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**Yongtian Wang
Yunlong Sheng
Han-Ping Shieh
Kimio Tatsuno**
Editors

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Contents

ix	<i>Symposium Committee</i>
xi	<i>Conference Committee</i>
xiii	<i>Introduction</i>

PLENARY SESSION

8197 02	Applications of optical measurement technology in pollution gas monitoring at thermal power plants (Plenary Paper) [8197-92] J. Wang, D. Yu, Focused Photonics (Hangzhou) Inc. (China); H. Ye, Zhejiang Univ. (China); J. Yang, L. Ke, S. Han, H. Gu, Y. Chen, Focused Photonics (Hangzhou) Inc. (China)
---------	--

SESSION 1 OPTICAL MEASUREMENT

8197 03	Long distance measurement with submicrometer accuracy (Invited Paper) [8197-88] N. Bhattacharya, M. Cui, M. G. Zeitouny, H. P. Urbach, Technische Univ. Delft (Netherlands); S. A. van den Berg, VSL (Netherlands)
8197 04	Stereo vision system based on the laser dot matrix projection [8197-51] C. Liu, S. Ma, Q. Ma, X. Zeng, Beijing Institute of Technology (China)
8197 05	An off-axis optical system design applied in the precision measurement of axle hole's inner diameter [8197-78] H. Xie, F. Li, T. Li, T. Yang, Tianjin Univ. (China)
8197 06	Flying attitude measurement of projectile using high speed photography and 3D digital image correlation technique [8197-52] X. Zeng, S. Ma, Beijing Institute of Technology (China)

SESSION 2 OPTICAL SENSING AND TESTING

8197 07	Fiber optic multipoint pressure and temperature sensing system using BOF/DWPR (Invited Paper) [8197-89] S. Onoda, K. Inoue, M. Nakano, Y. Komatsu, Watanabe Co., Ltd. (Japan)
8197 09	The instrument of high-precision photoelectric autocollimator based on PSD [8197-17] X. Zhang, Z. An, Changchun Univ. of Science and Technology (China)
8197 0A	Comparison of wavefront reconstruction with modal method and zonal method for the inspection of catadioptric projection optics using Hartmann wavefront sensor [8197-93] J. Wang, K. Liu, Y. Li, H. Wang, G. Li, Beijing Institute of Technology (China)

SESSION 3 NANO- AND MICRO-OPTICS

- 8197 0B **Fourier analysis of metallic near-field superlens (Invited Paper)** [8197-85]
Y. Sheng, G. Tremblay, Y. Gravel, COPL, Univ. of Laval (Canada)
- 8197 0C **Design of waveguide grating filter with an antireflective surface using approximate and rigorous methods** [8197-16]
T. Sang, T. Cai, W. Zhou, X. Zhang, F. Liu, Qiannan Normal College for Nationalities (China)
- 8197 0D **Analysis of microstructure heights error of multilayer diffractive optical elements for far infrared optical system** [8197-25]
L. Yang, Q. Cui, C. Xue, T. Liu, Changchun Univ. of Science and Technology (China)

SESSION 4 OPTICAL ELEMENTS AND SYSTEMS

- 8197 0F **Design and test of a high-contrast imaging coronagraph based on two 50-step transmission filters** [8197-82]
J. Dou, Nanjing Institute of Astronomical Optics & Technology (China) and Key Lab. of Astronomical Optics & Technology (China); D. Ren, Nanjing Institute of Astronomical Optics & Technology (China), Key Lab. of Astronomical Optics & Technology (China), and California State Univ., Northridge (United States); Y. Zhu, Nanjing Institute of Astronomical Optics & Technology (China) and Key Lab. of Astronomical Optics & Technology (China); X. Zhang, X. Wang, Nanjing Institute of Astronomical Optics & Technology (China), Key Lab. of Astronomical Optics & Technology (China), and Graduate Univ. of the Chinese Academy of Sciences (China)
- 8197 0G **Design of the cooled IRFPA real-time non-uniformity correction system based on FPGA** [8197-71]
Y. Sheng, L. Yun, J. Shi, C. Zhang, Yunnan Normal Univ. (China)
- 8197 0H **Design of OLED gamma correction system based on the LUT** [8197-46]
Y. Tai, L. Yun, J. Shi, Z. Chen, Q. Li, Yunnan Normal Univ. (China)

SESSION 5 OPTICAL SYSTEMS DESIGN

- 8197 0I **Developments in modern panoramic lenses: lens design, controlled distortion, and characterization (Invited Paper)** [8197-81]
S. Thibault, J. Parent, H. Zhang, M. Larivière-Bastien, A.-S. Poulin-Girard, A. Arfaoui, P. Désaulniers, COPL, Univ. Laval (Canada)
- 8197 0J **A universal and smart helmet-mounted display of large FOV (Invited Paper)** [8197-76]
N. Zhang, D. Weng, Y. Wang, X. Li, Y. Liu, Beijing Institute of Technology (China)
- 8197 0K **The comparison of different medical electronic endoscope systems** [8197-31]
W. Ye, L. Wang, H. Duan, Zhejiang Univ. (China)
- 8197 0L **Optimization design of suspension biochip detection system** [8197-68]
G. Xu, Y. Bu, Anhui Univ. of Technology (China) and Zhejiang Univ. (China); L. Wang, Zhejiang Univ. (China)

