

Nov. 19 (Sun.)	Time		Room A (Capri Room, 2F)	Room B (Grand Ballroom 1, 2F)	Room C (Grand Ballroom 2, 2F)	Room D (Grand Ballroom 3, 2F)	Room E (Sidney Room, 2F)	Room F (Sicily Room, 1F)	2F Lobby
	15:00	18:00	Tutorial 1					Tutorial 2	
			Session Chair: Jeonglim Nam (Hanyang Univ.)					Session Chair: Se Hun Kwon (Pusan Nat'l Univ.)	
			Jeongdong Choe (Technights) Memory Process and Materials Technology: DRAM, NAND, Emerging Memory					Prof. Il-Kwon Oh (Ajou Univ.) Atomic Layer Deposition and Area-Selective Deposition in Semiconductor Process	
18:30	20:00	Welcome Reception (Sicily Room, 1F)							

Nov. 20 (Mon.)	Time		Room A (Capri Room, 2F)	Room B (Grand Ballroom 1, 2F)	Room C (Grand Ballroom 2, 2F)	Room D (Grand Ballroom 3, 2F)	Room E (Sidney Room, 2F)	Room F (Sicily Room, 1F)	2F Lobby		
	10:00	10:45	Plenary Session I (Capri Room, 2F) "Memory Technology Innovation for the New AI Era" SVP. Ilsup Jin (SK hynix, Korea)								
			Coffee Break (2F Lobby)								
			Opening Ceremony (Grand Ballroom 1, 2, 3, 2F)								
10:45	11:00	Lunch									
11:00	11:30	Lunch									
13:00	14:00	13:00	MA1 Advanced Atomic Scale Thin Films I	MB1 Power Device I	MC1 Advanced Ceria-abrasive based CMP	MD1 Novel Etch Technology	ME1 EUV Lithography I	MF1 Frontier Metrology and Modeling I	Exhibition		
		Session Chair: Hyeontag Jeon (Hanyang Univ.)	Session Chair: Ogyun Seok (Kumoh Nat'l Inst. of Tech.)	Session Chair: Tae Dong Kim (Hannam Univ.)	Session Chair: Gottlieb S. Oehrlein (Univ. of Maryland)	Session Chair: Sangsul Lee (POSTECH)	Session Chair: Tae-Hun Shim (Hanyang Univ.)				
		[13:00-13:30] Invited (30') Yukihiro Shimogaki (The Univ. of Tokyo) 01_1269 Development of Material Systems and Processes for High-Reliable ULSI-Cu Interconnect	[13:00-13:20] Invited (20') Kevin Kyoheon Cho (Resonac) 07_1010 Low Turn-On Voltage Silicon Carbide Diode	[13:00-13:20] Invited B (20') Satoyuki Nomura (Resonac) 02_1026 Polishing Mechanism on Ceria/SiO ₂ Interface	[13:00-13:20] Oral (20') Jwon Jung (Hanyang Univ.) 03_1253 Low-Energy Electron Beam Assisted Etching in Inductively Coupled Plasma	[13:00-13:30] Invited (30') Takeo Watanabe (Univ. of Hyogo) 04_1298 EUV R&D Activity at New SUBARU	[13:00-13:45] Plenary (45') Victor M. Blanco Carballo (imec) Patterning and Metrology Challenges in EUV Lithography				
		[13:30-14:00] Invited (30') Chunhyung Chung (Samsung Electronics Co., Ltd.) 01_1153 The Advancements of Atomic Scale Interface Engineering for High Quality Dielectric Thin Films	[13:20-13:40] Invited (20') Han Seok Seo (RIST) 07_1097 4H-SiC Epitaxial Growth Technology for Large Area Substrate	[13:20-13:40] Oral (20') Pii-Su Kim (Hanyang Univ.) 02_1184 Remarkable SiO ₂ -Film Polishing-Rate Enhancement Using Wet-Ceria-Abrasives Based Chemical-Mechanical-Planarization Slurry and Radical Oxidation	[13:20-13:40] Oral (20') MunPyo Hong (Korea Univ.) 03_1179 Reactive Proton Assisted Etching for Cu and Ni Alloy Dry Etching	[13:30-14:00] Invited (30') Sangsul Lee (POSTECH) 04_1173 Synchrotron Based Actinic EUV Metrology and Inspection Technologies	[13:45-14:15] Invited (30') Seong Oh Kim (Park Systems) 06_1004 Advancing Semiconductor Research with AFM: High-Resolution Imaging, Precise Measurements, and Failure Analysis				
