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8th International Symposium on Advanced Optical Manufacturing and Testing Technologies

# Advanced Optical Manufacturing Technologies

Wenhan Jiang Li Yang Oltmann Riemer Shengyi Li Yongjian Wan Editors

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## Contents

- ix Authors
- xiii Symposium Committees
- xv Introduction
- xvii Sponsors

### ORAL SESSION

9683 02	Numerical investigation of the performance of aerostatic journal bearings [9683-8]
9683 03	In-process electrical discharge dressing of arc-shaped metal bonded diamond wheels [9683-85]
9683 04	Investigation of variable spindle speed in slow tool servo-based turning of noncircular optical components [9683-24]
9683 05	Fluid field characteristics analysis of rectangular-nozzle aspect change [9683-26]
9683 06	Manufacturing progress of production of high aspherical axis and off-axis astronomical and space optics for the last decade [9683-6]
9683 07	Vacuum system for applying reflective coatings on large-size optical components using the method of magnetron sputtering [9683-11]
9683 08	Optical material removal property analysis of Ar <sup>+</sup> and Kr <sup>+</sup> in ion beam figuring [9683-72]
9683 09	An investigation on the surface/subsurface defects in potassium dihydrogen phosphate crystals after fly-cutting [9683-73]
9683 OA	Influence of flexibility of polishing tool on the microscopic figure of spinel surface and optimal design [9683-55]
9683 OB	Rapidly removing grinding damage layer on fused silica by inductively coupled plasma processing [9683-88]
9683 OC	High-precision structure fabrication based on an etching resistance layer [9683-95]
9683 OD	Method of smoothing an aspheric surface with mm-scale departure [9683-91]
9683 OE	Research on thickness uniformity correction of thin film by IBF [9683-96]
9683 OF	Investigation of the atomic emission spectroscopy of F atoms and CF <sub>2</sub> molecules in CF <sub>4</sub> plasma processing [9683-78]

- 9683 0G Fabrication of large aperture SiC brazing mirror [9683-9]
- 9683 0H Polishing an off-axis aspheric mirror by ion beam figuring [9683-41]
- 9683 01 Dynamic aberration correction for conformal optics using model-based wavefront sensorless adaptive optics [9683-94]
- 9683 0J Thermal modeling of wafer-based precision glass molding process [9683-43]
- 9683 0K Ultra-precision deterministic processing algorithm and experiment research of FJP [9683-29]
- 9683 0L Method for ion beam etching in angles with multi-layers model [9683-31]
- 9683 0M Study on optical fabrication and metrology of precise convex aspheric mirror [9683-37]
- 9683 0N Effect of silicon carbide ceramic coating process on the mirror surface quality [9683-38]
- 9683 00 Development of atmospheric pressure plasma processing machine tool for large aperture optics [9683-32]
- 9683 OP Effection of grinding system rigidity ultra-precision grinding of aspheric mould and error compensation [9683-92]

#### **POSTER SESSION**

- 9683 0Q Design and experimental research of the on-line detection system for diamond arc grinding wheel [9683-19]
- 9683 OR High efficient machining technology and equipment for edge chamfer of KDP crystals [9683-87]
- 9683 05 Automatic low-order aberration correction based on geometry optics: simulations [9683-42]
- 9683 0T Athermal design for mid-wave infrared lens with long EFFL [9683-99]
- 9683 00 Effect of incident deposition angle on optical properties and surface roughness of TiO<sub>2</sub> thin films [9683-5]
- 9683 0V Rapid online measurement method for radius of curvature of fine grinding optics based on tool setting system [9683-97]
- 9683 0W Freeform surface of progressive addition lens represented by Zernike polynomials [9683-93]
- 9683 0X Normal contour error measurement on-machine and compensation method for polishing complex surface by MRF [9683-1]
- 9683 0Y Study on dynamic photographic properties of holographic gratings [9683-53]
- 9683 0Z Influence of optical component defects on scattering characteristics [9683-30]

