

1F Middle-Sized Hall A	1F Middle-Sized Hall B	1F 101	1F 102	1F 107a	1F 107b	1F 108a
<p>A-3: Optical Interconnection (9:00-10:45) Chairs: H. Fukuda (NTT) S. Itabashi (NTT-AT)</p>		<p>C-3: Thin-film Photovoltaics (9:00-10:30) Chairs: K. Ohdaira (JAIST) T. Negami (Panasonic)</p>	<p>D-3: Nanocarbon-based Devices (9:00-10:30) Chairs: T. Kawai (NEC) K. Maehashi (Tokyo Univ. of Agri. & Tech.)</p>		<p>F-3: Microfluidics (9:00-10:45) Chairs: J. Ohta (NAIST) C.-H. Liu (National Tsing Hua Univ.)</p>	<p>G-3: Dots and Non-structures (9:00-10:45) Chairs: T. Iwai (Fujitsu Labs.) T. Nagata (NIMS)</p>
<p>9:00 A-3-1 (Invited) High-Density Optical Interconnection Based on Silicon Photonics <i>Y. Tanaka, S. Sekiguchi and K. Morito, PETRA (Japan)</i></p>		<p>9:00 C-3-1 (Invited) Thin-Film Solar Cells Based on Liquid Phase Crystallized Silicon on Glass <i>D. Amkreutz¹, J. Haschke², S. Kuehnappel¹, P. Sonntag¹ and B. Rech¹, ¹Helmholtz-Zentrum Berlin fuer Materialien und Energie GmbH and ²Ecole Polytechnique Federale de Lausanne (Germany)</i></p>	<p>9:00 D-3-1 Development of Highly Sensitive Tactile Sensor using Multi-Walled Carbon Nanotube Arrays <i>K. Suzuki, T. Nozaki and H. Miura, Tohoku Univ. (Japan)</i></p>		<p>9:00 F-3-1 (Invited) Label-Free Integrated Plasmonic Biosensors for Cytokine Immunodiagnosics <i>M.T. Chung, P. Chen, B.R. Oh and K. Kurabayashi, Univ. of Michigan (USA)</i></p>	<p>9:00 G-3-1 High-density Self-assembled Quantum Dots of InGaAs for Ultrafast and Efficient Spin Injection <i>J. Takayama¹, T. Kiba², T. Yamamura¹, D. Yamazaki¹, S. Chen¹ and A. Murayama¹, ¹Hokkaido Univ. and ²Kitami Inst. of Tech. (Japan)</i></p>
<p>9:30 A-3-2 High-Performance MOS Capacitor Type Si Optical Modulator, and Surface Illumination-type Ge Photodetector for Optical Interconnection <i>J. Fujikata¹, S. Takahashi¹, M. Takahashi², M. Noguchi¹, M. Miura¹, T. Nakamura¹ and Y. Arakawa³, ¹PETRA, ²AIST and ³Univ. of Tokyo (Japan)</i></p>		<p>9:30 C-3-2 Development of Nearly Crystallized P-type Hydrogenated Amorphous Silicon Oxide as Window Layer in a-Si:H Single-junction and a-Si:H/a-Si_{1-x}Ge_x:H Tandem Solar cells <i>P.L. Chen, W.H. Tu, C.H. Hsu and C.C. Tsai, NCTU (Taiwan)</i></p>	<p>9:15 D-3-2 Micro-Supercapacitors with Carbon Nanotubes and Flexible Components <i>F. Tanaka¹, A. Sekiguchi², K.U. Laszczyk¹, K. Kobashi², S. Sakurai², D.N. Futaba², T. Yamada² and K. Hata², ¹TASC and ²AIST (Japan)</i></p>		<p>9:30 F-3-2 (Invited) Molecular Analysis in Biological Samples by Actuator-Integrated Microfluidic Chips <i>Y. Takamura^{1,2}, ¹JAIST and ²JST-CREST (Japan)</i></p>	<p>9:15 G-3-2 (Late News) Fabrication and Magnetic Properties of Co-doped La_{0.5}Sr_{0.5}TiO₃ Nanofibers <i>S. Maenstiri¹, W. Ponhan² and Y. Amornkitbamrung², ¹Suranaree Univ. of Tech. and ²Khon Kaen Univ. (Thailand)</i></p>
<p>9:45 A-3-3 Ultra-Compact 100Gb/s Coherent Receiver Monolithically Integrated on Silicon <i>Z. Tu, P. Gong, Z. Zhou and X. Wang, Peking Univ. (China)</i></p>		<p>9:45 C-3-3 (Invited) Development of CTS-Based Thin Film Solar Cells <i>H. Araki¹, A. Kanai¹, A. Takeuchi¹, K. Jimbo¹ and H. Katagiri¹, Nat. Inst. of Tech., Nagaoka Coll. (Japan)</i></p>	<p>9:30 D-3-3 Wafer-Scale Statistical Characterization of Carbon Nanotube Thin-Film Transistors <i>J. Hirotsu, S. Kishimoto and Y. Ohno, Nagoya Univ. (Japan)</i></p>		<p>10:00 F-3-3 Detection of Amyloid-Beta Proteins during Fibrillization Process by Liposome-Immobilized Microcantilevers in Microfluidic Channel <i>M. Sohgawa¹, Z. Zhang², Y. Abe¹, T. Abe¹, K. Yamashita² and M. Noda², ¹Niigata Univ. and ²Kyoto Inst. of Tech. (Japan)</i></p>	<p>9:30 G-3-3 Characteristics of Highly Stacked InAs Quantum-dot Laser Grown on Vicinal (001)InP Substrate <i>K. Akahane¹, N. Yamamoto¹, T. Umezawa¹, A. Matsumoto¹ and T. Kawanishi^{1,2}, ¹NICT and ²Waseda Univ. (Japan)</i></p>
