ISSM 2026 Day-1 (December 7, 2026)

Room A (KFC Hall, 3F) Day-1							
Start	**Finish**	**Session**	**Paper#**	**Title**	**Author/Speaker**	**Additional Speaker**	**Affiliation**
9:00	9:10	Opening		Opening Remarks			
9:10	9:50	Tutorial	Tutorial-1	Tailor-made GAAFET development from scratch for the shared AIST R&D 300mm pilot-line using vertical and horizontal nano-processes	Dr. Yoshihiro Hayashi		National Institute of Advanced Industrial, Science and Technology
9:50	9:55	Break					
9:55	10:35	Tutorial	Tutorial-2	Fluid Mechanics of Liquid Exchange on Wafers and the Role of PVA Brushes in Post-CMP Cleaning	Dr. Toshiyuki Sanada		Shizuoka University
10:35	10:40	Break					
10:40	11:20	Keynote	Keynote-1	TBA	Dr. Steven Scheer		imec
11:20	11:25	Break					
11:25	12:05	Keynote	Keynote-2	Lithography Tool Roadmaps in the Age of AI	Dr. Junya Matsunami		ASML
12:05	12:50	Sponsor Exhibition, Lunch Break					
12:50	13:30	Keynote	Keynote-3	Trends in Heterogeneous Integration and Its Applications	Dr. Jun Mizuno		National Cheng Kung University
13:30	13:35	Break					
13:35	14:15	Keynote	Keynote-4	Enabling New Value Creation through Converged Front-End and Back-End Manufacturing Systems	Dr. Kazuya Okamoto		Nippon Institute of Technology
14:15	14:25	Break					

Room A (KFC Hall, 3F) Day-1							
Start	**Finish**	**Session**	**Paper#**	**Title**	**Author/Speaker**	**Speaker**	**Affiliation**
14:25	14:45	INE A-1	UC-73	Numerical Simulation of Liquid Replacement by Impinging Jet on a Rotating Disk	Makoto Miwa		Shizuoka University
14:45	15:05	INE A-1	YE-36	Application of High-Sensitivity In-Situ Particle Monitor for Particle Evaluation in Low-pressure Process Equipment	Kaoru Fujihara		Tokyo Electron
15:05	15:25	INE A-1	YE-9	Metal Contamination Analysis of Wafer Edge/Bevel using LA-ICP-MS	Katsu Kawabata		RORZE IAS
15:25	15:45	Author's Interview (Session A-1) , Sponsor Exhibition & Break					
15:45	16:05	YE A-2	YE-19	Improving Defect Classification Accuracy Using Attention Bias from a Defect Extraction Model Trained on Non-Defective Images	Osamu Yamane		KIOXIA
16:05	16:25	YE A-2	YE-27	An Effective Closed-Loop Meta-Learning Framework for Few-Shot Semiconductor Defect Classification	Bing-Sheng Lin		Macronix International
16:25	16:45	YE A-2	YE-30	Early Detection 3D NAND Array Word Line Disconnection by Advanced Electron Beam Pre-Charging Inspection Technology	Yi-Lung Fang	Bing-Sheng Lin	Macronix International
16:45	17:05	Author's Interview (Session A-2), Sponsor Exhibition & Break					
17:05	17:25	UC&MC A-3	UC-113	Evaluation of Chemical Cleaning for Particle and AMC Removal in FOUPs	Tae Kamino		KIOXIA
17:25	17:45	UC&MC A-3	UC-46	An Online Monitoring System for Single-Nanometer Particles in UPW Using an Ultraclean Vapor-Phase Condensation Particle Counter	Yuya Hirahara		Tohoku University
17:45	18:05	UC&MC A-3	MC-101	MES-in-the-Loop: Generating MES-Consistent Production Data through API-Based Discrete-Event Simulation	Masao Joko		IBM
18:05	18:45	Author's Interview (Session A-3), Sponsor Exhibition & Break					
18:45	20:00	Reception @ Foyer					

