

# PROCEEDINGS OF SPIE

## 2013 International Conference on Optical Instruments and Technology

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### **Optical Sensors and Applications**

**Brian Culshaw**  
**Xuping Zhang**  
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**Xiaoyi Bao**  
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*Editors*

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## Introduction

The fields of optical sensors and applications have witnessed great development in recent years. Optical sensors, especially fiber-optic sensors, are widely used for measuring various physical and chemical parameters in many fields. Recent developments in micro-structured optical fibers, specially-doped optical fibers, and fiber gratings, etc., provide great potential and solutions for a variety of sensing applications that are difficult to handle with conventional sensors.

This branch of OIT's 2013 Optical Sensor and Applications collected over 80 papers from different countries and areas around the world. Over 300 authors came from Hong Kong (China), Japan, Korea, Singapore, USA and China. More than 60 papers have been accepted and presented at the conference in Beijing, covering many research fields including micro-structured optical fiber sensors, physical and mechanical sensors, interferometric and polarimetric optical sensors, distributed and quasi-distributed optical sensors, and other advanced optical sensors. At the conference cutting-edge technologies and applications of optical sensors were discussed and quite a few invited papers detailed exciting achievements in many related research fields. It is my great pleasure that the most recent progress in optical sensors and applications were a part of this meeting.

Finally, on behalf of the Conference Chairs of this branch of OIT's 2013 Optical Sensor and Applications, I'd like to heartily thank our committee members and supporters for all they have done for the meeting. Thanks also go to all authors for their contributions; to all of the participants and friends for their interest. I am also grateful for the staff of SPIE for their support in publishing the Proceedings.

**Xuping Zhang**