		[14:00-14:20] Invited (20') Hao Yan Bui (Phenikaa Univ.) Spontaneous Surface Reactions in Atomic Layer Deposition of Platinum Using Atomic Hydrogen as a Reactant	[13:40-14:00] Oral (20') Hyowon Yoon (Kumoh Nat'l Inst. of Tech.) 07_1092 Design of A 1.2 kV SiC MOSFET with Buried Oxide for Improved Gate Charge Characteristics	[13:40-14:00] Oral (20') Sungmin Kim (Hanyang Univ.) 02_1262 Ce ³⁺ Enriched Ceria Nanoparticles for Silicate Adsorption	[13:40-14:00] Oral (20') Sang-Woo Kim (Pusan Nat'l Univ.) 03_1343 Characteristics of Segmented-Dielectric Window Inductively Coupled Plasma	[14:00-14:30] Invited 3(30') Jebum Yoon (ESOL Inc) 04_1133 Development of High-Efficiency EUV Zoneplate for Advanced EUV Lithography Equipment	[14:15-14:45] Invited (30') Jun Ho Lee (Kongju Nat'l Univ.) 06_1354 Adaptive Optics for Optical Metrology & Inspection				
		[14:20-14:40] Invited (20') Woo-Jae Lee (Pukyong Nat'l Univ.) 01_1151 Pt Thin Films by Atomic Layer Deposition Using Dimethyl((N,N-Dimethyl-3-Buten-1-Amine-N) Platinum and O ₂ Reactant towards the Semiconductor Application	[14:00-14:45] Plenary (45') Hyeimin Kang (KENTECH) On the Origin of Gate Oscillation of Power Devices	[14:00-14:20] Oral (20') Jeong Ho Lee (Soulbrain) 02_1007 Nano Cerium Oxide Slurry for Scratch Free with High Selectivity in Various Film	[14:00-14:30] Invited (30') R. Dussart (GREMI Univ. of Orleans CNRS) 03_1038 Cryogenic Etching Processes Applied to the Next Generation of Nanoelectronic Technologies						
				[14:20-14:40] Oral (20') Min-Uk Jeon (Hanyang Univ.) 02_1183 Super-Fine CeO ₂ Abrasives Having 4-nm in Diameter Synthesized via Oxidation Reaction between Trivalent Cerium and H ₂ O ₂							
				Coffee Break (2F Lobby)							
		14:40	14:55	Coffee Break (2F Lobby)							
		14:55	16:35	14:55	MA2 Advanced Atomic Scale Thin Films II	MB2 Power Device II	MC2 CMP Challenges for the Next Generation Devices	MD2 Plasma-Surface Interaction		ME2 EUV lithography II	MF2 Frontier Metrology and Modeling II
Session Chair: Se Hun Kwon (Pusan Nat'l Univ.)	Session Chair: Hojun Lee (Pusan Nat'l Univ.)			Session Chair: Jihoon Seo (Clarkson Univ.)	Session Chair: Remi Dussart (GREMI University of Orleans CNRS)	Session Chair: Changhyun Cho (ex. SK hynix, Samsung Electronics Co., Ltd.)	Session Chair: Jun Ho Lee (Kongju Nat'l Univ.)				
[14:55-15:40] Plenary (45') Erwin Kessels (Eindhoven Univ. of Tech.) Elevating Atomic Layer Deposition to the Angstrom Era	[14:55-15:15] Invited (20') Hyungseok Lee (ETRI) 07_1016 GaN Power Devices for High Temperature and High Voltage Applications			[14:55-15:25] Invited (30') Hoyoung Kim (Samsung Electronics Co., Ltd.) 02_1292 CMP Challenges and Opportunities for the Next Generation Devices	[14:55-15:15] Oral (20') Taegun Park (Yonsei Univ.) 03_1124 Improvement of Mass Transfer Characteristics in Si ₃ N ₄ Etching in H ₂ PO ₄ Solution for 3D NAND Manufacturing	[14:55-15:25] Invited (30') ChangMin Park (Samsung Electronics Co., Ltd.) 04_1033 High NA EUV: Eco Systems & Requirements	[14:55-15:25] Invited (30') Younghoon Sohn (Samsung Electronics Co., Ltd.) 06_1176 3D Gray Level Index for Pattern Depth Monitoring Using SEM Image				
[15:40-16:00] Invited (20') Myung Mo Sung (Hanyang Univ.) 01_1198 Hybrid Multilayer EUV Photoresist for 1.5 Technology Node	[15:15-15:35] Oral (20') Tai Hee Eun (RIST) 07_1103 A Study on 4H-SiC Single Crystal Growth Using Recycled Powders			[15:25-15:45] Oral (20') Muskan Dogra (Hanyang Univ.) 02_1140 Effect of Organic Amine on Ceria Contamination for Nitride Surface During STI CMP	[15:15-15:35] Oral (20') Se Youn Moon (Jeonbuk Nat'l Univ.) 03_1352 Plasma Process Switching from Deposition to Etching in Ar/CF ₄ Plasma by N ₂ Addition	[15:25-15:55] Invited (30') Changhyun Cho (ex. SK hynix, Samsung Electronics Co., Ltd.) 04_1284 EUV Application for Memory Devices	[15:25-15:55] Invited (30') Byoung-Ho Lee (Hitachi Hightech) 06_1379 MI's Direction for Next Journey				
