

The 9th International Workshop on Advanced Patterning Solutions 第九届国际先进光刻技术研讨会

October 14-15, 2025, WuZhou Hotel, Shenzhen, Guangdong Province, China 2025年10月14日至15日,五洲宾馆五洲厅,广东深圳,中国 (October 13 for registration, 10月13日注册)

Agenda 会议日程

Program Chairs: Qiang Wu, Shiyuan Liu

| Registration 注册 | | | |
|--------------------|--------|---------------------------------------|--|
| 13 Oct. 2025 | | 10:30-20:00 | 酒店大厅 WuZhou Hotel |
| 14-15 Oct. 2025 | | 08:00-18:00 | 五洲厅 Wuzhou Banquet Hall |
| DAY 1: | | | |
| 14 Oct. 2025 (| Tuesda | <u>ay)</u> | |
| Wuzhou Ban | quet H | [all 五洲厅 | |
| DAY 1-Morn | | | |
| 08:30-09:00 | | ning Ceremony & Welc | ome Address |
| TA7-1 | 1 | r: Yayi Wei Ference Chairs Address | |
| Welcome Address | | | |
| Address | | /Organizer Address ary Session I | |
| 09:00-10:10 | | r: Shiyuan Liu | |
| | 1 | utes Q&A for each talk | |
| | | ong(Leo) Pang (D2S, In | c)· |
| | | | fective Way to Advance Technology |
| 09:00-09:35 | | | Production-Ready Full-Chip Curvilinear |
| | | ınd Curvilinear Masks fo | J 1 |
| | Qian | g Wu (Fudan Universit | y): |
| 09:35-10:10 | | | of Large Scale Process, Equipment, and |
| | | rial Development | |
| | | - | |
| 10:10-10:40 | Grou | ip Photo & Coffee Brea | k |
| | | | |
| | Plen | ary Session II | |
| 10:40-11:50 | | r: Qiang Wu | |

| | 5 minutes Old for each tall |
|-------------|--|
| | 5 minutes Q&A for each talk |
| 10:40-11:15 | Bei Yu (The Chinese University of Hong Kong): |
| | (KEYNOTE) Large Scale VLSI Mask Optimization |
| 11:15-11:50 | ByoungHo Lee (Hitachi High-tech Corporation): |
| | (KEYNOTE) The Role and Direction of MI in the Era of 3D |
| | |
| 11:50-12:20 | Poster Session |
| 11.50 12.20 | Authors should be present at your poster. |
| | |
| 12:20-13:50 | Lunch |
| | |
| DAY 1-After | noon |
| 13:50-15:30 | Patterning Session |
| 13:30-15:30 | Chairs: Wenzhan Zhou & Jin Li |
| | 5 minutes Q&A for each talk |
| | Jette van den Broeke (ASML): |
| 13:50-14:15 | (INVITED) Printing towards the resolution limit of DUV immersion |
| | lithography |
| | Ingo Bork (Siemens): |
| 14:15-14:40 | (INVITED) Practical solutions for writing curvilinear shapes on |
| | photomasks |
| | Chin-Chou Kevin Huang (KLA): |
| 14:40-15:05 | (INVITED) From Metrology to Control: A Comprehensive Overlay |
| | Solution for IC Manufacturing and Packaging Challenges |
| | Lei Zhu (Wintech-Nano Co., Ltd.): |
| 15:05-15:30 | (INVITED) Application of failure analytical techniques for photoresist |
| | and photomask defects |
| | |
| 15:30-15:50 | Coffee Break |
| | |
| | AI and Process Session |
| 15:50-17:25 | Chairs: Weimin Gao & Liguo Zhang |
| | 5 minutes Q&A for each talk |
| | Yelin Hu (Engitist Corporation): |
| 15:50-16:15 | (INVITED) Machine Learning and Artificial Intelligence in |
| 10.00 10.10 | Semiconductor Metrology and Inspection for Smart Manufacturing |
| | Ao Chen (SEIDA Technology Co. Ltd.): |
| 16:15-16:40 | (INVITED) AI Assisted Etch Models |
| | Xianhe Liu (Fudan University): |
| 16:40-17:05 | (INVITED) Study of SMO for High-NA EUV Lithography via Sub-2 |
| 10.10 17.00 | nm Nodes |
| | Devin Sima (Fujian Jinhua Integrated Circuit Co., Ltd.): |
| 17:05-17:25 | A composite model for LELE process |
| | 11 composite model for BEBE process |