<p>10:00 A-3-4 Suppression of Void Generation in Direct Wafer Bonding for Si High-k MOS Optical Modulators using Al₂O₃/HfO₂ Bonding Interface <i>J.H. Han^{1,2}, M. Takenaka^{1,2} and S. Takagi^{1,2}, ¹Univ. of Tokyo and ²JST-CREST (Japan)</i></p>		<p>10:15 C-3-4 Crystallographic and Optical Properties, and Band-diagrams of CuInSe₂, CuIn₂Se₅, and CuIn₃Se₈ Phases in Cu-poor Cu₂Se-in₂Se₃ Pseudo-binary System <i>T. Maeda, W. Gong and T. Wada, Ryukoku Univ. (Japan)</i></p>	<p>9:45 D-3-4 PMMA Dry Transfer of Graphene on h-BN using Heating/Cooling System <i>T. Uwanno¹, K. Watanabe², T. Taniguchi² and K. Nagashio^{1,3}, ¹Univ. of Tokyo, ²NIMS and ³JST-PRESTO (Japan)</i></p>		<p>10:15 F-3-4 A Microfluidic Labchip For Angiogenesis Studies Using Multi-Gradients Generator and Cell Trapping Structures <i>C.H. Liu¹, C.H. Chin¹, Y.L. Chiu¹ and K.Y. Lee², ¹National Tsing Hua Univ. and ²Shuang Ho Hospital (Taiwan)</i></p>	<p>9:45 G-3-4 Selective Epitaxy of Ge on Nano-tip Patterned Si (001): Towards Defect-free Ge Islands <i>G. Niu¹, G. Capellini^{1,2}, T. Niermann³, M. Salvalaglio¹, A. Marzegalli¹, M.A. Schubert¹, P. Zaumseil¹, H.M. Krause¹, O. Skibitzki¹, M. Lehmann³, F. Montalenti⁴, Y.H. Xie⁵ and T. Schroeder^{1,6}, ¹IHP, ²Univ. Roma Tre, ³TU Berlin, ⁴Univ. degli Studi di Milano-Bicocca, ⁵UCLA and ⁶BTU (Germany)</i></p>
<p>10:15 A-3-5 Monolithically Integrated Quantum Dot Optical Modulator with Semiconductor Optical Amplifier for T-Band Optical Communication <i>N. Yamamoto¹, K. Akahane¹, T. Umezawa¹, A. Matsumoto¹ and T. Kawanishi^{1,2}, ¹NICT and ²Waseda Univ. (Japan)</i></p>			<p>10:00 D-3-5 Fluorinated Graphene as Passivation Layer of Graphene Field Effect Transistor <i>Y.P. Ho, K.I. Ho, B. Liu and C.S. Lai, Chang Gung Univ. (Taiwan)</i></p>		<p>10:30 F-3-5 (Late News) An Integrated One-chip-sensor System for miRNA Quantitative Analysis Based on Digital Droplet PCR <i>M. Tsukuda¹, R.S. Wiederkehr², Q. Cai³, B. Majeed³, P. Fiorini³, T. Stakenborg³ and T. Matsuno⁴, ¹Panasonic Corp. Advanced Research Lab., ²Panasonic Corp. AIS Company and ³IMEC vzw (Japan)</i></p>	<p>10:00 G-3-5 Miniband Formulation in Ge/Si Quantum Dot Array <i>Y.C. Tsai¹, M.Y. Lee¹, Y. Li¹ and S. Samukawa², ¹NCTU and ²Tohoku Univ. (Taiwan)</i></p>

Tuesday, September 29

2F 201	2F 202	2F Small Hall	2F 204	2F 206	2F 207	1F 108b
<p>H-3: Novel Functional Devices (9:00-10:45) Chairs: T. Machida (Univ. of Tokyo) T. Ota (NTT BRL)</p>		<p>K-3: Characterization I (9:00-10:30) Chairs: K. Maekawa (Renesas Electronics) N. Planes (STMicroelectronics)</p>	<p>M-3: SiC & GaN Power Devices (9:00-10:30) Chairs: H. Umezawa (AIST) R. Hattori (Mitsubishi Electric)</p>	<p>N-3: Advanced Process and Characterization (9:00-10:30) Chairs: T. Nakayama (Chiba Univ.) S. Migita (AIST)</p>	<p>O-3: ReRAM I (9:00-10:50) Chairs: M.-H. Lee (Macronix) K. Yamamoto (Toshiba)</p>	<p>P-3: Semiconductor and RF Spintronics (9:00-10:45) Chairs: J. Nitta (Tohoku Univ.) Y. Saito (Toshiba)</p>
<p>9:00 H-3-1 (Invited) Gigahertz Single-Electron Pump Towards a Representation of the New Ampere <i>A. Fujiwara, G. Yamahata and K. Nishiguchi, NTT BRL (Japan)</i></p>		<p>9:00 K-3-1 (Invited) Impacts of RDF, RTN, and Shot Noise on Nanowire Transistor Performance Studied by Ensemble Monte Carlo / Molecular Dynamics Simulation <i>T. Watanabe, Waseda Univ. (Japan)</i></p>	<p>9:00 M-3-1 (Invited) SiC Power Electronics - Current and Future Prospects of SiC Devices <i>P. Friedrichs, Infineon AG (Germany)</i></p>	<p>9:00 N-3-1 (Invited) High Performance Poly-Ge p- and nMOSFETs Fabricated by Flash Lamp Annealing <i>K. Usuda^{1,2}, Y. Kamata^{1,2}, Y. Kamimuta^{1,2}, M. Koike^{1,2}, T. Mori^{2,3}, T. Maeda^{2,3} and T. Tezuka^{1,2}, ¹Toshiba Corp., ²GNC-AIST and ³AIST (Japan)</i></p>	<p>9:00 O-3-1 (Invited) TMO-ReRAM Based Synaptic Device for Neuromorphic Computing <i>J.F. Kang, B. Gao, Z. Chen, P. Huang, Y.D. Zhao, L.F. Liu and X.Y. Liu, Peking Univ. (China)</i></p>	<p>9:00 P-3-1 (Invited) Graphene as a Versatile Spin Tunnel Barrier <i>E. Cobas, US Naval Res. Lab. (USA)</i></p>
<p>9:30 H-3-2 Formation of Coupled Triple Silicon Quantum Dot with a Compact Device Structure <i>T. Uchida¹, A. Fukuchi¹, M. Arita¹, A. Fujiwara¹ and Y. Takahashi¹, ¹Hokkaido Univ. and ²NTT BRL (Japan)</i></p>		<p>9:30 K-3-2 Effect of 3D Current Distribution in the Characterizing Parasitic Resistance of FinFETs <i>P.Y. Lin¹, Y.L. Chiu¹, F.H. Meng¹, K.H. Chen², S. Hao², B.Z. Tien², T.S. Chang², C.J. Lin¹ and Y.C. King¹, ¹National Tsing Hua Univ. and ²TSMC (Taiwan)</i></p>	<p>9:30 M-3-2 Development of Novel 1200V-Class 4H-SiC Implantation and Epitaxial Trench MOSFETs with Low On-resistance <i>H. Shiomi, H. Kitai, H. Tamaso and K. Fukuda, AIST (Japan)</i></p>	<p>9:30 N-3-2 Direct Evidence of Free-carrier Induced Band-gap Narrowing in Ge <i>S. Kabuyanagi, T. Nishimura, T. Yajima and A. Toriumi, Univ. of Tokyo (Japan)</i></p>	<p>9:30 O-3-2 Microstructural Change in Cu/WO₃/TiN during Resistive Switching <i>M. Arita, A. Takahashi, Y. Ohno, A. Nakane, A. Tsurumaki Fukuchi and Y. Takahashi, Hokkaido Univ. (Japan)</i></p>	<p>9:30 P-3-2 Suppression of Spin Transport in Ferromagnet/Oxide/Semiconductor Junctions by Inserting Magnetic Impurities <i>A. Spiessner, H. Saito, S. Yuasa and R. Jansen, AIST (Japan)</i></p>