[16:00-16:20] Invited (20') Jin Seong Park (Hanyang Univ.) 01_1285 Atomic Layer Deposition for Nanoscale Oxide Semiconductor Field Effect Transistors: Four Values and Outlook	[15:35-15:55] Oral (20') Myeong-Hun Jo (Seoul Nat'l Univ. of Science and Tech.) 07_1289 3D-Printed Micro-Intersection of Thin/Thick Films for Ultrafast Charge Transport			[15:45-16:05] Oral (20') Youngwook Park (KITECH) 02_1108 Effect of Pad Topography with Engineered Surfaces on Removal Rate in CMP	[15:35-15:55] Oral (20') Hee Tae Kwon (Kwangwoon Univ.) 03_1387 Cryogenic Aspect Ratio Etching of SiO ₂ at CF ₄ /H ₂ /Ar Plasma	[15:55-16:15] Oral (20') Jaeyeong Kim (ESOL Inc) 04_1129 Cleaning of Contaminated EUV Optics Using 172 nm Radiation	[15:55-16:25] Invited (30') Mohit Kumar (Ajou Univ.) 06_1035 Local Probe Microscopy: A Potential Tool for Material Characterization at Nanoscale				
[16:20-16:40] Oral (20') Jinsik Kim (UP Chemical) 01_1076 High Throughput SiO ₂ Thin Films Using Novel Si Precursors	[15:55-16:15] Oral (20') Yeongeun Park (Kumoh Nat'l Inst. of Tech.) 07_1091 Design Optimization of 1.2 kV SiC Trench MOSFETs			[16:05-16:35] Invited (30') Tae Dong Kim (Hannam Univ.) 02_1196 Surface Modified Nanoparticles Abrasives for Efficient CMP Process	[15:55-16:40] Plenary (45') Gottlieb S. Oehrlein (Univ. of Maryland) Low Temperature Plasma-Materials Interactions for Plasma Etching						
				[16:15-16:35] Oral (20') Jeehun Jeong (Pusan Nat'l Univ.) 07_1071 Enhancement of Low Specific On-Resistance and Reduced Switching Loss in 4H-SiC Single-Channel MOSFET with Extend P-Layer							
				Break							
16:35	16:50			Break							
16:50	17:40			Poster Session I (Grand Ballroom 4, 2F)							

Time		Room A (Capri Room, 2F)	Room B (Grand Ballroom 1, 2F)	Room C (Grand Ballroom 2, 2F)	Room D (Grand Ballroom 3, 2F)	Room E (Sidney Room, 2F)	Room F (Sicily Room, 1F)	2F Lobby	
		TA1	TB1	TC1	TD1	TE1	TF1		
		Advanced Atomic Scale Thin Films III	Heterogeneous Integration Device and Packaging	Challenges and Opportunities in CMP	Plasma Characterization	DTCO and Computational Lithography	Frontier Metrology and Modeling III		
		Session Chair: Woo Hee Kim (Hanyang Univ.)	Session Chair: Gu-Sung Kim (Kangnam Univ.)	Session Chair: Tae Dong Kim (Hannam Univ.)	Session Chair: Hae June Lee (Pusan Nat'l Univ.)	Session Chair: Ryoung han Kim (imec)	Session Chair: Mohit Kumar (Ajou Univ.)		
08:30	10:10	[08:30-08:50] Invited (20') Se Hun Kwon (Pusan Nat'l Univ.) 01_1370 Effect of Surface Pre-Treatment on the Initial Growth Stages of ALD-Ir Thin Films	[08:30-08:50] Invited (20') - Pre-recorded Video Kitty Pearsall (IEEE EPS) Supply Chain Trends, Challenges, and Disruptions in Semiconductor Packaging	[08:40-09:00] Oral (20') Sumit Kumar (Hanyang Univ.) 02_1044 Effect of Colloidal Silica and Molybdenum Ions on PVA Brush Loading during Mo Post-CMP Cleaning	[08:40-09:00] Oral (20') Young-Chang Kim (Siemens EDA) 04_1083 EUV OPC in High High-NA Extreme Ultraviolet Lithography	[08:30-09:00] Invited (30') Jaehyun Kim (SK hynix) 06_1378 Important Role of Nano-Scale Metrology for Next Generation Device Manufacturing	[08:30-09:00] Invited (30') Jaehyun Kim (SK hynix) 06_1378 Important Role of Nano-Scale Metrology for Next Generation Device Manufacturing		
