

[KISM 2025 BUSAN] Program at a Glance (ver. 2025. 10. 20)

Time			Room A (Capri Room, 2F)				Room D (Sidney Room, 2F)				2F Lobby					
Nov. 10 (Mon.)	13:00	- 16:00	Tutorial 1 Current and Future Challenges and Solutions in AI & HPC System and Thermal Management Dr. Gamal Refai-Ahmed (AMD, USA)				Short Course (in Korean Language) 3D NAND Flash Technology Trends Prof. Sungnam Chang (Hanyang Univ. / PeDiSem Ltd., Korea)				Registration					
	16:00	- 17:30	Tutorial 2 Non-Volatile Memory-Based AI Semiconductors for Low-Power Neural Networks Prof. Jong-Ho Lee (Seoul Nat'l Univ., Korea)													
	18:15	- 20:00	Welcome Reception (Sicily Room, 1F)													
Nov. 11 (Tue.)	Time		Room A (Capri Room, 2F)		Room B (Grand Ballroom 1, 2F)		Room C (Grand Ballroom 3, 2F)		Room D (Sidney Room, 2F)		Room E (Sicily Room, 1F)		Room F (Panorama Room, 16F)		2F Lobby	
	10:00	- 10:45	Plenary Session I (Capri Room, 2F) Semiconductor Technology Trends to Overcome the Integration Limitations for Future AI Memory Devices Dr. Jiho Kang (SK hynix Inc., Korea)													
	10:45	- 11:00	Coffee Break (2F Lobby)													
	11:00	- 11:30	Opening Ceremony (Grand Ballroom 1, 2, 3, 2F)													
	11:30	- 13:00	Lunch													
	13:00	- 14:40	TuA1 (Thin Film)		TuB1 (Etching)		TuC1 (MI)		TuD1 (Power)		TuE1 (CMP)					
			Nanoscale Thin Film Deposition I		Advanced Etch I		Advanced Metrology & Inspection, Process Diagnostics & Control, and Yield Management I		Power Devices I		Innovative Abrasives and Carbon Layer CMP					
			[13:00-13:30] Invited (30') Rong Chen (Huazhong Univ. of Science and Tech.) 01_1152 Selective Atomic Layer Deposition in Advancing Semiconductor Manufacturing		[13:00-13:45] Plenary (45') Thorsten Lill (Lam Research) 03_1136 Etch Innovation for 3D Electronic Devices		[13:00-13:45] Plenary (45') Daniel Schmidt (IBM Research) 06_1068 Characterizing Complexity: Metrology Innovations for Next-Gen Logic Nodes		[13:00-13:25] Invited (25') Hajoon Kim (ENF Technology Co., Ltd.) 02_1106 Zirconia as a Novel Abrasive for CMP of Amorphous Carbon Layer (ACL)							
			[13:30-14:00] Invited (30') Jongho Lee (SK hynix Inc.) 01_1159 Development of a Selective-Area ALD Process for Buried Word Line in DRAM		[13:45-14:15] Invited (30') Thi-Thyu-Nga Nguyen (Nagoya Univ.) 03_1223 Nonhalogen Etching for Hard-to-Etch Materials: A Concept Developed from Wet-Like Plasma Technology for Semiconductor Device Etching		[13:45-14:15] Invited (30') Kazuhiko Omote (Rigaku Corporation) 06_1101 Progress of X-ray Metrology for Analyzing Device Nanostructure in Advanced Semiconductors		[13:25-13:50] Invited (25') Ho-Young Cha (Hongik Univ. and ChipsK Corp.) 07_1121 III-N Heterojunction Devices for Power Electronics and Extreme Environment Applications		[13:20-13:40] Oral (20') Junhyuk Kim (Soulbrain Co., Ltd.) 02_1005 Development of ITO stop Ag slurry based on structural differences in carboxylic acids					
			[14:00-14:20] Invited (20') Seung hyun Lee (Soulbrain Co., Ltd.) 01_1092 Novel Organic Molecular Inhibitors for Improved Step Coverage in High-Temperature ALD Dielectrics		[14:15-14:40] Invited (25') Hae June Lee (Pusan Nat'l Univ.) 03_1265 K-PIC: A Particle-in-Cell Plasma Simulation for RF Capacitively Coupled Plasmas		[14:15-14:45] Invited (30') Trevor A. Norman (NeXray, Inc.) 06_1197 Spatially Coherent X-ray Imaging Over a Large FOV, High-resolution, Within Seconds		[13:50-14:15] Invited (25') Jeong-Gil Kim (Dong-A Univ.) 07_1143 Possibility of AlN/GaN/AlN Heterostructure for Power Device Applications		[13:40-14:10] Invited (30') Jea-Gun Park (Hanyang Univ.) 02_1080 Surface Modification Mechanism of Carbon-Metal-Carbon Structures for Enhanced Mechanical Polishing Performance in Hard Amorphous Carbon Layer Chemical-Mechanical-Planarization					