| 19:00-19:05 | Best Poster Award 最佳墙报颁奖 |
|-------------|-----------------------------------|
| | Wuzhou Banquet Hall 五洲厅 |
| 19:05-21:00 | Welcome Banquet for all attendees |
| | 晚宴 (Wuzhou Banquet Hall 五洲厅) |

| Day 2: | | | |
|--|--|--|--|
| 15 Oct. 2025 (Wednesday) —— Parallel Session I, 并行报告会场 I | | | |
| Wuzhou Banquet Hall Part I,五洲厅(一) | | | |
| DAY 2-Morn | DAY 2-Morning | | |
| 08:30-10:05 | Mask Equipment Session | | |
| 00.50-10.05 | Chairs: Jiangliu Shi & Modern Xu | | |
| | 5 minutes Q&A for each talk | | |
| | Robert Eklund (Mycronic AB): | | |
| 08:30-08:55 | (INVITED) The Laser mask writer and its unique position in the | | |
| | semicon industry | | |
| | Sebastian Vollmar (Carl Zeiss SMT): | | |
| 08:55-09:20 | (INVITED) Advancing E-Beam Repair: Unveiling the MeRiT® MG | | |
| | neo's Enhanced Throughput and Expanded Capabilities | | |
| | Ya Xu (SUSS MicroTec (Shanghai) Co., Ltd): | | |
| 09:20-09:45 | (INVITED) Development of Sulfate and Ammonium Free Resist | | |
| | Stripping and Final Cleaning Process | | |
| | Weiyu Xu (Carl Zeiss SMT): | | |
| 09:45-10:05 | Mask yield accelerator: AIMS AutoAnalysis application to high | | |
| | volume manufacturing | | |
| | | | |
| 10:05-10:30 | Coffee Break | | |
| | | | |
| 10:30-12:20 | Mask Optimization Session | | |
| 10.00 12.20 | Chairs: Yijiang Shen & Haizhou Yin | | |
| | 5 minutes Q&A for each talk | | |
| | Haizhou Yin (Siemens): | | |
| 10:30-10:55 | (INVITED) Accelerating Semiconductor Innovation: ML/AI | | |
| | Solutions for Mask Synthesis and Beyond | | |
| | Jichuan Xiong (Nanjing University of Science and Technolog): | | |
| 10:55-11:20 | (INVITED) Phase-Space-Driven ILT with Swin Transformers: A | | |
| | Generative AI Framework for Sub-Wavelength Mask Optimization | | |
| | Juan Wei (Beijing Superstring Academy of Memory Technology): | | |
| 11:20-11:40 | Enhancing ILT Modeling Efficiency: Symmetry-Averaged Gauge | | |
| | Processing and Kernel DDM for RMS and Runtime Optimization | | |
| 11:40-12:00 | Yuhang Wang (Guangdong University of Technology): | | |
| | Parametric Curvilinear OPC Using B-splines Data Format | | |
| 12:00-12:20 | Shi Chen (Fudan University): | | |
| | M3D Effect Compensation in 2 nm Node EUV Lithography via | | |

