

# 3/4 (SUN)

Registration 12:30-

Tutorial Plasma Science & Technologies <Chair> T. Shirafuji (Osaka City University)	13:00-14:00 <04pG01TU> Pascal Chabert (LPP,CNRS,Ecole Polytechnique) "Fundamentals of Low-Temperature Plasma Physics."
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Break 14:00-14:15

Tutorial Nitride Semiconductors <Chair> M. Miyoshi (Nagoya Institute of	14:15-15:15 <04pG02TU> Yasushi Nanishi (Ritsumeikan University) "Growth of InN and In-rich InGaN by RF-MBE -Present Status and Challenges-"
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Break 15:15-15:30

Tutorial Nanomaterials <Chair> H. Sato (Mie University)	15:30-16:30 <04pG03TU> Yahachi Saito (Nagoya University) "Carbon Nanomaterials as an Electron Emitter: Fundamentals and Applications"
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Break 16:30-16:45

Tutorial Bioapplications <Chair> K. Niitsu (Nagoya University)	16:45-17:15 <04pG04TU> Pietro Favia (University of Bari) "Tutorial Introduction to Plasma Processing of Biomedical Materials"  17:15-17:45 <04pG05TU> Hajime Sakakita (AIST) "Study on International Standardization of a Low Energy Ionized Gas Haemostasis Equipment"
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Welcome Party  
18:00-19:30