			[14:20-14:40] Oral (20') Jieun Oh (Hanyang Univ.) 01_1047 Enhancing Oxide/Nitride Selectivity in Area-Selective ALD via Pyridine-Catalyzed Inhibition						[14:15-14:40] Invited (25') Dongkwang Lee (Semipower Inc.) 07_1149 Power Semiconductor Packaging Using Ceramic Clip		[14:10-14:30] Oral (20') Pil-Su Kim (Hanyang Univ.) 02_1081 Si-Wafer Polishing Rate Enhancing Mechanism Through Accelerating Hydrolysis Reaction at Si-Wafer Surface					
	14:40	- 14:50	Coffee Break (2F Lobby)													
	14:50	- 16:30	TuA2 (Thin Film)		TuB2 (Etching)		TuC2 (MI)		TuD2 (Power)		TuE2 (CMP)					
			Nanoscale Thin Film Deposition II		Sustainable Etch		Advanced Metrology & Inspection, Process Diagnostics & Control, and Yield Management II		Power Devices II		CMP Consumables: Conditioning, Monitoring, and Abrasives					
			[14:50-15:20] Invited (30') Min Hyuk Park (Seoul Nat'l Univ.) 01_1271 Ferroelectric Materials for Low Power Electronic Devices and Computing		[14:50-15:20] Invited (30') Chang-Koo Kim (Ajou Univ.) 03_1124 Low-GWP Cyclic Etching of SiO2 Contact Holes Using Heptafluoropropyl Methyl Ether		[14:50-15:20] Invited (30') Taejong Jo (Samsung Electronics Co., Ltd.) 06_1024 The Future Is Here: Next-Gen Semiconductor Metrology & Inspection		[14:50-15:15] Invited (25') Gyeon Seok (Pusan Nat'l Univ.) 07_1276 Radiation-Hardened Edge Termination Design for SiC Power Devices under Proton		[14:50-15:20] Invited (30') Yongsik Moon (EHWHA Diamond) 02_1175 CMP Pad Conditioning of the Future: Fundamentals, Emerging Technologies, and Development Pathways					
			[15:20-15:40] Invited (20') Ho Jun Kim (Hanyang Univ.) 01_1282 Parametric Dependence of O ₂ (D) Flux and Density in O ₂ /Ar Inductively Coupled Plasmas: Effect of Gas Ratio and Pressure		[15:20-15:35] Oral (15') Daeun Hong (Sungkyunkwan Univ.) 03_1216 Low Global Warming C5F10O/H2O Plasma for Low Temperature Etching of SiO2 and Si3N4		[15:20-15:50] Invited (30') Byoung-Ho Lee (Hitachi Hightech Corp.) 06_1132 The Importance and Role of MI in Semiconductor Devices' 3D Era		[15:15-15:40] Invited (25') Hongki Kim (Power Master Semiconductor) 07_1127 Development Status of SiC MOSFET in Powermaster Semiconductor		[15:20-15:50] Invited (30') Min Ku Kim (Hanyang Univ.) 02_1126 Slurry sensing for CMP processes					
			[15:40-16:00] Oral (20') Yoonsuok Lee (Hanyang Univ.) 01_1224 Gate Metal Engineering for Tailoring Ferroelectric Properties of Hf _{0.5} Zr _{1-x} O ₂ Thin Films		[15:35-15:50] Oral (15') Ho June Chang (Daejeon Univ.) 03_1170 Etching Characteristics of SiO2 Using PF5 + X(C4F6 & C4F8) Plasma Chemistries with ACL Mask		[15:50-16:20] Invited (30') Nahae Park (KLA Corp.) 06_1139 Overlay Metrology for Layer Alignment Accuracy in Device Processing		[15:40-16:05] Invited (25') Sung Mo Koo (EYEQ Lab Inc.) 07_1006 Fabrication of SiC SBD for 6.5kV EdgeTermination Designs		[15:50-16:10] Oral (20') Jae Uk Hur (Soulbrain Co., Ltd.) 02_1020 Synthesis Strategies of Ceria Abrasives for Optimizing Dielectric Chemical Mechanical Planarization Performance					
[16:00-16:20] Oral (20') Hyojun Choi (Seoul Nat'l Univ.) 01_1107 Role of Oxygen Incorporation in Ru Electrodes on Phase Stability and Reliability of Hf _{0.5} Zr _{0.5} O ₂ Ferroelectrics			[15:50-16:05] Oral (15') Inkyoung Cho (Ajou Univ.) 03_1133 Comparative Study of C ₄ F ₆ and CF ₄ for Sustainable Plasma Etching of SiO ₂				[16:05-16:30] Invited (25') Geumchan Hwang (TES) 07_1296 Performance of TES Tunable SiC Epitaxial System "TRION"		[16:10-16:30] Oral (20') Man-Hyup Han (Hanyang Univ.) 02_1086 Fenton Reaction Enhancing Significant Chemical Oxidation for Ag Chemical Mechanical Planarization							