- 9683 10 The design of multilayer dielectric grating for laser frequency selection [9683-216]
- 9683 11 Research on lithography based on the digital coding-mask technique [9683-3]
- 9683 12 **3D** printing optical watermark algorithms based on the combination of DWT and Fresnel transformation [9683-35]
- 9683 13 Modeling and simulation of wheeled polishing method for aspheric surface [9683-10]
- 9683 14 **Production of off-axis high asphericity large-size astronomical mirrors** [9683-7]
- 9683 15 The improvement of laser induced damage resistance of optical workpiece surface by hydrodynamic effect polishing [9683-22]
- 9683 16 Mold design with simulation for chalcogenide glass precision molding [9683-74]
- 9683 17 Design of optics for compact star sensors [9683-15]
- 9683 18 Study on machining deformation of the ultra-thin mirror [9683-57]
- 9683 19 Experimental investigation of the ultra-precision turning capability of PVD ZnSe [9683-56]
- 9683 1A **Design of null lens system for** *f***/0.5 hyperboloid mirror** [9683-17]
- 9683 1B Research on subsurface damage of glass-ceramics mirror [9683-18]
- 9683 1C Research on the residual stress of glass ceramic based on rotary ultrasonic drilling [9683-48]
- 9683 1D Study on subsurface damage of optical glass after grinding with free abrasives [9683-50]
- 9683 1E Beam quality measurements by modal decomposition using a spatial light modulator [9683-21]
- 9683 1F The advancement of the high precision stress polishing [9683-51]
- 9683 1G Research of forming characteristic of precision glass molding [9683-75]
- 9683 1H Control of rolled edge based on the discrete local error figuring technique [9683-62]
- 9683 11 Ultra-precision molding of chalcogenide glass aspherical lens [9683-98]
- 9683 1J Process for the Φ130 sapphire window element with long distance and high resolution [9683-64]
- 9683 1K Optimization on manufacturing and testing technology for rectangle aperture off-axis aspheric mirror fine grinding [9683-14]
- 9683 1L A novel method about online monitoring surface shape of optical elements in continuous polishing [9683-25]
- 9683 1M New machining and testing method of large angle infrared wedge mirror parts [9683-66]

9683 1N	A new processing technology and detection method for isosceles prism [9683-61]
9683 10	New machining method of high precision infrared window part [9683-68]
9683 1P	Improvement of three-dimensional microstructure contour accuracy using maskless lithography technique based on DMD [9683-34]
9683 1Q	Research of annular polishing asymmetric ZnS plane window [9683-100]
9683 1R	Correction on the edge collapse during the synchrospeed polishing process [9683-49]
9683 15	The technical research on fabricating large aperture flat SiC mirror [9683-82]
9683 1T	Study on precision processing of L-form ZnSe deflect prism [9683-60]
9683 10	Error analysis of spherical scanning mechanism used for surface defects detection [9683-52]
9683 1V	Annular-force-based variable curvature mirror combined with multi-point actuation array to improve the surface figure accuracy: a prototype design [9683-27]
9683 1 W	Performance evaluation of pitch lap in correcting mid-spatial-frequency errors under different smoothing parameters [9683-219]
9683 1X	The lightweight structure design of a CFRP mirror [9683-58]
9683 1Y	Research on robot navigation vision sensor based on grating projection stereo vision [9683-36]
9683 1Z	The development of high precision carbon fiber composite mirror [9683-69]
9683 20	Study on supporting force sensing and control during large aperture space mirror test [9683-47]
9683 21	Optimization design for the supporting system of 5m collimator primary mirror [9683-89]
9683 22	Effect of electron tunnelling to laser induced damage properties of optical coatings [9683-79]
9683 23	Stress reduction and structural properties of Ta2O5/SiO2 mixture films produced by ion- beam sputtering [9683-83]
9683 24	Mirrors fabricated with slightly oxidized C/C composites [9683-70]
9683 25	Effect of oxygen flow on the structure and optical properties of the Gd <sub>2</sub> O <sub>3</sub> optical films [9683-86]
9683 26	Effect of polishing induced subsurface damages on laser induced damage in fused silica optics [9683-80]
9683 27	Study on manufacturing method of optical surface with high precision in angle and surface [9683-71]