		[08:50-09:10] Invited (20') Viet Huong Nguyen (Phenikaa Univ.) 01_1268 Spatial Atomic Layer Deposition of Functional Thin Films	[08:50-09:10] Invited (20') - Pre-recorded Video Jan Vardamann (Techsearch International) TBA	[09:00-09:20] Oral (20') Jongwon Lee (KCTech) 02_1256 A Better Way of Removing Topography to Improve Surface Roughness of the Tungsten Film	[08:50-09:10] Oral (20') Beom-Jun Seo (Hanyang Univ.) 03_1243 Floating Harmonic Probe Measurement Using Indium Tin Oxide (ITO) Glass for Noninvasive Plasma Diagnostics	[09:00-09:30] Invited (30') Sungwoo Ko (SK hynix) 04_1070 Memory OPC Technology Development History and Future Strategy	[09:00-09:30] Invited (30') Hyungtak Seo (Ajou Univ.) 06_1304 Spectroscopically Resolved Electronic Band Structures of Ultrathin Oxide Layers and Interfaces for Advanced ICs and IGZO-Based TFTs		
		[09:10-09:30] Oral (20') Saulwon Choi (Soonchunhyang Univ.) 01_1370 Computational Fluid Dynamics of Flow through Line Charge Volume Design for Atomic Layer Deposition	[09:10-09:40] Invited (30') Seok Hyun Lee (Samsung Electronics Co., Ltd.) 05_1288 Advanced Packaging Technology for Heterogeneous Integration	[09:20-09:40] Oral (20') Jinhyung Park (LJBM) TBA	[09:10-09:30] Oral (20') Sung Kyu Jang (KETI) 03_1279 Employing Data-Driven Methods for the Evaluation of Plasma Resistance in Ceramics under High-Temperature Conditions	[09:30-10:00] Invited (30') Ryoung-han Kim (imec) 04_1086 Evolution of Photolithography and Patterning Paradigms: Navigating into the DTCO and STCO Scaling Era	[09:30-10:00] Oral (20') Woohui Lee (Sungkyunkwan Univ.) 06_1255 Comparative Electrical Characterization of High-K Dielectrics on Ge: Single and Stacked Structures Grown by H ₂ O and O ₂ -Based ALD		
		[09:30-09:50] Oral (20') Seung-Moo Lee (TES Co., Ltd.) 01_1232 Development of Low-K Smart PECVD Equipment and Process for System LSI Devices-II	[09:40-10:10] Invited (30') Yasuo Enomoto (Rapidus Corp. Inc.) 05_1177 Challenge Again for Latest Logic Semiconductor and Packaging Device	[09:40-10:10] Invited (30') Haedo Jeong (Pusan Nat'l Univ.) 02_1382 Challenges and Opportunities in CMP for More than Moore Innovation	[09:30-09:50] Oral (20') Hyunju Lee (Seoul Nat'l Univ.) 03_1385 Development of PI-VM for Monitoring Wafer Etch Uniformity in a VHF-Driven Capacitively Coupled Plasma Equipment	[10:00-10:20] Invited (20') Yonghwi Kwon (Synopsis) 04_1204 Lithography Modeling with Machine Learning Techniques			
		[09:50-10:10] Oral (20') Yunseok Kim (Soonchunhyang Univ.) 01_1241 Transient Analysis and Optimization of a Spatial Atomic Layer Deposition Model Utilizing Dynamic Mesh Methods							
10:10	10:20	Break							
		TA2	TB2	TC2	TD2	TE2	TF2		
		Advanced Atomic Scale Thin Films IV	Integration and Interposer	Advanced Cu and Mo CMP	Plasma/Etch Simulation	EUV Resist & Advanced Lithography for Optical Materials	Frontier Metrology and Modeling IV		
		Session Chair: Jin-Seong Park (Hanyang Univ.)	Session Chair: Changhwan Choi (Hanyang Univ.)	Session Chair: Haedo Jeong (Pusan Nat'l Univ.)	Session Chair: Chinwook Chung (Hanyang Univ.)	Session Chair: Myung-Gil Kim (Sungkyunkwan Univ.)	Session Chair: Byung-Ho Lee (Hitachi Hightech)		
10:20	12:00	[10:20-10:50] Invited (30') JinHee Park (SK hynix) 01_1118 Challenges and Requirements of ThinFilm Technology in the Era of Moore's Law Extension and Beyond	[10:20-10:50] Invited (30') Minsuk Suh (SK hynix) 05_1117 Technology Trend of the Interposer for 2.5D SIP	[10:20-10:50] Invited (30') Jea-Gun Park (Hanyang Univ.) Achieving Erosion-Less Depending on Pattern Density via Radical Oxidation in Copper-Film Chemical-Mechanical Planarization	[10:20-10:40] Oral (20') Cheongbin Cheon (Pusan Nat'l Univ.) 03_1344 Dependence of Gas Mixing Ratio and Pressure on Optimal Condition for Abundant O ⁽⁺⁾ D Surface Flux in O ₂ /Ar Inductively Coupled Plasmas	[10:30-10:50] Oral (20') Jungchul Song (NNFC) 04_1299 Mask Shift Double Exposure in ArF Immersion Lithography	[10:20-10:50] Invited (30') Tae Yong Lee (imec) 06_1119 Methodology for Efficient Inspection of Wafer Defects in Very Low Volume Manufacturing (VLVM)		
