## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>v</td>
<td>Authors</td>
<td></td>
</tr>
<tr>
<td>vii</td>
<td>Symposium Committees</td>
<td></td>
</tr>
<tr>
<td>xi</td>
<td>Conference Committee</td>
<td></td>
</tr>
</tbody>
</table>

### MICRO/NANO OPTOELECTRONIC INTEGRATION

<table>
<thead>
<tr>
<th>Proc.</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>09</td>
<td>Si-Ge intermixing induced at mesa sidewalls of Si-capped Ge epitaxial layers on Si for operation wavelength tuning in Ge photonic devices</td>
<td>[11193-7]</td>
</tr>
<tr>
<td>0C</td>
<td>Grating-assisted MDM-PDM hybrid (de)multiplexer for optical interconnect applications</td>
<td>[11193-10]</td>
</tr>
</tbody>
</table>

### OPTICAL MANIPULATION

<table>
<thead>
<tr>
<th>Proc.</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>0Q</td>
<td>Reflection of whispering gallery modes propagating on the optical fiber surface from its facet</td>
<td>[11193-26]</td>
</tr>
<tr>
<td>0R</td>
<td>Diffraction and interference of classical spiraling photons in accord with the law of conservation of energy</td>
<td>[11193-27]</td>
</tr>
<tr>
<td>0T</td>
<td>Bandwidth optimization of germanium-doped silicon optical modulator for high-speed applications</td>
<td>[11193-28]</td>
</tr>
</tbody>
</table>

### NONLINEAR NANOPHOTONICS

<table>
<thead>
<tr>
<th>Proc.</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>0V</td>
<td>Review of femtosecond laser induced surface periodic structure</td>
<td>[11193-32]</td>
</tr>
</tbody>
</table>

### MICRO/NANO PHOTODETECTORS

<table>
<thead>
<tr>
<th>Proc.</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>All-inorganic halide perovskites thin-film self-powered photodetector</td>
<td>[11193-38]</td>
</tr>
</tbody>
</table>

### POSTER SESSION

<table>
<thead>
<tr>
<th>Proc.</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>Wideband infrared metal wire grating polarizer using holographic lithography and lift-off process</td>
<td>[11193-25]</td>
</tr>
</tbody>
</table>
Plasmon-enhanced fluorescence of nanoparticle-dye-protein complex as perspective approach for increase in fluorescent labeling effectiveness [11193-39]

200-mm silicon photonics technology development [11193-41]

A comparative study of the spin-orbit interactions in Pancharatnam-Berry phase elements and in normal incidence of a light beam at a sharp interface [11193-42]

Rutile TiO$_2$ nanorod arrays grown by solution-processed for high efficiency solid state perovskite solar cells [11193-44]

Mode-locked fibre laser with e-controlled cavity length in ultra-wide range [11193-48]

Electronic-induced-transparency-like in a single polydimethylsiloxane-coated whispering gallery mode microbubble resonator [11193-49]

Novel hybrid adhesive material based on thiol-ene system for nano-conglutination technology [11193-51]

Raman lasing in optofluidic microbubble resonator [11193-55]
Authors

Numbers in the index correspond to the last two digits of the seven-digit citation identifier (CID) article numbering system used in Proceedings of SPIE. The first five digits reflect the volume number. Base 36 numbering is employed for the last two digits and indicates the order of articles within the volume. Numbers start with 00, 01, 02, 03, 04, 05, 06, 07, 08, 09, 0A, 0B...0Z, followed by 10-1Z, 20-2Z, etc.

