



International Workshop on



Advanced Patterning Solutions

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
<u>DAY 1:</u>		
<u>14 Oct. 2025 (Tuesday)</u>		
Wuzhou Banquet Hall 五洲厅		
<u>DAY 1-Morning</u>		
08:30-09:00	Opening Ceremony & Welcome Address Chair: Yayi Wei	
Welcome Address	Conference Chairs Address Host/Organizer Address	
09:00-10:10	Plenary Session I Chair: Shiyuan Liu	
	<i>5 minutes Q&A for each talk</i>	
09:00-09:35	Linyong(Leo) Pang (D2S, Inc): (KEYNOTE) The Most Effective Way to Advance Technology Nodes – Even Mature Ones: Production-Ready Full-Chip Curvilinear ILT and Curvilinear Masks for DUV	
09:35-10:10	Qiang Wu (Fudan University): (KEYNOTE) DICO in Times of Large Scale Process, Equipment, and Material Development	
10:10-10:40	Group Photo & Coffee Break	
10:40-11:50	Plenary Session II Chair: Qiang Wu	

	<i>5 minutes Q&A for each talk</i>
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 Authors should be present at your poster.
12:20-13:50	Lunch
DAY 1-Afternoon	
13:50-15:30	Patterning Session Chairs: Wenzhan Zhou & Jin Li
	<i>5 minutes Q&A for each talk</i>
13:50-14:15	Jette van den Broeke (ASML): (INVITED) Printing towards the resolution limit of DUV immersion lithography
14:15-14:40	Ingo Bork (Siemens): (INVITED) Practical solutions for writing curvilinear shapes on photomasks
14:40-15:05	Chin-Chou Kevin Huang (KLA): (INVITED) From Metrology to Control: A Comprehensive Overlay Solution for IC Manufacturing and Packaging Challenges
15:05-15:30	Lei Zhu (Wintech-Nano Co., Ltd.): (INVITED) Application of failure analytical techniques for photoresist and photomask defects
15:30-15:50	Coffee Break
15:50-17:50	AI and Process Session Chairs: Weimin Gao & Liguozhang
	<i>5 minutes Q&A for each talk</i>
15:50-16:15	Kan Zhou (HLMC): (INVITED) AI in Wafer Manufacturing: Applications and Implementation Pathways
16:15-16:40	Yelin Hu (Engitist Corporation): (INVITED) Machine Learning and Artificial Intelligence in Semiconductor Metrology and Inspection for Smart Manufacturing
16:40-17:05	Ao Chen (SEIDA Technology Co. Ltd.): (INVITED) AI Assisted Etch Models
17:05-17:30	Xianhe Liu (Fudan University): (INVITED) Study of SMO for High-NA EUV Lithography via Sub-2

