

A Special Issue on *Optoelectronics* Dedicated to Prof. Bingkun Zhou's 80th Birthday

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Prof. Bingkun Zhou is a famous expert in optoelectronics and has made the outstanding contribution for the development of optoelectronic technology in China. Thanks for the guidance and support from Prof. Dexiu Huang, Associate Editor-in-Chief of the *Frontiers of Optoelectronics*, we are honored to edit this special issue with emphasis on the current hot topics and future trends in the area of optoelectronics and applications to celebrate Prof. Bingkun Zhou's 80th Birthday.

Optoelectronics have made enormous progress in the past several decades, during which Prof. Bingkun Zhou dedicated himself to this area. Prof. Bingkun Zhou invented in 1984 a laser-diode-pumped monolithic Nd:YAG laser featuring highest efficiency, narrowest line-width, and most frequency-stability of that time, which starts a brand-new researching field—Diode Pump Solid State Laser. In the years that followed, he has made outstanding contributions to information optoelectronics area, in the meanwhile mentoring a large number of young researchers. His textbook on Laser Principles, first edited in the early 1980s and currently 7th edition, has been widely used as a classic one in Chinese universities and Institutes by many generations of students. In 2008, he was the main founding editor of the Journal *Frontiers of Optoelectronics* which seeks to provide a multidisciplinary forum for a broad mix of peer-reviewed academic papers in order to promote rapid communication and exchange between researchers.

This special issue includes 21 excellent scientific reviews and original research papers from China, USA, Germany, UK, Australia, Japan, etc. These papers cover the research area of optical communications and networks, microwave photonics, fiber lasers and semiconductor lasers, integrated optics and nano-photonics, etc. with the world's leading research level.

As a present to greet Prof. Bingkun Zhou's 80th birthday, this special issue is a valuable opportunity for us to express our admiration to Prof. Bingkun Zhou through reporting our research progress and sharing our research finding. We sincerely wish that publication of this special issue can promote academic exchange and cooperation, stimulate more innovative achievements.

We would sincerely appreciate all the authors for their excellent contributions and the managing editors and other editorial office members of the *Frontiers of Optoelectronics* for their valuable efforts in the publication of this special issue.



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Yidong Huang received her B.S. and Ph.D. degrees in optoelectronics from Tsinghua University, Beijing, China, in 1988 and 1994, respectively. From 1991 to 1993, she was with Arai Laboratories, Tokyo Institute of Technology, Japan, on leave from the Tsinghua University. Her Ph.D. dissertation was mainly concerned with strained semiconductor quantum well lasers and laser amplifiers. In 1994, she joined the Photonic and Wireless Devices Research Laboratories, NEC Corporation, where she was engaged in the research on semiconductor laser diodes for optical-fiber communication and became an assistant manager in 1998. She received “Merit Award” and “Contribution Award” from NEC Corporation in 1997 and 2003, respectively. She joined the Department of Electronics Engineering, Tsinghua University in 2003, as a professor. She was Vice Chairman of the Department from 2007–2012 and has been the Chairman of the Department from 2013.

She is presently engaged in research on nano-structure optoelectronics.

Prof. Huang authored/co-authored more than 300 journal and conference papers. She is a senior member of the IEEE.