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Ping Wei
Jesse Zheng
Editors

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Introduction

These proceedings are from the 2011 International Conference on Optical Instrument and Technology (OIT2011), held in Beijing, China, 7–9 November 2011. The conference was the third event following the success of OIT'08 and OIT'09 and was sponsored and supported by SPIE, China Instrument and Control Society (CIS), and the Chinese Optical Society (COS).

OIT2011 was a professional conference which was combined and focused on instrument science and related technology, and involved in many technical aspects such as detection; observation; information collection, transfer and storage; communication; economization on energy; environmental protection; inspection and prevention of food security, traffic safety and mine safety; measure and control for aviation and space engineering, etc.

These proceedings, a collection of six volumes, contain the accepted oral and poster papers presented at OIT2011. It is truly a great pleasure for me that the most recent progress in optical instrumentation technology is reported in the OIT2011 proceedings. I firmly believe that the papers included in these volumes will provide reference information in the most up-to-date techniques of optical instrumentation technology.

The OIT2011 conference collected over 330 papers from different countries or regions of the world. Over 300 authors came from more than 12 countries. This conference consists of eight oral sessions (and a one-day poster session): Optical Systems and Modern Optoelectronic Instruments; Optical Device & Integration; Optical Sensor and Applications; Opto-electronic Imaging and Processing Technology; Optoelectronic Measurement Technology and System; Solid State Lighting and Display Technologies; Holography, Speckle Pattern Interferometry and Application; Micro/Nano Manufacturing and Metrology. Published in these six volumes of the Proceedings of SPIE are close to 330 papers. The technical fields of the presented papers at the conference cover a lot of current advanced technologies. The cutting-edge technologies and applications of optical instruments are discussed. Quite a few invited papers describe exciting achievements in the fields of optical instrument technology. It is evident that the OIT2011 conference has provided an excellent platform for participants and colleagues in research and development to share the technical progress and to develop new partnerships or broaden new markets.

SPIE has given great support to organize this international conference by collaborating with us in the whole organizing process from abstract collection to the proceedings publication. COS has provided great support and assistance.

Finally, on behalf of CIS and conference general chairs, I would like to heartily thank our supporters and committee members for all they have done for this conference. Thanks also go to all authors for their contributions, to all of the participants and friends for their interest, especially those who have traveled great distances and taken time from their busy schedules to attend the conference. Thanks also go to the staff of CIS for their support. I am also grateful to the SPIE staff for their support and collaboration in publishing these six volumes.

Songlin Zhuang
Chairman, China Instrument and Control Society (CIS)