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 (Tuesday)** **Wuzhou Banquet Hall 五洲厅**		
DAY 1–Morning		
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**	
	5 minutes Q&A for each talk	
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**	

	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** **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**
	5 minutes Q&A for each talk
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 & Liguo Zhang**
	5 minutes Q&A for each talk
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**
	5 minutes Q&A for each talk
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**
	5 minutes Q&A for each talk
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**
	5 minutes Q&A for each talk
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**
	5 minutes Q&A for each talk
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

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**
	5 minutes Q&A for each talk
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**
	5 minutes Q&A for each talk
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**
	5 minutes Q&A for each talk
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**
	5 minutes Q&A for each talk
15:40-16:05	**Taekwon Jee (SemiAl 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**
	5 minutes Q&A for each talk
08:30-08:55	**Yasin Ekinci (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**
	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):** (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**

	5 minutes Q&A for each talk
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 pattering 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**
	5 minutes Q&A for each talk
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 Fang[2], Yu Zhang[2] ([1] Shanghai University; [2] Shanghai Huali Integrated Circuit Corporation)** A study of photoresist residue defect induced by wafer surface condition
IWAPS2025-P-05	**Caiwei Shang[1], Jiacheng Luo[1], Weixuan Zeng[2], Yan Zhang[2], 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 Zhou[1], 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 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-	**CHIH-LI(Julius) Chen[1], Zekui Li[1], Alex Fan[3], Dawen Yang[3],**

P-11	**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
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 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
IWAPS2025-P-14	**Chaoxin Feng[1], Cheng Qian[2], 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 He[1], Jiamin Liu[1,*], Jinlong Zhu[1], Honggang Gu[1], Hao Jiang[1], 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 Guo[1], Wenzhang Li[1], T. H. Ying[1], Devin Sima[1], Siqi Wang[2], Shengrui Zhang[2], 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 IAO[1], Fengnien Tsai[1], T.H.Ying[1], Shengrui.Zhang[2], 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 Xu[1], Jiacheng Luo[2], Zhiyong Wu[1], Wenda Bao[1], Yudan Su[1], Yan Zhang[1], 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 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
IWAPS2025-P-22	**Zhiyong Wu[1], Qingshu Dong[2], Huangyan Shen[2], Shengru Niu[2], Yan Zhang[1], Fei Pei[1], Weixuan Zeng[1], Zhonghan Cao[1], Mingkun Zhao[1], Zili Li[1,2], Weihua Li[2], 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 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
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 Wang[1], Xiaoqi Pang[2], Pei Yu[2], Chao Shang[2], Zhiwei Wang[3], Xianhui Chen[3], Bowen Chen[4], Yi Yin[4], Xia Chen[5], Jie Zhang[5], Trina Wong[2], Feng Hong[2], Athena Chang[2] ([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 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.)** A Swing Curve Fitting Algorithm Based on Physics-Informed Neural Networks
IWAPS2025-P-33	**Xue Zhou[1], Tianhao Huang[1], Jiakun Lan[1], Jianming Wu[2], Yanan 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
IWAPS2025-P-34	**Baotong Chen, Biqiu 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, Biqiu 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	**Peng Wu[1], Wenliang Li[1], Yiming Zhu[1], Yu Fu[1], Guojie Cheng[2], Geffery Ying[2] ([1]HuaLi Integrated Circuit Corporation, [2]KLA)** AI Solution for Litho FS Condition Optimization
IWAPS2025-P-37	**Xiaomin Xu, Qian Zhang, Huanyin Xie (HuaLi Integrated Circuit Corporation)** Research on the Analysis and Solutions to Mask Haze in IC Manufacturing
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 Tan[1], Jun-dan Huang[1], Ming-Qiang Zhu[1,] * (Huazhong University of Science and Technology)**

	Etch-Resistant Chemically Amplified Positive-Tone Photoresist with Synergistic Dual Nonionic Photoacid Generators
IWAPS2025-P-40	**Ying-Yi Ren[1], Cong Li[1], Shi-li Xiang[2], 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