	nm Nodes
17:30-17:50	Devin Sima (FUJIAN JINHUA INTEGRATED CIRCUIT CO., LTD.): A composite model for LELE 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 A, 五洲厅 A	
DAY 2-Morning	
08:30-10:05	Mask Equipment Session Chairs: Jiangliu Shi & Modern Xu
	<i>5 minutes Q&A for each talk</i>
08:30-08:55	Robert Eklund (Mycronic AB): (INVITED) The Laser mask writer and its unique position in the semicon industry
08:55-09:20	Sebastian Vollmar (Carl Zeiss SMT): (INVITED) Advancing E-Beam Repair: Unveiling the MeRiT® MG neo's Enhanced Throughput and Expanded Capabilities
09:20-09:45	Ya Xu (SUSS MicroTec (Shanghai) Co., Ltd): (INVITED) Development of Sulfate and Ammonium Free Resist Stripping and Final Cleaning Process
09:45-10:05	Weiyu Xu (Carl Zeiss SMT): Mask yield accelerator: AIMS AutoAnalysis application to high volume manufacturing
10:05-10:30	Coffee Break
10:30-12:20	Mask Optimization Session Chairs: Yijiang Shen & Haizhou Yin
	<i>5 minutes Q&A for each talk</i>
10:30-10:55	Haizhou Yin (Siemens): (INVITED) Accelerating Semiconductor Innovation: ML/AI Solutions for Mask Synthesis and Beyond
10:55-11:20	Jichuan Xiong (Nanjing University of Science and Technolog): (INVITED) Phase-Space-Driven ILT with Swin Transformers: A Generative AI Framework for Sub-Wavelength Mask Optimization
11:20-11:40	Juan Wei (Beijing Superstring Academy of Memory Technology): 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-Afternoon	
13:50-15:25	Equipment Session Chairs: Yun Zhan & Jing Li
	<i>5 minutes Q&A for each talk</i>
13:50-14:15	Yoshiaki Yamada (Hangzhou Cobetter Filtration Equipment Co. Ltd.): (INVITED) Next-Generation Polyethylene Membrane with Ultra-Fine Pores Beyond Sub-1nm for Lithography Chemical Filtration
14:15-14:40	Jie Liu (ASML Cymer): (INVITED) Maximizing System Performance to Improve Process, Availability and Sustainability
14:40-15:05	Yang Liu (HIT): (INVITED) Modeling and Control of Linear Reluctance Actuators for Next-Generation Wafer Scanners
15:05-15:25	Jerry Wu (Shanghai Jheat Technology Co., Ltd.): An In-wafer System: In-situ Scanner Temp System
15:25-15:45	Coffee Break
15:45-17:15	Other Lithography Session Chairs: Shisheng Xiong & Yang Liu
	<i>5 minutes Q&A for each talk</i>
15:45-16:10	Qiming Zhang (University of Shanghai for Science and Technology): (INVITED) Artificial neural networks enabled by direct laser writing
16:10-16:35	Xing Cheng (Southern University of Science and Technology): (INVITED) Opportunities and Perspectives of Nanoimprint for Commercial Microelectronic Manufacturing
16:35-16:55	Chenhui Deng (Institute of Electrical Engineering, CAS): High-speed versatile pattern generator for high-resolution electron-beam lithography
16:55-17:15	Xin Zhuang (Southern University of Science and Technology): Scanning Helium Ion Beam Lithography on Freestanding Silicon Nitride Membranes for Sub-Nanometer Resist Characterization
17:15-17:20	Closing Plenary Address 闭幕致辞

	Chairs: Qiang Wu, Shiyuan Liu & Yayi Wei
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Day 2:	
15 Oct. 2025 (Wednesday) — Parallel Session II, 并行报告会场 II	
Wuzhou Banquet Hall Part B, 五洲厅 B	
DAY 2-Morning	
08:30-10:15	Computational Lithography Session Chairs: Xu Ma & Xiaodong Meng
	<i>5 minutes Q&A for each talk</i>
08:30-08:55	David H. Wei (Guangdong University of Technology): (INVITED) Computational Imaging and Computational Lithography
08:55-09:15	Cai Chen (Advanced Manufacturing EDA Co., Ltd.): Enhancing Lithographic Resolution for Via and Metal Layers in Advanced Semiconductor Manufacturing: NTD-Based Multi-Patterning Strategies
09:15-09:35	Yuhao Wang (Hangzhou HFC Semiconductor Corp): D-CAF: Data-Driven CPU Allocation Framework for Efficient OPC Workloads
09:35-09:55	Honglan Shao (Shanghai Huali Integrated Circuit Corp): An OPC model for predicting HMO defects
09:55-10:15	Chuansheng Dai (Advanced Manufacturing EDA Co., Ltd): 3D resist profile simulation for compact modeling considering z-diffusion
10:15-10:35	Coffee Break
10:35-12:25	Computational Lithography Session II Chairs: David H. Wei & Sikun Li
	<i>5 minutes Q&A for each talk</i>
10:35-11:00	Yanli Li (Fudan University): (INVITED) Imaging Characteristics of Hyper NA (0.75 NA) EUV Lithography in sub-2 nm Logic Technology Nodes
11:00-11:25	Jing Fu (Shanghai Silicon Thread Technology Co., Ltd): (INVITED) AI-Assisted Hotspot-Aware Layout Correction for Lithography-Friendly DTCO
11:25-11:45	Ningmu Zou (Nanjing University): SVD-based Layout Representation for Lithographic Hotspot Detection
11:45-12:05	Kaisheng Chen (Shanghai Optical Lithography Engineering Corp.): Fraunhofer diffraction by rectangular patterns on mask: a generic diffraction formula for modeling perspective
12:05-12:25	Haofeng Guo (Changchun Institute of Optics, Fine Mechanics and Physics, CAS): A low-memory-consumption lithography imaging model based on