Registration 9:00-							
Opening <Chair> M. Ito (Meijo University)	10:00-10:05 Opening Address Mineo Hiramatsu (ISPlasma2018/IC-PLANTS2018 Organizing Committee Chairperson)						
	10:05-10:10 Introduction of the Plenary Lecture						
Plenary Lecture <Chair> M. Hiramatsu (Meijo University)	10:10-11:00 Plenary Lecture <05aA01PL> Sumio Iijima (Meijo University) "Carbon Nanotubes: Discovery, Impact and Beyond"						
Break 11:00-11:10							
Keynote Lecture <Chair> M. Hiramatsu (Meijo University)	11:10-11:50 Keynote Lecture <05aA02K> Jeon Geon Han (Sungkyunkwan University) "New Horizon of Novel Plasma and Films for Next Generation Flexible Devices"						
Keynote Lecture <Chair> M. Hiramatsu (Meijo University)	11:50-12:30 Keynote Lecture <05aA03K> Uwe Czarnetzki (Ruhr-Universität Bochum) "Ten Years of Plasma Diagnostics as ISPlasma: Progress, Challenges and Perspectives"						
Photograph 12:30-12:45							
Lunch 12:45-14:15							
Plasma Science 1 Plasma Sources <Chair> J. P. Trelles (University of Massachusetts Lowell)	14:15-14:45 Invited Lecture <05pB04I> Dmytro Rafalsky (Ecole Polytechnique) "Plasma Sources of Bipolar Flows: Principles of Operation and Diagnostic Methods"	Nitride Semiconductors 1 Growth & Characterizations <Chair> N. Tansu (Lehigh University)	14:15-14:45 Invited Lecture <05pE04I> Konrad Sakowski (Unipress) "Energy Dissipation During Adsorption at Solid Surfaces - The Role of Electron Transfer"	Nanomaterials 1 Carbon/2D <Chair> H. Sato (Mie University)	14:30-15:00 Invited Lecture <05pD04I> Gheorghe Dinescu (National Institute for Lasers, Plasma and Radiation Physics) "Cold Plasma Jet Sources: From Design to Multidisciplinary Applications"	Bioapplications 1 Bio Material <Chair> N. Hayashi (Kyushu University)	14:15-14:45 Invited Lecture <05pF04I> Masaaki Nagatsu (Shizuoka University) "Tailoring Surface-functionalized Graphite-encapsulated Metal Nanoparticles by Plasma Processing for Biomedical and Environmental Applications"
	14:45-15:00 1063 <05pB05O> Haruhiko Himura "Development of Experimental Machine for Testing Oxidation Reaction by Negative Oxygen Ions"		14:45-15:00 1505 <05pE05O> Tatsuya Hattori "Comparison of In Incorporation in Axial InGaN Quantum Wells on GaN and InGaN Nanorods Grown by Plasma Assisted Molecular Beam Epitaxy"				14:45-15:15 Invited Lecture <05pF05I> Yoshimichi Nakatsu (Kyushu University)
	15:00-15:15 1114 <05pB06O> Masaya Hotta "Study of Plasma Density Profile by Superposing Two Resonant Modes in Microwave Cavity Discharge"		15:00-15:15 1014 <05pE06O> Yasuhiro Isobe "High Quality GaN Crystal Growth using Radical-enhanced Metalorganic Chemical Vapor Deposition (REMOCVD) with Optimizing a Shield of Plasma Regions"		15:00-15:30 Invited Lecture <05pD05I> Kosuke Nagashio (The University of Tokyo) "Understanding of Layered Heterointerfaces in 2D Semiconductors"		
	15:15-15:30 1099 <05pB07O> Thi-Thuy Nga Nguyen "A Novel Designed High-density Atmospheric Pressure Inductively Coupled Plasma Remotely Generated at the Downstream Side of a Quartz Tube using a Floating Wire"		15:15-15:30 1014 <05pE07O> Faizulsalihin Bin Abas "Epitaxial InN Growth with in situ Surface Reformation by Radical Beam Irradiation"				15:15-15:30 1045 <05pF06O> Chu-Hao Yang "Dielectric-barrier-discharge Based Remote Atmospheric-pressure Plasma for One-step Protein Immobilization"