			[16:05-16:20] Oral (15') Seyoung Choi (Sungkyunkwan Univ.) 03_1211 Comparison of Etching Characteristics and Environmental Impact of Fluorocarbon Isomers in High Aspect Ratio (HAR) Etching Processes													
16:30			- 16:40	Break												
16:40	- 17:25	Special Session I (Capri Room, 2F) Why Semiconductor in the AI World? Chairman Chul Joo Hwang (Jussung Engineering Co., Ltd., Korea)														
		Poster Session I (Grand Ballroom 4, 2F)														

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Time		Room A (Capri Room, 2F) WeA1 (Thin Film)		Room B (Grand Ballroom 1, 2F) WeB1 (Etching)		Room C (Grand Ballroom 3, 2F) WeC1 (MI)		Room D (Sidney Room, 2F) WeD1(Litho)		Room E (Sicily Room, 1F) WeE1 (CMP)		Room F (Panorama Room, 16F) WeF1 (PKG)		2F Lobby			
09:00	- 10:40	Nanoscale Thin Film Deposition III		HARC Etch and Plasma Source		Advanced Metrology & Inspection, Process Diagnostics & Control, and Yield Management III		Lithography Process		Nanostructured Materials and Surface Chemistry		Processing for AI Semiconductor Modules					
		[09:00-09:30] Invited (30') Jungho Lee (Lam Research Korea) 01, 1242 Non-Fluorinated Molybdenum Metallization in 3D NAND		[09:00-09:30] Invited (30') Jaehwo Min (Samsung Electronics Co., Ltd.) 03, 1074 Next Generation HARC Etch Technologies Requiring Ultra-High Aspect Ratio, High Selectivity, and Very High Etch Rate for VNAND Device		[09:00-09:30] Invited (30') Joonho You (Nexensor Inc.) 06, 1287 Next-Generation Optical Metrology for Advanced Semiconductor Packaging		[09:00-09:30] Invited (30') Jong-Hwa Baek (Samsung Electronics Co., Ltd.) 04, 1297 A Voyage to the Future : Low & High NA EUV Lithography for Next Generation Logic Devices		[09:00-09:30] Invited (30') Panant Khajornrungsung (Kyushu Inst. of Tech.) 02, 1043 3D Observation Method of Transporting Nano-Particle near a Surface		[09:00-09:45] Plenary (45') Seungbae Park (State Univ. of New York at Binghamton) 05, 1238 Status of AI Packages and its Manufacturing Issues					
		[09:30-10:00] Invited (30') Chang Bong Yeon (Soulbrain Co., Ltd.) 01, 1049 Atomic Layer Deposition of Molybdenum Thin Films: Enhancing Deposition Characteristics and Film Quality with Advanced Deposition Methods		[09:30-09:55] Invited (25') Dongsoo Lee (Lam Research Korea) 03, 1025 3D NAND Dielectric Etch Technology Challenges and Breakthroughs		[09:30-09:50] Invited (20') Hyun-Jung Kim (Nexust Co., Ltd.) 06, 1219 Wafer Fracture Stress Due to Edge Cracks and Crack Inspection Method		[09:30-10:00] Invited (30') Chan-Uk Jeon (Tekscend Photomask Corp.) 04, 1248 EUV Mask Technology: Evolution and Future Outlook		[09:30-10:00] Invited (30') Seho Sun (Yeungnam Univ.) 02, 1104 Oxidation Behavior of Co Metal for CMP Slurry Design		[09:45-10:15] Invited (30') Jaehwa Park (Samsung Electronics Co., Ltd.) 05, 1015 Challenges of hybrid Cu bonding for high bandwidth memory					
		[10:00-10:20] Oral (20') Taewon Hwang (Hanyang Univ.) 01, 1240 Interlayer Engineering for Reliable Hybrid Channel NAND Flash		[09:55-10:10] Oral (15') Jangyoun Park (Hanyang Univ.) 03, 1260 Advanced Etch Technology Using Ultra-Low Electron Temperature Plasma		[09:50-10:10] Invited (20') Janghwan Kim (SEMES) 06, 1172 Development of designing motion profile with advanced jerk for vibration suppression and high wafer throughput		[10:00-10:20] Invited (20') Youngjue Um (Applied Materials Korea) 04, 1134 SEM Overlay Target Optimization for NZO Improvement by Measuring Device Like Target Using E-Beam Simulation		[10:00-10:30] Invited (30') Tae-Dong Kim (Hannam Univ.) 02, 1190 Surface Modified Nanoparticle Abrasives for Efficient CMP Process		[10:15-10:35] Invited (20') Kwang-Seong Choi (ETRI) 05, 1146 Cu Post Bonding Technology, Based on Laser-Assisted Bonding with Compression (LABC) and Fume-Free Laser Solder Paste for Advanced 3D Interconnections					