Alexandrov, Konstantin Y., 13
Chao, Yinyin, 12
Chen, Xiaogang, 1C, 11
Chen, Z., 11
Churkin, D. V., 0Q
Dang, Sulhu, 1E
Du, Chunlei, 1E
Fu, Liang, 1C, 11
Han, Zhiyong, 0Q
Hu, WenLiang, 18
Ishikawa, Yasuhiro, 09
Ito, Kazuki, 09
Ivanenko, A., 1B
Jin, L. F., 11
Katamawari, Riku, 09
Kawashita, Kazuki, 09
Khan, Mohd. Mansoor, 0C, 0T
Koetsev, S., 1B
Li, Bin, 15
Li, Hongrui, 0R
Li, Xinghui, 12
Li, Y., 11
Li, Zhihua, 15
Lin, Hui, 12
Ling, Xiaohui, 16
Liu, Ruonan, 15
Liu, Xianlin, 1C, 11
Lu, Qijing, 1C, 11
Luo, Huiling, 16
Lutsenko, D., 1B
Matveeva, Karina I., 13
Minz, Manoranjan, 0C, 0T
Mishra, Darpan, 0C, 0T
Ni, Kai, 12
Nyushkov, B., 1B
Qi, Zhiqiang, 18
Samusev, Ilya G., 13
Serebrennikov, K., 1B
Sonkar, Ramesh Kumar, 0C, 0T
Solto, Moïse, 09
Sun, Haochong, 18
Tang, Bo, 15
Valnik, Ilya D., 0Q
Wang, Yan, 0V
Wang, Yuying, 0V
Wu, Xiang, 1C
Wu, Xiang, 11
Xia, Liangping, 1E
Xie, Shusen, 1C, 11
Yao, J. Q., 11
Yu, Y., 11
Zhang, Man, 1E
Zhang, Peng, 15
Zhang, Y. T., 11
Zhdanov, Andrey, 0V
Zhou, Qian, 12
Zhou, XinXing, 16
Zyubin, Andrey Y., 13
Symposium Committees

General Chairs

Jim M. Oschmann, President, SPIE and Ball Aerospace (United States)
Qihuang Gong, President, Chinese Optical Society and Peking University (China)

General Co-chairs

Guangcan Guo, Past President, Chinese Optical Society and University of Science and Technology of China (China)
Zejin Liu, Vice President, Chinese Optical Society and National University of Defense Technology (China)

Technical Program Chairs

Ruxin Li, Vice President, Chinese Optical Society and Shanghai Institute of Optics and Fine Mechanics (China)
Xingde Li, Johns Hopkins University (United States)

Technical Program Co-chairs

Tianchu Li, National Institute of Metrology (China)
Wei Huang, Northwestern Polytechnical University (China)
Ying Gu, Vice President, Chinese Optical Society and PLA General Hospital (China)
Huilin Jiang, Changchun University of Science and Technology (China)
Wenqing Liu, Vice President, Chinese Optical Society, and Anhui Institute of Optics and Fine Mechanics (China)
Guobin Fan, China Academy of Engineering Physics (China)
Suotang Jia, Vice President, Chinese Optical Society, and Shanxi University (China)
Xiaomin Ren, Vice President, Chinese Optical Society, and Beijing University of Posts and Telecommunications (China)

Secretaries-General

Bo Gu, Deputy Secretary General, Chinese Optical Society (China)
Hong Yang, Deputy Secretary General, Chinese Optical Society and Peking University (China)
Yan Li, Deputy Secretary General, Chinese Optical Society, and Peking University (China)
Daoxin Dai, Zhejiang University (China)

Local Organizing Committee Chair
Xu Liu, Secretary General, Chinese Optical Society and Zhejiang University (China)

Local Organizing Committee Co-chairs
Jianrong Qiu, Zhejiang University (China)
Daoxin Dai, Zhejiang University (China)

Local Secretaries
Wei Xiong, Chinese Optical Society (China)
Qing Yang, Zhejiang University (China)

Local Organizing Committee
Qing Yang, Zhejiang University (China)
Lan Wu, Zhejiang University (China)
Yaocheng Shi, Zhejiang University (China)
Dong Liu, Zhejiang University (China)
Yungui Ma, Zhejiang University (China)
Ke Si, Zhejiang University (China)
Yang Yang, Zhejiang University (China)
Xinyong Dong, China Jiliang University (China)
Le Wang, China Jiliang University (China)
Fei Tong, Chinese Optical Society (China)

