
Editorial

Dawei Zhang

School of Opto-Electrical and Computer Engineering,
University of Shanghai for Science and Technology,
516 Jun Gong Road, Shanghai, 200093, China
Email: dwzhang@usst.edu.cn

Huikai Xie

Department of Electrical and Computer Engineering,
University of Florida,
116550 Gainesville, FL 32611-6550, USA
Email: hqx@ufl.edu

Guangya Zhou

Department of Mechanical Engineering,
National University of Singapore,
Singapore 119260
Email: mpezgy@nus.edu.sg

Hongzhi Jia

School of Opto-Electrical and Computer Engineering,
University of Shanghai for Science and Technology,
516 Jun Gong Road, Shanghai, 200093, China
Email: hzjia@usst.edu.cn

Dao Hua Zhang

School of Electrical and Electronic Engineering, Nanyang
Technological University,
50 Nanyang Avenue, 639798, Singapore
Email: EDHZHANG@ntu.edu.sg

Biographical notes: Dawei Zhang is a Professor at School of Opto-Electrical and Computer Engineering, University of Shanghai for Science and Technology. He received his PhD in Shanghai Institute of Optics and Fine Mechanics, Chinese Academy of Sciences in 2005. He has authored and co-authored over 50 journal papers, presented over 30 conference papers and filed 15 patents. His research interests include gratings, guided-mode resonance devices and thin solid films.

Huikai Xie is a Professor at the Department of Electrical and Computer Engineering of the University of Florida. He received his BS, MS and PhD degrees all in Electrical Engineering from Beijing Institute of Technology, Tufts University and Carnegie Mellon University, respectively. Before he joined the University of Florida as an Assistant Professor in 2002, he worked at Tsinghua University (1992–1996), Bosch Corporation (2001), and Akustica Inc. (2002). He has published over 200 technical papers and holds 30 US patents. His current research interests include MEMS/NEMS, integrated inertial sensors, sensor interface circuits, microactuators, integrated power passives, CNT-CMOS integration, optical MEMS, biophotonics, IR spectroscopy, and miniaturised medical devices. He has also founded or co-founded three startup companies, WiOptix Inc. in Florida, Senodia Technologies in Shanghai, and WiO Technologies in Wuxi, China. He has served on the technical program committees of various international conferences and the editorial boards of several international journals. He is a Senior Member of IEEE and Optical Society of America.

Guangya Zhou is an Associate Professor at Department of Mechanical Engineering, National University of Singapore. His research interests are micro/nano-electromechanical systems (MEMS/NEMS) optical microsystems nanophotonics, silicon photonics micro and nano fabrication sensors, optical precision measurement techniques.

Hongzhi Jia is a Professor at School of Opto-Electrical and Computer Engineering, University of Shanghai for Science and Technology. His research interests are micro and nano fabrication sensors, and optical precision measurement techniques.

Dao Hua Zhang is a Professor at the School of Electrical and Electronic Engineering, Nanyang Technological University. His research interests include semiconductor materials and devices, nano-structures and applications, and nanophotonics. He has published over 360 papers in international journals and conferences, five books and proceedings, and three book chapters. He served as an Editor and a Guest Editor for nine international journals, including *IEEE Transaction on Nanotechnology*, *Journal of Crystal Growth* and *Thin Solid Films*. He also chaired and co-chaired several international conferences. He is a Fellow of Institute of Physics (IOP).

It is a great pleasure to present here a selection of the best papers from the 2014 International Conference on Optoelectronic Technology and Application (2014 IPTA) held in Beijing, China, in May 2014. The theme of the conference is *Optoelectronic Technology and Applications*, aiming at providing a platform and link for scientists and engineers from academia and industry. The conference attracted about 1000 participants from many countries over the world, including USA, UK, Australia, Sweden, Canada, France, Japan, Korea, India, Thailand, Egypt, Iran and China.

This conference consisted of 16 technical conferences covering all photonics and technology as shown below:

- Development and Application of High Power Fibre Lasers
- Laser Materials and Laser Manufacturing Technology

- Laser Rapid Prototyping Technique
- Advanced Display Technology
- Laser and Optical Measurement Technology
- Imaging Spectrometry
- Optical Remote Sensing Technology and Applications
- Infrared Technology and Applications
- Image Processing and Pattern Recognition
- Telescopes and Large Optics
- Micro/Nano Optical Technology and Application
- Optical Fibre Sensor
- Vacuum Manufacturing, Optical Thin Film and Surface Characterisation Testing Technology
- Nonimaging Optics: Efficient Design for Illumination and Solar Concentration
- Symposium on advanced solid state laser and semiconductor technology and application
- Advanced Optical Manufacturing Technology and System Application

In the conference, six plenary lectures, 224 invited talks, 119 oral presentations and 1042 posters were presented at a high scientific level. The selected papers in this special issue reflect the most important works done in the field of micro/nano optical technology and application, and the papers selected for this volume reflect the high quality of research in the field.

We would like to thank the Editorial Board of the *International Journal of Nanotechnology* and, especially, Dr. Lionel Vayssieres, the Editor-in-Chief of the *IJNT* for their support. We would also like to thank all the authors who have contributed to this special issue.