

3/4 (SAT)

Registration 9:10

Plasma Science 6 Deposition I <Chair> Hiroyuki Kosaka (Gifu University)	9:30-10:00 Invited Lecture <04aB011> Eugen Stamate (Technical University of Denmark) "Conductive, Transparent and Low Emissivity Coatings of Aluminum Doped Zinc Oxide Produced by Magnetron Sputtering"	Nitride Semiconductors 4 Electron Devices 2 <Chair> E. Zanoni (Universita' di Padova)	9:30-10:00 Invited Lecture <04aC011> Hiroji Kawai (POWDEC K.K.) "New Platform for Low-Cost High-Voltage GaN Power Devices"	Nanomaterials 5 Plasma Synthesis and Plasma Treatment <Chair> X. Li (Peking University), Y. Suda (Toyoashi University of Technology)	9:30-10:00 Invited Lecture <04aD011> Xingguo Li (Peking University) "Synthesis and Properties of Nanostructured Materials for Hydrogen Storage and Lithium Battery by Hot and Cold Plasma"	Bioapplications 5 Biointerfaces <Chair> K. Ishikawa (Nagoya University), T. Ohta (Meijo University)	9:30-9:45 1291 <04aE010> Ryugo Tero "Mechanism of Plasma-induced Pore Formation in Artificial Cell Membranes"
	10:00-10:15 1245 <04aB020> Tomoya Washizu "Selective Growth of Ge1-xSn Epitaxial Layer on Patterned Si Substrate using Metal-organic Chemical Vapor Deposition Method"		10:00-10:30 1228 Invited Lecture <04aC021> Atsushi Yamada "Electron Mobility Enhancement in MOVPE-grown InAlN-HEMTs by Control of Surface Morphology of Spacer Layer"		10:00-10:15 1045 <04aD020> Wan-Ting Yang "Graphene Lateral p-n Homojunction by Nitrogen Plasma Treatment"		10:00-10:15 1175 <04aE030> Hirofumi Kurita "Rapid Analysis of DNA Damage Induced by Exposure to an Atmospheric Pressure Plasma Jet"
	10:15-10:30 1230 <04aB030> Tien-Hong Cheng "The Electric Properties of IAZO Thin-Film Transistors by RF Sputtering"		10:30-10:45 1164 <04aC030> Taofei Fu "Enhancement-Mode GaN-Based High Electron Mobility Transistors with a P-Type GaN Cap Layer"		10:15-10:30 1054 <04aD030> Kai-Cheng Chang "Growth of Graphene on CuO Fibers by Microwave Plasma Chemical Vapor Deposition for Enhanced Photocatalytic and Antibacterial Activities"		10:15-10:30 1084 <04aE040> Chia-Heng Chang "A Electrical Biosensor Based on Graphene Oxide/Graphene Structure for Sensitive Detection of Circulating miRNA-21"
	10:30-10:45 1145 <04aB040> Ying Peng "Thermoelectric Property of Si1-xGe Multilayered Quantum Dot Films Prepared by RF Magnetron Sputtering using B Buffer Layer"		10:45-11:00 1022 <04aC040> Kentarou Hayashi "Current Crowding Caused by Surface Roughness of Vertical GaN p-n Diodes"		10:30-10:45 1176 <04aD040> Akoya Yoshida "Investigation of Isocyanate Groups Functionalized on Multi-walled Carbon Nanotubes after Nitrogen/Carbon-dioxide Plasma Exposure"		10:30-10:45 1180 <04aE050> Kenji Ishikawa "Plasma-Activated Medium Induced Intracellular Changes of HeLa Cells"
	10:45-11:00 1268 <04aB050> Hirotaka Toyoda "Measurement of Directional Heat Flux Component in VHF-Magnetron Sputtering"				10:45-11:00 1338 <04aD050> Xinghua Chang "The Application of Tandem Plasma Technology in Lithium-ion Batteries"		10:45-11:00 1174 <04aE060> Mu-Chien Wu "Argon-based Round Atmospheric Pressure Plasma Jet on Inactivation of Pseudomonas Aeruginosa on Human Nail Model"