- 9683 28 Experimental investigation of precision grinding oriented to achieve high process efficiency for large and middle-scale optic [9683-44]
- 9683 29 A method for cleaning optical precision surface of laser gyro cavity [9683-102]
- 9683 2A Study on electroplating technology of diamond tools for machining hard and brittle materials [9683-101]
- 9683 2B Research on optimal process parameters in thermally oxidation-assisted polishing of reaction-sintered silicon carbide [9683-12]
- 9683 2C Research on large aperture multi-angle multi-surface mirror process technology [9683-81]
- 9683 2D Freeform surface grinding and polishing by CCOS based on industrial robot [9683-67]
- 9683 2E Hot isostatic atmospheric pressure casting H-K9L lightweight mirror [9683-63]
- 9683 2F Study on the method of combined uniform removal in fabrication of large aspheric mirror [9683-90]

### Authors

Numbers in the index correspond to the last two digits of the six-digit citation identifier (CID) article numbering system used in Proceedings of SPIE. The first four digits reflect the volume number. Base 36 numbering is employed for the last two digits and indicates the order of articles within the volume. Numbers start with 00, 01, 02, 03, 04, 05, 06, 07, 08, 09, 0A, 0B...0Z, followed by 10-1Z, 20-2Z, etc.

Abdulkadyrov, Magomed A., 06, 07, 14 Azerbaev, Alexander A., 07 Ba, Tu, 1E Bai, Jian, 1U Bai, Lu, 11 Bai, Yu, OT Bai, Yunli, ON Bao, Zhenjun, 1S Belousov, Sergey P., 06, 07 Cai, Chao, 26 Cai, Xikun, OE Cao, Axiu, 0C Cao, Pin, 1U Chai, Huiting, 1U Chen, Chaoping, 1N Chen, Dongsheng, 04, 0R Chen, Gui Yang, 08 Chen, Heng, OB Chen, Hua, 0X Chen, Jian Hua, 1C, 2A Chen, Jiaojie, OW Chen, Jihong, OR, OX Chen, Shan-yong, OA Chen, Xi, 1A, 1B, 1K Chen, Xianhua, OF Chen, Xinrong, 0Y, 10 Cui, Ying, 29, 2A Dai, Chen, OH Dai, Lei, OE, OV Dai, Zuo Cai, 08 Deng, Qiling, 0C Deng, Wenhui, OF Ding, Jiaoteng, 1X, 1Z, 24 Dong, Bing, Ol Dong, Huiwen, 0G, 0H Dong, Lizhi, OS Du, Hang, 1H Du, Yan, OM Du, Yunfei, 1V Duan, Jin, 12 Fan, Fei, 03 Fan, Xue-wu, 1Z Fang, Kai, 2D Feng, Haihua, OW Fu, Shaojun, OL Gao, Yiqing, 11 Gong, S., OP Gu, Yong Qiang, 0E, 0V Guan, Chaoliang, 15

Guan, Shaohua, 21 Guo, Pei-ji, 1A, 1B, 1K Guo, Rui, 11, 1J Guo, Rui, 1N, 1M, 1O Guo, Weijin, 1Q Guo, Wen, 0M Guo, Xinlong, 1J Guo, Zongfu, OK, 28 Han, Xinli, Ol Han, Yu, 1F Hao, Peiming, 20 He, Manze, 2C He, Xiang, 26 Hong, Yilin, OL Hou, Ning, 09 Hu, Bin, Ol Hu, JiangChuan, 26 Hu, Qi, 12 Hu, Song, OC Hu, Wenqi, 20 Hu, Xiaochuan, OZ Hu, Yang, OJ Huang, QiTai, 2E Huang, Shengzhou, 1P Huang, Weihai, 04 Huang, Ying, 26, 2C Hui, Changshun, 1R, 1T Ignatov, Aleksandr N., 06, 07 Jiao, Ling Yan, 29 Jiao, Lingyan, 1D Jiao, Xiang, 1L Jin, Huiliang, OF Jin, Tan, 0K, 28 Jin, Yuzhu, 1C, 1D, 1Q Lei, Baiping, 1F Lei, Jianli, 1J Li, Ang, 0G, 0M Li, Ange, OK Li, Chaohona, OW Li, Chaoming, 0Y, 10 Li, Chaoqiang, 1F Li, Chen, 0Q Li, Chen, 1U Li, Jie, OF Li, Junqi, 16, 1G Li, Mujun, OJ, 1P Li, Ping, 28 Li, Shengyi, 15, 1H Li, Wei-hao, 19