- 8197 OM **Testing of a high-contrast imaging coronagraph based on an active liquid crystal array** [8197-84]
 X. Zhang, Nanjing Institute of Astronomical Optics & Technology (China), Key Lab. of Astronomical Optics & Technology (China), and Graduate Univ. of the Chinese Academy of Sciences (China); D. Ren, Nanjing Institute of Astronomical Optics & Technology (China), Key Lab. of Astronomical Optics & Technology (China), and California State Univ., Northridge (United States); Y. Zhu, J. Dou, Nanjing Institute of Astronomical Optics & Technology (China) and Key Lab. of Astronomical Optics & Technology (China); X. Wang, Nanjing Institute of Astronomical Optics & Technology (China), Key Lab. of Astronomical Optics & Technology (China), and Graduate Univ. of the Chinese Academy of Sciences (China)

SESSION 6 OPTICAL SYSTEMS AND LASERS

- 8197 ON **The character of branch points' variation in laser propagation through atmosphere** [8197-57]
 X. Ge, Shandong Univ. of Technology (China); C. Fan, X. Feng, Anhui Institute of Optics and Fine Mechanics (China); C. Li, X. Liu, S. Fu, Shandong Univ. of Technology (China)
- 8197 OO **Numerical analysis of fundamental mode selection of a He-Ne laser by a circular aperture** [8197-07]
 X. He, B. Zhang, National Univ. of Defense Technology (China)

POSTER SESSION

- 8197 OP **Design and simulation of optical system based on microlens array for scannerless pulsed laser radar** [8197-03]
 X. Cai, X. Leng, J. Liu, Heilongjiang Univ. (China); Q. Han, Harbin Institute of Technology (China); W. Dai, Heilongjiang Univ. (China)
- 8197 OQ **The application of diagnostic equipment in the Tokamak fusion reaction** [8197-05]
 B. Zhang, J. Chang, Beijing Institute of Technology (China); X. Gong, J. Gan, Institute of Plasma Physics (China); S. Feng, Changchun Institute of Optics, Fine Mechanics and Physics (China)
- 8197 OR **Linewidth narrowing and wavelength stabilization of high-power laser diode array by use of volume Bragg grating** [8197-06]
 H. Wang, X. Yuan, Soochow Univ. (China)
- 8197 OS **Design of apochromatic telescopic optical system based on PWC method** [8197-08]
 X.-X. Wei, F. Xu, J. Yu, Soochow Univ. (China)
- 8197 OT **Writing on wet paper based on multipixel differencing** [8197-14]
 X. Yang, L. Cao, Z. Chen, F. Li, B. Li, Z. Wu, Tianjin Univ. of Technology (China)
- 8197 OU **Design of airborne imaging spectrometer based on curved prism** [8197-15]
 Y. Nie, The Academy of Opto-Electronics (China) and Graduate Univ. of the Chinese Academy of Sciences (China); B. Xiangli, J. Zhou, The Academy of Opto-Electronics (China); X. Wei, Soochow Univ. (China)

- 8197 0V **Impact of the light source expanded width on optical readout uncooled infrared system** [8197-18]
Q. Jia, Y. Zhao, X. Liu, W. Zhu, G. Yin, L. Dong, Beijing Institute of Technology (China)
- 8197 0W **PSF analysis on subaperture aberrations of optical synthetic aperture imaging system** [8197-20]
Z. Wang, S. Zhang, Y. Jiang, L. Hao, L. Zhang, Harbin Institute of Technology (China)
- 8197 0X **Research on the tangible tabletop interaction system based on the optical sensors** [8197-21]
D. Feng, D. Weng, Y. Wang, Y. Liu, Beijing Institute of Technology (China)
- 8197 0Y **Optimization of laser induced breakdown spectroscopy system by neurogenetic method for multi-elemental analysis of heavy metals in soil** [8197-23]
L. Liu, J. Liu, N. Zhao, Y. Wang, H. Shi, C. Wang, Y. Zhang, W. Liu, Anhui Institute of Optics and Fine Mechanics (China)
- 8197 0Z **The model-based approach to wavefront sensorless adaptive optics in space remote imaging system** [8197-27]
X. Ren, X. Zhang, Beijing Institute of Technology (China); B. Wang, China Academy of Space Technology (China); N. An, Heibei Univ. of Science and Technology (China)
- 8197 10 **The study of transfer function characteristic of long-base laser strainmeters** [8197-29]
J. You, Harbin Engineering Univ. (China)
- 8197 11 **Design study of optical fiber F-P sensing system for bio-tissue temperature real-time measurement** [8197-33]
S. Ning, Engineering College of Armed Police Force (China); G. Heng, North China Univ. of Water Conservancy and Electric Power (China)
- 8197 12 **Research of sampling interval in wavefront coded system** [8197-35]
Z. Zhou, D. Wang, Y. Wang, Beijing Univ. of Technology (China)
- 8197 14 **Precision measurement facility of mid-infrared spectral emissivity measurement** [8197-38]
G. Feng, Y. Wang, P. Li, National Institute of Metrology (China); T. Guo, Huaihai Institute of Technology (China); T. Guo, China Agricultural Univ. (China)
- 8197 15 **Mid-wave infrared dual-field-of-view lenses with high ratio for third generation thermal imager** [8197-40]
R. Li, X. Zhang, L. Liu, North China Research Institute of Electro-optics (China)
- 8197 16 **Analysis of comprehensive influence of piston error and subapertures' aberrations upon sparse-optical-synthetic-aperture systems' image quality for the broadband target wave** [8197-43]
Z. Liu, National Univ. of Defense Technology (China), Key Lab. on Adaptive Optics (China), and Institute of Optics and Electronics (China); S.-Q. Wang, L.-H. Huang, C.-H. Rao, Key Lab. on Adaptive Optics (China) and Institute of Optics and Electronics (China)
- 8197 17 **Design of photoelectric autocollimator for NC rotary table position detection** [8197-44]
M. Hu, B. Yan, L. Zhu, Beijing Information Science and Technology Univ. (China)