Technical Organizing Committee
Mohammad Hossein Asghari, Loyola Marymount University (United States) and Tachyonics Inc. (United States)
Pablo Benítez, Universidad Politécnica de Madrid (Spain)
Liangcai Cao, Tsinghua University (China)
P. Scott Carney, University of Rochester (United States)
Benyong Chen, Zhejiang University of Science and Technology (China)
Hongqiang Chen, GE Global Research (United States)
Daoxin Dai, Zhejiang University (China)
Qionghai Dai, Tsinghua University (China)
Qihuang Gong, Peking University (China)
Ying Gu, Chinese PLA General Hospital (China)
Xinliang Zhang, Wuhan National Laboratory for Optoelectronics (China)
Xuping Zhang, Nanjing University (China)
Zhenrong Zheng, Zhejiang University (China)
Changhe Zhou, Shanghai Institute of Optics and Fine Mechanics (China)
Zhiping Zhou, Peking University (China)
Dan Zhu, Huazhong University of Science and Technology (China)
Ning Hua Zhu, Institute of Semiconductors, CAS (China)
Conference Committee

Symposium Chairs

Jacobus M. Oschmann, Ball Aerospace (United States)
Qihuang Gong, Peking University (China)

Conference Chairs

Zhiping Zhou, Peking University (China)
Kazumi Wada, Massachusetts Institute of Technology (United States)
Limin Tong, Zhejiang University (China)

Conference Program Committee

Eric Cassan, Centre de Nanosciences et de Nanotechnologies (France)
Tao Chu, Zhejiang University (China)
David S. Citrin, Georgia Institute of Technology (United States)
Hiroshi Fukuda, NTT Device Technology Laboratories (Japan)
Min Gu, RMIT University (Australia)
El-Hang Lee, INHA University (Korea, Republic of)
Ching-Fuh Lin, National Taiwan University (Taiwan, China)
Gong-Ru Lin, National Taiwan University (Taiwan, China)
Yan-Qing Lu, Nanjing University (China)
Jurgen Michel, Massachusetts Institute of Technology (United States)
Takahiro Nakamura, Photonics Electronics Technology Research Association (PETRA) (Japan)
Andrew W. Poon, Hong Kong University of Science and Technology (Hong Kong, China)
Haisheng Rong, Intel Corporation (United States)
Yikai Su, Shanghai Jiao Tong University (China)
Hon Ki Tsang, The Chinese University of Hong Kong (Hong Kong, China)
Yun-Feng Xiao, Peking University (China)
Dan-Xia Xu, National Research Council Canada (Canada)
Koji Yamada, National Institute of Advanced Industrial Science and Technology (Japan)
Qing Yang, Zhejiang University (China)
Changhe Zhou, Jinan University (China)
Weidong Zhou, The University of Texas at Arlington (United States)
Session Chairs

1  Micro/Nano Light Emitting Devices
   Qing Yang, Zhejiang University (China)
   Xin Guo, Zhejiang University (China)

2  Micro/Nano Optoelectronic Integration
   Eric Cassan, Centre de Nanosciences et de Nanotechnologies (France)
   Tawfique Hasan, University of Cambridge (United Kingdom)

3  Nanobiophotonics Sensors
   Chen Yang, Boston University (United States)

4  Nanostructures and Nanomaterials
   Yang Yang, Zhejiang University (China)
   Qinghai Song, Harbin Institute of Technology (China)

5  Optical Manipulation
   Xiaoshun Jiang, Nanjing University (China)
   Wei Fang, Zhejiang University (China)

6  Nonlinear Nanophotonics
   Yong Zhang, Nanjing University (China)

7  Micro/Nano Photodetectors
   Yaoguang Ma, Zhejiang University (China)