Li, Wenqin, OH Li, Wenting, 1M, 1N, 1O Li, Xiaoyang, OY, 10 Li, Xin, 27 Li, Yan, Ol Li, Yang, 1U Li, Yiyu, OW Lin, Na Na, 29 Lin, Nana, 1Q Lin, Yuchi, 1Y Liu, Dan-dan, 19 Liu, Dong, 1U Liu, Hailun, 1E Liu, Haitao, 1W, 2D Liu, Jinguang, 04 Liu, Meiying, 1V Liu, Xin, 0C Liu, Xuanmin, 11, 1J, 1M, 1N, 1O Liu, Yang, 1R Liu, Yibin, 2C Liu, Yong, OS Liu, Zhengkun, OL Liu, Zhongde, 03, 0Q Lu, Ange, 28 Lu, Ying, 08 Lu, Yongbin, 1T Lu, Zhongwen, 25 Luo, Ningning, 11 Luo, Yao, 1X Luo, Yinsheng, 1Y Ma, Jun, 1E Ma, Ping, 1S, 22, 23, 25, 26 Ma, Tianmeng, 21 Ma, Zhen, 1X, 1Z, 24 Meng, Xiaohui, OH Mi, Shaogui, 05 Miao, Erlong, OV Mukhammedzyanov, Timur R., 07 Mylvaganam, Kausala, 09 Ni, Yin, 2E Pan, Shaohua, 1E Pan, Yongqiang, OU Pang, Hui, OC Pang, Zhihai, 1X Patrikeev, Vladimir E., 06, 14 Peng, Dongxu, 25 Peng, Jiaqi, OZ Peng, Kang, 2B Peng, Ling-jie, 1A, 1B Peng, Wenqiang, 15 Peng, Zhike, 02 Ping, Li, OK Pu, Yunti, 22, 23, 25 Qiao, Zhao, 22, 23, 25 Qin, Hui, 1G Qiu, Fuming, 23 Qiu, Gufeng, 2E Qiu, Jinfeng, 1P Qiu, Keqiang, OL Qu, Meina, 0K, 28

Ren, Guorui, 1V Ren, Jianfeng, 2E Ren, Lele, 0Q Semenov, Aleksandr P., 06, 14 Shen, Lianguan, OJ, 1P Shen, Weimin, 17 Shen, Xinmin, 2B Shen, Yi, 1R Shen, Yibing, 1U Shi, Baolu, OB Shi, Guang, OE Shi, Lifang, OC Shi, Rongbao, 17 Song, Ci, 1H Su, Xing, 0O Su, Ying, 16, 1G, 1I, 1J, 1M, 1N, 1O Sun, Lipeng, 1C, 27, 2A Sun, Taohui, 1J Tang, Caixue, OF Tang, Guomao, OS Tang, Xiaojun, 2E Tian, Guoyu, 03 Tong, Yi, 1D, 1Q, 27 Wan, Yongjian, 1W, 2D Wang, Ansu, 13 Wang, Baorui, 02, 0R, 0X Wang, Bo, 0O Wang, Dong, 2B Wang, Dongdong, 1K Wang, Gang, ON Wang, Gang, 23 Wang, Gang, 2E Wang, Gui-lin, 0A Wang, Huijun, OM Wang, Jia, 1W Wang, Jiazhou, OC Wang, Kai, 03 Wang, Li, ON Wang, LiNing, 12 Wang, Peipei, 0G, 0N Wang, Peng, 18, 19 Wang, Peng, OG, OH, OM, ON, 1R Wang, Rui, Ol Wang, Siyu, 22, 23 Wang, Siyu, 25 Wang, Xinkuan, 02 Wang, Yi, 2E Wang, Yonggang, OH Wang, Yongjie, 1X, 1Z, 24 Wang, Yue, 2A Wang, Zhibin, 16, 1G, 11 Wang, Zhongqiang, 16 Wang, Zhuo, 15 Wang, Zi-wu, 1A, 1B Wei, Jingxuan, 1V Wei, Jungi, 09 Wu, Fan, 2F Wu, Jianhong, 0Y Wu, Jianhong, 10 Wu, Lixiang, OL