		[10:50-11:20] Invited (30') Annelies Delabie (imec) 01_1248 Area-Selective Deposition on Features with Nanoscale Dimensions for Semiconductor Device Manufacturing	[10:50-11:10] Invited (20') Gu-Sung Kim (Kangnam Univ.) 05_1389 2.5D Interposer Technologies for Heterogeneous Integration	[10:50-11:10] Oral (20') Ganggyu Lee (Hanyang Univ.) 02_1259 Electrochemical Galvanic Corrosion Behavior of the Cu/Ru Bimetallic System in the Chemical Mechanical Planarization	[10:40-11:00] Oral (20') Yeon Ho Im (Jeonbuk Nat'l Univ.) 03_1351 Predictable Process Simulation Platform for Next-Generation Plasma Oxide Etching Processes	[10:50-11:20] Invited (30') Myung-Gil Kim (Sungkyunkwan Univ.) 04_1252 Recent Advances in Inorganic EUV Photoresist	[10:50-11:10] Oral (20') Jae-Hong Park (Agilent Technologies) 02_1377 Analysis Theory and Method of Single Particle ICP-MS		
		[11:20-11:40] Invited (20') Woo Hee Kim (Hanyang Univ.) 01_1325 Combined Atomic Layer Deposition and Etching Process towards Advanced Atomic Level Patterning	[11:10-11:30] Invited (20') Jihwan An (POSTECH) 02_1099 High Density Thin Film Capacitor by Plasma Assisted Atomic Layer Annealing	[11:10-11:30] Oral (20') Seunghun Jeong (Pusan Nat'l Univ.) 02_1099 CMP Strategy for Dishing Control of TGV Interposers	[11:00-11:30] Invited (30') Won-Jun Lee (Sejong Univ.) 03_1362 Etching Mechanism of Amorphous Hydrogenated Silicon Nitride by Hydrogen Fluoride	[11:20-11:40] Oral (20') Jiyoung Bang (Chonnam Nat'l Univ.) 04_1126 Electron Beam Cross-Linking Mechanism of Cyclohexane-Based Inorganic Molecular Resists for EUV Lithography	[11:10-11:30] Oral (20') H. B. Lim (RAM Tech.) 06_1114 Characterization of Nanoparticles in Size and Particle Concentration by Inductively Coupled Plasma-Mass Spectrometry		
		[11:40-12:00] Invited (20') Woongkyu Lee (Soongsil Univ.) 01_1165 The Improvement of Interfacial Properties of MIM Capacitors	[11:30-11:50] Invited (20') Jinsub Park (Hanyang Univ.) 05_1311 Metal-Oxide Based Thermal Interface Materials for Improvement of Heat Transfer Characteristics	[11:30-11:50] Oral (20') Nayoung Kang (Hanyang Univ.) 02_1178 Investigation and Characterization of Mo Surface during Mo Post-CMP Cleaning Process		[11:40-12:10] Invited (30') Junsuk Rho (POSTECH) 04_1290 Low-Cost and Scalable Manufacturing of Optical Metasurfaces in the Visible Using Engineered Optical Materials (PER, Low-Loss a-Si:H, and Hybrid ALD Structural	[11:30-11:50] Oral (20') Sang Hee Han (Seongkyunkwan Univ.) 06_1294 Uniformity Monitoring of Photoresist Etching Using Multi-Channel Optical Emission Spectroscopy		
		[11:50-12:10] Oral (20') Sun Bum Kim (Hanyang Univ.) 05_1310 FEOL Process-Based Redistribution Layer (RDL) Formation							
12:00	13:30	Lunch							
13:30	14:15	Plenary Session II (Capri Room, 2F) "New Precursors and Approaches to ALD and AS-ALD of Metallic Films" Prof. Mikko Ritala (Univ. of Helsinki, Finland)							
14:15	14:25	Coffee Break (2F Lobby)							

Nov. 21 (Tue.)

Exhibition

		TA3	TB3	TC3	TD3	TE3	TF3
		Advanced Atomic Scale Thin Films V	Process and Equipment	CMP Innovations	HARC Etching/Green Etch Technology	EUV HVM Status and Cutting-Edge Topics in Advanced Lithography	Frontier Metrology and Modeling V
		Session Chair: Hanwool Yeon (GIST)	Session Chair: Jihwan An (POSTECH)	Session Chair: Sangwoo Lim (Yonsei Univ.)	Session Chair: Shin Jae You (Chungnam Nat'l Univ.)	Session Chair: Jong-Rak Park (Chosun Univ.)	Session Chair: Hyungtak Seo (Ajou Univ.)