	15:30-15:45 1190 <05pB08O> Haruka Suzuki "Power Absorption Mechanism of Atmospheric-pressure Microwave Line Plasma"		15:30-15:45 1007 <05pE08O> Atsushi Tanide "Improvement of Quality of GaN Films Grown by Plasma-enhanced CVD"		15:30-15:45 <05pD06O> Keigo Takeda "Synthesis of Vertical Graphene Network for Emerging Applications"		15:30-15:45 1258 <05pF07O> Chen-Kuang Chiang "Paper-based Microfluidic Devices for Label Free Human Hemoglobin Detection"
Break 15:45-16:00							
Plasma Science 2 Thermal Plasma <Chair> D. Rafalsky (Ecole Polytechnique)	16:00-16:30 Invited Lecture <05pB09I> Juan Pablo Trelles (University of Massachusetts Lowell) "Nonequilibrium Plasma Flows Simulation: Kinetics, Patterns and Turbulence"	Nitride Semiconductors 2 Novel materials <Chair> K. Sakowski (Unipress)	16:00-16:30 Invited Lecture <05pE09I> Nelson Tansu (Lehigh University) "Beyond Conventional III-Nitride Semiconductor Technologies"	Nanomaterials 2 Optical properties/Carbon nanomaterials <Chair> G. Dinescu (National Institute for Lasers, Plasma and Radiation Physics)	16:00-16:30 Invited Lecture <05pD07I> Kazunari Matsuda (Kyoto University) "Optical Phenomena and Application of Two-dimensional Materials; Control and Dynamics of Optical Properties in Atomically Thin Materials"	Biosensing <Chair> M. Nagatsu (Shizuoka University)	16:00-16:30 Invited Lecture <05pF08I> Hideaki Kano (University of Tsukuba) "Label-free Live Cell Imaging using a White-light Laser Source"
	16:30-17:00 Invited Lecture <05pB10I> Sergey Gortchakov (INP Greifswald) "Advanced Optical Diagnostics for Characterisation of Switching and Welding Arcs"		16:30-16:45 1162 <05pE10O> Akira Kusaba "Driving Force for m-plane GaN MOVPE: a New Thermodynamic Modeling"		16:30-16:45 1153 <05pD08O> Takuya Okada "Low Temperature Growth of Single-walled Carbon Nanotubes by ACCVD using Co Catalyst on Al <sub>2</sub> O <sub>3</sub> Buffer Layer"		16:30-17:00 Invited Lecture <05pF09I> Kazuo Nakazato (Nagoya University) "Integration of Biochemistry on a Large-scale Integrated Circuit"
			16:45-17:00 1033 <05pE11O> Yu Inaishi "Heavily p-type Doping to Si <sub>1-x</sub> Sn <sub>x</sub> Layers Grown on SOI Substrates"		16:45-17:00 <05pD09O> Hideki Sato "Formation of Carbon Nanotube Filaments Induced by Gas Discharge Breakdown"		
	17:00-17:15 1130 <05pB11O> Yasunori Tanaka "Two-dimensional Rapid Oxidation of SiC Substrate Surface using Ar/O <sub>2</sub> Loop-type of Induction Thermal Plasmas"		17:00-17:15 1165 <05pE12O> Yuta Nakashima "Operand Study of Multiple Stacked Si Quantum Dots by Hard X-ray Photoelectron Spectroscopy"		17:00-17:15 <05pD10O> Takayuki Ohta "Synthesis of Copper Nanoparticles by Gas-liquid Interface Plasma"		17:00-17:15 1252 <05pF10O> Yu-Chun Lin "Investigation the Effects of Gas Flow Rate on Plasma Properties by Thomson Scattering"
Poster Session ① 17:15-18:45							