| | Controlled Aberration Manipulation |
|-------------|---|
| | |
| 12:20-13:50 | Lunch |
| | |
| DAY 2-After | noon |
| 13:50-15:25 | Equipment Session |
| 15:50-15:25 | Chairs: Yun Zhan & Jing Li |
| | 5 minutes Q&A for each talk |
| | Yoshiaki Yamada (Hangzhou Cobetter Filtration Equipment Co. |
| 13:50-14:15 | Ltd.): |
| 13.30-14.13 | (INVITED) Next-Generation Polyethylene Membrane with Ultra-Fine |
| | Pores Beyond Sub-1nm for Lithography Chemical Filtration |
| | Jie Liu (ASML Cymer): |
| 14:15-14:40 | (INVITED) Maximizing System Performance to Improve Process, |
| | Availability and Sustainability |
| | Yang Liu (HIT): |
| 14:40-15:05 | (INVITED) Modeling and Control of Linear Reluctance Actuators for |
| | Next-Generation Wafer Scanners |
| | |
| | |
| 15:05-15:45 | Coffee Break |
| | |
| 15:45-17:15 | Other Lithography Session |
| | Chairs: Shisheng Xiong & Yang Liu |
| | 5 minutes Q&A for each talk |
| 1-1-1-1 | Qiming Zhang (University of Shanghai for Science and |
| 15:45-16:10 | Technology): |
| | (INVITED) Artificial neural networks enabled by direct laser writing |
| 16 10 16 25 | Xing Cheng (Southern University of Science and Technology): |
| 16:10-16:35 | (INVITED) Opportunities and Perspectives of Nanoimprint for |
| | Chambri Dang (Institute of Floring CAS) |
| 16.05 16.55 | Chenhui Deng (Institute of Electrical Engineering, CAS): |
| 16:35-16:55 | High-speed versatile pattern generator for high-resolution electron- |
| | beam lithography Vin Thurng (Southern University of Science and Technology) |
| 16:55-17:15 | Xin Zhuang (Southern University of Science and Technology): |
| 10:00-17:15 | Scanning Helium Ion Beam Lithography on Freestanding Silicon Nitride Membranes for Sub-Nanometer Resist Characterization |
| | Triting Memoranes for Sub-Indiometer Resist Characterization |
| | Closing Planary Address 田草欲兹 |
| 17:15-17:20 | Closing Plenary Address 闭幕致辞 Chairs: Qiang Wu, Shiyuan Liu & Yayi Wei |
| | Chans, Qiang wu, Shiyuan Liu & Tayi wei |

Day 2:

15 Oct. 2025 (Wednesday) —— Parallel Session II, 并行报告会场 II

Wuzhou Banquet Hall Part II, 五洲厅 (二)

| DAY 2-Morning | | |
|---------------|---|--|
| | Computational Lithography Session | |
| 08:30-09:55 | Chairs: Xu Ma & Xiaodong Meng | |
| | 5 minutes Q&A for each talk | |
| | David H. Wei (Guangdong University of Technology): | |
| 08:30-08:55 | (INVITED) Computational Imaging and Computational Lithography | |
| | Cai Chen (Advanced Manufacturing EDA Co., Ltd.): | |
| | Enhancing Lithographic Resolution for Via and Metal Layers in | |
| 08:55-09:15 | Advanced Semiconductor Manufacturing: NTD-Based Multi- | |
| | Patterning Strategies | |
| | Yuhao Wang (Hangzhou HFC Semiconductor Corp): | |
| 09:15-09:35 | D-CAF: Data-Driven CPU Allocation Framework for Efficient OPC | |
| | Workloads | |
| | Chuansheng Dai (Advanced Manufacturing EDA Co., Ltd): | |
| 09:35-09:55 | 3D resist profile simulation for compact modeling considering z- | |
| | diffusion | |
| | | |
| | | |
| 09:55-10:35 | Coffee Break | |
| | | |
| 10.05 10.05 | Computational Lithography Session II | |
| 10:35-12:25 | Chairs: David H. Wei & Sikun Li | |
| | 5 minutes Q&A for each talk | |
| | Yanli Li (Fudan University): | |
| 10:35-11:00 | (INVITED) Imaging Characteristics of Hyper NA (0.75 NA) EUV | |
| | Lithography in sub-2 nm Logic Technology Nodes | |
| | Jing Fu (Shanghai Silicon Thread Technology Co., Ltd): | |
| 11:00-11:25 | (INVITED) AI-Assisted Hotspot-Aware Layout Correction for | |
| | Lithography-Friendly DTCO | |
| | Ningmu Zou (Nanjing University): | |
| 11:25-11:45 | SVD-based Layout Representation for Lithographic Hotspot | |
| | Detection | |
| | Kaisheng Chen (Shanghai Optical Lithography Engineering Corp.): | |
| 11:45-12:05 | Fraunhofer diffraction by rectangular patterns on mask: a generic | |
| | diffraction formula for modeling perspective | |
| | Haofeng Guo (Changchun Institute of Optics, Fine Mechanics and | |
| 12:05-12:25 | Physics, CAS): | |
| | A low-memory-consumption lithography imaging model based on | |
| | the Runge-Kutta Iterative Solution (RKIS) method | |
| 40.07.40.70 | | |
| 12:25-13:50 | Lunch | |
| DAY 0 4 6 | | |
| DAY 2-Aftern | | |
| 13:50-15:00 | X-ray Source and Metrology Session | |

