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The CID number appears on each page of the manuscript. The complete citation is used on the first page, and an abbreviated version on subsequent pages. Numbers in the index correspond to the last two digits of the six-digit CID number.

Contents

xi xiii xv	Symposium Committees Conference Committee Introduction
SESSION 1	IMAGING AND SPECTROSCOPY
7511 02	One-shot surface profile measurement using polarized phase-shifting (Invited Paper) [7511-07] YF. Chen, YL. Du, National Cheng Kung Univ. (Taiwan, China)
7511 03	One-shot 3D shape and color measurement using composite RGB fringe projection and optimum three-frequency selection (Invited Paper) [7511-48] Z. Zhang, S. Zhang, Hebei Univ. of Technolgy (China)
7511 04	Influence of partially coherent illumination on aerial-image-based aberration measurement of projection optics in lithographic tools [7511-34] T. Zhou, S. Liu, W. Liu, L. Wang, Huazhong Univ. of Science and Technology (China)
7511 05	Microstructure testing with digital holography [7511-42] Q. Lü, B. Ge, Y. Chen, J. Zou, Tianjin Univ. (China)
7511 06	Optimization of pupil sampling scheme for aerial-image-based aberration measurement of projection optics in lithographic tools [7511-35] L. Wang, S. Liu, W. Liu, T. Zhou, Huazhong Univ. of Science and Technology (China)
7511 07	Determination of magneto-optical characteristics of hexaferrites from 200 GHz to 1THz using time domain spectroscopy (Invited Paper) [7511-109] R. Zhang, Capital Normal Univ. (China); B. Yang, Queen Mary Univ. of London (United Kingdom); Y. Zhang, Capital Normal Univ. (China); R. S. Donnan, Queen Mary Univ. of London (United Kingdom)
7511 08	The research on promoting the measuring accuracy of UV radiometers [7511-68] B. Huang, C. Dai, J. Yu, National Institute of Metrology (China)
7511 09	Correlation between linear and angular kinematic errors in prismatic joint of machine tools [7511-111] A. Wahid Khan, W. Chen, Beihang Univ. (China)
7511 0A	The effects of water quality on the measurement results of nanoparticles' effective diameter and polydispersity by Photon Correlation Spectroscopy [7511-120] J. Xiang, G. Yang, P. Han, G. Wu, South China Normal Univ. (China)

SESSION 2	INTERFEROMETER			
7511 OB	Measurement of thin film shape with a sinusoidal wavelength scanning interferometer using a white light source (Invited Paper) [7511-121] O. Sasaki, H. Ueno, T. Suzuki, Niigata Univ. (Japan)			
7511 0C	Vibration measurements based on demodulating the phase of a fiber 3dB-coupler Michelson interferometer (Invited Paper) [7511-67] M. Li, F. Xie, J. Ren, Beijing Jiaotong Univ. (China)			
7511 OD	The dynamic interferometry technology of 4.5-meter concave aspherical mirror and relativity precision analysis [7511-02] Z. Wang, W. Zhang, Z. Ren, Harbin Institute of Technology (China)			
7511 OE	Research on chromatic dispersion measurement of PCF based on Michelson white-light interferometry [7511-14] D. Jia, Y. Zhu, F. Shi, X. Zhang, H. Zhang, W. Jing, Y. Zhang, Tianjin Univ. (China)			
7511 OF	Development of oral cavity inspecting system [7511-19] H. Zhang, D. Wu, D. Jia, Y. Zhang, Tianjin Univ. (China)			
7511 0G	Content measurement of textile mixture by Fourier transform near infrared spectroscopy (Invited Paper) [7511-79] L. Liu, L. Yan, Y. Xie, S. Li, G. Xia, L. Zhou, Wuhan Univ. of Science and Engineering (China)			
7511 OH	Vibration errors in phase-shifting interferometer [7511-27] H. Wei, Institute of Optics and Electronics (China) and Graduate School of the CAS (China); T. Xing, Institute of Optics and Electronics (China)			
<i>7</i> 511 0I	Research of full-field deformation measurement system [7511-36] K. Yue, Xi'an Jiaotong Univ. (China); M. Yuan, Y. Yi, Z. Li, The Second Artillery Engineering College (China); F. Zhang, L. Jian, Xi'an Jiaotong Univ. (China)			
7511 OJ	On-line measurement of profile parameters of rectangular holographic photoresist gratings during development [7511-37] S. Wei, L. Li, Tsinghua Univ. (China)			
7511 OK	Machine tools error characterization and compensation by on-line measurement of artifact [7511-112] A. Wahid Khan, W. Chen, L. Wu, Beihang Univ. (China)			
SESSION 3	OPTOELECTRIC MEASUREMENT			
7511 OL	An inversion of plume gas concentration distribution based on multivariate regression analysis (Invited Paper) [7511-58] Q. Ye, X. Sun, L. Shao, Y. Wang, Electronic Engineering Institute (China)			

