

# ACP2021

## Best Poster Award

### **Build-up Dynamics of Dissipative Solitons in a Nonlinear Polarization Evolution Mode-Locked Fiber Laser**

Denghui Pan<sup>1</sup>, Xuanyi Liu<sup>1</sup>, Boris Malomed<sup>2,3</sup>, H.Y. Fu<sup>1</sup>, Qian Li<sup>4</sup>

<sup>1</sup>*Tsinghua-Berkeley Shenzhen Inst. & Tsinghua Shenzhen International Graduate School, Tsinghua Univ., China;*

<sup>2</sup>*Department of Physical Electronics, School of Electrical Engineering, Faculty of Engineering, and Center for Light-Matter Interaction, Tel Aviv Univ., Israel;* <sup>3</sup>*Instituto de Alta Investigacin, Universidad de Tarapac, Chile;* <sup>4</sup>*School of Electronic and Computer Engineering, Peking Univ., China*

### **Improved Luminescence Properties in a Yb: YAG Crystal-Derived Fiber by Thermal Treatment**

Kai Zou, Jianxiang Wen, Ying Wan, Fufei Pang, Tingyun Wang

*Shanghai Univ., China*

### **Self-Homodyne Transmission of Eigenvalue Communication System Using Polarization-Multiplexed Pilot-Carrier and Injection Locking**

Junda Chen, Ming-Ming Zhang, Weihao Li, Yizhao Chen, Ziwen Zhou, Tianhao Tong, Yifan Zeng, Chen Cheng, Haoze Du, Deming Liu, Ming Tang

*Huazhong Univ. of Science and Technology, China*

### **Joint Shaping Technique of Signal Probability and Quantization Noise for Coherent Transmission Systems**

Hongyu Huang, Zhenming Yu, Liang Shu, Kaixuan Sun, Qiuyang Yin, Kun Xu

*Beijing Univ. of Posts and Telecommunications, China*

*State Key Laboratory of Information Photonics and Optical Communications, China*

### **Silicon Nitride Optical Phased Arrays With Large Beam Steering Range and Small Divergence Angle**

Zhenmin Chen, Shupeng Deng, Xiaomin Nie

*Robotics Research Center, Peng Cheng Laboratory, China*

### **Mode Conversion Based Silicon Mach-Zehnder Modulator With L-Shaped PN Junction for 0.37-V<sub>cm</sub> V<sub>π</sub>L<sub>π</sub> High Efficiency Modulation**

Jiacheng Liu, Gangqiang Zhou, Jiangbing Du, Weihong Shen, Linjie Zhou, Zuyuan He

*Shanghai Jiao Tong Univ., China*

### **Ultrafast and Energy-Efficient Electro-Optic Modulation Based on a Hybrid Silicon/in<sub>2</sub>O<sub>3</sub> Cavity**

Yishu Huang, Bingcheng Pan, Lijia Song, Zejie Yu, Daoxin Dai

*Zhejiang Univ., China*

*Ningbo Research Inst., Zhejiang Univ., China*

### **Inverse Design of a CMOS-Compatible Dual-Mode 3 dB Power Splitter at O-Band**

Xin Fu, Shanglin Yang, Jiaqi Niu, Gaolu Zhang, Lin Yang

*Inst. of Semiconductors, CAS, China*

### **Compact Silicon Mode Converter Using Fast Adiabatic-Evolution-Based Y-Junction With Wide Bandwidth**

Yichen Xu, He Yu, Zhen Wang, Yong Zhang, Weiqiang Xie, Yikai Su

*Shanghai Jiao Tong Univ., China*