Registration 9:00-							
Plasma Science 3 Surface and Thin Films <Chair> W. H. Chiang (National Taiwan University of Science and Technology)	9:30-09:45 1137 <06aB010> Simon Kos "Overstoichiometric Transition-metal Nitride Coatings: Is Magnetron Sputtering a Way to form Hard Dinitride Coatings?"	Nitride Semiconductors 3 Etching & Surface treatments <Chair> S. Keller (University of California, Santa Barbara)	Nanomaterials 3 Nanomechanical and Electronic Devices <Chair> J. Sakurai (Nagoya University)	9:30-10:00 Invited Lecture <06aD011> Kenji Fukuzawa (Nagoya University) "Real-time Visualization of nm-thick Liquid Films by Ellipsometric Microscopy"	Bioapplications 3 Plasma Medicine <Chair> E. Martinez (Consorzio RFX)	9:30-10:00 Invited Lecture <06aF011> Matteo Gherardi (Università di Bologna) "Current Research Activities on Plasma-assisted Biomedical Applications and Nanoparticle Synthesis at UniBO"	
	09:45-10:00 1176 <06aB020> Kazunori Iga "Ion Energy Distribution High Power Impulse Magnetron Sputtering Discharge"			10:00-10:30 Invited Lecture <06aD021> Heeyoung Chae (Sungkyunkwan University) "Plasma-enhanced Atomic Layer Deposition and Plasma-enhanced Chemical Vapor Deposition for Flexible Moisture Barrier Layers"		10:00-10:15 1280 <06aF020> Jaeho Kim "A Minimalized Microwave Air Plasma Jet for Medical Applications"	
	10:00-10:15 1049 <06aB030> Yusuke Miki "Growth of Ge <sub>1-x</sub> Sn <sub>x</sub> Layer by Metal-organic Chemical Vapor Deposition Method using Tetrakis Dimethylamino Tin"			10:15-10:30 1100 <06aE020> Xu Li "A Study of in-situ Auger Spectroscopic Surface Analysis in Development of Atomic Layer Etch for GaN/AlGaIn based Power Device Fabrication"		10:15-10:30 1089 <06aF030> Zhi Ying Chen "A Biocorrier Surface Modification of PP Nonwoven Fabric by O <sub>2</sub> Plasma and Photo-induced Grafting Thermo-sensitive Hydrogels to Improve of Immobilization Vitamin K1 for Biomaterial Application"	
	10:30-10:45 1115 <06aB050> Satoru Kaneko "Large Constriction of Lattice Constants in Epitaxial Oxide Film on Silicon Substrate"			10:30-10:45 1133 <06aE030> Masato Imamura "Low Damage Stripping on GaN Layer by HDRF Plasma Technology (High Density Radicals Flux) "		10:30-10:45 1205 <06aD030> Taige Dong "Highly Stretchable Crystalline Silicon Networks Woven by Self-automated and Self-assembly in-plane Silicon Nanowires"	10:30-10:45 1246 <06aF040> Chia-Feng Hsien "To Immobilize Chinese Herb Extracts on TPU Non-woven Fabric by O <sub>2</sub> Plasma Treated and Surface Graft Polymerization of Chitosan-PAA Hydrogel for Anti-bacterial and Biomedical Applications"
	10:45-11:00 1011 <06aB060> Sajjan Ajja "Two-step Treatments of Photoemission-assisted Plasma Irradiation for Cu/Si Surfaces Smoothing"			10:45-11:00 1104 Yannick Pilloux "Low Damage Stripping on GaN Layer by HDRF Plasma Technology (High Density Radicals Flux) "		10:45-11:00 1090 <06aF050> Chun Yu Wu "Development of Zirconia Surface Modifications by O <sub>2</sub> Plasma Treatments and UV Graft PAA/P-GA Hydrogel Carrying Biomolecule for Osteointegration Capability and Antibacterial Effect"	
Poster Session ② 11:00-12:30							
Lunch 12:30-14:00							