| | Chairs: Qiang Wu & Kan Zhou |
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| | 5 minutes Q&A for each talk |
| | Lifeng Wang (Institute of Advanced Light Source Facilities): |
| 13:50-14:15 | (INVITED) High order harmonic generation in capillary driven by |
| | few-cycle laser pulses |
| | Guangcai Chang (Institute of High Energy Physics, CAS): |
| 14:15-14:40 | (INVITED) Hard X-ray Nanoprobe Beamline of a new synchrotron |
| | light source - High Energy Photon Source (HEPS) |
| | Shuzhe Cao (Zhejiang University): |
| 14:40-15:00 | Coating Defect Localization via Patch-Guided Generative Adversarial |
| | Networks |
| | |
| | |
| 15:00-15:40 | Coffee Break |
| | |
| 15:40-16:20 | Process and Metrology Session |
| 15.40-10.20 | Chairs: Weijie Shi & Xianhe Liu |
| | 5 minutes Q&A for each talk |
| | Ganlin Song (Beijing Superstring Academy of Memory |
| 15:40-16:00 | Technology): |
| 15.40-10.00 | Innovative Topographic Mark Generation and Process Optimization |
| | for Enhancing Overlay Mark Signal in 3D Structures |
| 16:00-16:20 | Zhengpeng Zhang (Fudan University): |
| | Optimization of Process Parameters to Reduce Photon Absorption |
| | Stochastics for Bidirectional Patterning with EUV Single Exposure |
| | |
| 16:20-16:25 | Closing Plenary Address 闭幕致辞 |
| 10.20-10.23 | Chairs: Qiang Wu, Shiyuan Liu & Yayi Wei |

| Day 2: 15 Oct. 2025 (Wednesday) —— Parallel Session III, 并行报告会场 III | | |
|--|---|--|
| Wuzhou Ban | quet Hall Part III, 五洲厅(三) | |
| DAY 2-Morr | ing | |
| 08:30-10:00 | X-ray Metrology Session Chairs: Feng Luo & Ruzhi Zhang | |
| | 5 minutes Q&A for each talk | |
| | Yasin Ekinci (Paul Scherrer Institute): | |
| 08:30-08:55 | (INVITED) EUV metrology methods for semiconductor | |
| | manufacturing applications | |
| 08:55-09:20 | Jun Zhao (Shanghai Advanced Research Institute): | |
| | (INVITED) Soft X-ray interference lithography and its applications | |
| 09:20-09:40 | Jiahao Zhang (Huazhong University of Science and Technology): | |
| | X-ray critical dimension metrology with optimal experimental design | |

