

November 21 (Tue)	
8:30	
8:40	
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9:00	Registration
9:10	
9:20	
9:30	
9:40	Opening Remark / Award Ceremony (M. Matsui, D. Ogawa, T. Ohba)
9:50	
10:00	Nishizawa Award Lecture
10:10	Jean-Paul Booth (CNRS/Ecole Polytechnique)
10:20	"Improving our understanding of plasma-surface interactions through in-situ measurements"
10:30	Nobuo Fujiwara (Mitsubishi Electric Corp.)
10:40	"DPS as a forum to share emerging challenges"
10:50	
11:00	Break 20min
11:10	
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11:30	A-1 <Invited> Mark J. Kushner (University of Michigan)
11:40	"Engineering Reactor and Feature Scale Processes for High Aspect Ratio Plasma Etching"
11:50	
12:00	
12:10	A-2 <Invited> Jaeho Min (Samsung Electronics Co., Ltd.)
12:20	"Key Parameters of Realizing High Aspect Ratio Contact Etch in VNAND Channel Hole"
12:30	
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13:00	Lunch Break
13:10	12:40 - 14:00 (80min)
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14:00	A-3 Ryutarō Suda (Tokyo Electron Miyagi Ltd.)
14:10	"Ultra-High-Aspect Ratio Etching for 3D NAND Memory Utilizing Cryogenic Process with Novel Chemistry"
14:20	
14:30	A-4 Taito Yoshie (Nagoya Univ.)
14:40	"Control of etching profile by bias supply timing in cyclic process using C ₄ F ₈ /SF ₆ gas modulated plasma"
14:50	
15:00	A-5 Shuichi Kuboi (Nagoya Univ.)
15:10	"Influence of Ion Composition on High Aspect Ratio Etching in Pulse-operated Ar/C ₄ F ₈ /O ₂ DF-CCP"
15:20	
15:30	Break 20min
15:40	
15:50	
16:00	B-1 Yu-Hao Tsai (TEL Technology Center, America)
16:10	"Ultrafast Cryogenic O ₂ /SiN Dry Etch Process Development -The Density Functional Theory (DFT) Utilization"
16:20	
16:30	B-2 Koji Eriguchi (Kyoto Univ.)
16:40	"Prediction of ion irradiation-induced defect creation in ultimately scaled devices based on stochastic process"
16:50	
17:00	B-3 Zoltan Donko (Wigner Research Centre for Physics)
17:10	"Integration of a Collisional Radiative Model into the Particle-in-Cell simulation of low-pressure Ar capacitively coupled plasmas"
17:20	
17:30	C-1 Lucas Jaloustre (Univ. Grenoble Alpes, CNRS, CEA/LETI-Minatec, LTM)
17:40	"Plasma etching of high aspect ratio GaN and AlN nanopillar arrays for next generation of ultraviolet light-emitting diodes"
17:50	
18:00	Break 10min
18:10	
18:20	D-1 <Invited> Satoshi Hamaguchi (Osaka University)
18:30	"Plasma-surface interactions for atomic layer processes"
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21:00	Banquet

Session A
AS1. Challenges to overcome the limits for high aspect ratio etching

Session B
Computational Approaches

Session C
Plasma Processes for New Material Devices

Session D
AS2. Atomic layer processes (ALE/ALD/ASD) toward 2nm and beyond

November 22 (Wed)	
8:30	
8:40	
8:50	
9:00	Registration
9:10	
9:20	
9:30	E-1 Makoto Sekine (Nagoya Univ.)
9:40	"A pseudo-wet cryogenic plasma etching of SiO ₂ investigated with in-situ surface monitoring"
9:50	
10:00	E-2 Takashi Hattori (Hitachi, LTD.)
10:10	"Effect of pressure on gas-phase etching of SiO ₂ using HF and methanol"
10:20	
10:30	E-3 Trung Nguyen Tran (Nagoya Univ.)
10:40	"Hydrofluorocarbon Molecule Dissociation through Photoelectron-Photoion Coincidence (PEPICO) Studies"
10:50	
11:00	E-4 Yusuke Imai (Nagoya Univ.)
11:10	"Etch selectivities of SiO ₂ and SiN against a-C films using CF ₄ /H ₂ plasma at low temperature"
11:20	
11:30	E-5 Shih-Nan Hsiao (Nagoya Univ.)
11:40	"An approach to reduce surface charging with cryogenic plasma etching using hydrogen-fluoride contained gases"
11:50	
12:00	Poster (120min)
12:10	Core-time (1) 10:40 - 11:40 † Odd number
12:20	Core-time (2) 11:40 - 12:40 ‡ Even number
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13:00	Lunch Break
13:10	12:40 - 13:40 (60min)
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14:00	F-1 Richard A. Gottscho (Lam Research Corp.)
14:10	"Attacking the Little Data Problem in Research and Development"
14:20	
14:30	F-2 Jun Haeng Lee (Samsung Electronics Co., Ltd.)
14:40	"AI-Driven Plasma Dry Etch Recipe Optimization: Challenges, Approaches, and Practical Insights"
14:50	
15:00	Break 20min
15:10	
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15:30	G-1 Shunya Kawamura (Nagoya Univ.)
15:40	"Effect of collisions in a sheath on angular distributions of high-speed particles incident on an RF electrode from a dual-frequency capacitively-coupled plasma"
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16:00	G-2 Ryunosuke Goto (Hiroshima Univ.)
16:10	"Direct Measurement of silicon wafer surface temperature during plasma processing using Optical Interference Contactless Thermometry (OICT)"
16:20	
16:30	G-3 Kazuki Toji (Nagoya Univ.)
16:40	"Compositions of Ions Related with Electrode Materials in Pulsed Plasma for High-Aspect-Ratio Hole Etching"
16:50	
17:00	Break 10min
17:10	
17:20	H-1 <Invited> Yasumitsu Orii (Rapidus Corporation)
17:30	"Challenges and Opportunities of Semiconductor Packaging in the Chiplet Era"
17:40	
17:50	H-2 Hajime Kato (Panasonic Connect Co. Ltd.)
18:00	"Development of the Wafer for Bumpless Via-Last Chip-on-Wafer (COW) Integration"
18:10	
18:20	I-1 Junghwan Um (Samsung Electronics Co., Ltd.)
18:30	"Understanding about tungsten melting phenomenon of Bypass-VIA by plasma induced damage"
18:40	
18:50	I-2 Takahiro Goya (Kyoto Univ.)
19:00	"Characterization of H ₂ plasma-induced damage in InP substrates using optical and electrical methods"
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21:00	Closing Remarks (M. Omura, K. Satoh)

Session E
Etching Technologies

Session F
AS3. How AI and Machine Learning are transforming dry process technologies

Session G
Plasma Diagnostics and Monitoring Systems

Session H
Advanced Packaging

Session I
Surface Reaction and Damage