		[10:20-10:40] Oral (20') Hyong-Seo Cho (Pusan Nat'l Univ.) 01, 1206 Atomic Layer Deposition of Binary Alloy Thin Films for Advanced Interconnects		[10:10-10:25] Oral (15') Sung-Hyeon Jung (Pusan Nat'l Univ.) 03, 1229 Investigation of Toroidal Slot Antennas for Microwave Heating and Plasma Generation		[10:10-10:30] Invited (20') Jihye Seo (KETI) 06, XXXXX AI-Enhanced Metrology Integration Framework for Atomic Layer Deposition Systems		[10:20-10:40] Invited (20') Prashant Purwar (S&S TECH.) 04, 1163 Development of EUV Pellicles supporting High EUV Power									
				[10:25-10:40] Oral (15') Seong Eun Oh (Pusan Nat'l Univ.) 03, 1227 Investigation of Plasma Density Distribution and Electron Heating Mechanisms in Capacitively Coupled Plasma													
		Coffee Break (2F Lobby)															
		Plenary Session II (Capri Room, 2F) Atomic Layer Processing: Status and Perspectives in Advancing Semiconductor Manufacturing Prof. Fred Roozboom (Univ. of Twente, The Netherlands)															
		Lunch															
		Plenary Session III (Capri Room, 2F) Forward-Looking Roadmap View to Enable Heterogeneous Integration in the Next 10 Years Dr. Gamal Refai-Ahmed (AMD, USA)															
Coffee Break (2F Lobby)																	
Nov. 12 (Wed.)	14:10 - 15:50	WeA2 (Thin Film)		WeB2 (Etching)		WeC2 (MI)		WeD2 (Litho)		WeE2 (CMP)		WeF2 (PKG)					
		Nanoscale Thin Film Deposition IV		Advanced Etch II		Advanced Metrology & Inspection, Process Diagnostics & Control, and Yield Management IV		Material & Process		AI-Driven CMP and Emerging Process Strategies		Materials and Processing for Advanced Packaging					
		[14:10-14:40] Invited (30') Kibum Kang (KAIST and TDS Innovation Co., Ltd.) 01, 1217 2D Semiconductor Crystal Layer Deposition Toward Fab-Line Compatibility		[14:10-14:40] Invited (30') Jae Li (imec) 03, 1029 Advanced Patterning of Metal Oxide Semiconductors for Memory Applications: IBE, RIE, and ALE Approaches		[14:10-14:40] Invited (30') Hagyoung Kihm (KRISS and Univ. of Science and Tech.) 06, 1100 Development of DUV & EUV Optics for Semiconductor Inspection		[14:10-14:40] Invited (30') Ben Eynon (Lam Research) 04, 1137 Advanced Patterning: Tackling the Big Problems in Printing Small Features		[14:10-14:40] Invited (30') Jihoon Seo (Clarkson Univ.) 02, 1002 Machine Learning-Based Strategic Corrosion Management for Targeted Inhibitor Implementation in CMP Applications		[14:10-14:30] Invited (20') Bo Yeon Lee (ENF Technology Co., Ltd.) 05, 1147 Development of an Eco-Friendly Photoresist Striper for Advanced Semiconductor Packaging Processes					
		[14:40-15:10] Invited (30') Kwangmin Park (Samsung Electronics Co., Ltd.) 01, 1120 Innovations in Deposition Technologies at the Onset of 3D Devices		[14:40-15:05] Invited (25') Taeho Shin (ICD Ltd.) 03, 1293 r-Wave Resonance-Enhanced ICP Etcher for High-Precision Dry Etching		[14:40-15:10] Invited (30') In-Yong Park (KRISS) 06, 1072 Development of a high-brightness LaB6 electron source and REELS (Reflection Electron Energy Loss Spectroscopy)		[14:40-15:10] Invited (30') Ethan C & Lee (SDI) 04, XXXXX Understanding of Novel Patterning Materials Approaching to Next Gen Lithography		[14:40-15:00] Oral (20') Chang-Jin Lee (Hanyang Univ.) 02, 1156 Mechanism on Formation of Selective Hindrance Layer on Si-Film Enhancing Etch-Rate Selectivity of Si1-xGe to Si-film		[14:30-14:50] Invited (20') Seok-Joon Lee (ITI) 05, 1284 FINE Cut and FINE Forming (TGV) of HBM4, Glass Core and Interposer					