- 8197 18 **New system of miniaturization online testing of spherical interferometer** [8197-48]
J. Lin, Z. Han, J. Zhuo, M. Wang, Fujian Normal Univ. (China)
- 8197 19 **The design of analysis system of refractive index profile of optical fiber** [8197-54]
G. He, Z. Liu, Harbin Engineering Univ. (China)
- 8197 1A **Flat-field EUV spectrometer and its performance test by Penning discharge source** [8197-55]
X. Du, Univ. of Science and Technology of China (China); Y. Shi, W. Zhang, Y. Shen, Institute of Plasma Physics (China); Q. Wang, Univ. of Science and Technology of China (China)
- 8197 1B **Bandwidth determination of a Czerny-Turner double monochromator with varied slit widths through experiment and data computation** [8197-56]
H. Ouyang, C. Dai, B. Huang, Z. Wu, National Institute of Metrology (China)
- 8197 1C **An experimental apparatus for normal spectral emissivity measurement** [8197-60]
K. Yu, Beijing Institute of Technology (China) and Xingyi Normal Univ. for Nationalities (China); Y. Liu, Beijing Institute of Technology (China) and Henan Normal Univ. (China); G. Jia, Beijing Institute of Technology (China); D. Shi, Henan Normal Univ. (China)
- 8197 1D **Novel MOEMS-based beam steering method** [8197-61]
J. Wang, Q. Hao, Y. Song, Y. Hu, Beijing Institute of Technology (China)
- 8197 1E **Research on the transmission of information on bi-grating diffraction imaging** [8197-65]
M. Huang, Quzhou Univ. (China); W. Zhang, Guangxi Univ. (China)
- 8197 1F **A single channel input virtual dual-phase lock-in amplifier** [8197-74]
Z. Gao, H. Zheng, L. Li, F. Chen, F. Guo, Fujian Normal Univ. (China)
- 8197 1H **Modeling of a field-widened Michelson interferometric filter for application in a high spectral resolution lidar** [8197-80]
D. Liu, C. Hostetter, A. Cook, NASA Langley Research Ctr. (United States); I. Miller, LightMachinery Inc. (Canada); J. Hair, NASA Langley Research Ctr. (United States)
- 8197 1I **A dual-channel imaging polarimetry system** [8197-83]
X. Wang, Nanjing Institute of Astronomical Optics & Technology (China), Key Lab. of Astronomical Optics & Technology (China), and Graduate Univ. of the Chinese Academy of Sciences (China); D. Ren, Nanjing Institute of Astronomical Optics & Technology (China), Key Lab. of Astronomical Optics & Technology (China), and California State Univ., Northridge (United States); J. Dou, Y. Zhu, Nanjing Institute of Astronomical Optics & Technology (China) and Key Lab. of Astronomical Optics & Technology (China); X. Zhang, Nanjing Institute of Astronomical Optics & Technology (China), Key Lab. of Astronomical Optics & Technology (China), and Graduate Univ. of the Chinese Academy of Sciences (China)
- 8197 1J **2000W high beam quality diode laser for direct materials processing** [8197-87]
W. Qin, Y. Liu, Y. Cao, J. Gao, F. Pan, Z. Wang, Beijing Univ. of Technology (China)
- 8197 1K **Research of zernike fitting algorithm in finite element process** [8197-90]
X.-F. Song, L. Li, Y.-F. Huang, S.-Y. Lu, Beijing Institute of Technology (China)

- 8197 1L **The method of identification of cloud phase by using micropulse lidar** [8197-94]
L. Wang, H. Chen, Y. Zhang, S. Chen, P. Guo, Beijing Institute of Technology (China)

Author Index

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- 5 Optical Systems Design
Yongtian Wang, Beijing Institute of Technology (China)
- 6 Optical Systems and Lasers
Dongdong Weng, Beijing Institute of Technology (China)

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)