## Chinese Optics Letters

Volume 12 Supplement 2 September 30, 2014 www.col.org.cn

## Atmospheric and oceanic optics

Influence of dynamic parameters on interacting efficiency between ground-based laser and air-based flying target	Shaoyong Deng, Shiqiang Zhang, Yanhong Sun, and Xiaowei Guan	S20101		
Atomic and molecular physics				
Investigation of thermal features of two types of alkali-vapor cells pumped by a laser diode	Juhong Han, You Wang, He Cai, Wei Zhang, Liangping Xue, and Hongyuan Wang	S20201		
Diffraction and gratings				
Design and fabrication of thin-film spatial filter	Ying Zhang, Hongji Qi, Kui Yi, Yanzhi Wang, Hongbo He, and Jianda Shao	S20501		
Fiber optics and optical communications				
Rotation function development of four-core fiber optic tweezers	Shang Gao and Libo Yuan	S20601		
Piezoelectric strain coefficient measurement based on elasto-optic effect of fiber	Tao Qin, Zhengyong Li, Chongqing Wu, and Zhi Wang	S20602		
Experimental study on mode instabilities in all-fiberized high-power fiber amplifiers	Rumao Tao, Pengfei Ma, Xiaolin Wang, Pu Zhou, and Zejin Liu	S20603		
Beam quality and photodarkening comparison of tandem-pumped and directly diode-pumped ytterbium-doped fiber amplifiers	Hailong Yu, Xiaolin Wang, Pu Zhou, Hu Xiao, and Jinbao Chen	S20604		
Image processing				
Improved method to analyze hyperspectral characteristics of coral reefs	Yang Chaoyu and Yang Dingtian	S21001		
Adaptive image enhancement using nonsubsampled contourlet transform domain histogram matching	Yan Zhou, Qingwu Li, and Guanying Huo	S21002		
Instrumentation, measurement, and metrology				
Measurement of mild asphere by digital plane	Xiaokun Wang	S21201		
Integrated manufacturing technology of off-axis three-mirror anastigmatic system	Donglin Xue	S21202		

Study on measurement of medium and low spatial wavefront errors of long focal length lens	Chunxiang Jin, Shijie Liu, You Zhou, Xueke Xu, Chaoyang Wei, and Jianda Shao	S21203	
Lasers and laser optics			
Beam cleanup of the stimulated Raman scattering in grade-index multi-mode fiber	Wenliang Wang, Liangjin Huang, Jinyong Leng, Shaofeng Guo, and Zongfu Jiang	S21401	
Q-switched Er-doped fiber laser with single-walled carbon nanotube saturable absorber by evanescent field	Xinzheng Dong, Jinrong Tian, Zhenhua Yu, and Yanrong Song	S21402	
Single-polarization distributed feedback fiber laser with multiple phase shifts	Haifeng Qi, Zhiqiang Song, Jian Guo, Jiasheng Ni, Jun Chang, Chang Wang, and Gangding Peng	S21403	
1881 nm Tm:YAG ceramic laser with a volume bragg grating as a cavity mirror	Xiaolan Liu, Haitao Huang, Deyuan Shen, Xuan Liu, Jian Zhang, and Dingyuan Tang	S21404	
Diode-pumped composite $YVO_4/Nd:YVO_4$ $YVO_4$ self-Raman second-Stokes laser at 1764 nm	Xiaohua Xie, Yongqin Yu, Yufeng Zhang, Dong Wang, and Chenlin Du	S21405	
Simulations of far-field optical transmission properties influence by mirror thermal deformation for high-power pulsed transversely excited atmospheric $\mathrm{CO}_2$ with unstable resonator	Xudong Han and Ruhai Guo	S21406	
Energy enhancement in mode-locked fiber lasers by using multiple nonlinear optical fiber loop mirrors	Feng Li and P. K. A. Wai	S21407	
Flow field analysis of the rod amplifier with water thermal recovery system	Zhiyuan Ren and Jianqiang Zhu	S21408	
Experimental study on characteristics of nanosecond laser-induced damage on optical elements	Xianhua Yin, Yifei Zhuang, Yan Zhang, Guowen Zhang, Xingqiang Lu, Shenlei Zhou, Weixin Ma, and Jianqiang Zhu	S21409	
High-power random distributed feedback Raman fiber laser operating at 1.2- $\mu$ m	Hanwei Zhang, Hu Xiao, Pu Zhou, Xiaolin Wang, and Xiaojun Xu	S21410	
Analysis of the maximum extractable power of photonic crystal fiber lasers	Kai Guo, Xiaolin Wang, Cheng Luo, Pu Zhou, and Bohong Shu	S21411	
A multipass Ti:sapphire laser amplifier pumped with homogenized Nd:YAG lasers	Yi Zheng, Jinglong Ma, Xulei Ge, Yutong Li, Zhiyi Wei, and Jie Zhang	S21412	
Materials	, <u>,</u>		
Studies on the wideband design of acousto- optic deflector using lithium niobate crystal	Jing Yang, Yanlei Gao, Jie Li, Zhenjun Yang, and Zhaoguang Pang	S21601	
Medical optics and biotechnology			
Near-infrared photon propagation in complex knee by Monte-Carlo modeling	Yanping Chen, Xiong Ma, Xiaoling Wang, and Shaojie Wang	S21701	