<p>9:45 H-3-3 Solid-State Operation of Mott Transistors with Ultra-Thin VO₂ Channels <i>T. Yajima^{1,2}, T. Nishimura^{1,2} and A. Toriumi^{1,2}, ¹Univ. of Tokyo and ²JST-CREST (Japan)</i></p>		<p>9:50 K-3-3 Quantitative Understanding of Scanning Spreading Resistance Microscopy with Schottky Contact Model <i>S. Itai, L. Zhang, K. Matsuzawa, M. Ono and T. Ishihara, Toshiba Corp. (Japan)</i></p>	<p>9:45 M-3-3 A High Current Operation in a 1.6 kV GaN-based Trenched Junction Barrier Schottky (JBS) Diode <i>R. Kajitani, H. Handa, S. Ujita, D. Shibata, K. Tanaka, M. Ogawa, H. Ishida, S. Tamura, M. Ishida and T. Ueda, Panasonic Corp. (Japan)</i></p>	<p>9:50 N-3-3 Incorporated Nitrogen Behavior in Plasma-nitrided Silicon Oxides Formed by Chemical Vapor Deposition Method <i>N. Shinoda, H. Itokawa, R. Fujitsuka, K. Sekine, S. Onoue and J. Tonotani, Toshiba Corp. (Japan)</i></p>	<p>9:50 O-3-3 Defect Properties and Materials Selection for Oxide RRAM <i>J. Robertson and Y. Guo, Cambridge Univ. (UK)</i></p>	<p>9:45 P-3-3 Phonon-Assisted Efficient Spin Injection in InGaAs Quantum Well-Quantum Dot Tunnel-Coupled Structures <i>S.L. Chen¹, T. Kiba², J. Takayama¹ and A. Murayama¹, ¹Hokkaido Univ. and ²Kitami Inst. of Tech. (Japan)</i></p>
<p>10:00 H-3-4 Experimental Demonstration and Modeling of GeTe₂ Oscillators and Threshold Switches for Emerging Architectures and Memory <i>A.A. Sharma, Y.E. Kesim, J.A. Bain, M. Skowronski and J.A. Weldon, Carnegie Mellon Univ. (USA)</i></p>		<p>10:10 K-3-4 Assessment of GIDL Reduction and V_{th} Modulation with Plasma Doped FinFETs <i>J.M. Lee^{1,2}, K.H. Cho², H.J. Bae², D.W. Kim², S. Paak² and I. Chung¹, ¹Sungkyunkwan Univ. and ²Samsung Electronics Co. Ltd. (Korea)</i></p>	<p>10:00 M-3-4 Investigation of Breakdown Characteristics in High-voltage GaN-HEMTs <i>T. Suwa, W. Saito, T. Uchiyama, T. Naka and T. Kobayashi, Toshiba Corp. (Japan)</i></p>	<p>10:10 N-3-4 Comprehensive Understanding of SiO₂-IL Scavenging in HfO₂/SiO₂/Si Stack <i>X. Li, T. Yajima, T. Nishimura and A. Toriumi, Univ. of Tokyo (Japan)</i></p>	<p>10:10 O-3-4 Reproducing Resistive Switching Effect by Soret and Fick Diffusion in Resistive Random Access Memory (ReRAM) <i>K. Kinoshita^{1,2}, R. Koishi¹, T. Moriyama^{1,2}, K. Kawano¹, H. Miyashita^{1,2}, S.S. Lee^{1,2} and S. Kishida^{1,2}, ¹Tottori Univ. and ²Tottori Integrated Frontier Res. Center (Japan)</i></p>	<p>10:00 P-3-4 Magnetic Properties and Intrinsic Ferromagnetism in Narrow-gap Ferromagnetic Semiconductor (Ga,Fe) Sb <i>N.T. Tu¹, P.N. Hai², L.D. Anh¹ and M. Tanaka¹, ¹Univ. of Tokyo and ²Tokyo Tech (Japan)</i></p>
<p>10:15 H-3-5 Novel Field Emission Emitters with Nanoscale Tips Based on Mo Oxide Fabricated by Electrochemical Methods <i>T. Tsukamoto, T. Sato, S. Kitamura, O. Kubota, A. Kitao, E. Ozaki and T. Motoi, Canon INC. (Japan)</i></p>			<p>10:15 M-3-5 A Robust 600V GaN HEMT Technology on GaN-on-Si with 400V, 5μsec Load-Short-Circuit Withstand Capability <i>H. Ichijoh¹, T. Nagahisa¹, M. Kubo¹ and A.O. Adan², ¹Sharp Corp. and ²Consultant (Japan)</i></p>	<p>10:30 O-3-5 A Study of Array Resistance Distribution and a Novel Operation Algorithm for WO₃ ReRAM Memory <i>K.C. Hsu, F.M. Lee, Y.Y. Lin, E.K. Lai, J.Y. Wu, D.Y. Lee, M.H. Lee, H.L. Lung, K.Y. Hsieh and C.Y. Lu, Macronix Int'l. Corp., Ltd. (Taiwan)</i></p>	<p>10:15 P-3-5 Millimeter-Wave Detector Using Magnetic Tunnel Junctions With Perpendicularly Magnetized L1₀-Ordered FePd Free Layer <i>K. Mukaiyama¹, H. Nagamura¹, T. Yui¹, H. Kubota², A. Fukushima², M. Oogane¹ and Y. Ando¹, ¹Tohoku Univ. and ²AIST (Japan)</i></p>	

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<p>A-3: Optical Interconnection</p> <p>10:30 A-3-6 MEMS Optical Switches Using Slot Ring Resonator for Low Voltage Operation <i>Y. Amemiya, K. Noda, T. Sennichi and S. Yokoyam, Hiroshima Univ. (Japan)</i></p>			<p>D-3: Nanocarbon-based Devices</p> <p>10:15 D-3-6 (Late News) Direct Evidence of Defect-defect Correlation in Atomically Thin MoS₂ Layer by Random Telegraphic Signals Observed in Back-gated FETs <i>N. Fang, K. Nagashio and A. Toriumi, Univ. of Tokyo (Japan)</i></p>			<p>G-3: Dots and Non-structures</p> <p>10:15 G-3-6 Formation and Characterization of High Density FePt Nanodots on SiO₂ Induced by Remote Hydrogen <i>K. Makihara, Y. Kabeya, A. Ohta, T. Kato, A. Iwata and S. Miyazaki, Nagoya Univ. (Japan)</i></p> <p>10:30 G-3-7 In Situ TEM Observation of Dynamic Behavior of Metal-Based Nanoparticles in Ionic Liquid <i>K. Kogure, J. Ishioka, K. Ofuji, R. Mirza, S. Yatsu, T. Shibayama and S. Watanabe, Hokkaido Univ. (Japan)</i></p>

