

**PROGRAM
ISPlasma2010
2nd International Symposium on Advanced Plasma Science and
its Applications for Nitrides and Nanomaterials**

MAR 7 (Sun)	MAR 8 (Mon)			MAR 9 (Tue)			MAR 10 (Wed)		
	Registration (8:30-19:00)			Registration (9:00-18:00)			Registration (9:00-17:00)		
Chair: K. Yoshimura (ASTF, Japan) Opening/Plenary Lecture <ROOM A>	(9:20-9:35) Opening • Y. Komatsu (Deputy Director-General, Ministry of Education, Culture, Sports, Science and Technology, Japan) • S. Kato (President, Tokai Region Knowledge Cluster Headquarters, Japan) • M. Hori (Professor, Nagoya University, Japan)	(9:20-9:50) Keynote Lecture 9a-A01KA M. Goeckner (University of Texas at Dallas, USA) "Energy Considerations in Plasma-surface Interactions"	(9:20-9:50) Keynote Lecture 9a-B01KB Y. Cordier (CRHEA-CNRS, France) "Comparison of GaN Based Structures Grown by Molecular Beam Epitaxy using Nitrogen Plasma and Ammonia Sources"	(9:20-9:50) Keynote Lecture 9a-C01KC S. Fukuzumi (Osaka University, Japan) "Nanomaterials for Artificial Photosynthesis"	(9:20-9:50) Keynote Lecture 10a-A01KA R. d'Agostino (University of Bari, Italy) "Plasma Nano-Structured Fluorinated Polymers"	(9:20-9:50) Keynote Lecture 10a-B01KB K. Ota (TOYODA GOSEI Co., Ltd., Japan) "History of GaN LEDs and Their Progress"	(9:20-9:50) Keynote Lecture 10a-C01KC L. A. Rocha (University of Minho, Portugal) "Functionalization of Ti surfaces for Biomedical Applications"	(9:20-9:50) Keynote Lecture 10a-D01DC E. Miura-Fujiwara (Nagoya Institute of Technology, Japan) "Fabrication of Metal-based Functionally Graded Grinding Wheel Dispersing Fine Ceramic Particles by a Centrifugal Mixed-powder Method"	(9:20-9:50) Keynote Lecture 10a-E01EC M. Tokita (Nagoya Institute of Technology, Japan) "Development of Industrial Products on Functionally Graded Materials by Spark Plasma Sintering (SPS) Method"
	(10:15-10:35) Coffee Break			(10:30-10:50) Coffee Break			(10:40-10:50) Coffee Break		
Chair: S. Noda (ASTF, Japan) Knowledge Cluster Initiative (The Second Stage)-Tokai Region Nanotechnology Manufacturing Cluster-<ROOM A>	(10:35-11:00) Knowledge Cluster Lecture 8a-A02C M. Hori (Nagoya University, Japan) "Fundamental Research on Plasma Nanoprocessing"	(10:50-11:20) Keynote Lecture 9a-A04KA J. P. Chang (UCLA, USA) "Multifunctional Oxide Materials: Synthesis and Patterning"	(10:50-11:20) Keynote Lecture 9a-B04KB B. Daudin (CEA Grenoble, France) "Growth, Structural and Optical Properties of GaN/AlN Nanowire Heterostructures"	(10:50-11:20) Keynote Lecture 9a-C04KC J. Patscheider (EMPA, Switzerland) "Hard and Optically Transparent Al-Si-N Thin Films: Solid Solutions, Nanocomposites and Nanomultilayers"	(10:50-11:20) Keynote Lecture 10a-A04KA T. Takamoto (SHARP CORPORATION, Japan) "High Efficiency Multijunction Solar Cells"	(10:50-11:20) Keynote Lecture 10a-B04KB C. J. Sun (ITRI, Taiwan) "UV-WLED for Wide Color Gamut Display Application"	(10:50-11:20) Keynote Lecture 10a-C04KC P. Milani (The University of Milan, Italy) "Pulsed Microplasma Cluster Source: A Powerful Tool for the Integration of Nanomaterials on Microdevices"	(10:50-11:20) Keynote Lecture 10a-D04DC M. Tokita (Nagoya Institute of Technology, Japan) "Fe-Si Core/Si Shell Clusters Prepared by Collisions of Fe and Si Clusters in a Plasma-Gas-Condensation System"	(10:50-11:20) Keynote Lecture 10a-E04EC H. Miyata (Toyo University, Japan) "Control of Surface Roughness of Nano-particle Composite Low-k Film Deposited in CVD Plasma"