- 7511 0M A polarization-modulated multichannel Mueller-matrix scatterometer for smoke particle characterization (Invited Paper) [7511-102]
 - Q. Zhang, L. Qiao, J. Wang, J. Fang, Y. Zhang, Univ. of Science and Technology of China (China)
- 7511 0N Depth measurement using infrared thermography [7511-43]

Y. Huo, Y. Zhao, Beijing Institute of Technology (China); C. Zhang, Capital Normal Univ. (China); Y. Li, Beijing Institute of Technology (China); Z. Zeng, Chongqing Normal Univ. (China)

7511 00 A tunable external cavity laser diode with no mechanical movement (Invited Paper) [7511-110]

T. Suzuki, R. Nagai, O. Sasaki, Niigata Univ. (Japan)

7511 OP Light scattering modeling of bacteria using spheroids and cylinders [7511-60]

C. Feng, Shanghai Institute of Optics and Fine Mechanics (China) and Graduate School of CAS (China); L. Huang, Shanghai Institute of Optics and Fine Mechanics (China); J. Han, G. Zhou, Shanghai Institute of Optics and Fine Mechanics (China) and Graduate School of CAS (China); A. Zeng, Y. Zhao, H. Huang, Shanghai Institute of Optics and Fine Mechanics (China)

- 7511 0Q Optical measurement of atmospheric refractive index structure constants [7511-74] X. Qiang, Xi'an Jiaotong Univ. (China) and Northwest Institute of Nuclear Technology (China); J. Liu, Northwest Institute of Nuclear Technology (China); J. Song, Xi'an Jiaotong Univ. (China); F. Zong, J. Zhao, Y. Li, Northwest Institute of Nuclear Technology (China)
- 7511 OR A single channel spatial polarization encoding and decoding method based on photoelastic modulator [7511-80]

J. Han, Shanghai Institute of Optics and Fine Mechanics (China) and Graduate School of CAS (China); A. Zeng, Shanghai Institute of Optics and Fine Mechanics (China); C. Feng, G. Zhou, Shanghai Institute of Optics and Fine Mechanics (China) and Graduate School of CAS (China); H. Huang, H. Qian, Shanghai Institute of Optics and Fine Mechanics (China)

7511 0S Color identification and fuzzy reasoning based monitoring and controlling of fermentation process of branched chain amino acid [7511-101]

L. Ma, Y. Wang, Q. Xu, H. Huang, R. Zhang, N. Chen, Tianjin Univ. of Science and Technology (China)

7511 0T Measurement and evaluation on advanced adaptive optoelectronic sensor system [7511-99]

Q. Ding, C. Guo, M. Cai, H. Liu, Luoyang Institute of Electro-Optical Equipment, AVIC (China)

7511 0U Method for decrease of the centroid error of star image caused by stellar spectrum [7511-115]

H. Liu, J. Tan, S. Huang, X. Li, L. Liu, National Univ. of Defense Technology (China); W. Tan, Wuhan Ordnance Noncommissioned Officers Academy (China)