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2F 201	2F 202	2F Small Hall	2F 204	2F 206	2F 207	1F 108b
<p>H-3: Novel Functional Devices</p> <p>10:30 H-3-6 STDP Behavior Realization in BiFeO₃-based Artificial Synapses with Short and Simplified Spike Sequences <i>N. Du¹, C. Mayr², T. You¹, D. Buerger¹, I. Skorupa^{1,3}, M. Di Ventra⁴, O.G. Schmidt^{1,5} and H. Schmidt¹, ¹TU Chemnitz, ²Univ. of Zurich and ETH Zurich, ³Helmholtz-Zentrum Dresden-Rossendorf, ⁴UCSD and ⁵IFW Dresden (Germany)</i></p>						<p>P-3: Semiconductor and RF Spintronics</p> <p>10:30 P-3-6 Generation of Highly Stable Microwave from a Spin Torque Oscillator by Phase Locked Loop <i>S. Tamaru, H. Kubota, K. Yakushiji, S. Yuasa and A. Fukushima, AIST (Japan)</i></p>

1F Middle-Sized Hall A	1F Middle-Sized Hall B	1F 101	1F 102	1F 107a	1F 107b	1F 108a
<p>A-4: Group-IV Optical Devices I (15:40-16:55) Chairs: S. Saito (Univ. of Southampton) Y. Ishikawa (Univ. of Tokyo)</p>	<p>B-4: 2D Materials I (15:40-16:55) Chairs: T. Machida (Univ. of Tokyo) K. Terabe (NIMS)</p>	<p>C-4: Organic Devices I (15:40-17:10) Chairs: T. Hayashi (NTT BRL) H. Murata (JAIST)</p>	<p>D-4: Nanowire Devices & Characterization (15:40-16:55) Chairs: G. Zhang (NTT BRL) K. Kawaguchi (Univ. of Tokyo)</p>	<p>E-4: MEMS and Sensor (15:40-16:55) Chairs: H. Kanaya (Kyushu Univ.) M. Fujino (Univ. of Tokyo)</p>		<p>G-4: Growth of Germanium-based Semiconductors I (15:40-16:55) Chairs: T. Suemasu (Univ. of Tsukuba) N. Watanabe (NTT)</p>
<p>15:40 A-4-1 (Invited) Ge/SiGe Quantum Well Optical Modulator <i>D. Marris Morini¹, V. Vakarin¹, P. Chaisakul^{1,2}, J. Frigerio³, M. Rouifed⁴, X. Le Roux¹, D. Chrastina³, L. Vivien¹ and G. Isella², ¹Univ. Paris Sud / IEF, ²Univ. of Tokyo and ³L-Ness, Politecnico Di Milano (France)</i></p>	<p>15:40 B-4-1 (Invited) Growth and Applications of Surface Oxides on Two-Dimensional Transition Metal Dichalcogenides <i>M. Yamamoto, NIMS (Japan)</i></p>	<p>15:40 C-4-1 (Invited) Development of New Soft Actuator using Piezoelectric Polymer Film <i>Y. Tajitsu, Kansai Univ. (Japan)</i></p>	<p>15:40 D-4-1 (Invited) Template-Assisted Selective Epitaxy (TASE) of III-V Nanoscale Devices for Heterogeneous Integration with Si <i>H. Schmid, M. Borg, K. Moselund, D. Cutaia and H. Riel, IBM Research - Zurich (Switzerland)</i></p>	<p>15:40 E-4-1 Mechanical Properties of Cu-Ni-Si alloy Evaluated by Micro-Tensile Test for Application in MEMS <i>S. Yanagida^{1,2}, A. Araki¹, T.F.M. Chang^{1,2}, C.Y. Chen^{1,2}, T. Nagoshi³, E. Kobayashi¹, H. Hosoda¹, T. Sato¹ and M. Sone^{1,2}, ¹Tokyo Tech, ²JST-CREST and ³AIST (Japan)</i></p>		<p>15:40 G-4-1 (Invited) Crystal Growth of GeSn-related Group-IV Thin Films for Integrating on Si Nanoelectronics Platform <i>S. Zaima^{1,2}, O. Nakatsuka², T. Asano^{2,3}, T. Yamaha^{2,3}, S. Ike^{2,3}, A. Suzuki², M. Kurosawa^{1,2,4}, W. Takeuchi² and M. Sakashita², ¹EcoTopia Sci. Inst., Nagoya Univ., ²Grad. Sc. Eng., Nagoya Univ., ³JSPS Reserach Fellow and ⁴Inst. Adv. Res., Nagoya Univ. (Japan)</i></p>
<p>16:10 A-4-2 Ge/graded-SiGe Multiplication Layers for Low-voltage and Low-noise Ge Avalanche Photodiodes on Si <i>Y. Miyasaka¹, T. Hiraki^{2,3}, K. Okazaki^{2,3}, K. Takeda^{2,3}, T. Tsuchizawa^{2,3}, K. Yamada^{2,3}, K. Wada¹ and Y. Ishikawa¹, ¹Univ. of Tokyo, ²NTT Device Tech. Labs. and ³NTT Nanophotonics Center (Japan)</i></p>	<p>16:10 B-4-2 Josephson Coupling in NbSe₂/NbSe₂ Van Der Waals Junction <i>R. Moriyadi¹, N. Yabuki¹, M. Arai¹, Y. Sata¹, S. Morikawa¹, S. Masubuchi¹ and T. Machida^{1,2}, ¹IIS, Univ. of Tokyo and ²INQIE, Univ. of Tokyo (Japan)</i></p>	<p>16:10 C-4-2 Controllable n- to p-type Doping of MEH-PPV Films by Evaporative Spray Deposition using Ultra-Dilute Solution Method <i>N. Mizutani¹, S. Sakiyama² and K. Fujita^{1,2}, ¹IMCE, Kyushu Univ. and ²JGSES Kyushu Univ. (Japan)</i></p>	<p>16:10 D-4-2 Highly Tunable Multiple Quantum Dots Made in InAs Nanowires by Local Finger Gates <i>J. Wang¹, S. Huang¹, D. Pan², J. Zhao² and H.Q. Xu^{1,3}, ¹Peking Univ., ²CAS and ³Lund Univ. (China)</i></p>	<p>16:00 E-4-2 The CeO₂ Sensing Membrane with NH₃ Plasma Treatment in Biosensor Applications <i>C.F. Lin, C.H. Kao, S.W. Chang, C.W. Chang, C.L. Chang, Y.L. Su and Y.X. Huang, Chang Gung Univ. (Taiwan)</i></p>		<p>16:10 G-4-2 Sn-doped Al-induced Layer Exchange for Large-grained GeSn Thin Films on Insulators <i>N. Oya, K. Toko and T. Suemasu, Univ. of Tsukuba (Japan)</i></p>