	(12:00-13:00) Lunch			(12:00-13:00) Lunch			(12:00-13:00) Lunch		
	(13:00-14:30) Poster Session A			(13:00-14:30) Poster Session B			(13:00-14:30) Poster Session B		
Chair: K. Nakamura (Chubu University, Japan) Plasma 1. Advanced Plasma Measuring Technology <ROOM A>	(14:30-15:00) Keynote Lecture 8p-A01KA U. Czarnetzki (Ruhr University, Bochum, Germany) "The Optical Probe: A Novel Device for Spatially Resolved Optical Emission Spectroscopy in Plasmas"	(14:30-15:00) Invited Lecture 8p-B01IB S. Arulkumaran (Nanyang Technological University, Singapore) "High performance AlGaIn/AlN/GaN High-Electron-Mobility Transistors on Silicon Substrate"	(14:30-15:00) Keynote Lecture 8p-C01KC J. Robertson (Cambridge University, UK) "Plasma Deposition of Amorphous Diamond-like Carbon Films"	(14:30-15:00) Keynote Lecture 9p-A01KB S. Noda (Kyoto University, Japan) "Photonic Crystals and Their Application to Wide Bandgap Materials (GaN, SiC)"	(15:00-15:30) Topical Lecture 8p-B02IB T. Hashizume (Hokkaido University, Japan) "Effects of Plasma Processing on Surface Properties of GaN and AlGaIn"	(15:00-15:30) Keynote Lecture 9p-A02KB N. Grandjean (EPFL, Switzerland) "Polariton Condensation Effects in GaN Microcavities"	(15:00-15:30) Keynote Lecture 10p-A01KA T. Higashi (Tokyo Electron Limited, Japan) "Global Competitive Strength by Core Technology"	(15:00-15:30) Keynote Lecture 10p-A02KA J. G. Han (CAPST, Sungkyunkwan University, Korea) "Synthesis of Functional Hybrid Films on Polymer by Dual RF Plasma CVD"	(15:00-15:30) Keynote Lecture 10p-A03KA E. Schultheiss (Fraunhofer Institute, Germany) "Technology Transfer in Germany: the Fraunhofer Model"
Chair: N. Grandjean (EPFL, Switzerland) Nitride 1. Nitride Electronic Devices <ROOM B>	(15:00-15:20) 8p-A02OA K. Urabe (Kyoto University, Japan) "Spatial Distribution of Electron Density in a Parallel-plate Dielectric Barrier Discharge Measured by CO ₂ -laser Heterodyne Interferometry"	(15:10-15:30) 8p-B03OB S. Nakamura (Tokyo Metropolitan University, Japan) "Electrical and Optical Characterization of Plasma-Induced Defects in n-type GaN Exposed to Plasma"	(15:20-15:40) Topical Lecture 8p-C03TC M. Hasegawa (National Institute of Advanced Industrial Science and Technology, Japan) "Low Temperature Nano-crystalline Diamond Film Synthesis using Surface Wave Plasma Chemical Vapor Deposition"	(15:30-16:00) Keynote Lecture 9p-A03KB *Due to unexpected reason, speaker has changed. U. Mishra (UC Santa Barbara, USA) "The Use of Plasma in the Growth and the Processing of Gallium Nitride Materials" ⇒ A. Yoshikawa (Chiba University, Japan) "Recent Advances in Plasma-assisted MBE of 1ML-InN/GaN-matrix Nanostructures for Novel Solar Cell and Light Emitters"	(15:40-16:00) 8p-A04OA Q. Zhang (Chubu University, Japan) "Plasma Electron Monitoring with Multi-Resonator Frequency Shift Probe"	(16:00-16:20) Invited Lecture 9p-A04IB T. Uesugi (Toyota Central R&D Labs., Inc., Japan) "GaN Power Switching Devices for Automotive Applications"	(16:00-16:30) Keynote Lecture 10p-A04KA W. Izumiya (Sangyo Times, Inc., Japan) "Environmental Energy Technology is the Detonator of the Second Industrial Revolution."	(16:30-16:50) Coffee Break	(16:30-16:50) Coffee Break