		[15:10-15:30] Invited (20') Van Quang Nguyen (ISAC Research Inc.) 01, 1292 ALD/ALE for the Advanced Technology		[15:05-15:20] Oral (15') Somyeong Shin (Wonik IPS) 03, 1019 Crystalline Ultra-Thin High-K Films Enabled by Fluorine-Radical-Based Atomic Layer Etching		[15:10-15:40] Invited (20') A.D. Giddings (Infinitesima Ltd.) 06, 1180 Applications of High-Speed AFM for Advanced Packaging, EUV Lithography and CMP		[15:10-15:30] Invited (20') Hyunjun Lee (Dongjin Semichem Co., Ltd.) 04, 1010 EUV vs. E-Beam Photoresists : Cross-Platform Analysis and Optimization Strategies		[15:00-15:20] Oral (20') Hyun Jun Ryu (KAIST) 02, 1195 Design Rules for Micro-Structured Chemical Mechanical Polishing Pads to Enhance MRR		[14:50-15:10] Invited (20') Jamin Kwon (UNIST) 05, 1164 Glass Package Substrates for High-Performance Chiplet Systems					
		[15:30-15:50] Oral (20') Myung-Jin Jung (Pusan Nat'l Univ.) 01, 1205 Development of ALD-Based Initial Surface Control Technology for Sub-10 nm Continuous Ir Films in Advanced Interconnect Metallization		[15:20-15:35] Oral (15') Chang-Min Lim (Hanyang Univ.) 03, 1264 Study on SiO2 Atomic Scale Etching Using Selective Control of Ar Metastable Atom Generation				[15:30-15:50] Invited (20') Byeongseon Kim (SEMES) 04, 1204 EUV mask local CD correction system development via laser irradiation		[15:10-15:40] Invited (20') Arunkumar G V (IBM Research) 02, 1284 Post CMP Cleaning Strategies for Amorphous Silicon in Wafer Bonding Processes (Pre-recorded video presentation)		[15:10-15:30] Invited (20') Ah-Young Park (Univ. of Seoul) 05, 1167 Bonding Strength and Fracture Behavior in Patterned Cu-SiO2 Hybrid Interfaces					
				[15:35-15:50] Oral (15') Min-seok Kim (Hanyang Univ.) 03, 1258 Ultra-Low Electron Temperature Plasma for Atomic-Scale Semiconductor Processing								[15:30-15:50] Invited (20') Honggun So (Hanyang Univ.) 05, 1200 Development of Optical Interconnection Core Technologies for Implementation and Reliability Enhancement of Co-Packaged Optics					
		Break															
		16:05	- 17:45	WeA3 (Thin Film)						WeD3 (Litho)		WeE3 (CMP)		WeF3 (PKG)			
				Nanoscale Thin Film Deposition V						Computational Lithography & Mask		Reliability and Integration Challenges in Advanced Packaging		Advanced Designs, Processing, and Reliability			
[16:05-16:35] Invited (30') Jin-Seong Park (Hanyang Univ.) 01, 1220 Atomically Ordered ALD Oxide Semiconductors for High-Mobility, Low-Temperature Logic and BEOL Integration								[16:05-16:35] Invited (30') Jeonghoon Lee (imec) 04, 1067 EUV and High-NA EUV Patterning for DRAM Scaling: Challenges and Opportunities		[16:05-16:25] Invited (20') Jae-Dong Lee (KCTech) 02, 1079 Emerging CMP Solutions for Next Generation Advanced Packaging Process		[16:05-16:25] Invited (20') Haek-Sung Kim (Hanyang Univ.) 05, 1178 Advanced Flip-chip Bonding Process via Intense Pulsed Light Irradiation: From Single-Chip to Multi-Chip Stacking Applications					
[16:35-17:05] Invited (30') Young-Rae Cho (Pusan Nat'l Univ.) 01, 1113 High-Performance Transparent Conducting Oxides via Nano-Textured Substrates and Ag Interlayer								[16:35-16:55] Invited (20') Su-Mi Hur (Chonnam Nat'l Univ.) 04, 1201 From Molecular Simulations to Artificial Intelligence for Advanced Patterning Materials Designs		[16:25-16:55] Invited (30') Young-Hoo Kim (Samsung Electronics Co., Ltd.) 02, 1203 Wet Cleaning Process Issues with Memory Device Scaling		[16:25-16:45] Invited (20') Junyoung Park (Kyung Hee Univ.) 05, 1150 Statistical Signal Integrity Analysis with Nonideal Buffer of DFE for Chiplet					