| | using the Fisher information |
|-------------|--|
| | Yuxiang Huang (Shenzhen Angstrom Excellence Technology Co. |
| 00 40 10 00 | Ltd): |
| 09:40-10:00 | Semiconductor Metrology Tool: X-Ray Diffraction, X-Ray Reflectivity |
| | and X-Ray Fluorescence Techniques |
| | |
| 10:00-10:20 | Coffee Break |
| | |
| 10:20-11:50 | Photoresist Session I |
| | Chairs: Guoqiang Yang & Dean Wu |
| | 5 minutes Q&A for each talk |
| 10:20-10:45 | Feng Luo (Nankai University): |
| | (INVITED) EUV Photoresist for Advanced 0.55NA Lithography |
| 10.45 11.10 | Hideaki Tsubaki (FUJIFILM): |
| 10:45-11:10 | (INVITED) Negative-Tone-Imaging (NTI) Process and Material |
| | Technology for ArF Immersion and EUV Lithography |
| 11.10 11.20 | Ruiwen Ai (Xuzhou B&C Chemical Co.,Ltd): |
| 11:10-11:30 | A Feasible Approach to Understand Acid Diffusion in DUV Resist Using Open Frame Exposure |
| | Yi-Fan Shen (Suzhou Laboratory): |
| 11:30-11:50 | Acid Diffusion Detection in Chemically Amplified Photoresists |
| | Acid Diffusion Detection in Chemically Amplified Photoresists |
| 12:10-13:50 | Lunch |
| 12.10 15.50 | Luici |
| DAY 2-After | noon |
| 40 50 45 05 | Photoresist Session II |
| 13:50-15:25 | Chairs: Mark Neisser & Bing Li |
| | 5 minutes Q&A for each talk |
| | Ruzhi Zhang (Suzhou Laboratory): |
| 13:50-14:15 | (INVITED) Molecular Feature Influence on ArF Photoresist Polymer |
| | Dissolution Behavior |
| | Lei Zhang (Nankai University): |
| 14:15-14:40 | (INVITED) Molecular Engineering of Metal-Oxo Clusters for |
| | Advanced Patterning Applications |
| | Yang Hu (Tsing-innovation Semiconductor Company): |
| 14:40-15:05 | (INVITED) MOR photoresists: the next generation pattering solutions |
| | for Moore's more |
| | Zhongmei Han (PiBond Oy): |
| 15:05-15:25 | Metal oxides and organometal complexes as alternatives for |
| | lithography hard masks |
| 45.05.45.45 | |
| 15:25-15:45 | Coffee Break |
| 15:45-17:10 | Photoresist and Material Session |
| | |

| | Chair: Xudong Guo | |
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| | 5 minutes Q&A for each talk | |
| | Yu Chen (Suzhou Rainbowmaterial Co., Ltd.): | |
| 15:45-16:10 | (INVITED) High etching ration ArF immersion BARC to improve | |
| | advanced lithographs technology | |
| | Ruzhi Zhang (Suzhou Laboratory): | |
| 16:10-16:30 | Development of High-Performance NTD Developers via HSP- | |
| | Assisted HTE | |
| | Xiang Dong (Shanghai B&C Chemical Co., Ltd.): | |
| 16:30-16:50 | Application and Advantage of RAFT Polymerization in High- | |
| | resolution Lithography Formulation | |
| | Jialin Wu (Fudan University): | |
| 16:50-17:10 | A Hierarchical Pipeline for Data-Efficient χ Prediction in Block | |
| | Copolymers via Large Language Models | |
| | | |
| 17:10-17:15 | Closing Plenary Address 闭幕致辞 | |
| | Chairs: Qiang Wu, Shiyuan Liu & Yayi Wei | |