	POSTER SESSION
7511 OV	Used digital speckle correlation method to measure vibration [7511-03] H. Yan, Henan Univ. of Urban Construction (China); Z. Zhen, Z. Tang, Henan Univ. of Science & Technology (China)
7511 OW	The self-reacting machining process of optical accessories and the precision testing [7511-04]
	Z. Wang, Z. Hu, W. Zhang, Harbin Institute of Technology (China)
7511 OY	Modal analysis of low-level-light aiming sight-glass based on vibration testing conditions [7511-10] Y. Gao, S. Tian, J. Qiao, J. Niu, Nanjing Univ. of Science and Technology (China) and Nan Yang Instiute of Technology (China); B. Chang, Nanjing Univ. of Science and Technology (China)
7511 OZ	Small roll angle measurement based on auto-collimation and moiré fringe [7511-11] X. Bai, S. Cai, Changchun Institute of Optics, Fine Mechanics and Physics (China) and Graduate School of the CAS (China); Y. Qiao, M. Dai, Graduate School of the CAS (China)
7511 10	Design of an MCU-controlled laser liquid turbidimeter based on OPT101 [7511-18] Y. Liu, H. Xu, Xiamen Univ. (China)
7511 11	Experimental studies of PCS system for measuring of nanometer particles [7511-20] S. Deng, Q. Zhang, National Univ. of Defense Technology (China)
7511 12	Measurement of the laser beam quality using knife-edge method [7511-21] J. Wen, L. Jia, Y. Zhu, Shijiazhuang Univ. of Economics (China)
7511 13	Processing technology of interferogram for thin film thickness measurement [7511-24] J. Su, J. Ge, Xi'an Technological Univ. (China)
7511 14	Design and simulation of comparative method for testing transverse thermal conductivity of Si_xN_y thin film [7511-25] L. Yang, Z. Wu, K. Yuan, Y. Jiang, Univ. of Electronic Science and Technology of China (China)
7511 15	Single-image based dimensions inspection technology for planar industrial parts [7511-28] J. Chen, Beihang Univ. (China); Y. Jiang, Shanghai Boiler Works Ltd. (China)
7511 16	Optoelectronic measurement in deformation of blast shock with Doppler effect [7511-29] L. Shao, Tianjin Univ. of Technology (China) and Tianjin Univ. (China); H. Liu, C. Jiang, Tianjin Univ. (China)
7511 17	A novel method measuring optical fiber nonlinear coefficient based on XPM [7511-31] S. Zhang, X. Wu, F. Ai, C. Zhang, B. Zhang, B. Yu, Anhui Univ. (China)

Dynamic deformation inspection of a human arm by using a line-scan imaging system

E. Hu, China Univ. of Mining & Technology (China)

7511 18

Design and tolerance analysis of compensator for high order aspheric surface testing [7511-33]

X. Chen, Changchun Institute of Optics, Fine Mechanics and Physics (China) and Graduate School of CAS (China); W. Liu, Y. Kang, Z. Wei, Changchun Institute of Optics, Fine Mechanics and Physics (China)

7511 1A Experimental study on absolute spectral responsivity value transfer with cryogenic radiometer [7511-38]

X. Shi, K. Chen, National Key Lab. of Science and Technology (China) and The 41st Research Institute (China); H. Liu, National Key Lab. of Science and Technology (China); H. Wang, Q. Sun, The 41st Research Institute (China)

- 7511 1B On-orbit visual principle point monitoring system of three-line array camera [7511-39]
 Y. Lv, Beijing Jiaotong Univ. (China) and Beijing Information Science & Technology Univ. (China); Q. Feng, Beijing Jiaotong Univ. (China); L. Liu, Q. Chen, X. Lang, Beijing Information Science & Technology Univ. (China)
- 7511 1C Simulation of ultraviolet laser-induced fluorescence LIDAR for detecting bioaerosol [7511-41]
 P. Liu, Y. Zhang, S. Chen, T. Lan, Y. Wang, Z. Qiu, W. Kong, G. Ni, Beijing Institute of Technology (China)
- 7511 1D Analysis for angle anisoplanatic effect of the steady thermal blooming [7511-44]
 Y. Sun, F. Xi, National Univ. of Defense Technology (China) and Institute of Optics and Electronics (China); X. Xu, Q. Lu, W. Wu, National Univ. of Defense Technology (China); H. Chen, National Univ. of Defense Technology (China) and Institute of Optics and Electronics (China)
- 7511 1E Ellipsometric data inversion of absorbing films by simulated annealing-simplex hybrid algorithm [7511-45]
 Z. Huang, L. Wang, Z. He, South China Normal Univ. (China)
- 7511 1F Infrared object detection: the influence of flying altitude and velocity [7511-47]
 Y. Yi, The Second Artillery Engineering College (China); K. Yue, Xi'an Jiaotong Univ. (China);
 M. Yuan, J. Xie, The Second Artillery Engineering College (China)
- Online image acquisition system of magnet chip surface quality based on asynchronous reset [7511-49]
 K. Wu, Z. Li, S. Hu, Hangzhou Dianzi Univ. (China)
- 7511 1H Measurement of surface bidirectional reflectance distribution based on parabolic mirror [7511-50]