Plasma <06pB071> Wei-Hung Chiang (National Taiwan University of Science and Technology) Nanotechnology Engineering using Microplasmas: Synthesis and Applications" <Chair> X. Wang (National Institute of Advanced Industrial Science and Technology)	14:00-14:30 Invited Lecture <06pE051> Daniel Feczell (University of New Mexico) "High-speed Nonpolar and Semipolar Light-emitting Diodes for Visible Light Communication"	Nitride Semiconductors 4 Optical Devices 1 <Chair> X. Wang (National Institute of Advanced Industrial Science and Technology)	Nanomaterials 4 Functional Nanomaterials <Chair> S. Miyazaki (Nagoya University)	14:00-14:30 Invited Lecture <06pD041> Ju-Liang He (Feng Chia University) "HIPIMS Coatings for Stretchable Electronics"	Bioapplications 4 Plasma Medicine II <Chair> M. Gherardi (Università di Bologna)	14:00-14:30 Invited Lecture <06pF061> Emilio Martinez (Consorzio RFX) "Interacting with Cellular Processes using a Helium Plasma"	
	14:30-14:45 1050 <06pB080> Mika Takahashi "Polycarbonate Surface after Atmospheric Pressure Plasma Treatments"			14:30-15:00 Invited Lecture <06pD051> Yi-Chia Chou (National Chiao Tung University) "Silicide and Germanide Formation in Semiconductor Nanowires"		14:30-14:45 1244 <06pF070> Saitong Muneekaeaw "Cytotoxicity of L-929 and 3T3 Mouse Fibroblasts by Atmospheric Pressure Plasma Jet Treatments"	
	14:45-15:00 1301 <06pB090> Yosuke Sato "Numerical Analysis on Size Dependency of Particulate Matter Charging Property in Plasma Electric Collector"			14:45-15:00 1237 <06pE070> Muhammad Ajmal Khan "Characterization of AlGaIn based Lower Bound (280-300nm) UVB LED Device Grown by MOCVD"		14:45-15:00 1029 <06pF080> Yi-Jing Cheng "Plasma-activated Medium as Adjuvant Therapy on Lung Cancer with Malignant Pleural Effusion"	
	15:00-15:15 1272 <06pB100> Yoshimi Watanabe "Effects of Carbon and Nitrogen in Iron on Bonding Performance with Stainless Steels by Spark Plasma Sintering Method"			15:00-15:15 1112 <06pE080> Han-Ming Wu "Photoelectrical Properties of Flexible InGaIn Light Emitting Membranes Separated from Si Substrate"		15:00-15:30 Invited Lecture <06pD061> Linwei Yu (Nanjing University) "Programming Silicon Nanowires for High Performance Large Area Electronics and Energy Applications"	15:00-15:15 1085 <06pF090> Hiromasa Tanaka "Plasma-activated Medium and Plasma-activated Ringer's Lactate Solution Exhibited Anti-tumor Effects through Different Mechanisms"
	15:15-15:30 1290 <06pB110> Hirotomo Itagaki "Iron Nitriding by Quasi-atmospheric Microwave Excited Nitrogen Radical Flow"					15:15-15:30 1016 <06aF100> Yugo Hosoi "Antitumor Agents in the Plasma-activated Lactate in Ringer's Solution (PAL) "	
Break 15:30-15:45							
Topical Session 1 The States of the Art Plasma-bioapplications <Chair> K. Ishikawa (Nagoya University) K. Nitsui (Nagoya University)	15:45-16:15 Invited Lecture <06pA121> Alexander Fridman (Drexel University) "Atmospheric Pressure Plasma Sources for Agricultural Applications"						
	16:15-16:45 Invited Lecture <06pA131> Klaus-Dieter Weltmann (INP Greifswald e.V.) "Development of Plasma Sources for Medical Applications"						
	Break 16:45-17:00						
	17:00-17:30 <06pA141> Kiichi Nitsui (Nagoya University) "Energy-autonomous Biomedical IoTs using Plasma-enhanced Bio-fuel Cell and Low-energy CMOS Biosensor"						
	17:30-18:00 Invited Lecture <06pA151> Zdenko Machala (Comenius University) "Plasma Activated Water: Air Plasma-induced Gas-phase and Liquid-phase Reactive Species for Biomedical Applications"						
	18:00-18:30 Invited Lecture <06pA161> Stephan Reuter (Princeton University) "Energy Transfer in Atmospheric Pressure Plasma Jets used in Medicine"						
Banquet 18:30-20:30							