	the Runge-Kutta Iterative Solution (RKIS) method
12:25-13:50	Lunch
DAY 2-Afternoon	
13:50-15:20	X-ray Source and Metrology Session Chairs: Qiang Wu & Kan Zhou
	<i>5 minutes Q&A for each talk</i>
13:50-14:15	Lifeng Wang (Institute of Advanced Light Source Facilities): (INVITED) High order harmonic generation in capillary driven by few-cycle laser pulses
14:15-14:40	Guangcai Chang (Institute of High Energy Physics, CAS): (INVITED) Hard X-ray Nanoprobe Beamline of a new synchrotron light source - High Energy Photon Source (HEPS)
14:40-15:00	Yinqiao Feng (Shenzhen Angstrom Excellence Technology Co. Ltd): IGZO Inline Monitoring Tool for 3D DRAM Performance Control
15:00-15:20	Shuzhe Cao (Zhejiang University): Coating Defect Localization via Patch-Guided Generative Adversarial Networks
15:20-15:40	Coffee Break
15:40-17:10	Process and Metrology Session Chairs: Weijie Shi & Xianhe Liu
	<i>5 minutes Q&A for each talk</i>
15:40-16:05	Taekwon Jee (SemiAI Co. Ltd.): (INVITED) Human-in-the-Loop Intelligent Yield Enhancement in Photolithography via AI-Driven Root Cause Analysis
16:05-16:30	YiFei Zhu (Huali Microelectronics Corporation): (INVITED) Cross-Product Overlay Fingerprint Prediction Using Term-Level Virtual Metrology and Neural Networks
16:30-16:50	Ganlin Song (Beijing Superstring Academy of Memory Technology): Innovative Topographic Mark Generation and Process Optimization for Enhancing Overlay Mark Signal in 3D Structures
16:50-17:10	Zhengpeng Zhang (Fudan University): Optimization of Process Parameters to Reduce Photon Absorption Stochastics for Bidirectional Patterning with EUV Single Exposure
17:10-17:15	Closing Plenary Address 闭幕致辞 Chairs: Qiang Wu, Shiyuan Liu & Yayi Wei

Day 2: 15 Oct. 2025 (Wednesday) — Parallel Session III, 并行报告会场 III Wuzhou Banquet Hall Part C, 五洲厅 C	
DAY 2–Morning	
08:30-10:00	X-ray Metrology Session Chairs: Feng Luo & Ruzhi Zhang
	<i>5 minutes Q&A for each talk</i>
08:30-08:55	Yasin Ekinici (Paul Scherrer Institute): (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
09:40-10:00	Yuxiang Huang (Shenzhen Angstrom Excellence Technology Co. Ltd): Semiconductor Metrology Tool: X-Ray Diffraction, X-Ray Reflectivity and X-Ray Fluorescence Techniques
10:00-10:20	Coffee Break
10:20-12:10	Photoresist Session I Chairs: Guoqiang Yang & Dean Wu
	<i>5 minutes Q&A for each talk</i>
10:20-10:45	Feng Luo (Nankai University): (INVITED) EUV Photoresist for Advanced 0.55NA Lithography
10:45-11:10	Hideaki Tsubaki (FUJIFILM): (INVITED) Negative-Tone-Imaging (NTI) Process and Material Technology for ArF Immersion and EUV Lithography
11:10-11:30	Ruiwen Ai (Xuzhou B&C Chemical Co.,Ltd): A Feasible Approach to Understand Acid Diffusion in DUV Resist Using Open Frame Exposure
11:30-11:50	Yanjiao Li (Shanghai Huali Microelectronics Corporation): Source-only Optimization Method to adjust Freeform Source for Improved Photoresist Matching
11:50-12:10	Yi-Fan Shen (Suzhou Laboratory): Acid Diffusion Detection in Chemically Amplified Photoresists
12:10-13:50	Lunch
DAY 2–Afternoon	
13:50-15:25	Photoresist Session II Chairs: Mark Neisser & Bing Li