<p>16:25 A-4-3 Low Dark Current Ge Photodetector with Selectively Grown Si Capping Layer <i>S. Okumura, K. Kinoshita, T. Fujikata, T. Simoyama, H. Ono, Y. Tanaka, K. Morito, T. Horikawa and T. Mogami, PETRA (Japan)</i></p>	<p>16:25 B-4-3 In Situ and Nonvolatile Tuning of Sp²/Sp³ Fraction in Graphene Oxide For All-Solid-State Multifunctional Devices <i>C.P. Lin¹, P.S. Liu¹, L.S. Lyu¹, M.Y. Li², C.C. Cheng¹, T.H. Lee³, W.H. Chang¹, L.J. Li³ and T.H. Hou¹, ¹NCTU, ²Academia Sinica and ³KAUST (Taiwan)</i></p>	<p>16:25 C-4-3 Study of Discharging Process of Double Layer Organic Diodes Using Displacement Current Measurement Coupled with Electric-Field-Induced Optical Second-Harmonic Generation Measurement <i>T. Noma, D. Taguchi, T. Manaka and M. Iwamoto, Tokyo Tech (Japan)</i></p>	<p>16:25 D-4-3 Growth and Characterization of Vertical Nanocavity Using Core-multishell Nanowires <i>T. Wada, S. Hara and J. Motohisa, Hokkaido Univ. (Japan)</i></p>	<p>16:20 E-4-3 Reliability Results of 4 million Micro Bump Interconnections of 3D Stacked 16 M Pixel Image Sensor <i>Y. Takemoto, N. Takazawa, M. Tsukimura, H. Saito, T. Kondo, H. Kato, J. Aoki, K. Kobayashi, S. Suzuki, Y. Gomi, S. Matsuda and Y. Tadaki, Olympus Corp. (Japan)</i></p>		<p>16:25 G-4-3 Low-Temperature (~ 150°C) Solid-Phase Epitaxy of a-GeSn/c-Ge for High Non-Equilibrium Substitutional Sn-Concentration GeSn <i>T. Sadoh, A. Ooato, J. Park and M. Miyao, Kyushu Univ. (Japan)</i></p>
<p>16:40 A-4-4 Influences of Metal/Ge Contact and Surface Passivation on Light Emission and Detection for Asymmetric Metal/Ge/Metal Diodes <i>T. Maekura, D. Wang, K. Yamamoto and H. Nakashima, Kyushu Univ. (Japan)</i></p>	<p>16:40 B-4-4 N-type Doping Effect of Transferred MoS₂ and WSe₂ Monolayer <i>C.P. Lin¹, P.S. Liu¹, L.S. Lyu¹, M.Y. Li², C.C. Cheng¹, T.H. Lee³, W.H. Chang¹, L.J. Li³ and T.H. Hou¹, ¹NCTU, ²Academia Sinica and ³KAUST (Taiwan)</i></p>	<p>16:40 C-4-4 Realizing Mechanically Robust ITO and PEDOT:PSS by Reducing Substrate Thickness to as Thin as 1.4 μm <i>S. Harimurti¹, N. Matsuhisa¹, P. Zalar^{1,2}, T. Yokota^{1,2} and T. Someya^{1,2}, ¹Univ. of Tokyo and ²JST-ERATO (Japan)</i></p>	<p>16:40 D-4-4 Study of Heat Conduction in Corrugated Si Nanowires Using Raman Mapping <i>V. Poborchii¹, Y. Morita¹, J. Hattori¹, T. Tada¹ and P. Geshev², ¹AIST and ²Inst. of Thermophysics of the Russian Academy of Sciences (Japan)</i></p>	<p>16:40 E-4-4 (Late News) Robustness of Integrated Stoppers for MEMS Accelerometer Fabricated by Multi-layered Metal Technology <i>D. Yamane^{1,4}, T. Konishi², M. Takayasu^{1,4}, T. Safu², H. Toshiyoshi^{3,4}, M. Sone^{1,4}, K. Masu^{1,4} and K. Machida^{1,2,4}, ¹Tokyo Tech, ²NTT Adv. Tech. Corp., ³Univ. of Tokyo and ⁴JST-CREST (Japan)</i></p>		<p>16:40 G-4-4 Influence of Precursor Gas on SiGe Epitaxial Material Quality in Terms of Structural and Electrical Defects <i>S. Ike^{1,2,3}, E. Simoen³, Y. Shimura^{3,4,5}, A. Hikavy³, W. Vandervorst^{3,4}, R. Loo³, W. Takeuchi¹, O. Nakatsuka¹ and S. Zaima^{1,6}, ¹Nagoya Univ., ²JSPS Research Fellow, ³IMEC, ⁴KU Leuven, ⁵FWO Pegasus Marie Curie Fellow and ⁶EcoTopia Sci. Inst., Nagoya Univ. (Japan)</i></p>

2F 201	2F 202	2F Small Hall	2F 204	2F 206	2F 207	1F 108b
		<p>K-4: CMOS (15:40-16:50) Chairs: Y. Fukuzaki (SONY) K. Sukegawa (SOCIONEXT)</p>	<p>M-4: GaN Power Devices (15:40-16:55) Chairs: T. Tanaka (Panasonic) T. Uesugi (Toyota Central R&D Labs.)</p>	<p>N-4: Interface and Material Science (15:40-17:00) Chairs: S. Yoshida (SONY) K. Kakushima (Tokyo Tech)</p>	<p>O-4: Advanced Processing Circuits with Functional Materials (15:40-17:10) Chairs: R. Kuroda (Tohoku Univ.) K. Ito (Tohoku Univ.)</p>	
		<p>15:40 K-4-1 (Invited) High Performance 14nm SOI FinFET Technology <i>C.-H. Lin, IBM T.J. Watson Research Center (USA)</i></p>	<p>15:40 M-4-1 (Invited) Vertical Power Electronic Devices based on Bulk Gallium Nitride Substrates <i>I.C. Kizilyalli and O. Aktas, Avogy Inc. (USA)</i></p>	<p>15:40 N-4-1 Beyond GeO₂ on Ge: Network Modification of GeO₂ for Reliable Ge Gate Stacks <i>C. Lu, C.H. Lee, T. Nishimura and A. Toriumi, Univ. of Tokyo (Japan)</i></p>	<p>15:40 O-4-1 (Invited) Spintronics Memory Devices for Ultralow-power and High-performance Integrated Circuits <i>S. Fukami, H. Sato and H. Ohno, Tohoku Univ. (Japan)</i></p>	