		[14:25-14:55] Invited (30') Seán T. Barry (Carleton Univ.) 01_1361 Molybdenum Precursors and Deposition Mechanisms	[14:25-14:55] Invited (30') Masahiro Kobayashi (Nippon Electric Glass Co., Ltd.) 05_1381 Glass Wafer for Supporting Semiconductors	[14:25-14:55] Invited (30') Hyo Chol Koo (SK hynix) 02_1233 Enhancing Advanced Memory Development through CMP Innovations	[14:25-14:45] Oral (20') Wonnyoung Jeong (Chungnam Nat'l Univ.) 02_1152 Study of Redeposition Effects on the High Aspect Ratio SiO ₂ Etching Profile Evolution	[14:25-15:10] Plenary (45') Stuart Young (ASML Netherlands B.V.) EUV Systems for High Volume Manufacturing	[14:05-14:35] Invited (30') Seungwo Han (Seoul Nat'l Univ.) 06_1001 Atomistic Simulation of Semiconductor Processing Using Machine Learning Potentials
		[14:55-15:15] Invited (20') Ngoc Linh Nguyen (Phenikaa Univ.) 01_1220 Atomistic Modeling of Electronics and Thermodynamics of Defects on Titania Surfaces under Environmental Condition	[14:55-15:15] Invited (20') Hyunkyu Moon (KIMM) 05_1367 Development of Heterogenous and Multi-Stack Flexible Packaging with Photo-Patternable Polymer Elastic Bumps	[14:55-15:15] Oral (20') Seong In Kim (Hanyang Univ.) 02_1186 1-Step Tungsten Chemical-Mechanical Planarization Performing Remarkable High Tungsten Film Polishing-Rate and Reverse Polishing-Rate Selectivity between Tungsten-And SiO ₂ -film via Radical Oxidation	[14:45-15:05] Oral (20') Gilyoung Choi (Korea Univ.) 03_1332 A Study on the High-Aspect-Ratio Oxide Etching Characteristics Using a Hexafluoroisobutylene	[15:10-15:40] invited (30') Sumi Hur (Chonnam Nat'l Univ.) 04_1104 Deciphering Line Edge Roughness Formation in EUV Patterning: Insights from Molecular Simulations and Strategies for Minimization	[14:35-15:05] Invited (30') Yoon Jong Park (Semilab Korea) 06_1309 The Optical System and Analysis for Thickness and Transition Zone Measurement of Epitaxial Layer
		[15:15-15:35] Invited (20') Won-Jun Lee (Sejong Univ.) 01_1250 Atomic Layer Deposition of Silicon Oxide Films Using Tris(dimethylamino)silane and Ozone	[15:15-15:35] Invited (20') Nam Son Park (Tech Univ. of Korea) 05_1322 Development Trends of Plasma System and Applications in Semiconductor Packaging and Substrate	[15:15-16:00] Plenary (45') Jihoon Seo (Clarkson Univ.) A Holistic Approach to Optimizing Chemical Mechanical Planarization (CMP) for Enhanced Semiconductor Manufacturing and Sustainability	[15:05-15:25] Oral (20') Sanghyun You (Ajou Univ.) 03_1315 Innovative Cyclic Etching Process for High-Aspect-Ratio SiO ₂ Features Using Low-GWP Heptafluoropropyl Methyl Ether	[15:40-16:10] Invited 13(30') Min Seok Jang (KAIST) 04_1106 Thermal Emission Steering and Mid-IR Complex Amplitude Modulation with Graphene-Based Active Metasurfaces	[15:05-15:35] Invited (30') Sangjoon Cho (Park Systems) 06_1363 Inline Convergence AFM Solutions for Advanced Packaging
		[15:35-15:55] Oral (20') Seung-Ho Seo (GO Element Co., Ltd.) 01_1251 Computational Fluid Dynamics Analysis of Cyclone-Type Vaporizer for Mass Delivery of Atomic Layer Deposition Precursors	[15:35-15:55] Invited (20') Jae-Seong Jeong (KETI) 05_1280 Adhesion of Plated Thick Film Metal on Epoxy Molding Compound under Thermal Cycle		[15:25-15:55] Invited (30') Huichan Seo (SK hynix) 03_1169 Green Technologies in Advanced Etching Process		[15:35-16:05] Invited (30') A. D. Giddings (AMETEK Korea Co. Ltd., Korea) 06_1372 Improved Semiconductor Nanodevice Metrology with Next Generation Atom Probe
		[15:55-16:15] Oral (20') Kyuhoo Cho (EGTM) 01_1084 Novel Liquid Precursors of Group IV/V Transition Metals for High Temperature ALD Process			[15:55-16:15] Oral (20') Hongsik Jeong (UNIST) 03_1384 The Investigation of Etching Characteristics between Isomer Gases of Low GWP Etch Gases		
14:25	16:05						
					Break		
16:05	18:30						
18:30	20:30						
							Banquet (Grand Ballroom, 2F)

Time	Room A (Capri Room, 2F)		Room B (Grand Ballroom 1, 2F)		Room C (Grand Ballroom 2, 2F)		Room D (Grand Ballroom 3, 2F)		Room E (Sidney Room, 2F)		Room F (Sicily Room, 1F)		2F Lobby
	WA1		WB1		WC1		WD1		WE1		WF1		
Nov. 22 (Wed.)	08:30	Advanced Atomic Scale Thin Films VI		Materials and Innovation		Functional Wet Etching Technology		New Materials Etching		Advanced Lithography for Future Optical Devices I		Advanced Lithography for Future Optical Devices I	
		Session Chair: Ngoc Linh Nguyen (Phenikaa Univ.)		Session Chair: TBA		Session Chair: Jea-Gun Park (Hanyang Univ.)		Session Chair: Heeyeop Chae (Sungkyunkwan Univ.)		Session Chair: Myungki Kim (Korea Univ.)		Session Chair: Tae-Hun Shim (Hanyang Univ.)	