Room B (Annex, 3F) Day-1							
Start	**Finish**	**Session**	**Paper#**	**Title**	**Author/Speaker**	**Speaker**	**Affiliation**
14:25	14:45	PC B-1	PC-17	High-Speed High-Precision Gas Concentration Distribution Measurement in a 300 mm ALD Chamber Toward Data-driven Accurate Digital Twin Construction	Yushi Sakai		Tohoku University
14:45	15:05	PC B-1	PC-105	In-Situ Chemical Concentration Distribution Monitoring in Wet Processes Using High-SNR CMOS Image Sensors	Takezo Mawaki		Tohoku University
15:05	15:25	PC B-1	PC-14	Neural Operator-based Virtual Sensing for Single-Wafer Wet Processing	Ryoto Watanabe		SCREEN Advanced System Solutions
15:25	15:45	Author's Interview (Session B-1) , Sponsor Exhibition & Break					
15:45	16:05	PC B-2	PC-12	AI-Driven Integrated CMP AOI Inspection and Vibration Sensor Monitoring for Intelligent Process Control	Tuung Luoh	Kuang Wei Chen	Macronix International
16:05	16:25	PC B-2	PC-56	Natural-Language-Driven Measurement System for SEM/TEM Images with Contour Extraction	Kaoru Yui		Tokyo Electron
16:25	16:45	PC B-2	PC-33	A Matrix-Profile-Based, Multi-Scale Fault Detection Algorithm for Time-Series Data in Semiconductor Manufacturing Processes	Ruiki Kobayashi		Tokyo Electron
16:45	17:05	Author's Interview (Session B-2), Sponsor Exhibition & Break					
17:05	17:25	PC&PO B-3	PC-23	A data-driven autonomous control framework for semiconductor manufacturing: experimental demonstration in floating-zone silicon crystal growth	Shunta Harada		Nagoya University
17:25	17:45	PC&PO B-3	PC-38	Stress Control of Terminal Structures in Trench Field-Plate Power MOSFETs	Takuya Yasutake		TOSHIBA ELECTRONIC DEVICES & STORAGE
17:45	18:05	PC&PO B-3	PO-61	Surface Appearance Optimization of Backside Metallization through Effective Wafer Temperature Management in a Sputtering Process	Tomohiro Taniguchi		TOSHIBA ELECTRONIC DEVICES & STORAGE
18:05	18:25	PC&PO B-3	PO-20	Catalytic Oxygen Dissociation for Area-Selective HfO_2 Deposition on Cobalt through Selective PMMA Etching	Christophe Vallee		University at Albany, CNSE
18:25	18:45	Author's Interview (Session B-3), Sponsor Exhibition & Break					
18:45	20:00	Reception @ Foyer					

ISSM 2026 Day-2 (December 8, 2026)