		<p>16:10 K-4-2 Stacked-Nanowire and FinFET Transistors: Guidelines for the 7nm Node <i>L. Gaben¹, S. Barraud², M.A. Jaud³, S. Martinie², O. Rozeau³, J. Lacord², G. Hibel¹, S. Monfray¹, F. Boeuf¹, T. Skotnicki¹, F. Balestra³ and M. Vinet², ¹STMicroelectronics, ²CEA-LETI and ³IMEP-LAHC (France)</i></p>	<p>16:10 M-4-2 Embedded Source Field-Plate for Reduced Parasitic Capacitance of AlN/GaN MIS-HEMTs on Si Substrate <i>K. Chikamatsu, M. Akutsu, T. Tanaka, S. Takado, K. Sakamoto, N. Ito and K. Nakahara, ROHM Co., Ltd. (Japan)</i></p>	<p>16:00 N-4-2 Understanding on the Impact of Interface Reactions on Dipole Strengths at MgO/SiO₂ and Y₂O₃/SiO₂ Interfaces <i>J. Fei and K. Kita, Univ. of Tokyo (Japan)</i></p>	<p>16:10 O-4-2 A 600-μW Ultra-Low-Power Associative Processor for Image Pattern Recognition Employing Magnetic Tunnel Junction (MTJ) Based Nonvolatile Memories with Novel Intelligent Power-Gating (IPG) Scheme <i>Y. Ma, S. Miura, H. Honjo, S. Ikeda, T. Hanyu, H. Ohno, T. Shibata and T. Endoh, Tohoku Univ. (Japan)</i></p>	
		<p>16:30 K-4-3 W and Copper Interconnection Stability for 3D VLSI CoolCube Integration <i>C. Fenouillet Beranger¹, S. Kerdiles¹, F. Deprat^{1,3}, P. Batude¹, M.P. Samson^{2,1}, B. Previtali¹, N. Rambal^{2,1}, V. Lapras^{1,2}, L. Emery², C. Euvrard Colnat¹, A. Seignard^{1,2}, P. Besson^{2,1}, R. Kachtouli¹, A. Roman^{2,1}, C. Ribiere¹, V. Lu^{2,1}, L. Brunet¹, E. Gourvest¹, G. Druais², Y. Loquet², L. Arnaud¹, Y. Le Fric², O. Pollet¹, V. Benevent¹, F. Aussenac¹, H. Denis¹, V. Jousseume¹, S. Maitrejean¹ and M. Vinet¹, ¹CEA-LETI, ²STMicroelectronics and ³IMEP-LAHC (France)</i></p>	<p>16:25 M-4-3 Analysis of GaN-HEMT Switching Characteristics for High-Power Applications <i>T. Mizoguchi¹, T. Naka¹, Y. Tanimoto², Y. Okada², W. Saito¹, M. Miura Mattausch² and H.J. Mattausch², ¹Toshiba Corp. and ²Hiroshima Univ. (Japan)</i></p>	<p>16:20 N-4-3 Positive and Negative Dipole Layer Formation at High-k/SiO₂ Interfaces Simulated by Classical Molecular Dynamics <i>K. Shimura¹, R. Kunugi¹, A. Ogura^{2,5}, S. Satoh^{3,5}, J. Fei⁴, K. Kita⁴ and T. Watanabe^{1,5}, ¹Waseda Univ., ²Meiji Univ., ³Univ. of Hyogo, ⁴Univ. of Tokyo and ⁵JST-CREST (Japan)</i></p>	<p>16:30 O-4-3 180-mV Subthreshold Operation of Crystalline Oxide Semiconductor FPGA Realized by Overdriving Programmable Power Switch and Programmable Routing Switch <i>M. Kozuma¹, Y. Okamoto¹, T. Nakagawa¹, T. Aoki¹, Y. Kurokawa¹, T. Ikeda¹, Y. Ieda¹, N. Yamade¹, H. Miyairi¹, M. Ikeda², M. Fujita² and S. Yamazaki¹, ¹Semiconductor Energy Lab. Co., Ltd. and ²Univ. of Tokyo (Japan)</i></p>	
			<p>16:40 M-4-4 Effect of Drain Conductance in Equivalent Circuit Model for GaN GIT Bidirectional Switch <i>T. Ide¹, M. Shimizu¹, X.Q. Shen¹, T. Morita², N. Otsuka² and T. Ueda², ¹AIST and ²Panasonic Corp. (Japan)</i></p>	<p>16:40 N-4-4 Thermodynamic Knob for High Performance SiGe Gate Stack Formation <i>C.T. Chang, T. Nishimura and A. Toriumi, Univ. of Tokyo (Japan)</i></p>	<p>16:50 O-4-4 Area-Efficient Non-volatile Carry Chain Based on Pass-Transistor/Atom-Switch Hybrid Logic <i>X. Bai, Y. Tsuji, A. Morioka, M. Miyamura, T. Sakamoto, M. Tada, N. Banno, K. Okamoto, N. Iguchi and H. Hada, NEC Corp. (Japan)</i></p>	

Tuesday, September 29

1F Middle-Sized Hall A	1F Middle-Sized Hall B	1F 101	1F 102	1F 107a	1F 107b	1F 108a
		C-4: Organic Devices I				
		16:55 C-4-5 Enhanced Performance in Organic Light-emitting Diode by Surface Modification of ITO with Graphene Oxide <i>D. Yamaguchi¹, H. Sakai¹ and H. Murata¹, JAIST (Japan)</i>				

Tuesday, September 29

2F 201	2F 202	2F Small Hall	2F 204	2F 206	2F 207	1F 108b

1F Middle-Sized Hall A	1F Middle-Sized Hall B	1F 101	1F 102	1F 107a	1F 107b	1F 108a
<p>A-5: Group-IV Optical Devices II (17:25-18:40) Chairs: Y. Ishikawa (Univ. of Tokyo) S. Saito (Univ. of Southampton)</p>	<p>B-5: 2D Materials II (17:25-18:40) Chairs: H. Miyazaki (Toshiba) S. Sato (Fujitsu Labs.)</p>	<p>C-5: New Concepts (17:25-18:25) Chairs: H. Suzuki (Univ. of Miyazaki) Y. Kurokawa (Nagoya Univ.)</p>			<p>F-5: Nano Devices for Chemical & Biosensing (17:25-18:40) Chairs: T. Sakata (Univ. of Tokyo) H.-M. Chen (NCTU)</p>	<p>G-5: Growth of Germanium-based Semiconductors II (17:25-18:40) Chairs: A. Kikuchi (Sophia Univ.) Y. Hotta (Univ. of Hyogo)</p>
