

PHOTONICS Research

Volume 7 Number 1 January 2019

Intermodal group-velocity engineering for broadband nonlinear optics [Cover Paper]	Jeff Demas, Lars Rishøj, Xiao Liu, Gautam Prabhakar, and Siddharth Ramachandran	1
Stimulated Brillouin scattering induced all-optical modulation in graphene microfiber	Jiwen Zhu, Xuemei Cheng, Yali Liu, Ruiduo Wang, Man Jiang, Diao Li, Baole Lu, and Zhaoyu Ren	8
Wideband tunable passively <i>Q</i> -switched fiber laser at 2.8 µm using a broadband carbon nanotube saturable absorber	Yanjia Lü, Chen Wei, Han Zhang, Zhe Kang, Guanshi Qin, and Yong Liu	14
Generation and measurement of arbitrary four-dimensional spatial entanglement between photons in multicore fibers	Hee Jung Lee and Hee Su Park	19
Plasmonic resonant nonlinearity and synthetic optical properties in gold nanorod suspensions	Huizhong Xu, Pepito Alvaro, Yinxiao Xiang, Trevor S. Kelly, Yu-Xuan Ren, Chensong Zhang, and Zhigang Chen	28
Ultracompact fiber laser based on a highly integrated optical device	Xiaoxiang Han and Xueming Liu	36
High-order mode lasing in all-FMF laser cavities	Teng Wang, Ao Yang, Fan Shi, Yiping Huang, Jianxiang Wen, and Xianglong Zeng	42
High-Q, low-mode-volume microsphere- integrated Fabry–Perot cavity for optofluidic lasing applications	Xiaoqin Wu, Yipei Wang, Qiushu Chen, Yu-Cheng Chen, Xuzhou Li, Limin Tong, and Xudong Fan	50

(Contents continued)









Observation of controllable tightly and loosely bound solitons with an all-fiber saturable absorber	Tianyu Zhu, Zhaokun Wang, D. N. Wang, Fan Yang, and Liujiang Li	61
Optically induced rotation of Rayleigh particles by arbitrary photonic spin	Guanghao Rui, Ying Li, Sichao Zhou, Yusong Wang, Bing Gu, Yiping Cui, and Qiwen Zhan	69
Complementary transmissive ultra-thin meta-deflectors for broadband polarization-independent refractions in the microwave region	Yueyi Yuan, Kuang Zhang, Xumin Ding, Badreddine Ratni, Shah Nawaz Burokur, and Qun Wu	80
Antenna-assisted subwavelength metal– InGaAs–metal structure for sensitive and direct photodetection of millimeter and terahertz waves	Jinchao Tong, Yue Qu, Fei Suo, Wei Zhou, Zhiming Huang, and Dao Hua Zhang	89
Vacuum ultraviolet photovoltaic arrays	Wei Zheng, Richeng Lin, Lemin Jia, and Feng Huang	98

The color images are shown online.