Agenda is subject to change

| Poster Session | | |
|--|---|--|
| 14 Oct. 2025 | | |
| 11:50-12:20 Outdoor of Wuzhou Banquet Hall 五洲厅前廊 | | |
| 11.50-12.20 | Kang Wang*, ZhaoLong Luo, Shiqi Yin (Nexchip Semiconductor | |
| IWAPS2025- | Corporation) | |
| P-01 | Full-Field Contour-Based PWA Enables Precision Depth-of-Focus | |
| | Characterization at Advanced-Node | |
| | Kang Wang*, Zhaolong Luo, Die Liu (Nexchip Semiconductor | |
| IWAPS2025- | Corporation) | |
| P-02 | Smart RBAF: Hierarchical Main Pattern Definition for Advanced- | |
| 1 0 - | Node Lithography Enhancement | |
| ***** DC=0== | Tong Liang, Jing Li* (Zhejiang University) | |
| IWAPS2025- | A measurement scheme for beam parallelism based on image | |
| P-03 | measurement method | |
| | Caiwei Shang ¹ , Jiacheng Luo ¹ , Weixuan Zeng ² , Yan Zhang ² , | |
| IWAPS2025- | Shisheng Xiong ^{1,2,*} (¹ Fudan University; ² Zhangjiang Laboratory) | |
| P-05 | Fast Simulation of Directed Self-Assembly for Contact Hole | |
| | Multiplication with an Optimized Compact Model | |
| | Xin Zhou ¹ , Yuejing Qi ^{1,2} ,*, Zhipeng Wu ^{1,2} , Wei Qi ^{1,2} (¹ Institute of | |
| IWAPS2025- | Microelectronics of the Chinese Academy of Sciences; ² University | |
| P-06 | of Chinese Academy of Sciences) | |
| 1-06 | A Moving-average-filter-based Dynamic Decoupling Control for Wafer | |
| | Stage Motion Systems | |
| | Yanbei Nan, Zhenkun Zhang, Yanqiu Li* (Beijing Institute of | |
| IWAPS2025- | Technology) | |
| P-07 | Design of an anamorphic extreme ultraviolet lithography projection | |
| | objective adopted high order XY polynomial freeform surfaces | |
| IWAPS2025- | Weichen Huang, Yangqiu Li* (Beijing Institute of Technology) | |
| P-08 | High-fidelity curvilinear SRAF method adopting distance-versus-angle- | |
| | signature | |
| HAZA DCOOF | Zhenkun Zhang, Yanbei Nan, Yanqiu Li* (Beijing Institute of | |
| IWAPS2025- | Technology) | |
| P-09 | Wavefront Fitting of Different Obscuration Shapes in Anamorphic | |
| | Extreme Ultraviolet Lithography Projection Objective | |
| IWAPS2025- P-10 | Zhilong Zhong ¹ , Yunhao Liu ¹ , Jiamin Liu ^{1,*} , Pinxuan He ¹ , Hao | |
| | Jiang ¹ , Honggang Gu ¹ , Shiyuan Liu ^{1,2,*} (¹ Huazhong University of Science and Technology; ² Optics Valley Laboratory) | |
| | Full-chip EUVL simulation based on wide-angle full-vector beam | |
| | propagation method | |
| IWAPS2025- P-11 | CHIH-LI(Julius) Chen ¹ , Zekui Li ¹ , Alex Fan ³ , Dawen Yang ³ , | |
| | Pinhong Lin ³ , Lei Chen ³ , Xiaodong Meng ^{2,3,*} (¹ Rong Semiconductor | |
| | Co., Ltd.; ² Tsinghua University; ³ Advanced Manufacturing EDA | |
| | Co., Ltd.) | |
| | An effective methodology to accelerate early stage of OPC development | |
| | by use of TVeXpert and CPG | |
| L | , , , , , , , , , , , , , , , , , , , | |