Wu, Xiaoye, OE Wu, Yangong, 00 Wu, Yongzhong, 1L Wu, Zhi-ming, 0A Xia, Risheng, OW Xiao, Zhenghang, ON Xie, Bin, 13 Xie, Haisheng, OQ Xie, Xiaopeng, 1V Xie, Xu Hui, 08, 0B Xie, Yongjie, 1X, 1Z, 24 Xin, Qiang, 00 Xing, Tingwen, OT Xiong, Haobin, OB Xiong, Haoliang, 1U Xu, Bing, OS Xu, Jin, OM Xu, Liang, 1X, 1Z Xu, Liang, 24 Xu, Lichao, 1W, 2D Xu, Minyi, 17 Xu, Qiao, 02 Xu, Yangiang, 11 Xu, Zengqi, 11, 1J, 1M, 1N, 1O Xv, Wenlin, 1U Yamamura, Kazuya, 2B Yan, Ding-yao, 1S, 2C Yan, Kai, 1U Yang, Chen, OU Yang, Haicheng, 10 Yang, Kun, 19 Yang, Liming, 05 Yang, Ping, OS Yang, Yongying, 1U Yao, Jin, 04 Ye, Sizhe, 1T Yin, Jin, 1L Yin, S. H., 0P You, Xinghai, OZ Yu, Deping, 04 Yu, Jian, 0Y, 10 Yu, Xin, OS Yu, Xin, 27 Yu, Ze, 27 Yuan, Yimin, OW Zeng, Siwei, OL Zeng, ZhiGe, 2D, 2F Zha, Hang, 0Y, 10 Zhai, Di, 12 Zhang, Bin, OZ Zhang, Bingqin, 1R Zhang, Chunlei, OE Zhang, Dong, 29 Zhang, Feihu, 03, 09, 0Q Zhang, Feng, 16, 1G, 1I, 1J, 1N, 1M, 1O Zhang, Fumei, 1M Zhang, Gao-feng, 19 Zhang, Hao, 18 Zhang, Hao, 1R, 1T Zhang, Jian, 0D, 0V

Zhang, Liangchi, 09 Zhang, Lianxin, 02 Zhang, Long, 20 Zhang, Man, OC Zhang, Min, 04 Zhang, Ming, 21 Zhang, Mingxiao, 22, 25 Zhang, Peng, 00 Zhang, Rongzhu, 05 Zhang, Wei, 2F Zhang, Xiangpo, 2B Zhang, Xiaoling, 1Y Zhang, Xiaonan, 2B Zhang, Xuebin, 27 Zhang, Yihui, 1U Zhang, Yong, 09 Zhang, Yunlong, 16, 1G, 1I, 1N Zhang, Zheng, 1M Zhang, Zhimin, 11 Zhao, Bin, 27 Zhao, Heng, 1S, 26 Zhao, HongShen, 2D Zhao, Hui, 1V Zheng, Liehua, 20 Zheng, Yongcheng, 0X Zhou, Jian, OJ Zhou, Lin, 08, 0B Zhou, Lin, 1U Zhou, Youquan, 1P Zhu, Dexi, OW Zhu, Heng, 1S Zhu, Jianqiang, 1L Zhu, Lei, 1Y Zhu, Yongwei, 1D Zong, Liang, 13