	<i>5 minutes Q&A for each talk</i>
13:50-14:15	Ruzhi Zhang (Suzhou Laboratory): (INVITED) Molecular Feature Influence on ArF Photoresist Polymer Dissolution Behavior
14:15-14:40	Lei Zhang (Nankai University): (INVITED) Molecular Engineering of Metal-Oxo Clusters for Advanced Patterning Applications
14:40-15:05	Yang Hu (Tsing-innovation Semiconductor Company): (INVITED) MOR photoresists: the next generation patterning solutions for Moore's more
15:05-15:25	Zhongmei Han (PiBond Oy): Metal oxides and organometal complexes as alternatives for lithography hard masks
15:25-15:45	Coffee Break
15:45-17:10	Photoresist and Material Session Chair: Xudong Guo
	<i>5 minutes Q&A for each talk</i>
15:45-16:10	Yu Chen (Suzhou Rainbowmaterial Co., Ltd.): (INVITED) High etching ration ArF immersion BARC to improve advanced lithographs technology
16:10-16:30	Ruzhi Zhang (Suzhou Laboratory): Development of High-Performance NTD Developers via HSP-Assisted HTE
16:30-16:50	Xiang Dong (Shanghai B&C Chemical Co., Ltd.): Application and Advantage of RAFT Polymerization in High-resolution Lithography Formulation
16:50-17:10	Jialin Wu (Fudan University): 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**

IWAPS2025-P-01	Kang Wang* , ZhaoLong Luo, Shiqi Yin (Nexchip Semiconductor Corporation) Full-Field Contour-Based PWA Enables Precision Depth-of-Focus Characterization at Advanced-Node
IWAPS2025-P-02	Kang Wang* , Zhaolong Luo, Die Liu (Nexchip Semiconductor Corporation) Smart RBAF: Hierarchical Main Pattern Definition for Advanced-Node Lithography Enhancement
IWAPS2025-P-03	Tong Liang, Jing Li* (Zhejiang University) A measurement scheme for beam parallelism based on image measurement method
IWAPS2025-P-04	Chao Long^{1,2}, Jiantao Wang^{2,*}, Jingxun Fang², Yu Zhang² (1 Shanghai University; 2 Shanghai Huali Integrated Circuit Corporation) A study of photoresist residue defect induced by wafer surface condition
IWAPS2025-P-05	Caiwei Shang¹, Jiacheng Luo¹, Weixuan Zeng², Yan Zhang², Shisheng Xiong^{1,2,*} (1 Fudan University; 2 Zhangjiang Laboratory) Fast Simulation of Directed Self-Assembly for Contact Hole Multiplication with an Optimized Compact Model
IWAPS2025-P-06	Xin Zhou¹, Yuejing Qi^{1,2,*}, Zhipeng Wu^{1,2}, Wei Qi^{1,2} (1 Institute of Microelectronics of the Chinese Academy of Sciences; 2 University of Chinese Academy of Sciences) A Moving-average-filter-based Dynamic Decoupling Control for Wafer Stage Motion Systems
IWAPS2025-P-07	Yanbei Nan, Zhenkun Zhang, Yanqiu Li* (Beijing Institute of Technology) Design of an anamorphic extreme ultraviolet lithography projection objective adopted high order XY polynomial freeform surfaces
IWAPS2025-P-08	Weichen Huang, Yangqiu Li* (Beijing Institute of Technology) High-fidelity curvilinear SRAF method adopting distance-versus-angle-signature
IWAPS2025-P-09	Zhenkun Zhang, Yanbei Nan, Yanqiu Li* (Beijing Institute of Technology) Wavefront Fitting of Different Obscuration Shapes in Anamorphic Extreme Ultraviolet Lithography Projection Objective
IWAPS2025-P-10	Zhilong Zhong¹, Yunhao Liu¹, Jiamin Liu^{1,*}, Pinxuan He¹, Hao Jiang¹, Honggang Gu¹, 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-	CHIH-LI(Julius) Chen¹, Zekui Li¹, Alex Fan³, Dawen Yang³,