Registration 9:00								
Plasma Science 5 Multiphase Media <Chair> Daisuke Ogawa (Chubu University)	9:30-10:00 <07aB011> Invited Lecture James W Bradley (University of Liverpool) "Plasma Discharges for the Ambient Processing of Materials"							
	10:00-10:30 <07aB021> Invited Lecture Fumiyoshi Tochikubo (Tokyo Metropolitan University) "Numerical Simulation of Atmospheric-pressure Dc Glow Discharge using Liquid Electrode with Noble Gas Flow"							
Break 10:30-10:45								
Plasma Science 5 Multiphase Media <Chair> James W Bradley (University of Liverpool) Fumiyoshi Tochikubo (Tokyo Metropolitan University)	10:45-11:00 1148 <07aB030> Invited Lecture Timothy R. Brubaker "Visualization of Advection in Plasma-liquid Interactions: Flow Due to an Impinging Plasma Jet"	Nitride Semiconductors 5 Optical Devices <Chair> T. Kachi (Nagoya University)	10:45-11:15 <07aE011> Invited Lecture Kazuya Yamamura (Osaka University) "Highly Efficient Damage-free Chemical Mechanical Dry Finishing of Wide Gap Semiconductor Substrate by Plasma Assisted Polishing"	Nanomaterials 5 Functional Nanomaterials/Plasma Synthesis and Plasma Treatment <Chair> Y. Suda (Toyoohashi University of Technology)	10:45-11:00 1142 <07aD010> Che-Wei Chang "Sputtering-assisted Growth of ZnO-WO <sub>3</sub> Composite Nanorods and Their Photoactivity and Sensing Performance"	Plasma Applications 5 Plasma Agriculture <Chair> T. Ohta (Meijo University)	10:45-11:15 <07aF011> Invited Lecture Juergen F. Kolb (INP Greifswald) "Post-harvest Processing of Crops by Plasma and Pulsed Electric Fields"	
	11:00-11:15 1267 <07aB040> Ryoma Sawata "Electrical Charges on Liquid Droplets Passing through Plasma"		11:15-11:30 1504 <07aE020> Hayata Fukushima "Mesa Depth Dependence of Breakdown Voltage of GaN pn diode"		11:00-11:15 1194 <07aD020> Kun-Cheng Peng "Structure and Piezoelectric Property of ZnO Nanorods Grown by using Hydrothermal Method on Soft Nickel and PET Substrates"		11:15-11:30 1106 <07aD030> Tian Xie "Fabrication and Photoelectrochemical Evaluation of CuO Thin Film Photocathodes Grown by Magnetron Reactive Sputtering"	11:15-11:30 1154 <07aF020> Masakazu Takemoto "Growth-promotion of Purple Photosynthetic Bacteria using Atomic Oxygen Radical Treatment"
	11:15-11:30 1311 <07aB050> Vladimir Kolobov "Simulations of Multi-phase Processes Associated with Explosive Electron Emission in Cathodic Arcs"		11:30-11:45 1110 <07aE030> Hirokuni Tokuda "A Method for Deriving Interface State Density from Sub-threshold Wving in AlGaIn/GaN MIS-HEMTs"		11:30-11:45 1152 <07aD040> Vladimir Svrcek "Atmospheric-plasma Processing of Environmentally Friendly Silicon and Carbon Quantum Nanostructures Applied for Photovoltaic Devices"		11:30-11:45 1075 <07aF030> Krystal Iris M. de Castro "Water Uptake, Surface Morphology and Germination of White Corn (Zea Mays) Kernels Treated with Atmospheric Air Plasma"	
	11:30-11:45 1349 <07aB060> Remnev Alexey "Geometrical Aspects of Ion Beam and Plasma Based Stripping Processes for Cutting Tools Refurbishing"		11:45-12:00 1247 <07aE040> Noriyuki Taoka "Impacts of Surface Potential Fluctuation and Nature of Interface Traps on Carrier Mobility in an Inversion Layer of GaN MOSFET"		11:45-12:00 1177 <07aD050> Xu Zhao "Low-temperature Plasma Treatment for Releasing Residual Strain and Forming Helical Nanostructures"		11:45-12:00 1079 <07aF040> Koichi Takaki "Influence of Relative Humidity on Ethylene Removal using Dielectric Barrier Discharge"	
	11:45-12:00 1341 <07aB070> Magdalena R. Vasquez Jr. "Extraction of Low-energy Ion Beams from Ar-C2H2 Plasma"		12:00-12:15 1071 <07aE050> Niloy Chandra Saha "Interface State Density Measurements of Diamond MOS Structure"		12:00-12:15 1155 <07aD060> Kazunori Koga "Analysis of Coupling of Interaction Fluctuation between Reactive Plasmas and Nanoparticles"			
	12:00-12:15 1312 <07aB080> Yuji Shimabukuro "A Tuner Integrated Microwave Driven Atomic Gases for Radical Treatment"				12:15-12:30 1121 <07aD070> Hiroaki Nakamura "FDTD Simulation on Absorption of Electromagnetic Waves in Tungsten Photonic-fractals"			
Lunch 12:30-14:00								
Topical Session 2 GaIn Plasma Process <Chair> M. Kuzuhara (University of Fukui)	14:00-14:30 <07pA101> Invited Lecture Srabanti Chowdhury (UC Davis) "Vertical GaN Transistors for Power Switching Application"							
	14:30-15:00 <07pA111> Invited Lecture Satecia Keller (University of California) "Growth of N-polar (Al,Ga,In)N Heterostructures for Electronic Device Applications"							
	Break 15:00-15:15							
	15:15-15:45 <07pA121> Invited Lecture Kazuo Nojiri (Lam Research Corp.) "Atomic Layer Etching of GaN and AlGaN using Directional Plasma-enhanced Approach"							
	15:45-16:15 <07pA131> Invited Lecture Heiji Watanabe (Osaka University) "Gate Stack Technology for Advanced GaN-based MOS Devices"							
16:15-16:45 <07pA141> Invited Lecture Romualdo Alejandro Ferreyra (Kyoto Institute of Technology) "Non-alloy Ohmic Contacts based on Ge-doped GaN Regrown by PicoSecond Pulsed Laser Deposition"								
Poster Session @ 16:45-18:15								