Room A (KFC Hall, 3F) Day-2							
Start	**Finish**	**Session**	**Paper#**	**Title**	**Author/Speaker**	**Speaker**	**Affiliation**
9:00	9:10	Opening	-	Program Outline of Day2			
9:10	9:50	Keynote	Keynote-5	TBA	Ryūichirō Hattori		Rapidus Corporation
9:50	9:55	Break					
9:55	10:35	Keynote	Keynote-6	From Materials to AI Factories: System Technology Co-Optimization for Japan's Next Semiconductor Era	John Maculley		Dassault Systèmes
10:35	10:40	Break					
Room A (KFC Hall, 3F) **Day-2**							
Start	**Finish**	**Session**	**Paper#**	**Title**	**Author/Speaker**	**Speaker**	**Affiliation**
10:40	11:40	Flash Presentation of Poster Session					
		Poster	DM-53	PGRC-SISSO: Physics- and Residual- Guided Generation of Intermediate-Variable Candidates for Semiconductor Causal Modeling	Jia Lin		Toyota Central R&D Labs
		Poster	PC-122	Machine Learning-based Optical Emission Spectroscopy Monitoring of SiGe Selective Etching for GAAFET Channel Release Process	Hanchan Song		Electronics and Telecommunications Research Institute
		Poster	PC-94	Graph-Based Virtual Metrology for Wafer-to-Wafer Thickness Prediction in Batch ALD	Min Cheol Kim		Korea Electronics Technology Institute
		Poster	PC-43	Root-Cause Diagnosis of PEALD Si_3N_4 Thickness Deviationn via GRU Hidden-State Analysis using FDC Data	Byeong Jun Song		KETI & Sungkyunkwan University
		Poster	PC-71	A Novel Inline Quality Check Method for Platinum Solid-Phase Diffusion Using SEM Image Analysis	Yuhki Fujino		TOSHIBA ELECTRONIC DEVICES & STORAGE
		Poster	PC-108	AI-Driven Residual Gas Analysis for Dose-to-Clear Prediction and Formulation Optimization of EUV Chemically Amplified Resists	Rui Liu	Alan Sisa	Kent State University
		Poster	PC-85	Full-Field Surface Temperature Reconstruction of a 300 mm Silicon Wafer From Sparse Optical-Interference Contactless Thermometry (OICT) Signals Using a Sensor-Structured Deep Neural Network	Jiawen Yu		Hiroshima University
		Poster	PC-80	Feedforward Signal Generation for Fast and High-Precision Temperature Control with Various Thermal Ramps in Semiconductor Vertical Furnaces	Christian Milleneuve Budiono		The University of Tokyo
		Poster	PC-90	Chip-Level Virtual Metrology of SiC Electric-Field Distributions Using a Latent Diffusion Model	Yutaka Sawai		Rohm
		Poster	PC-10	Impact of Back Side Grinding Tape Thickness on Back Side Grinding Thickness Control of 310 mm Panels	Bandharla Dharani		ASE Technology
		Poster	PC-124	Practical Monitoring System for Simultaneous Detection of Particles and Micro-Arcing in Plasma Etching Equipment	Yuji Kasashima		National Institute of Advanced Industrial Science and Technology
		Poster	PC-88	Development of a Mid-Infrared Optical Frequency Comb Source for Real-Time Monitoring of Semiconductor Etching Gases	Seung-Yu Jeong		Seoul National University of Science and Technology
		Poster	UC-18	Elucidation of the formation mechanism of petal-like particles on wafers	Misako Saito		Tokyo Electron
		Poster	UC-49	Touch Test Using Core–Shell Nano-Sensors for Chemical Amplification, Visualization, and Color Dot Mapping of Sub-100 nm Particle Contamination	Yukiko Takahashi		Nagaoka University of Technology
		Poster	UC-44	A Point-Cloud-Based Method for Particle-Wise Pattern Classification of Semiconductor Wafer Particles	Norifumi Ohmi		Tokyo Electron
		Poster	UC-120	Evaluation of Electrostatic Charging during Two-Fluid Spray Cleaning Using MOS Capacitors	Yoshiyuki Seike		Aichi Institute of Technology
		Poster	YE-52	Integrating Perceptual Metrics with Deep Learning for TEM Image Quality Assessment	Zhiyuan.Gui	Bingxing Wu	Fujian Jinhua Integrated Circuit
		Poster	YE-39	Improving the Polishing Efficiency of SiC through the Mechanical Action of Abrasives	Shogo Hamajima		FUJIMI INCORPORATED
		Poster	YE-82	Spatial Defect Signature Analysis for Rapid Identification and Containment of CMP Process Non-Uniformity	Ankit Tewari		GlobalFoundries
11:40	12:30	Poster Session, Sponsor Exhibition, Lunch Break					

Room A (KFC Hall, 3F) Day-2							
Start	**Finish**	**Session**	**Paper#**	**Title**	**Author/Speaker**	**Speaker**	**Affiliation**
12:30	13:10	Keynote	Keynote-7	“AI for Design” and “Design for AI”: Redefining Semiconductor Design and Manufacturing with Cloud-Driven AI	Takeyoshi Ikeda		Cadence Design Systems Japan
13:10	13:15	Break					
13:15	13:55	Keynote	Keynote-8	Reinventing the Semiconductor Manufacturing Platform for an AI-First Era	Dr. John K. Kibarian		PDF Solutions, Inc.
13:55	14:00	Break					
14:00	14:30	Invited	Invited-1	TBA	Prof. Swaroop Ganguly		IIT Bombay
14:30	14:35	Break					