P-11	Pinhong Lin³, Lei Chen³, 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
IWAPS2025-P-12	Benjamin Shen*, Wenchun Huang, Chunhung Wu (Advanced Manufacturing EDA Co., Ltd.) OPC Consistency Improvement with Hash Code
IWAPS2025-P-13	Qinghua Ye^{1,2}, Dongchao Pan², Chun Zhang², 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
IWAPS2025-P-14	Chaoxin Feng¹, Cheng Qian², Ruoran Jia^{3,*} (1 University of Chinese Academy of Sciences; 2 University of Science and Technology of China; 3 Chongqing Institute of Green and Intelligent Technology, Chinese Academy of Sciences) An effective mask optimization method using Deep Reinforcement Learning
IWAPS2025-P-15	Lingjie Li, Yichi Pan, Haokang Zhang, Wei Liang, Chong Shen*, Dekun Yang* (Hainan University) learning-assisted angle-resolved scatterometry of 3D NAND channel hole structure
IWAPS2025-P-16	Pinxuan He¹, Jiamin Liu^{1,*}, Jinlong Zhu¹, Honggang Gu¹, Hao Jiang¹, Shiyuan Liu^{1,2,*} (1 Huazhong University of Science and Technology; 2 Optics Valley Laboratory) Large-scale electromagnetic simulations enabled by the modified Born series with virtual absorbing boundaries
IWAPS2025-P-17	Yingxiong Guo¹, Wenzhang Li¹, T. H. Ying¹, Devin Sima¹, Siqi Wang², Shengrui Zhang², C. M. Hu^{1,*} (1 Fujian Jinhua Integrated Circuit Co., Ltd.; 2 Dongfang Jingyuan Electron Co., Ltd.) A Comprehensive intra-CD uniformity control through optimizing pattern loading effect correction by AI-trained model
IWAPS2025-P-18	Tatsi IAO¹, Fengnien Tsai¹, T.H.Ying¹, Shengrui.Zhang², C.M. Hu^{1,*} (1 Fujian Jinhua Integrated Circuit Co., Ltd.; 2 Dongfang Jingyuan Electron Co., Ltd.) A Co-optimization Flow to Expanding PWQ through HSF and Model-based loading effect for DRAM LELE Metal Layer
IWAPS2025-P-19	Yanting Xu¹, Jiacheng Luo², Zhiyong Wu¹, Wenda Bao¹, Yudan Su¹, Yan Zhang¹, Shisheng Xiong^{1,2,*} (1 Zhangjiang laboratory; 2 Fudan University) Quantitative Characterization of Brushes Grafting for Graphoepitaxial Directed Self-assembly
IWAPS2025-P-20	Yanzhong Ma*, Xiangyu Ma*, Langfeng Wen (Skyverse Tech. Co. Ltd.)