J. Ren, J. Zhao, Northwestern Polytechnical Univ. (China)

- A new method for obtaining aerosol backscattering ratio with partial pure rotational Raman spectrum [7511-51]
 Y. Wang, Y. Zhang, S. Chen, T. Lan, Z. Qiu, W. Kong, P. Liu, G. Ni, Beijing Institute of Technology (China)
- 7511 1J Partial coherence theory relating to dispersive medium involved interference [7511-55] Q. Chen, Y. Li, Y. Lu, F. Jiang, Beijing Information Science and Technology Univ. (China)

	measurement [7511-63] D. Chu, X. Gong, L. Cheng, F. Yu, Zhejiang Univ. (China)
7511 1L	Design of wide field and high resolution video lens [7511-65] Z. Xiao, B. Zhan, H. Han, Guilin Univ. of Electronic Technology (China)
7511 1M	Adaptive optics techniques without a wave-front sensor based on guide laser in atmospheric laser communications [7511-66] X. Wang, X. Xu, P. Zhou, H. Ma, Z. Liu, Y. Zhao, National Univ. of Defense Technology (China)
7511 1N	Monitor system of cable tension with fiber Bragg grating [7511-71] Z. Wu, Tianjin Univ. (China) and Northeast Univ. at Qinhuangdao (China); A. Song, Northeast Univ. at Qinhuangdao (China); T. Liu, Tianjin Univ. (China); Z. Li, Yanshan Univ. (China)
7511 10	Research of the temperature measurement of high-energy laser energy meter and energy loss compensation technique [7511-76] X. Yu, H. Wang, Xi'an Technological Univ. (China); J. Wu, F. Wang, Xi'an Institute of Applied Optics (China); Q. Li, Xi'an Technological Univ. (China)
7511 1P	Research of the standard wave-front reconstruction [7511-77] J. Han, J. Zhang, Xi'an Technological Univ. (China); J. Wu, F. Wang, Xi'an Institute of Applied Optics (China); C. Zhang, Xi'an Technological Univ. (China)
7511 1Q	Methods to measure wave front of light beam [7511-81] Q. W. Wang, T. Sun, C. S. Han, S. Dong, Harbin Institute of Technology (China); A. Yu. Rodionov, A. S. Shirin, V. N. Skekhtman, EFL Ltd. (Russian Federation)
7511 IR	Identification of oil spills by near-infrared spectroscopy (NIR) and support vector machine (SVM) [7511-82] W. Bi, A. Tan, Y. Zhao, M. Gao, Yanshan Univ. (China)
7511 IS	Accuracy assessment of novel two-axes rotating and single-axis translating calibration equipment [7511-83] B. Liu, D. Ye, R. Che, Harbin Institute of Technology (China)
7511 IT	Measuring the wavefront distortion of a phased-array laser radar by using a real-time optoelectronic measurement system [7511-86] C. Zheng, J. Wu, Univ. of Electronic Science and Technology (China)
7511 1U	Research on distortion measurement and calibration technology for TV-seeker [7511-87] X. Yu, Q. Li, Xi'an Technological Univ. (China); X. Jiang, F. Wang, Xi'an Institute of Applied Optics (China); H. Wang, Xi'an Technological Univ. (China)
7511 1V	A soft x-ray streak tube designed for ICF [7511-89] L. Gu, Q. Yang, F. Zong, H. Liao, J. Zhou, Shenzhen Univ. (China)
7511 1W	Noise filtering of rotational Raman lidar using threshold amendment for atmospheric temperature measurement [7511-90] W. Kong, S. Chen, Y. Zhang, T. Lan, Z. Qiu, Y. Wang, P. Liu, G. Ni, Beijing Institute of Technology (China)