[17:05-17:25] Oral (20') Mingji Kim (Ewha Womans Univ.) 01, 1090 Theoretical Study of Radical Decomposition of Low GWP Alternative Gases and Fluorocarbon Film Formation on SiO2								[16:55-17:10] Oral (15') Seong-Ji Ha (UNIST) 04, 1279 Pioneering Carboxylated Zirconium Oxide Cluster Resist for Precision Nanoscale Patterning		[16:55-17:15] Oral (20') Ganggu Lee (Hanyang Univ.) 02, 1061 Mitigating Galvanic Corrosion in Cu/Ru Interfaces through Selective Surface Interactions for Ru Barrier Metal CMP		[16:45-17:05] Invited (20') Tae-In Lee (KITECH) 05, 1213 Visualized Thermo-Mechanical Failure Mechanisms in Advanced Semiconductor Package Interconnects via Microscale Deformation Analysis					
[17:25-17:45] Oral (20') Gyeong Min Jeong (Hanyang Univ.) 01, 1241 Work Function Modulation of Chlorine-Free TiAlN Films through Controlled Al Incorporation by Thermal ALD								[17:10-17:30] Invited (20') Rieko Nishimura (NuFlare Technology, Inc.) 04, 1155 MBM-4000: electron multi-beam mask writer for advanced mask making		[17:15-17:35] Oral (20') Min-Uk Jeon (Hanyang Univ.) 02, 1082 Si-Wafer Polishing Rate Enhancement by Amine Functional Group as Hydrolysis Reaction Accelerator		[17:05-17:25] Oral (20') Hulseon Jung (UNIST) 05, 1148 3D-Printed Organic Interposer with Embedded Fan-Out Interconnects Enabled by Additive Manufacturing					
								[17:30-17:45] Oral (15') Bluen Tu (Gudeng Precision Industry Co., Ltd.) 04, 1007 Contamination Control Strategies in Next-Generation EUV Pods				[17:05-17:25] Oral (20') Jonghee Park (Myongji Univ.) 05, 1091 Predictive Analysis of Signal Transmission in Pogo Pin-Load Board					
Break																	
Banquet (Grand Ballroom, 2F)																	
17:45	- 18:30																
18:30	- 20:30																

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Time		Room A (Capri Room, 2F)	Room B (Grand Ballroom 1, 2F)	Room C (Grand Ballroom 3, 2F)	Room D (Sidney Room, 2F)	Room E (Sicily Room, 1F)	Room F (Panorama Room, 16F)	2F Lobby
09:00	- 10:40	ThA1 (Thin Film) Nanoscale Thin Film Deposition VI	ThB1 (Etching) Atomic Scale Etching	ThC1 (MI) Advanced Metrology & Inspection, Process diagnostics & control, and Yield management V	ThD1 (Litho) Process & Mask	ThE1 (CMP) CMP for Heterogeneous Integration and New Materials	ThF1 (ESG) Carbon Neutrality in Semiconductor Industry I	
		[09:00-09:30] Invited (30') Changhwan Choi (Hanyang Univ.) 01_1278 Multi-Threshold Voltage (Vth) Engineering using ALD TaN-based HKMG Gate Stack for Advanced Logic and DRAM Devices	[09:00-09:30] Invited (30') Yeonghun Han (SK hynix Inc.) 03_1026 Challenges and Approaches of HARC Patterning for AI Memory Devices	[09:00-09:20] Invited (20') Won Jun Jang (Sungkyunkwan Univ.) 06_1234 High-/Low-Pressure Swing Annealing for Uniform Curing of High-Aspect-Ratio TiN Electrodes in DRAM Capacitors	[09:00-09:45] Plenary (45') Kurt Ronse (imec) 04_1221 Advances in Lithography and Patterning for Logic and DRAM	[09:00-09:45] Plenary (45') K. Mikhaylichenko (Applied Materials) 02_1280 Role of CMP in Enabling New Materials for Heterogeneous Integration	[09:00-09:45] Plenary (45') Shih-Nan Hsiao (Nagoya Univ.) 08_1040 Advances in Etching Technologies for Next Generation Semiconductor Manufacturing Towards Sustainable Development Goals	
		[09:30-09:50] Invited (20') Seul-Gi Kim (KETI) 01_1253 Ultrathin Freestanding Ceramic Membranes for Yield Enhancement in Extreme Ultraviolet Lithography	[09:30-10:00] Invited (30') Taewook Nam (Sejong Univ.) 03_1041 Conversion-Free Atomic Layer Etching (ALE) of ZnO: Effect of Precursor on the ALE Process	[09:30-09:50] Invited (30') Ali Ozhan Altun (UNISERS AG) 06_1122 A New Approach to High-Throughput Defect Review of Unpatterned Wafers for Leading Edge Nodes	[09:45-10:15] Invited (30') Heeyoul Lim (SK hynix Inc.) 04_1062 EUV ECO Equal Maximizing Productivity	[09:45-10:15] Invited (30') Tae-seup Song (Hanyang Univ.) 02_1060 Oxide Layer Engineering for Cobalt CMP	[09:45-10:10] Invited (25') Jeongssoon Lee (KRISS) 08_1035 Estimating GWP Based on a Comprehensive Analysis of R134a: A Method for Accurate Monitoring of Greenhouse Gas Emissions	