<p>17:25 A-5-1 Tensile Strain of Germanium Micro-Disks on Freestanding SiO₂ Beams A. Alattili¹, S. Kako², M. Husain¹, F. Gardes¹, S. Iwamoto², Y. Arakawa² and S. Saito¹, ¹Univ. of Southampton and ²Univ. of Tokyo (UK)</p>	<p>17:25 B-5-1 (Invited) Transport Studies in Graphene and Black Phosphorus Field Effect Transistors B. Özyilmaz, NUS (Singapore)</p>	<p>17:25 C-5-1 (Invited) A New Concept of Solar Energy Harvesting Using Solar-Pumped Lasers Coupled with Monochromatic Photovoltaics S. Mizuno¹, K. Hasegawa¹, T. Ichikawa¹ and H. Ito², ¹Toyota CRDL, Inc. and ²Nagoya Univ. (Japan)</p>			<p>17:25 F-5-1 (Invited) Acquiring Biological Information of Individuals Using Quantum Mechanics M. Taniguchi, Osaka Univ. (Japan)</p>	<p>17:25 G-5-1 High Quality GeSn Layer Formation Due to Well-controlled Sn Migration at High Temperature N. Taoka¹, G. Capellini^{1,2}, P. Zaumseil¹, I. Costina¹, M.A. Schubert¹ and T. Schroeder^{1,3}, ¹IHP, ²Univ. Roma Tre and ³BTU (Germany)</p>
<p>17:40 A-5-2 Suspended Ge Cross-shaped Microstructures for Enhancing Biaxial Tensile Strain S. Ishida¹, S. Kako¹, K. Oda², T. Ido², S. Iwamoto¹ and Y. Arakawa¹, ¹Univ. of Tokyo and ²Hitachi Ltd. (Japan)</p>	<p>17:55 B-5-2 Band-to-Band Graphene Resonant Tunneling Field Effect Transistor S. Suzuki¹, M. Muruganathan¹, S. Oda² and H. Mizuta^{1,3}, ¹JAIST, ²Tokyo Tech and ³Univ. of Southampton (Japan)</p>	<p>17:55 C-5-2 Surface Passivation Studies on Vertical Junction Silicon Microwire Solar Cells Y.G. Ro¹, R. Chen¹ and S.A. Dayeh¹, Univ. of California San Diego (USA)</p>			<p>17:55 F-5-2 Vertical Nano-Junction Organic Diode as Sensitive Sensing Array M.Y. Chuang¹, J.N. Chen², H.W. Zan¹ and C.J. Lu³, ¹NCTU, ²National Tsing Hua Univ. and ³National Taiwan Normal Univ. (Taiwan)</p>	<p>17:40 G-5-2 Heavily Ga-doped Germanium-Tin Alloys by Molecular Beam Epitaxy W. Wang, V.R. D' Costa, S.L. Lim, Q. Zhou, E.S. Tok and Y.C. Yeo, NUS (Singapore)</p>
<p>17:55 A-5-3 Crystallinity Improvement of Ge Waveguides Fabricated by Epitaxial Lateral Overgrowth and Chemical Mechanical Polishing K. Oda¹, T. Okumura¹, J. Kasai¹, S. Kako², S. Iwamoto² and Y. Arakawa², ¹Hitachi Ltd. and ²Univ. of Tokyo (Japan)</p>	<p>18:10 B-5-3 Influence of Local Electric Field on Electronic States of Graphene Nanoribbons A. Yamanaka and S. Okada, Univ. of Tsukuba (Japan)</p>	<p>18:10 C-5-3 Photo-Assisted Impedance Spectroscopy for Quantum Dot Solar Cell T. Hoshii¹, S. Naitoh¹ and Y. Okada¹, Univ. of Tokyo (Japan)</p>			<p>18:10 F-5-3 Ammonia Gas Sensor Based on Surface Modified Poly-Si Nanowires Field Effect Transistor J.S. Hsu and H.M.P. Chen, NCTU (Taiwan)</p>	<p>17:55 G-5-3 Thermally-Stable High Sn Concentration (~ 9%) GeSn on Insulator by Ultra-Low Temperature (~ 180°C) Solid-Phase Crystallization Triggered by Laser-Anneal Seeding R. Matsumura^{1,2}, K. Moto¹, Y. Kai¹, T. Sadoh¹, H. Ikenoue¹ and M. Miyao¹, ¹Kyushu Univ and ²JSPS Research Fellow (Japan)</p>
<p>18:10 A-5-4 Temperature Dependent Electroluminescence from GeSn Heterojunction Light Emitting Diode on Si Substrate C. Chang, H. Li, S.H. Huang and H.H. Cheng, National Taiwan Univ. (Taiwan)</p>	<p>18:25 B-5-4 Back Gate Bias-Temperature Instability in Single-Layer Double-Gated Graphene Field-Effect Transistors Y.Y. Illarionov^{1,2}, M. Waltl¹, A.D. Smith², S. Vaziri³, M. Ostling³, M. Lemme¹ and T. Grasser¹, ¹TU Wien, ²Ioffe Physical-Tech. Inst., ³KTH Royal Inst. of Tech. and ⁴Univ. of Siegen (Austria)</p>				<p>18:25 F-5-4 Biosensing by Differential Si Ring Resonators Robust to Process Variations T. Taniguchi, S. Yokoyama, Y. Amemiya, T. Ikeda, A. Kuroda and S. Yokoyama, Hiroshima Univ. (Japan)</p>	<p>18:10 G-5-4 Au Induced Low Temperature Formation of (111) Preferred Oriented Crystalline Ge on Insulator H. Okamoto, K. Kudo, T. Nomitsu, K. Takakura and I. Tsunoda, Kumamoto College (Japan)</p>
<p>18:25 A-5-5 Sharp and Intense Si-vacancy Center Emission from Diamond Cube Selective-grown on Si (100) Substrate H. Isshiki, K. Komiya and R. Kojima, Univ. of Electro-Communications (Japan)</p>					<p>18:25 G-5-5 Enhancement of Au Induced Lateral Crystallization in Electron Irradiated Amorphous Ge on SiO₂ K. Moto¹, S. Sakiyama¹, H. Okamoto¹, H. Hara², H. Nishimura², K. Takakura¹ and I. Tsunoda¹, ¹Kumamoto College and ²Bruker BioSpin K.K. (Japan)</p>	

2F 201	2F 202	2F Small Hall	2F 204	2F 206	2F 207	1F 108b