 $7511\ 1K \qquad \textbf{The application of new simulated annealing genetic algorithm in film characters}$

7511 1X	The application of uniaxial crystal reflectivity in NO ₂ -DIAL optical path [7511-91] K. Yang, B. Xu, China Jiliang Univ. (China); S. Zhi, ZheJiang Univ. (China); D. Fang, HuZhou Teachers College (China)
7511 1Y	Photocatalytic degradation of SO ₂ by diffuser of light pipe coated with Nanometer TiO ₂ thin films [7511-92] Y. Wu, Univ. of Science and Technology Beijing (China); C. Ma, Beijing Univ. of Technology
	(China)
7511 1Z	Analysis of survey of exterior surface color of buildings in Beijing [7511-95] Y. Wu, F. Zhang, Univ. of Science and Technology Beijing (China); D. Li, Beijing Univ. of Civil Engineering and Architecture (China)
7511 20	Novel packaging method for optical fiber collimator based on image processing [7511-96] J. Qiu, P. Zhong, Shanghai Univ. of Engineering Science (China) and Donghua Univ. (China)
7511 21	A measured-data processing method based on MATLAB wavelet for distributed optical fiber sensing system [7511-97]
	A. H. Chen, H. Y. Zeng, G. L. Jiang, P. Y. Zhu, Hunan Univ. of Science and Technology (China)
7511 22	A novel method for measuring the 2D information of burst strong flashing object in space [7511-98] P. Zhong, Y. Jin, Donghua Univ. (China)
7511.00	
7511 23	SNR analysis according to the practical factors for Mie-scattering lidar [7511-100] Z. Qiu, S. Chen, Y. Zhang, T. Lan, Y. Wang, W. Kong, P. Liu, G. Ni, Beijing Institute of Technology (China)
7511 24	Hardware circuit implementation of computer-generated holographic algorithm [7511-103] X. Jian, L. Guo, Univ. of Shanghai (China); H. Wang, Shanghai Univ. of Electric Power (China); L. He, Univ. of Shanghai (China)
7511 25	Calibration based on computer vision in measurement of the density of bullet fall [7511-108] H. Mergid, Z. Huang, J. Wang, N. Meng, Tianjin Univ. (China)
7511 26	Research on full-field measurement of optical film thickness by processing double interferometric fringes based on digital wavefront interferometry [7511-114] L. Chen, Y. Liang, J. Luo, C. Zhang, G. Yang, Zhejiang Univ. (China)
7511 27	Influence and correction of temperature on optical measurement for fat and protein contents in a complex food model system [7511-122] X. Zhang, M. Chang, Univ. of Shanghai for Science and Technology (China); K. Xu, Tianjin Univ. (China)
	Author Index

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Introduction

These proceedings result from the 2009 International Conference on Optical Instrument and Technology (OIT'09), held in Shanghai, China, 19–21 October 2009. The conference was the second event following the success of OIT'08 and it was sponsored and supported by SPIE, China Instrument and Control Society (CIS), and the Chinese Optical Society (COS).

OIT'09 was a professional conference which was combined with the exhibition of The 20th Fair for Measurement Instrumentation and Automation (MICONEX).

OIT'09 focused on instrument science and related technology 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 eight volumes, contain the accepted oral and poster papers presented at OIT'09. It is truly a great pleasure for me that the most recent progress in optical instrumentation technology is reported in the OIT'09 proceedings. I firmly believe that the papers included in these volumes will provide reference information in up-to-date techniques of optical instrumentation technology.

The OIT'09 conference collected over 630 papers from different countries or regions of the world. Over 400 authors came from more than 14 countries, including Canada, Iran, Japan, Russia, Singapore, USA, Sweden, Switzerland, Pakistan, the Netherlands, Republic of Korea, Slovenia, Germany and China. Published in these eight volumes of the Proceedings of SPIE are close to 455 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 OIT'09 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 paper collection to the proceedings publication. COS has provided enough 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 COS for their support. I am also grateful to the SPIE staff for their support and collaboration in publishing these eight volumes.

Songlin Zhuang

Chairman, China Instrument and Control Society (CIS)