

# PHOTONICS

## Research

Volume 5  
Number 1  
February 2017

Design of PANDA ring-core fiber with 10 polarization-maintaining modes	<i>Haozhe Yan, Shangyuan Li, Zhengyang Xie, Xiaoping Zheng, Hanyi Zhang, and Bingkun Zhou</i>	1
Experimental investigation on the time-delay signature of chaotic output from a 1550 nm VCSEL subject to FBG feedback	<i>Zhu-Qiang Zhong, Zheng-Mao Wu, and Guang-Qiong Xia</i>	6
Photonic bandgap structure and long-range periodicity of a cumulative Fibonacci lattice	<i>Xiong Hui and Chenhui Yu</i>	11
Generation of arbitrary vector vortex beams on hybrid-order Poincaré sphere	<i>Zhenxing Liu, Yuanyuan Liu, Yougang Ke, Yachao Liu, Weixing Shu, Hailu Luo, and Shuangchun Wen</i>	15
Image lithography in telluride suboxide thin film through controlling “virtual” bandgap	<i>Tao Wei, Jingsong Wei, Kui Zhang, and Long Zhang</i>	22
Synthesis of high-purity silver nanorods with tunable plasmonic properties and sensor behavior	<i>Haiying Xu, Caixia Kan, Changzong Miao, Changshun Wang, Jingjing Wei, Yuan Ni, Beibei Lu, and Daning Shi</i>	27
$g\text{-C}_3\text{N}_4$ as a saturable absorber for the passively Q-switched Nd:LLF laser at 1.3 $\mu\text{m}$	<i>Xiaochun Gao, Shixia Li, Tao Li, Guiqiu Li, and Houyi Ma</i>	33
Subpicosecond pulses in a self-starting mode-locked semiconductor-based figure-of-eight fiber laser	<i>D. Chaparro, L. Furfaro, and Salvador Balle</i>	37

Theory of ghost scattering with biphoton states	<i>Jing Cheng</i>	41
High peak power subnanosecond pulse characteristics with different wall structured CNTs in a doubly QML Nd: Lu <sub>0.15</sub> Y <sub>0.85</sub> VO <sub>4</sub> laser	<i>Wenjing Tang, Jia Zhao, Kejian Yang, Shengzhi Zhao, Guiqiu Li, Dechun Li, Tao Li, and Wenchao Qiao</i>	46
Q-switched fiber laser based on saturable absorption of ferroferric-oxide nanoparticles	<i>Dong Mao, Xiaoqi Cui, Wending Zhang, Mingkun Li, Tianxian Feng, Bobo Du, Hua Lu, and Jianlin Zhao</i>	52