Room A (KFC Hall, 3F) Day-2							
Start	**Finish**	**Session**	**Paper#**	**Title**	**Author/Speaker**	**Speaker**	**Affiliation**
14:35	14:55	INDIA A-4	PO-91	Impact of Plasma Operating Conditions on Tapering and Profile Evolution in High Aspect Ratio 3D NAND Pillar Etching	Siddharth Mohanty		Indian Institute of Technology (IIT), Gandhinagar
14:55	15:15	INDIA A-4	PC-32	Contour-Metrology-Based Lithography Process Drift Monitoring Using Repeat-Pattern Signatures	Muhammed Damsas Nalakath		SIEMENS EDA
15:15	1535	INDIA A-4	MS-24	A Yield-and-Cost-Aware Illumination Selection Framework for High-Volume DUV Memory Manufacturing	Raghavendra Botta		Siemens EDA
15:35	15:55	INDIA A-4	YE-59	Grading Within-Spec Wafer Outliers Using Multi-Parameter ET Risk Scoring	Shreyas P. Bhat		GlobalFoundries
15:55	16:15	INDIA A-4	TP-103	Fabrication and Characterization of 3D Embedded Spiral Structures in Glass Substrate	Pradeep Dixit		Indian Institute of Technology Bombay
16:15	16:35	Author's Interview (Session A-4) & Break					
16:35	16:55	TP&MS A-5	TP-13	A Novel Interface Characterization Technique for Hybrid Bonding Process Optimization	Masahiro Saito		Toray Research Center
16:55	17:15	TP&MS A-5	TP-83	Operando Evaluation of Lattice Strain in Stacked Silicon Dies within Advanced Semiconductor Packages	Shinichi Ogawa		RIKEN
17:15	17:35	TP&MS A-5	TP-29	Integration of a Si Capacitor into SOP Package for Low-Noise LVMOS Applications	Mitsuo Sano		Toshiba
17:35	17:55	TP&MS A-5	MS-16	AI-Augmented Root Cause Analysis in Structured Lean Problem Solving	Sebastian Maliyakal Francis		Aumovio
17:55	18:15	TP&MS A-5	MS-81	The Trust Gap: Human Control and Trustworthy Agentic AI in Semiconductor Manufacturing	Zohreh Champiri		PDF Solutions
18:15	18:35	Author's Interview (Session A-5) & Break					
18:35	20:00	Closing/Award Ceremony @ Foyer					

Room B (Annex, 3F) Day-2							
Start	**Finish**	**Session**	**Paper#**	**Title**	**Author/Speaker**	**Speaker**	**Affiliation**
10:40	11:40	Flash Presentation of Poster Session					
		Poster	ID-111	Autoregressive Sequence Generation with Causal Self-Attention for Tool Remaining Useful Life Prediction	Tori Wright		University of Central Florida
		Poster	ID-98	Learning Semiconductor Recipe Evolution with Graph Neural Networks	Yatin Daketi	Baoxin Li	Arizona State University
		Poster	MC-57	Fault-Aware Scheduling for Pre-Known and Runtime PM Faults in a Cluster Tool	Huixian Su		Beihang University
		Poster	MC-67	Cross-Domain Manufacturing Decision Support for Coordinating Capacity, Equipment Health, and Maintenance in Semiconductor Fabs	Surya Vamsi Miriyala		IBM
		Poster	PE-95	Deep-Learning-Based Quantification of ALD Coating Quality on CNT EUV Pellicles	Jihun Kim		Korea Electronics Technology Institute
		Poster	PE-79	Mechanical-to-Flow Modeling of Piezoelectric Valve for Model-Based Gas Flow Control under Varying Pressure and Temperature	Chihiro Hamada		HORIBA STEC
		Poster	PE-8	Self-Supervised Attention-Based Virtual Metrology for CMP MRR Prediction	Jonathan Adam Rico		Singapore University of Technology and Design
		Poster	PE-123	Development of a Vortex Shedder for Low-Flow Measurement in Semiconductor Equipment and Optimization of Sensor Location	Jiseung Kang		Gyeongsang National University
		Poster	PO-121	Space-Filling Design Augmentation with Enhanced One-Dimensional Projection Uniformity for Efficient Bayesian Optimization	Yuta Inoue		KIOXIA
		Poster	PO-74	Electrical Characterisation of Deep Level Traps in the Bulk of Silicon Wafer used in Production of IGBT using High Voltage Deep Level Transient Spectroscopy	MADISHETTY RITESH		Kyushu University
		Poster	PO-34	Susceptor-Configuration Engineering of Microwave Annealing for CoFeB/MgO MTJs	Ming-Chun, Hsu		National Tsing Hua University
		Poster	PO-77	3 nm thick Ferroelectric Nondoped HfO2 Formation utilizing ECR-Plasma Sputtering	Shi-Feng Liang		Institute of Science Tokyo
		Poster	PO-100	Analysis of the initial oxidation process on TiN surface by first-principles calculations —Investigation of the effect of H atoms from H2O on oxidation—	Yo Matsunaga		Osaka University
		Poster	PO-50	Improved Rectifying Characteristics through Interfacial Oxygen-Vacancy Suppression in Room-Temperature-Sputtered Pt/SiOC/In2O3 Structures	Yuya Yasaki		Kogakuin University
		Poster	PO-70	Water-Vapor-Assisted Sputtering of Flexible Transparent Conductive In-B-O Films: Effects on Electrical Properties and Mechanical Flexibility	Shu Ishigami		Kogakuin University
		Poster	PO-75	Si Substrate Orientation Dependence of Silicide Formation for Schottky-Barrier MFSFET	Hongqian Deng		Institute of Science Tokyo
		Poster	PO-47	Impact of AOI Light Source on RDL Defect Inspection of 600 mm Panels	Fado Gungor		ASE Technology
		Poster	PO-51	Threshold-Voltage Modulation in a-IGZO TFTs via Interfacial Dipoles in Room-Temperature-Deposited SiO2/Y2O3 Stacked Passivation Layers	Ko Ishihara		Kogakuin University
		Poster	TP-48	Approaches to Solving Technical Challenges of Glass Carrier for Panel-Level Packaging	Atsushi Tanaka		Nippon Electric Glass
11:40	12:30	Poster Session, Sponsor Exhibition, & Lunch Break					