		[08:30-08:50] Oral (20') Jong Hyun Kim (DNF Co., Ltd.) 01_1235 Characteristics for IGZO Films Deposited with New In & Ga Precursors		[08:30-09:00] Invited (30') Hidenori Abe (Resonac) 05_1015 Advanced Packaging Materials and Evaluation Platform at Resonac		[08:30-09:00] Invited (30') Ungyu Paik (Hanyang Univ.) 02_1212 Enhancing Planarity and Defect Management in Chemical Mechanical Planarization (CMP) Slurry for Advanced Middle-of-Line (MOL) Semiconductor Processes		[08:30-08:50] Oral (20') Seunghyo Lee (Yonsei Univ.) 03_1125 Highly Selective Etching of SiGe over Si for GAAFEET Fabrication		[08:30-09:00] Invited (30') Hyoungnan Kwon (KIST) 04_1180 Dielectric Metasurfaces for Optical Field Imaging Devices and Optimized Photonic Devices			
		[08:50-09:10] Oral (20') Dow Wook Lee (Hanyang Univ.) 01_1373 Effects of Plasma Enhanced Chemical Vapor Deposition Parameters on Silicon Oxide Thin Film Characteristics and Its Warpage		[09:00-09:20] Invited (20') Dae-bong Yoon (Samhwa Paints Ind Co., Ltd.) 05_1360 Low-CTE Epoxy Resin for the Semiconductor Packaging		[09:00-09:20] Oral (20') Changjin Lee (Hanyang Univ.) 02_1193 Novel Wet Oxidant for Highly Selective Etching of Si ₃ N ₄ /Ge ₃ S ₂ to Si-film Using Hydroxyl Radical Oxidation		[08:50-09:10] Oral (20') JinYoung Jang (APS Research) 03_1327 Development of Copper Dry Etching Equipment via ECR Plasma Source		[09:00-09:30] Invited (30') Hansuek Lee (KAIST) 04_1285 On-Chip Ultra-Low-Loss Optical Components for Mid-Infrared Photonics		[09:00-09:30] Invited (30') Seak-Joon Lee (ITI) 06_1391 Laser COOL Forming TGV for Glass Substrate of Semiconductor Packaging and Laser COOL Cut1 without Crack for Wafer(SiC, GaN, TSV, Sapphire)	
		[09:10-09:30] Oral (20') Seo-Hyun Lee (Hanyang Univ.) 01_1375 Enhanced Metal/Dielectric Selectivity in Ru Atomic Layer Deposition with Alkyl-Chain Length Dependent Phosphonic Acid Self-Assembled Monolayers		[09:20-09:40] Invited (20') Daewon Lee (Myongji Univ.) 05_1320 Fluidic Self-Assembly Packaging: The Future of Microchip Transfer Technologies in MicroLED Display		[09:20-09:40] Oral (20') Jieun Lee (Hanyang Univ.) 02_1194 Enhancing Etch Rate Selectivity between Si ₃ N ₄ /Ge ₃ S ₂ and Si-Film via Radical Concentration Control for Radical Oxidation-Based Wet Etchant		[09:10-09:40] Invited (30') Hyeong-U Kim (KIMM) 03_1317 Implementation of a Plasma-Based Integrated System for Synthesis, Etching, Machine-Learning of 2D TMDc		[09:30-09:50] Oral (20') Sungcheon Hong (ETRI) 04_1161 Fabrication of Tunable Metasurface Platform for Hologram Display		[09:30-10:00] Invited (30') Taegeun Kim (Cubixel Inc.) Flying-over Scanning Holography for Industrial Inspection	
[09:30-09:50] Oral (20') Hae Lin Yang (Hanyang Univ.) 01_1229 Modulating ALD Molybdenum Oxide Film Properties for DRAM Application through Controlled Oxidants and H ₂ Annealing with Mo(NMe ₂) ₄ Precursor		[09:40-10:00] Oral (20') CheongHa Jung (Kangnam Univ.) 05_1318 Study on Finite Element Analysis for Interposer Structures		[09:40-10:10] Invited (30') Sangwoo Lim (Yonsei Univ.) 02_1040 Surface Preparation for InGaAs MOSFET Fabrication		[09:40-10:10] Invited (30') Kukhan Yoon (Samsung Electronics Co., Ltd.) 03_1374 Extendable Etch Solutions for Sub 10-nm DRAM Device		[09:50-10:10] Oral (20') Moohyuk Kim (Korea Univ.) 04_1208 Multilayered All-Polymer Metasurfaces on Optical Fiber Apex Using Micropunching Method					
[09:50-10:10] Invited (20') Hyeongtag Jeon (Hanyang Univ.) 01_1303 Ozone Concentration Dependence of Tetragonal Phase of ZrO ₂		[10:00-10:20] Oral (20') Uhyeon Kim (POSTECH) 05_1077 Ultra-Thin Heterogeneous Integration via Transfer Printing											
10:10	10:20												Exhibition
Break													
Nov. 22 (Wed.)	10:20	WA2		WB2		WC2		WD2		WE2			
		Advanced Atomic Scale Thin Films VII		Advanced Cleaning Technology		Advanced Cleaning Technology		Atomic Layer Etching/Damage-Free Etching		Advanced Lithography for Future Optical Devices II			