	Synalib: A fast OCD engine with parametric process flow modeling for high-throughput semiconductor metrology
IWAPS2025-P-21	Haoyang Liang¹, 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
IWAPS2025-P-22	Zhiyong Wu¹, Qingshu Dong², Huangyan Shen², Shengru Niu², Yan Zhang¹, Fei Pei¹, Weixuan Zeng¹, Zhonghan Cao¹, Mingkun Zhao¹, Zili Li^{1,2}, Weihua Li², Shisheng Xiong^{1,2,*} (¹ Zhangjiang Laboratory; ² Fudan University;) 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 Zhang², Zhicheng Liu¹, Zhenguo Tian², Guiqi Li¹, Fangyi Shi¹, Zhuohong Zhou¹, Miaohua Zhang¹, Xing Yang³ (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
IWAPS2025-P-26	Jun Zhou, Lei Cheng, Lei Zhu, Yuheng Huang, QingJun Ding, Chengyu Li (Wuhan Xinxin Semiconductor Manufacturing Co., Ltd) Resolution enhancement technology of contact hole patterning by negative tone development of ArF immersion lithography
IWAPS2025-P-27	Sicong Wang¹, Xiaoqi Pang², Pei Yu², Chao Shang², Zhiwei Wang³, 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-29	Li Xiao*, Yueyu Zhang, Shirui Yu (Shanghai Huali Integrated Circuit Corporation) Research on Mask Template Cross Validation Method
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 Zhang³ (¹Institute of Electrical Engineering Chinese Academy of Sciences; ²University of Chinese Academy of Sciences; ³Beijing Academy of Quantum Information Sciences) Process Window and Resolution Limit Investigation of PMMA Resist under 30 kV Electron Beam Lithography
IWAPS2025-P-32	Jiakun Lan¹, Jibin He¹, Xue Zhou¹, Yanan Bao^{1,2}, Guodong Zhou^{1,*} (¹Zhejiang University; ²Zhejiang ICsprout Semiconductor Co., Ltd.) A Swing Curve Fitting Algorithm Based on Physics-Informed Neural Networks
IWAPS2025-P-33	Xue Zhou¹, Tianhao Huang¹, Jiakun Lan¹, Jianming Wu², Yanan Bao^{1,2}, Guodong Zhou^{1,*} (¹Zhejiang University; ²Zhejiang ICsprout Semiconductor Co., Ltd.) A Process-Parameter-driven Cross-Attention Convolutional Autoencoder for High-Precision Critical Dimension Prediction
IWAPS2025-P-34	Baotong Chen, Biqu Liu, Xianguo Dong, Jingxun Fang, Xiaobo Guo, Yu Zhang (Shanghai Huali Integrated Circuit Co.) Application of Synchrotron Radiation Multiscale Characterization Technology in Semiconductor Manufacturing Process Optimization Research
IWAPS2025-P-35	Xianguo Dong, Biqu Liu, Baotong Chen, Jingxun Fang, Xiaobo Guo, Yu Zhang (Shanghai Huali Integrated Circuit Co.) Challenges Faced by Carbon Spin Coating in Advanced Lithography Processes
IWAPS2025-P-36	Xiaomin Xu, Qian Zhang, Huanyin Xie (HuaLi Integrated Circuit Corporation) Research on the Analysis and Solutions to Mask Haze in IC Manufacturing
IWAPS2025-P-37	Peng Wu¹, Wenliang Li¹, Yiming Zhu¹, Yu Fu¹, Guojie Cheng², Geffery Ying² (¹HuaLi Integrated Circuit Corporation, ²KLA) AI Solution for Litho FS Condition Optimization
IWAPS2025-P-38	Jun-Dan Huang, Ming-Qiang Zhu (Huazhong University of Science and Technology) Photoacid-induced crosslinking/degradation of poly (2,3-dihydrofuran) for multi-tone photolithography
IWAPS2025-P-39	Xiao Tan¹, Jun-dan Huang¹, Ming-Qiang Zhu¹, * (Huazhong University of Science and Technology)

	Etch-Resistant Chemically Amplified Positive-Tone Photoresist with Synergistic Dual Nonionic Photoacid Generators
IWAPS2025-P-40	Ying-Yi Ren¹, Cong Li¹, Shi-li Xiang², Ming-Qiang Zhu^{1,*} (Huazhong University of Science and Technology) Photoswitchable Branched Polyurethanes Based on Hexaarylbiimidazole for Photolithography

Agenda is subject to change

For update agenda and further information, please visit the website: www.iwaps.org