# Chinese Optics Letters

Volume 18 Number 7 July 2020 col.clp.ac.cn

## General

Highly flexible Nyquist pulse generation based on multi-wavelength control	Bingjian Zhang, Kan Wu, Tianzhu Zhang, Siqi Liu, and Jianping Chen	070001
Atomic and Molecular Optics		
Laser stabilizing to ytterbium clock transition with Rabi and Ramsey spectroscopy	Yuxin Sun, Yuan Yao, Yaqin Hao, Hongfu Yu, Yanyi Jiang, and Longsheng Ma	070201
Diffraction and Gratings		
A broadband polarization-independent two- port beam splitter under normal incidence	Zhengkun Yin, Yunkai Lu, Junjie Yu, and Changhe Zhou	070501

A broadband polarization-independent twoport beam splitter under normal incidence based on encapsulated metal-dielectric reflective grating

#### Fiber Optics and Optical Communications

	DOE effect on BER performance in MSK space uplink chaotic optical communication	Mi Li, Yuan Chen, Yuejiang Song, Cheng Zeng, and Xuping Zhang	070601	
	Holography			
	Real-time spatiotemporal division multiplexing electroholography for 1,200,000 object points using multiple-graphics processing unit cluster	Hiromi Sannomiya, Naoki Takada, Kohei Suzuki, Tomoya Sakaguchi, Hirotaka Nakayama, Minoru Oikawa, Yuichiro Mori, Takashi Kakue, Tomoyoshi Shimobaba, and Tomoyoshi Ito	070901	
Image Processing and Machine Vision				
	Parallel registration algorithm with arbitrary affine transformation	Qin Shu, Xiuli He, Chang Wang, and Yunxiu Yang	071001	
	Imaging Systems			
	Performance comparison of ghost imaging ver-	Zijie Li, Qing Zhao, and Wenlin Gong	071101	

sus conventional imaging in photon shot noise cases

### Optical Sensing, Measurements, and Metrology

Demodulation of the multi-peak fiber Bragg	Pan Dai, Yu Zhou, Leilei Wang,	071201
grating sensor based on partial wavelength	Shangjing Liu, Xuping Zhang,	
scan	and Xiangfei Chen	

Multi-channel polarized low-coherence interfer- ence synchronous demodulation system based on a matrix charge-coupled device	Shuang Wang, Jie Zhou, Junfeng Jiang, Kun Liu, Qun Han, Yanan Duan, Rundong Wang, and Tiegen Liu	071202
Lasers and Laser Optics		
25 Gb/s directly modulated ground-state operation of 1.3 $\mu m$ InAs/GaAs quantum dot lasers up to 75°C	Zhongkai Zhang, Zunren Lü, Xiaoguang Yang, Hongyu Chai, Lei Meng, and Tao Yang	071401
Sub-10-fs pulse generation from a blue laser- diode-pumped Ti:sapphire oscillator [Editors' Pick]	Han Liu, Geyang Wang, Jianwang Jiang, Wenlong Tian, Dacheng Zhang, Hainian Han, Shaobo Fang, Jiangfeng Zhu, and Zhiyi Wei	071402
High-repetition-rate pulsed fiber laser based on virtually imaged phased array	Xuanjuan Chen, Yuxin Gao, Jiamin Jiang, Meng Liu, Aiping Luo, Zhichao Luo, and Wencheng Xu	071403
Materials		
Room-temperature synthesis of cyan CsPb(Cl/ $\rm Br)_3/SiO_2$ nanospheres with LiCl-H_2O solution	Peiyuan Cao, Bobo Yang, Yanrong Cao, Fei Zheng, and Jun Zou	071601
Biomedical Optics		
Three-dimensional tracking of multiple par- ticles in large depth of field using dual- objective bifocal plane imaging	Aiwang Huang, Danni Chen, Heng Li, Dexiang Tang, Bin Yu, Jia Li, and Junle Qu	071701
Nonlinear Optics		
Spectral analysis of short-wavelength emission by up-conversion in a Tm <sup>3+</sup> :ZBLAN dual- diode-pumped optical fiber	M. Juárez-Hernández and E. B. Mejía	071901
Frequency-doubled vortex beam emitter based on nonlinear Cherenkov radiation	Chen Lin, Yan Chen, Xiaoyang Li, Lei Yang, Rui Ni, Gang Zhao, Yong Zhang, Xiaopeng Hu, and Shining Zhu	071902
Affirming nonlinear optical coefficient con- stancy from z-scan measurement [Editors' Pick]	Shijia Hua, Kang Du, Heng Wang, Wending Zhang, Ting Mei, and Elhadj Dogheche	071903
Optical Design and Fabrication		
Dynamic aberrations correction of Roll-Nod conformal seeker based on the diffraction surface and anamorphic asphere surface	Yunqiang Zhang, Jun Chang, Fanyang Dang, Xiaodong Bai, and Guoqing Pan	072201
Plasmonics and Metamaterials		
Effective medium theory of checkboard structures in the long-wavelength limit	Zhanlei Hao, Yawen Zhuang, Ying Chen, Yineng Liu, and Huanyang Chen	072401
Optoelectronics		
Ultra-high resolution microwave photonic ra- dar with post-bandwidth synthesis	Cong Ma, Hao Chen, Xingwei Ye, Xiangchuan Wang, and Shilong Pan	072501
Ultrafast Optics		
THz generation from water wedge excited by dual-color pulse	Min Li, Zhenyu Li, Junyi Nan, Yu Xia, Mingyang He, Feng Wang, Wenhui Lu, Shuai Yuan, and Heping Zeng	073201

## Nanophotonics

Rectangular dielectric metagrating for high-efficiency diffraction with large-angle deflection [On the Cover] Weiyi Shi, Weimin Deng, Weinan Liu, 073601 Zepeng Zhuang, Zhibin Fan, and Jianwen Dong

The color images are shown online.