		[09:50-10:10] Invited (20') Jinwoo Kim (HEX A.I. Labs Inc.) 01_1236 Transforming Semiconductor Manufacturing with AI: Changing the Paradigm of Next-Generation Semiconductor Processes	[10:00-10:25] Invited (25') Sangheon Lee (Ewha Womans Univ.) 03_1184 Ab Initio Analysis of Atomistic Diffusion of Halogen Species at the Etching Front	[09:50-10:20] Invited (30') Hagyeoul Bae (Jeonbuk Nat'l Univ.) 06_1291 Advanced Technique for Analysis of Defect States in Future 3D Semiconductor Devices	[10:15-10:35] Invited (20') Hyun-Dam Jeong (Chonnam Nat'l Univ.) 04_1177 Recent Progress in Tin-Based Inorganic Molecular Resistors for EUV Lithography and Proposal of Cyclic Siloxane Resist for Blue-X Lithography	[10:15-10:45] Invited (30') Haeeri Kim (SK hynix Inc.) 02_1202 Hybrid Bonding Challenges and Advanced CMP Strategies for Yield Enhancement	[10:10-10:35] Invited (25') Chulhwan Choi (Samsung Electronics Co., Ltd.) 08_1054 Toward Sustainability: Green CVD Approaches for Decarbonizing Semiconductor Fabs	
		[10:10-10:30] Oral (20') Jun-Dar Huang (Nat'l Chiayi Univ.) 01_1201 NiO/Ag/NiO Transparent Conducting Electrode for NiO Based Photodetectors	[10:25-10:40] Oral (15') Sanghyun Jo (Hanyang Univ.) 03_1283 Investigation of Wafer Edge Tilting in Capacitively Coupled Plasmas via IEADF-Driven Monte Carlo Feature-Scale Simulation		[10:35-10:50] Invited (15') Donghyup Kim (Chonnam Nat'l Univ.) 04_1210 Cartridge-Based Van Der Waals Printing for Versatile Device Integration			
10:40	- 10:50	Coffee Break (2F Lobby)						
Nov. 13 (Thu.)	10:50 - 12:30	ThA2 (Thin Film) Nanoscale Thin Film Deposition VII	ThB2 (Etching) Etch Process Monitoring	ThC2 (MI) Advanced Metrology & Inspection, Process diagnostics & control, and Yield management VI	ThD2 (Litho) Alternative Lithography	ThE2 (CMP) Next-Generation Slurries and Pad Technologies	ThF2 (ESG) Carbon Neutrality in Semiconductor Industry II	Registration & Exhibition
		[10:50-11:20] Invited (30') Woojin Jeon (Kyung Hee Univ.) 01_1244 Atomic Layer Deposition Process Development of Molybdenum Dioxide for the DRAM Capacitor Electrode Applications	[10:50-11:20] Invited (30') Kyoungnam Kim (Daejeon Univ.) 03_1135 Development of an Endpoint Evaluation Sensor to Enhance Uniformity in Plasma Chamber Cleaning	[10:50-11:20] Invited (30') Seolhye Park (Samsung Display Co., Ltd.) 06_1114 Data-Driven Plasma Science-based Plasma Etching Process Design in OLED and Semiconductor Mass Productions Referring to PI-VM	[10:50-11:10] Invited (20') Minah Seo (Sogang Univ.) 04_1140 Large Scaled Metasurface Design and Fabrication for Terahertz Electromagnetic Wave Modulation and Their Applications	[10:50-11:20] Invited (30') Ungyu Paik (Hanyang Univ.) 02_1022 Molybdenum CMP: Aspects of Thermodynamics and Kinetics	[10:50-11:15] Invited (25') Wontae Noh (Wonik IPS) 08_1065 Development of NF3 Alternative Gas for Global Warming Potential Reduction	
		[11:20-11:40] Invited (20') Woo-Jae Lee (Pukyong Nat'l Univ.) 01_1214 Optimization of Atomic Layer Deposition Chemistry Toward Advanced Semiconductor Applications	[11:20-11:35] Oral (15') Zimeng Wang (Eindhoven Univ. of Tech.) 03_1013 Endpoint Detection of Plasma Etching in Small Open Area based on Feature Extraction and Trend Identification	[11:20-11:50] Invited (30') Dae-Woong Kim (KIMM) 06_1116 Advances in plasma diagnostics for process chamber monitoring and characterization: Microwave diagnostics	[11:20-11:30] Invited (20') Min Seok Jang (KAIST) 04_1123 Dynamic IR Beam Steering and Switching with Active Metasurfaces	[11:20-11:50] Invited (30') Ja-tung Koo (Dupont) 02_1016 New Pad for high rate and longer life in W bulk CMP	[11:15-11:40] Invited (25') Yongjin Kim (ECO ENERGEN Co., Ltd.) 08_1162 Improvement of PFC Gas Treatment Technology for Etching Using Catalysts and Its Additional Effects	