| TALLA DOGGO | Benjamin Shen*, Wenchun Huang, Chunhung Wu (Advanced |
|--------------------|---|
| IWAPS2025- | Manufacturing EDA Co., Ltd.) |
| P-12 | OPC Consistency Improvement with Hash Code |
| IWAPS2025- P-13 | Qinghua Ye ^{1,2} , Dongchao Pan ² , Chun Zhang ² , Diyu Fu,Sikun Li ^{1,2,*} |
| | (1 Shanghai University; 2 Shanghai Institute of Optics and Fine |
| | Mechanics, Chinese Academy of Sciences) Real-time Shack-Hartmann Wavefront Processor with FPGA |
| | Acceleration |
| | Chaoxin Feng ¹ , Cheng Qian ² , Ruoran Jia ^{3,*} (¹ University of Chinese |
| | Academy of Sciences; ² University of Science and Technology of |
| IWAPS2025- | China; ³ Chongqing Institute of Green and Intelligent Technology, |
| P-14 | Chinese Academy of Sciences) |
| | An effective mask optimization method using Deep Reinforcement |
| | Learning Discussion Hell Heavis Helleng 7byl Heavis Cyl Hea |
| | Pinxuan He ¹ , Jiamin Liu ^{1,2} *, Jinlong Zhu ¹ , Honggang Gu ¹ , Hao Jiang ¹ , Shiyuan Liu ^{1,2,*} (¹ Huazhong University of Science and |
| IWAPS2025- | Technology; 2 Optics Valley Laboratory) |
| P-16 | Large-scale electromagnetic simulations enabled by the modified Born |
| | series with virtual absorbing boundaries |
| | Yingxiong Guo ¹ , Wenzhang Li ¹ , T. H. Ying ¹ , Devin Sima ¹ , Siqi |
| IWAPS2025- | Wang ² , Shengrui Zhang ² , C. M. Hu ^{1,*} (¹ Fujian Jinhua Integrated |
| P-17 | Circuit Co., Ltd.; ² Dongfang Jingyuan Electron Co., Ltd.) |
| 1-17 | A Comprehensive intra-CD uniformity control through optimizing pattern |
| | loading effect correction by AI-trained model |
| | Tatsi IAO ¹ , Fengnien Tsai ¹ , T.H.Ying ¹ , Shengrui.Zhang ² , C.M. Hu ^{1,*} |
| IWAPS2025- | (1 Fujian Jinhua Integrated Circuit Co., Ltd.; 2 Dongfang Jingyuan Electron Co., Ltd.) |
| P-18 | A Co-optimization Flow to Expanding PWQ through HSF and Model- |
| | based loading effect for DRAM LELE Metal Layer |
| | Yanting Xu ¹ , Jiacheng Luo ² , Zhiyong Wu ¹ , Wenda Bao ¹ , Yudan Su ¹ , |
| IWAPS2025- | Yan Zhang ¹ , Shisheng Xiong ^{1,2,*} (¹ Zhangjiang laboratory; ² Fudan |
| P-19 | University) |
| | Quantitative Characterization of Brushes Grafting for Graphoepitaxial |
| | Directed Self-assembly Yanzhong Ma*, Xiangyu Ma*, Langfeng Wen (Skyverse Tech. Co. |
| IWAPS2025- P-20 | Ltd.) |
| | Synalib: A fast OCD engine with parametric process flow modeling for |
| | high-throughput semiconductor metrology |
| IWAPS2025- P-21 | Haoyang Liang ¹ , Honggang Gu ^{1,2,*} , Shiyuan Liu ^{1,2,*} (¹ Huazhong |
| | University of Science and Technology; ² Optics Valley Laboratory) |
| | Sub-wavelength scale lithographic defect detection based on vortex light |
| HAZA DOQQOE | Zhiyong Wu ¹ , Qingshu Dong ² , Huangyan Shen ² , Shengru Niu ² , |
| IWAPS2025- P-22 | Yan Zhang ¹ , Fei Pei ¹ , Weixuan Zeng ¹ , Zhonghan Cao ¹ , Mingkun Zhao ¹ , Ziii Li ¹ , Weixuan Li ² , Shighang Yinng ¹ , (1. Zhangiiang |
| | Zhao ¹ , Zili Li ^{1,2} , Weihua Li ² , Shisheng Xiong ^{1,2,*} (¹ Zhangjiang Laboratory; ² Fudan University;) |
| | Laboratory, - Fudan Oniversity,) |