		Session Chair: Sean Barry (Carleton Univ.)		Session Chair: Jinsub Park (Hanyang Univ.)		Session Chair: Jinsub Park (Hanyang Univ.)		Session Chair: Hyeong-U Kim (KIMM)		Session Chair: Hansuek Lee (KAIST)			
		[10:20-10:50] Invited (30') HongGun Kim (TEL) 01_1296 Advanced Process Technologies for Future Logic Devices		[10:20-10:50] Invited (30') Andreas Klipp (BASF) 03_1359 New Cleaning and Etch Solution Approaches for Advanced Sub 5nm Technology Nodes		[10:20-10:50] Invited (30') Ji Eun Kang (Sungkyunkwan Univ.) 03_1359 Layer-By-Layer Etching of 2 Dimensional Palladium Diselenide		[10:20-10:40] Oral (20') Minseok Kim (Hanyang Univ.) 03_1244 Ultra-Low Electron Temperature (ULET) Plasma for Damage-Free Plasma Processing		[10:20-10:50] Invited (30') Myungki Kim (Korea Univ.) 04_1166 Advanced On-Demand Micro-Transfer Printing Techniques for Seamless Integration of Nanophotonic and Metasurface Devices			
		[10:50-11:20] Invited (30') Changbong Yeon (Soulbrain) 01_1075 Advanced Deposition Materials for Atomic Layer Deposition and Beyond		[10:50-11:10] Invited (20') Myung Ho Lee (ENF Tech. Co., Ltd.) 02_1307 BOE-Based High Selective SiO ₂ Etching Technology Applicable to Next-Generation Semiconductor		[10:40-11:00] Oral (20') Minseok Kim (Hanyang Univ.) 03_1244 Ultra-Low Electron Temperature (ULET) Plasma for Damage-Free Plasma Processing		[10:40-11:00] Oral (20') Minseok Kim (Hanyang Univ.) 03_1244 Ultra-Low Electron Temperature (ULET) Plasma for Damage-Free Plasma Processing		[10:50-11:10] Oral (20') Gookha Song (KAIST) 04_1266 Double-Layered Disordered Metasurface Spectrometer			
[11:20-11:40] Invited (20') Byungjin Cho (Chungbuk Nat'l Univ.) 01_1078 Memtransistor Devices based on 2D Layered Semiconductor for Energy-Efficient Neuromorphic Computing		[11:10-11:30] Oral (20') Man Hyup Han (Hanyang Univ.) 02_1190 Fenton Reaction for Enhancing Ag-Film Polishing Rate in Chemical-Mechanical Planarization		[11:00-11:30] Invited (30') Heeyeop Chae (Sungkyunkwan Univ.) 03_1356 Plasma-Enhanced Atomic Layer Etching for Metals and Dielectric Materials		[11:00-11:30] Invited (30') Heeyeop Chae (Sungkyunkwan Univ.) 03_1356 Plasma-Enhanced Atomic Layer Etching for Metals and Dielectric Materials		[11:10-11:30] Oral (20') Yongjun Lim (Korea Univ.) 04_1302 Unconventional Approach for Fabricating Diffractive Optical Elements via Holographic Inscription					
[11:40-12:00] Invited (20') Hanwool Yeon (GIST) 01_1357 SMART Metallization for Reliable and Power-Efficient Hetero-Integrated Systems								[11:30-11:50] Oral (20') Sung Hun Park (Korea Univ.) 04_1300 Self-Assembly-Based Molecular Addressing on Chemically Modified Gold Surface					
Lunch													
Plenary Session III (Capri Room, 2F) "EUV Lithography in High Volume Manufacturing" Fellow, Young Seog Kang (Samsung Electronics Co., Ltd., Korea)													
Break													
Poster Session II (Grand Ballroom 4, 2F)													
Break													
Closing Ceremony & Award Ceremony (Capri Room, 2F)													

Time	Room A (Capri Room, 2F)		Room B (Grand Ballroom 1, 2F)		Room C (Grand Ballroom 2, 2F)		Room D (Grand Ballroom 3, 2F)		Room E (Sidney Room, 2F)		Room F (Sicily Room, 1F)		2F Lobby
	Nov. 23 (Thu.)	Optional Tour											

Topic	Sessions	Poster Session
1. Advanced Atomic Scale Thin Films	MA1, MA2, TA1, TA2, TA3, WA1, WA2	Poster Session II
2. CMP & Post CMP Cleaning	MC1, MC2, TC1, TC2, TC3, WC1, WC2	
3. Advanced Etching Technology	MD1, MD2, TD1, TD2, TD3, WD1, WD2	
4. Advanced Lithography	ME1, ME2, TE1, TE2, TE3, WE1, WE2	Poster Session I
5. Post Fabrication Technology and System Packaging	TB1, TB2, TB3, WB1	
6. Frontier Metrology, Diagnosis, and Modeling for Nanoscale IC Integration and Emerging Device Process	MF1, MF2, TF1, TF2, TF3	
7. Power Device	MB1, MB2	