		[11:40-12:00] Invited (20') Seong-Min Jeong (KICET) 01_1285 Reactor-Scale Modeling and AI-Surrogate Approaches for Thin Film and Bulk Crystal Growth: Oxide ALD, Diamond MPCVD and SiC PVT	[11:35-11:50] Oral (15') Seonghyeon Seo (Chungnam Nat'l Univ.) 03_1023 Quantitative Analysis of Radical Species in a Plasma Chamber Using RGA-Based Global Modeling	[11:50-12:10] Oral (20') Jun-Hyung Park (Korea Aerospace Univ.) 06_1261 Photon Momentum Induced Particle Extraction in the Low-Pressure Plasma	[11:30-11:50] Invited (20') Soo Jin Kim (Korea Univ.) 04_1128 Nanopatterned Surfaces for Advanced Manipulation of Light	[11:50-12:10] Invited (20') Sanghyun Ryu (Dongjin Semichem Co., Ltd.) 02_1076 A Novel CMP Slurry Systems for Next-Generation Semiconductor Fabrication	[11:40-12:05] Invited (25') Seung Han Kwon (NURI PLAN Co., Ltd.) 08_1174 Case Study on the Demonstration of a White Plume Reduction Device(K-Industry)	
		[12:00-12:20] Oral (20') Jisu Park (Hanyang Univ.) 01_1218 Improved thermal Stability and Retention in Carbon-Doped Ge2Sb2Te5-Based Phase-Change Random Access Memory	[12:05-12:05] Oral (15') Kwan Jae Lee (Myongji Univ.) 03_1228 On-Wafer Type Wireless Temperature Sensor for Cryogenic Etch Temperature Monitoring	[12:10-12:30] Oral (20') Inki Kim (Sungkyunkwan Univ. and KRISS) 06_1262 Development of Microwave Patch Antenna Sensor for Plasma Process Monitoring	[12:10-12:10] Invited (20') Gwang-Seok Chae (Korea Aerospace Univ. and KRISS) 04_1073 Scalable Nanomanufacturing for Optical Metasurfaces	[12:10-12:30] Invited (20') Nandan Baradanahalli Kenchappa (Applied Materials) 02_1295 CMP: Enabling Advanced Packaging for the AI Era (Pre-recorded video presentation)	[12:05-12:25] Oral (20') Sumin Park (Sungkyunkwan Univ.) 08_1215 Low Temperature Etching of SiO2 and Si3N4 Using Low Global Warming C3F6, C3HF5, and C3H2F4	
12:30	- 14:00	Lunch						
14:00	- 14:45	Special Session II (Capri Room, 2F) Memory Technology Trends and Outlook: DRAM, NAND, Emerging Memory Dr. Jeongdong Choe (Technights, Canada)						
14:45	- 15:00	Coffee Break (2F Lobby)						
15:00	- 15:45	Plenary Session IV (Capri Room, 2F) The Planarization Technology Innovations in the Era of 3D ICs Dr. Bo Un Yoon (Samsung Electronics Co., Ltd., Korea)						
15:45	- 15:55	Coffee Break (2F Lobby)						
15:55	- 16:45	Poster Session II (Grand Ballroom 4, 2F)						
16:45	- 17:00	Break						
17:00	- 17:30	Closing Ceremony & Award Ceremony (Capri Room, 2F)						
Nov. 14 (Fri.)	Time	Room A (Capri Room, 2F)	Room B (Grand Ballroom 1, 2F)	Room C (Grand Ballroom 3, 2F)	Room D (Sidney Room, 2F)	Room E (Sicily Room, 1F)	Room F (Panorama Room, 16F)	2F Lobby
	08:30-12:00	Optional Tour						
	08:30-17:30							

Topic	Session	How to See the Session Codes			
Day of Week	Room	Session No.	Presentation No.	Presentation Code	
Tuesday	Tu	A	1	1	TuA1-1
Wednesday	We	B	2	2	WeB2-2
Thursday	Th	C	3	3	ThC3-3
1. Nanoscale Thin Film Deposition		TuA1, TuA2, WeA1, WeA2, WeA3, ThA1, ThA2			
2. Advanced CMP & Cleaning		TuE1, TuE2, WeE1, WeE2, WeE3, ThE1, ThE2			
3. Advanced Etching Technology		TuB1, TuB2, WeB1, WeB2, ThB1, ThB2			
4. Advanced Lithography + Patterning		WeD1, WeD2, WeD3, ThD1, ThD2			
5. Advanced Packaging Technology		TuF1, WeF1, WeF2, WeF3			
6. Advanced Metrology & Inspection, Process Diagnostics & Control, and Yield Management		TuC1, TuC2, WeC1, WeC2, ThC1, ThC2			
7. Power Semiconductor Devices and Manufacturing Process		TuD1, TuD2			
8. Carbon Neutrality in Semiconductor Industry		ThF1, ThF2			