Registration 9:00-

Plasma science 6	9:30-10:00 Invited Lecture <08aB011> Remi Dussart (University of Orléans) <Chair> H. Toyoda (Nagoya University)	Nitride Semiconductors 6 Optical Devices 2 <Chair> D. Fezzell (The University of New Mexico)	9:30-10:00 Invited Lecture <08aE011> Xuelun Wang (AIST) "Directional Micro LED based on Evanescent Wave Coupling"	Nano Materials 6 Surface Modifications and Tribology <Chair> T. C. Wei (Chung Yuan Cristian University) H. Kosaka (Gifu University)	9:30-10:00 Invited Lecture <08aD011> Ta-Chin Wei (Chung Yuan Cristian University) "Super-amphiphobic Teflon-like Fluorocarbon Nanoflakes Deposited by Microwave Plasmas"	Bio applications 6 <Chair> K. Niitsu (Nagoya University)	9:30-9:45 1367 <08aF010> Daiki Kanno "Cytotoxic Effects of Fullereneol Enhanced by Atmospheric Pressure Plasma" 9:45-10:00 1366 <08aF020> Yukihiro Kurokawa "Cytotoxic Substances in the Laser Generated Plasma Activated Medium (LPAM)"
	10:00-10:15 1013 <08aB020> Minoru Sasaki "Processing Thin-film Membrane and Dry Etching Release of Torsional Resonator for Uncooled Infrared Sensor"		10:00-10:15 1164 <08aE020> Bo-Syun Hong "Efficiency Enhancement for InGaN-based Photodetector with a Photon-recycle Porous-GaN Bragg Distributed Reflector"		10:00-10:15 1268 <08aD020> Daisuke Ogawa "Size Dependency of Plasma-treated Carbon Nanotubes for Mechanical Enhancement of Polyurethane"		10:00-10:15 1048 <08aF030> Jun-Seok Oh "Vacuum Ultraviolet Absorption Spectroscopy for Analysis of Plasma-activated Water"
	10:15-10:30 1140 <08aB030> Takayoshi Tsutsumi "Understanding Morphology and Chemical Bonds of Si Surface in Cyclic CF <sub>4</sub> /Ar Plasma Process by Surface Analysis without Air Exposure"		10:15-10:30 1283 <08aE030> Gauangshuo Cai "Electrolyte-gated In <sub>2</sub> O <sub>3</sub> Dual-gate Thin Film Transistor Driven by Low Voltage for Visible-blind UV Detection"		10:15-10:30 1269 <08aD030> Ranjit R. Borude "Plasma Surface Treatment of Carbon Films Deposited by Magnetron Sputtering"		10:15-10:30 1365 <08aF040> Nevena Puac "Plasma Recycling of Water Contaminated with Organophosphates used for Seed Germination"
					10:30-10:45 <08aD040> Hiroyuki Kousaka "Effect of Humidity on the Friction Properties of a-C:H and a-C:H:Si Films Deposited by PECVD Employing Microwave Sheath-voltage Combination Plasma"		

Break 10:45-11:00

Topical Session 3	11:00-11:30 Invited Lecture <08aA051> Chen-Hao Wang (National Taiwan University of Science & Technology) "Synthesis of Non-precious Metal Catalysts by Different Kinds of Cobalt Precursors for Oxygen Reduction Reaction in Alkaline Media"						
Energy Nanomaterial	11:30-12:00 Invited Lecture <08aA061> Tomohiro Nozaki (Tokyo Institute of Technology) "Nonthermal Plasma-assisted Catalysis of Greenhouse Gas"						
	12:00-12:30 Invited Lecture <08aA071> Masaharu Shiratani (Kyushu Univeristy) "IoT-oriented Solar Cells Fabricated using Plasma-based Nanotechnology"						
	12:30-13:00 Invited Lecture <08aA081> Takeyoshi Sugaya (AIST) "Smart Stacked Heterogeneous Multijunction Solar Cells Fabricated by Advanced Bonding using Metal Nanoparticle Arrays"						

Award <Chair>	Award						
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Closing