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## Introduction

The 8th International Symposium on Advanced Optical Manufacturing and Testing Technology (AOMATT 2016) was held 26–29 April 2016 at the Suzhou International Conference Center, Suzhou, China. The symposium was opened in the morning of 26th April with a formal opening ceremony. The ceremony started with the introduction of VIP guests, symposium chairs, conference chairs, and plenary speakers. Professor Liwei Zhou AOMATT 2016 Symposium Chairman, Professor Bin Xu Vice President of Institute of Optics and Electronics (China), one of the sponsors of AOMATT 2016, and Professor Yuan Yinnan, Vice President of Soochow University (China) gave opening speeches to a packed auditorium.

Plenary sessions followed immediately after the conclusion of the opening ceremony. There were a total of eight plenary presentations: "Less is more: extreme optics with zero refractive index physics", by Dr. Eric Mazur, Balkanski Professor of Physics and Dean of Applied Physics at Harvard University (United States); "Large optical telescopes in the era of large wide-field survey", by Dr. David R. Silva, Director of United States National Optical Astronomy Observatory (United States); "The European Extremely Large Telescope (E-ELT) revolution is under construction", by Dr. Marc Cayrel, European Southern Observatory (ESO) Project Manager, E-ELT Optomechanics (Germany); "Ultra-precision lens fabrication via molding: advances and challenges", by Dr. Liangchi Zhang, Professorial Fellow of Australian, Head of the Laboratory for Precision and Nano Processing Technologies, The University of New South Wales (Australia); "Advancing ultra-precision machining to high performance", by Dr. Ing. Oltmann Riemer, Head of the Laboratory for Precision Machining, Universität of Bremen (Germany); "Micro/nano-optics for flexible functional devices: today and future", by Dr. Linsen Chen, Chief of National United Engineering Research Center of Digital Optical Imaging and Display, Soochow University (China); "New angles on angle metrology: approaching fundamental limits", by Dr. Ralf D. Geckeler, Head of Length and Angle Graduations Group, Physikalisch-Technische Bundesanstalt (Germany); and "Functional photonic nanostructures: from thin films and slits to catenaries", by Dr. Xiangang Luo, Director of State Key Laboratory of Optical Technologies for Nano-Fabrication and Micro-Engineering, Chinese Academy of Sciences (China).

More than 800 people attended the opening ceremony and full-day plenary sessions. More than 1,000 abstracts were submitted to AOMATT 2016. About 500 submissions were selected for oral and poster presentations after careful reviews by conference chairs and committee members. Oral papers were presented in eight parallel conference sessions 27 and 28 April. An all-symposium poster session was held in the afternoon of 28 April. Many papers highlighted cutting edge research and development in optical design, manufacturing, and testing. Authors and attendees had very productive discussions and exchanged ideas throughout the symposium.

The AOMATT 2016 organizing committee would like to express their sincere appreciation for the strong support of SPIE, technical co-sponsor and long-term partner of AOMATT. Dr. Andrew Brown, Senior Director of SPIE, sent a letter of congratulations to the symposium. In his letter, Dr. Brown thanked all symposium chairs, conference chairs, and committee members for their leadership, and all authors and attendee for their contributions to make AOMATT 2016 a success. Dr. Brown also stated: "The vision of AOMATT is closely aligned with SPIE's mission to promote optics and photonics around the world. SPIE sponsors and co-sponsors technical conferences around the world and contribute millions of dollars every year in support of education and outreach programs, such as scholarships, travel grants, and other educational programs."

Finally, we would like to express our sincere appreciation to COS—The Chinese Optical Society (China), and IOE—Institute of Optics and Electronics, Chinese Academy of Sciences (China), for sponsoring and supporting AOMATT 2016. We want to thank all authors and participants as well volunteers for their contributions to the symposium and sharing their research with colleagues around the world.

We look forward to seeing everyone at AOMATT 2018.

**Li Yang** Secretary General, AOMATT 2016 Committee of Optical Manufacturing Technology (COMT), COS

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