Optical design a	and fabrication
------------------	-----------------

Optical design and labrication		
Study on the material-remove mechanism of SiC surface polishing	Fan Di	S22201
Swing arm profilometer: improving the testing accuracy of large mirrors with shorter arms	Xiao Luo	S22202
Serial mode combined polishing of high-quality flat mirror	Feng Zhang	S22203
Tool path generation for grinding a 1.45 m off-axis aspherical SiC mirror blank	Zhiyu Zhang	S22204
Optical system design of a portable coherent population trapping (CPT) atom clock	Fan Shi, Yongshun Cui, Zhenwei Zhang, Huan Zhao, Nuanrang Wang, Shengkang Zhang, Renfu Yang, Feng Nian, and Keming Feng	S22205
Polishing silicon modification layer on silicon carbide surface by ion beam figuring	Weijie Deng	S22206
Optoelectronics		
Optic-electronic aims coordinate switch and orientation research based on many vehicle systems	Zhaobing Chen, Lihua Cao, Ning Chen, Bing Wang, and Xinyu Zhuang	S22501
13.4 W single emitter 940 nm semiconductor laser diode with asymmetric large optical cavity	Jian jun Li, Sheng jie Lin, Tao Liu, Jian chun Li, Jun Deng, Jun Han, and Bi feng Cui	S22502
Physical optics		
Property of the azimuthal orientation angles turning by the same axis of the system	Dong Wang and Jinsong Liu	S22601
Spectroscopy		
X-ray fluorescence spectra quantitative analysis based on characteristic spectra optimization of partial least-squares method	Wei Zhang, Lianfei Duan, Luozheng Zhang, Yujun Zhang, Liuyi Ling, and Yunjun Yang	S23001
SERS measurement of cancerous cells with optical fiber sensor	Shupeng Liu, Yuxue Bai, Zhenyi Chen, Na Chen, Jing Huang, Lianxin Li, and Bo Lu	S23002
Ultrafast optics		
Full-aperture backscatter diagnostics and applications at the Texas Petawatt Laser facility	C. Wang, C. Wagner, G. Dyer, E. Gaul, N. Kandadai, N. Riley, D. Kuk, E. McCary, A. Meadows, I. Pomerantz, M. Spinks, T. Borger, A. Bernstein, M. Donovan, M. Martinez, T. Ditmire, and Bjorn M. Hegelich	S23201
Simulation on terahertz emission from air plasma induced by circularly polarized few-cycle laser pulses	Fengchao Wang	S23202