Chair: N. Ohtake (Tokyo Institute of Technology, Japan) Nanomaterials 1. Nanocarbon Materials I <ROOM C>	(15:50-16:20) Coffee Break	(16:00-16:20) Coffee Break	(16:20-16:40) Coffee Break	(16:20-16:40) Coffee Break	(16:20-16:50) Coffee Break	(16:20-16:50) Coffee Break	(16:20-16:50) Coffee Break	(16:20-16:50) Coffee Break	(16:20-16:50) Coffee Break
Chair: K. Nakamura (Chubu University, Japan) Plasma 2. Simulation <ROOM A>	(16:20-16:50) Keynote Lecture 8p-A05KA M. J. Kushner (University of Michigan, USA) "Customizing Plasma Sources for Advanced Materials Synthesis"	(16:20-16:50) Keynote Lecture 8p-B05KB T. Fukuda (Tohoku University, Japan) "Prospects for the Acidic Ammonothermal Growth of GaN Crystal"	(16:20-16:50) Keynote Lecture 8p-C05KC Y. Wu (National University of Singapore, Singapore) "Growth of Two-dimensional Carbon Nanostructures and Their Electrical Transport Properties"	(16:40-18:10) Panel Discussion ~Application of Advanced Plasma Technology for Nitride Semiconductors~ (Moderator) Y. Nanishi (Ritsumeikan University, Japan) (Panelists) H. Amano (Meijo University, Japan) B. Daudin (CEA Grenoble, France) N. Grandjean (EPFL, Switzerland) T. Hashizume (Hokkaido University, Japan) H. Kano (NU Eco Engineering Co., LTD., Japan) T. Okumura (Tokyo Metropolitan University, Japan)	(16:50-17:10) 8p-A06OA A. Ito (National Institute for Fusion Science, Japan) "Molecular Dynamics Simulation of Chemical Sputtering and Chemical Vapor Deposition on Carbon Materials"	(16:50-17:10) 8p-B06OB H. Y. Geng (FUJIKAWA CO., LTD, Japan) "Residual Strain Evaluation by Cross-sectional Micro-reflectance Spectroscopy of Freestanding GaN Grown by HVPE"	(17:10-17:30) 8p-C07OC D. Iida (Meijo University, Japan) "Growth of GaInN Films by Raised Pressure MOVPE System at 200kPa"	(17:30-19:00) Poster Session A	(17:30-19:00) Poster Session A
Chair: H. Yamada (AIST, Japan) Plasma 3. Simulation <ROOM A>	(17:10-17:30) 8p-A07OA H. Kousaka (Nagoya University, Japan) "Numerical Simulation of High-density Plasma Column Sustained in Narrow Metal Tube with Microwave Propagation Along Plasma-sheath Interface"	(17:10-17:30) 8p-B07OB D. Iida (Meijo University, Japan) "Growth of GaInN Films by Raised Pressure MOVPE System at 200kPa"	(17:10-17:30) 8p-C07OC T. Suzuki (Meijo University, Japan) "Application of Carbon Nanotubes to Nylon Composite"	(18:00-19:30) Welcome Party (Student Hall in Meijo University)	(18:00-19:30) Welcome Party (Student Hall in Meijo University)	(18:00-19:30) Welcome Party (Student Hall in Meijo University)	(18:00-19:30) Welcome Party (Student Hall in Meijo University)	(18:00-19:30) Welcome Party (Student Hall in Meijo University)	(18:00-19:30) Welcome Party (Student Hall in Meijo University)
	(17:30-19:00) Poster Session A			(18:10-19:40) Banquet (Cafeteria in Meijo University)			(18:20-18:30) Closing		