		<p>K-5: Noise (17:25-18:25) Chairs: F.-L. Yang (Academia Sinica) K. Kokubun (Toshiba)</p>	<p>M-5: Novel Widegap Devices (17:25-18:40) Chairs: C.-F. Huang (National Tsing Hua Univ.) N. Hara (Fujitsu Labs.)</p>	<p>N-5: Gate Stack Characterization (17:25-18:55) Chairs: H. Nohira (Tokyo City Univ.) G. Nakamura (Tokyo Electron)</p>	<p>O-5: MRAM and Spintronics Logic (17:25-18:55) Chairs: K. Ito (Tohoku Univ.) H. Saito (Fujitsu Semicon.)</p>	
		<p>17:25 K-5-1 Transistor-level Characterization of SRAM Bit Failures Induced by Random Telegraph Noise <i>T. Mizutani, T. Saraya, K. Takeuchi, M. Kobayashi and T. Hiramoto, Univ. of Tokyo (Japan)</i></p>	<p>17:25 M-5-1 (Invited) Diamond Electronics for Power Devices and Sensing Applications <i>M. Hatano^{1,2}, T. Iwasaki^{1,2} and S. Yamasaki^{2,3}, ¹Tokyo Tech, ²JST-CREST and ³AIST (Japan)</i></p>	<p>17:25 N-5-1 (Invited) Engineering high-k/InGaAs Interface for Extremely Scaled Gate Stacks <i>D. H. Zadeh¹, H. Oomine², K. Kakushima² and H. Iwai¹, ¹NTT Device Tech. Labs. and ²Tokyo Tech (Japan)</i></p>	<p>17:25 O-5-1 (Invited) Harvesting the Physics of Spin and Magnetism for Low Power Logic <i>I. Young, S. Manipatruni and D. Nikonov, Intel Corp. (USA)</i></p>	
		<p>17:45 K-5-2 1/f Noise in Submicron Top-Gate Crystalline Oxide Semiconductor FET <i>A. Hirose, T. Aoki, S. Maeda, F. Akasawa, Y. Kurokawa, T. Ikeda, M. Tsubuku, T. Ishihara, Y. Kobayashi and S. Yamazaki, Semiconductor Energy Lab. Co. Ltd. (Japan)</i></p>	<p>17:55 M-5-2 High Voltage Diamond MESFET with $V_{BR} > 1.5kV$ <i>H. Umezawa^{1,2,3}, T. Matsumoto¹, S. Ohmagari¹, Y. Kato¹ and Y. Mokuno¹, ¹AIST, ²Univ. Grenoble Alpes, Inst. Neel and ³CNRS, Inst. Neel (Japan)</i></p>	<p>17:55 N-5-2 Impact of La_2O_3 Interfacial Layers on InGaAs MOS Interface Properties in ALD $Al_2O_3/ La_2O_3/InGaAs$ Gate Stacks <i>C.Y. Chang^{1,2}, M. Takenaka^{1,2} and S. Takagi^{1,2}, ¹Univ. of Tokyo and ²JST-CREST (Japan)</i></p>	<p>17:55 O-5-2 10 nm p-MTJ Array Design for Suppressing Switching Delay Induced by Interference Due to Magnetic Dipole Interaction for High Density STT-MRAM <i>S. Ohuchida^{1,3}, K. Ito², M. Muraguchi^{1,2,3} and T. Endoh^{1,2,3}, ¹Tohoku Univ., ²CIES, Tohoku Univ. and ³JST-ACCEL (Japan)</i></p>	
		<p>18:05 K-5-3 Using Sub-microsecond Measurement to Monitor AC NBTI and Dividing Trap Types into N_{IT}, N_{HT} and N_{FT} through Adjustable Stress Frequency and Measure Frequency <i>C.H. Chiang, N. Ke, S.N. Kuo, A. Juan and K.C. Su, UMC (Taiwan)</i></p>	<p>18:10 M-5-3 1.7 KV Breakdown C-H Diamond MOSFETs with High Drain Current Density <i>Y. Kitabayashi, T. Yamada, D. Xu, T. Saito, D. Matsumura, A. Hiraiwa and H. Kawarada, Waseda Univ. (Japan)</i></p>	<p>18:15 N-5-3 First Demonstration of 300mm InGaAs-On-Insulator Substrates Fabricated using the Smart Cut™ Technology <i>J. Widiez^{1,2}, S. Sollier^{1,2}, T. Baron^{1,3}, M. Martin^{1,3}, G. Gaudin⁴, F. Mazen^{1,2}, F. Madeira^{1,2}, S. Favier^{1,2}, A. Salaun^{1,2}, S. Arnaud^{1,3}, S. David^{1,3}, E. Beche^{1,2}, H. Grampeix^{1,2}, C. Veytizou¹, D. Delprat¹ and T. Signamarcheix^{1,2}, ¹Univ. Grenoble Alpes, ²CEA-LETI, ³CNRS-LTM and ⁴SOITEC (France)</i></p>	<p>18:15 O-5-3 Universal Damage Recovery Scheme using the Oxygen Showering Post-treatment (OSP) Process for Sub-20nm High Density STT-MRAM Devices <i>J.H. Jeong^{1,2} and T. Endoh^{1,3,4}, ¹Tohoku Univ., ²Samsung Electronics Co. Ltd., ³CIES, Tohoku Univ. and ⁴JST-ACCEL, Tohoku Univ. (Japan)</i></p>	
			<p>18:25 M-5-4 First Demonstration of β-Ge_2O_3 Schottky Barrier Diode with Field Plate Edge Termination <i>K. Sasaki^{1,2}, M. Higashiwaki², K. Goto¹, K. Nomura³, Q.T. Thieu³, R. Togashi³, H. Murakami³, Y. Kumagai³, B. Monemar^{3,4}, A. Koukitu³, A. Kuramata¹ and S. Yamakoshi¹, ¹Tamura Corp., ²NICT, ³Tokyo Univ. of Agri. & Tech. and ⁴Linköping Univ. (Japan)</i></p>	<p>18:35 N-5-4 High Mobility N-MOSFETs on GeSn Film Formed by Solid Phase Epitaxy with Surface Passivation by Oxygen Plasma Treatment <i>Y.H. Wu, C.C. Su, Y.C. Fang and C.H. Hsieh, National Tsing Hua Univ. (Taiwan)</i></p>	<p>18:35 O-5-4 Optimization of CoFeB Capping Layer Thickness for Characterization of Leakage Spot in MgO Tunneling Barrier of Magnetic Tunnel Junction <i>S. Sato^{1,6}, H. Honjo^{1,6}, S. Ikeda^{1,2,3,6}, H. Ohno^{1,2,3,4}, T. Endoh^{1,2,3,6} and M. Niwa^{1,6}, ¹CIES, Tohoku Univ., ²CSIS, Tohoku Univ., ³CSIS, Tohoku Univ., ⁴RIEC, Tohoku Univ., ⁵WPI-AIMR, Tohoku Univ., ⁶Tohoku Univ. and ⁶JST-ACCEL (Japan)</i></p>	