Break 11:00-11:15

Break 11:00-11:15

Break 11:00-11:15

Break 11:00-11:15

Plasma Science 7 Diagnostics <Chair> Shin Kajita (Nagoya University)	11:15-11:45 Invited Lecture <04aB061> Hennie van der Meiden (DIFFER) "Incoherent and Collective Thomson Scattering for the Determination of Electron and Ion Properties in High Density, Low-Temperature Plasma"	Nitride Semiconductors 5 Electron Devices 3 <Chair> T. Kachi (Nagoya University)	11:15-11:45 Invited Lecture <04aC051> Asamira Suzuki (Panasonic) "Low on-State Resistance Enhancement-Mode Algan/GaN Hfet with P-Type Nio Gate Formed by Atomic Layer Deposition"	Nanomaterials 6 Surface Modifications <Chair> T. Shirafuji (Osaka City University), Y. Suda (Toyoashi University of Technology)	11:15-11:30 1261 <04aD060> Akihisa Ogino "Surface Study of Electron Affinity on Semiconductor Produced by the Adsorption of Cs and Oxygen Atom"	Bioapplications 6 Bio Applications <Chair> R. Tero (Toyoashi University of Technology)	11:15-11:45 Invited Lecture <04aE071> Chi-Chang Hu (National Tsing Hua University) "Plasma-Enhanced Chemical Vapor Deposition of Heteroatom-Doped Graphenes for Biosensing"
	11:45-12:00 1211 <04aB070> Richard Engeln "Investigating the Role of Vibrationally Excited CO2 in Solar Fuel Production"		11:45-12:00 1308 <04aC060> Yoshitaka Nakano "Electrical Damage Introduced into n-GaN Films by CF4 Plasma Treatments"		11:30-11:45 1222 <04aD070> Dong-Sing Wu "Microstructure Transformation and Application of ZnO Nanorods Grown by Pulsed Laser Deposition via a Chemical-bath-deposited ZnS Seed Layer"		11:45-12:00 1210 <04aD080> Chia-Chun Wu "Improving the Lithium-ion Battery Properties through Surface Modification of Silicon Anodes"
	12:00-12:15 1250 <04aB080> Timothy Brubaker "Active Control of Reactive Oxygen and Nitrogen Species (RONS) in Plasma-Activated Media (PAM)"		12:00-12:15 1116 <04aC070> Chun-Lung Su "Free-standing GaN/AlGaIn-based Transistor Separated from Si Substrate"		12:00-12:15 1040 <04aD090> Mohamad Rusop Mahmood "Differences of ZnO Seed Layer Coating: Influence the Structural and Morphology Properties of ZnO Nanorod Grown via Solution Immersion Method"		12:00-12:15 1064 <04aE090> Yung-Hsin Liu "Protein onto Substrate for Biosensor Fabrication"
	12:00-12:15 1260 <04aB090> Masaya Hotta "Effects of Antenna Material on Miniaturized Curling Probe"		12:15-12:30 1345 <04aC080> Nguyen Xuan Truyen "PYS Study on Energy Distributions of Defect States in Remote O2 Plasma Enhanced CVD SiO2/GaN Structure"		12:15-12:30 1285 <04aD100> Mohamad Rusop Mahmood "Sensing Behavior of Nanostructured Zinc Oxide for Methane Detection"		12:15-12:30 1128 <04aE100> Shih-Chieh Yen "Electrospun Carbon Nanotube-Conducting Polymer Composite Nanofiber Membranes with Efficient Hemodialysis for Removing Protein-bound Uremic Toxins"

Lunch 12:30-14:00

Topical Session 2 Advanced Electronic Nitride Materials and Devices <Chair> A. Suzuki (Panasonic Corporation)	14:00-14:30 Invited Lecture <04pA111> Izabella Grzegory (Institute of High Pressure Physics of the Polish Academy of Sciences) "High Pressure Thermodynamics and Crystal Growth of GaN"
	14:30-15:00 Invited Lecture <04pA121> Tetsu Kachi (Nagoya University) "Developments of GaN on GaN Power Devices"
	Break 15:00-15:15
	15:15-15:45 Invited Lecture <04pA131> Colin Humphreys (University of Cambridge) "GaN-on-Si LEDs and Electronic Devices"
	15:45-16:15 Invited Lecture <04pA141> James S. Speck (University of California) "Pure and Disordered Group III Nitride Heterostructures: Growth and Physical Properties"

Break 16:15-16:30