| | Simultaneous Generation of Contact Holes with Circular and Rectangular |
|--------------------|--|
| | Shapes through Graphoepitaxy Directed Self-Assembly of Block |
| | Copolymer/Homopolymer Blends |
| IWAPS2025- P-23 | Hui Zeng ^{1*} , Libin Zhang ² , Zhicheng Liu ¹ , Zhenguo Tian ² , Guiqi Li ¹ , Fangyi Shi ¹ , Zhuohong Zhou ¹ , Miaohua Zhang ¹ , Xing Yang ³ (¹ CanSemi Technology Inc., ² Institute of Microelectronics, ³ Nanjing Chengxin Integrated Circuit Technology Research Institute Co., Ltd.) Critical Dimension Measurement Method for Curvilinear Patterns and Application in Lithography Process Development for Silicon Photonics Platform |
| IWAPS2025- P-24 | Chenpeng Zhao, Jazlyn Zhang, Pei Xie, Can Duan (Semiconductor |
| | Technology Innovation Center (STIC)) |
| | Optical Diameter-Driven Optimization of Optical Proximity Correction |
| | (OPC) Model Fidelity and Computational Efficiency |
| IWAPS2025- P-25 | Di Liang, Miao Jiang, Yaokun Li, Yuxing Zhou, Jiahao Xi, Enqiang Tian, Mingyi Yao, Ganlin Song, Jiangliu Shi, Guowei Jiang* (Beijing Superstring Academy of Memory Technology) An Open KLayout-Python-Based Framework for Automated AIM Overlay Mark Generation |
| | Sicong Wang ¹ , Xiaoqi Pang ² , Pei Yu ² , Chao Shang ² , Zhiwei Wang ³ , |
| IWAPS2025- P-27 | Xianhui Chen³, Bowen Chen⁴, Yi Yin⁴, Xia Chen⁵, Jie Zhang⁵, Trina Wong², Feng Hong², Athena Chang² (¹ Huazhong University of Science and Technology; ² Shenzhen Angstrom Excellence Technology Co. Ltd.; ³ University of Science and Technology of China; ⁴ Zhejiang University; ⁵ Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences) Thin Film Metrology Techniques: X-Ray Diffraction and X-Ray Reflectivity |
| IWAPS2025- P-28 | Chao Liu, Jing Li (Zhejiang University) |
| | Polarization-Induced Angular Deviation and Spatial Centroid Jumps in Laser Beams |
| IWAPS2025- P-30 | Jinyuan Song, Jing Li*, Qingyang Zhang (Zhejiang University) |
| | Apparatus and Method for Testing the Optical Uniformity of Optical Crystals |
| IWAPS2025- P-31 | Jingyu Huang ^{1,2} , Bohua Yin ^{1,2} , Zhengjie Li ^{1,2} , Botong Sun ^{1,2} , |
| | Pengfei Wang 1,2, Li Han 1,2, Liping Zhang 3 (1 Institute of Electrical |
| | Engineering Chinese Academy of Sciences; ² University of Chinese |
| | Academy of Sciences; ³ Beijing Academy of Quantum Information |
| | Sciences) |
| | Process Window and Resolution Limit Investigation of PMMA Resist |
| | under 30 kV Electron Beam Lithography |
| IWAPS2025- P-32 | Jiakun Lan ¹ , Jibin He ¹ , Xue Zhou ¹ , Yanan Bao ^{1,2} , Guodong Zhou ^{1,*} (¹ Zhejiang University; ² Zhejiang ICsprout Semiconductor Co., |
| | Ltd.) |
| | Liuij |

| | A Swing Curve Fitting Algorithm Based on Physics-Informed Neural |
|--------------------|---|
| | Networks |
| | Xue Zhou ¹ , Tianhao Huang ¹ , Jiakun Lan ¹ , Jianming Wu ² , Yanan |
| IWAPS2025- P-33 | |
| | Bao ^{1,2} , Guodong Zhou ^{1,*} (¹ Zhejiang University; ² Zhejiang ICsprout |
| | Semiconductor Co., Ltd.) |
| | A Process-Parameter-driven Cross-Attention Convolutional Autoencoder |
| | for High-Precision Critical Dimension Prediction |
| | Jun-Dan Huang, Ming-Qiang Zhu (Huazhong University of Science |
| IWAPS2025- | and Technology) |
| P-38 | Photoacid-induced crosslinking/degradation of poly (2,3- |
| | dihydrofuran) for multi-tone photolithography |
| | Xiao Tan ¹ , Jun-dan Huang ¹ , Ming-Qiang Zhu ^{1, *} (Huazhong |
| IWAPS2025- | University of Science and Technology) |
| P-39 | Etch-Resistant Chemically Amplified Positive-Tone Photoresist with |
| | Synergistic Dual Nonionic Photoacid Generators |
| | Ying-Yi Ren ¹ , Cong Li ¹ , Shi-li Xiang ² , Ming-Qiang Zhu ^{1,*} |
| IWAPS2025- | (Huazhong University of Science and Technology) |
| P-40 | Photoswitchable Branched Polyurethanes Based on |
| | Hexaarylbiimidazole for Photolithography |

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