layer with pulsed current *Deqiao Xie, Jianfeng Zhao, Yongai Qi, Yue Li, Lida Shen, and Meng Xiao* 111401

Materials

- Stable field emission of ion-sputtering-induced Si nanocone arrays *Shaolin Xue, Shuzian Wu, Ying Qiu, and Ming Lu* 111601
- From electromagnetically induced transparency to absorption in planar optical metamaterials *Bo Na, Jinhui Shi, Chunying Guan, and Zhengping Wang* 111602

Nonlinear Optics

- Frequency up-conversion imaging with 60-dB gain using picosecond optical parametric amplifier *Xiaoping Li, Jing Yang, Xinzhi Sheng, Jingyuan Zhang, Dafu Cui, Qinjun Peng, and Zuyan Xu* 111901

Optics in Computing

- Real-time video signal transmission over a terahertz communication link *Zhen Chen, Li Gu, Zhiyong Tan, Chang Wang, and Juncheng Cao* 112001

Optical Devices

- Femtosecond laser-inscribed waveguides in $\text{Nd}^{3+}:\text{Y}^{3+}:\text{SrF}_2$ crystals *Shengzhi Sun, Liangbi Su, Yufeng Yuan, and Zhenrong Sun* 112301
- A two-dimensional high-frequency electrostatic microscanner *Yaobo Liu, Weizheng Yuan, Dayong Qiao, Meng Wu, Xuan Yang, and Bin Lian* 112302

Optics at Surfaces

- Highly efficient narrow-band plasmonic waveguide filter based on cascaded slot cavities *Zongqiang Chen, Jing Chen, Yudong Li, Jun Qian, Jiwei Qi, Jingjun Xu, and Qian Sun* 112401

Optoelectronics

- Quadratic nonlinear response to 1.56- μm continuous wave laser in semi-insulating GaAs *Xiuhuan Liu, Yi Li, Zhanguo Chen, Mingli Li, Gang Jia, Yanjun Gao, Lixin Hou, Shuang Feng, Xinlu Li, and Qi Wang* 112501

- Optical behavior of self-assembled high-density Ge nanoislands embedded in SiO_2 *Alireza Samavati, Zulkafli Othaman, Sib Krishna Ghoshal, and Samad Zare* 112502

- Nanospheroidal particles as convenient nanoantenna elements *M. Khosravi, R. A. Sadeghzadeh, and M. S. Abrishamian* 112503

Physical Optics

- Investigation of Bessel beam propagation in scattering media with scalar diffraction method *Juanjuan Zheng, Baoli Yao, Yanlong Yang, Ming Lei, Peng Gao, Runze Li, Shaohui Yan, Dan Dan, and Tong Ye* 112601

Scattering

- Retrieval of spherical particle size distribution using ant colony optimization algorithm *Hong Qi, Biao Zhang, Yatao Ren, Liming Ruan, and Heping Tan* 112901

- Determination of bulk viscosity of liquid water via pulse duration measurements in stimulated Brillouin scattering *Yuan Ge, Jiulin Shi, Kaixing Zhu, and Xingdao He* 112902

Vision, Color, and Visual Optics

- Robust estimation of spectral reflectance by a projector-camera system *Yuqi Li, Dongming Lu, and Lei Zhao* 113301