Room B (Annex, 3F) Day-2							
Start	**Finish**	**Session**	**Paper#**	**Title**	**Author/Speaker**	**Speaker**	**Affiliation**
14:35	14:55	PE&PO B-4	PE-65	Cu Electroplating Yield Improvement by Stress and Process Optimization	Tuung Luoh		Macronix International
14:55	15:15	PE&PO B-4	PO-26	Molecular Dynamics Study of Diluted Hydrofluoric Acid in Nanoscale Space	Rintaro Higuchi		Tokyo Electron Kyushu
15:15	15:35	PE&PO B-4	PO-25	Stop on CMP Slurry for Silicon Nitride and Poly-Si	Sora Shirai		FUJIMI INCORPORATED
15:35	15:55	PE&PO B-4	PO-37	Comparison of Void Annihilation Behavior between Si (100) and Si (110) Wafers during Rapid Thermal Processing	Haruo Sudo		GlobalWafers Japan
15:55	16:15	PE&PO B-4	PO-55	Threshold-voltage control in PtSi S/D Schottky-barrier MFSFETs with FeND-HfO2	Haoran Yan		Institute of Science Tokyo
16:15	16:35	Author's Interview (Session B-4) & Break					
16:35	16:55	IM&ID B-5	IM-104	RecipeFormer: Structured Generation of Semiconductor Recipes	PrasanthSai Gouripeddi	Baoxin Li	Arizona State University
16:55	17:15	IM&ID B-5	ID-40	Dual Branch Deep Learning for Unknown Defect Detection and Known Component Recognition in Wafer Maps	Lianhao Qi		Beihang University
17:15	17:35	IM&ID B-5	ID-21	Data Analytics Platform for Intelligent Semiconductor Manufacturing	Steve Zamek		PDF Solutions
17:35	17:55	IM&ID B-5	ID-96	A Compute-to-Data Platform for Secure Ecosystem Collaboration in Advanced Semiconductor Manufacturing	Makoto Kogoh		IBM
17:55	18:15	IM&ID B-5	ID-89	A Composite KPI Framework for Automating and Visualizing Multi-Criterion Trade-offs in Semiconductor Fab Scheduling	Hiroto Akizuki		University of Tsukuba
18:15	18:35	Author's Interview (Session B-5) & Break					
18:35	20:00	Closing/Award Ceremony @ Foyer					