

EM-NANO 2015 Program

June 16 (Tue.)	Registration		14:30–20:00
	Opening Session [Nanophotonics]		
	Opening Remarks (Conference Chair) Keizo Kato, Niigata University		16:00–16:10
	Special Plenary OS-PL-1	Kenichi Iga, Tokyo Institute of Technology, Japan Micro- and Nano- Photonics – How Small is Small Enough	16:10–17:00
	Invited OS-I-1	Susumu Noda, Kyoto University, Japan Recent Progress in Photonic Crystals and Their Applications	17:00–17:30
	Break		17:30–17:50
	Welcome Invited Session		
	Invited WI-I-1	Martin Taylor, Bangor University, UK Organic Electronic Devices and Circuits: Fabrication, Performance Stability	17:50–18:20
	Invited WI-I-2	Hisao Ishii, Chiba University, Japan High Sensitivity Photoemission and Photoelectron Yield Spectroscopy of Weak Density of States of Organic Functional Films: Direct Detection of Gap States and Anion States	18:20–18:50
	Welcome Reception		18:50–20:30

June 17 (Wed.)	Registration		08:30–18:30
	Special Session 1 [Nanophotonics]		
	Plenary S1-PL-1	Satoshi Kawata, Osaka University, Japan Plasmonics: An Exotic Nanophotonics beyond the Classical Limits	09:30–10:10
	Break		10:10–10:30
	Invited S1-I-1	Takashi Yatsui, Tokyo University, Japan Dressed Photon Technology for Nanophotonic Device and Fabrication	10:30–11:00
	Oral S1-O-1	Hisaki Oka, Niigata University, Japan Efficient Two-photon Excitation Assisted by Plasmonic Nanoantenna	11:00–11:20
	Oral S1-O-2	Joel Henzie, NIMS, Japan How Small Changes in Shape Strongly Affect the Light Confining Properties of Silver Nanocubes	11:20–11:40
	Break		11:40–12:00
	Poster Session I		
	Break		12:00–13:30
	Oral Session A1 [Organic Devices]		
	Invited OA1-I-1	Chihaya Adachi, Kyushu University, Japan High Efficiency Organic Light Emitting Diodes Based on Delayed Fluorescence	13:40–14:10
	Invited OA1-I-2	Jang-Joo Kim, Seoul National University, Korea Orientation of Emitting Dipoles of Phosphorescent Dyes	14:10–14:40
	Invited OA1-I-3	Chin-Ming Hsu, Southern Taiwan University, Taiwan Surface Structured Transparent Conductive Films for Organic Light-Emitting Diodes	14:40–15:10
	Oral OA1-O-1	Hirotake Kajii, Osaka University, Japan Carrier Transport and Improved Emission Properties of Bilayer Polymer Light-Emitting Transistors Based on Crystallized Poly(alkylfluorene) Films	15:10–15:30
	Break		15:30–15:50
Oral Session B1 [Inorganic, Ferroelectrics, Oxide, etc.]			
Invited OB1-I-1	Kazumi Kato, AIST, Japan Shape-Dominant Characteristics of Nanocrystals for Miniaturization of Functional Devices	13:40–14:10	
Invited OB1-I-2	Tomoaki Yamada, Nagoya University, Japan Domain Structure and Piezoelectric Response in Epitaxial PZT 1D-Nanorods and 2D-Thin Films	14:10–14:40	
Oral OB1-O-1	Kumar Singh, University of Allahabad, India Strain Induced Spin Phonon Interaction and Multiferroic Properties in BiFeO ₃ /CoFe ₂ O ₄ Nanostructure Thin Films	14:40–15:00	
Oral OB1-O-2	Nobuyuki Iwata, Nihon University Experimental Results and Density Functional Theory Approach of CaFeOx/LaFeO ₃ Superlattice	15:00–15:20	
Break		15:20–15:50	

Invited OA1-I-4	Hiroshi Yamamoto, Institute for Molecular Science, Japan Field-induced Superconductivity in an Organic FET	15:50-16:20	Invited OB1-I-3	Koichi Hayashi, Tohoku University, Japan X-ray Fluorescence Holography for Visualization of 3D Local Structures	15:50-16:20
Oral OA1-O-2	Musubu Ichikawa, Shinshu University, Japan Performance of NTCDI-Cn Transistors Prepared by Vacuum Evaporation and Reduction of Their Operation Voltage by Electron Injection Layer	16:20-16:40	Oral OB1-O-3	Susumu SASAKI, Niigata University Microscopic Observation of Distributed Strain in Semiconductors	16:20-16:40
Oral OA1-O-3	Masatoshi Kitamura, Kobe University, Japan Operational Stability in Pentacene Thin-Film Transistors with Threshold Voltage Tuned by Oxygen Plasma Treatment	16:40-17:00	Oral OB1-O-4	Masaki Sato, Hokkaido University Detection of Surface Charge Dynamics in a GaAs-based Nanowire by Local Surface Potential Control	16:40-17:00
Oral OA1-O-4	Tetsuya Taima, Kanazawa University, Japan Interlayer Effects on Polymer Based Solar Cell	17:00-17:20	Oral OB1-O-5	Jean-Pierre Simonato, CEA, France Flexible Transparent Electrodes based on Random Networks of Copper and Silver Nanowires Stability and Integration into Various Functional Devices	17:00-17:20
Break					17:20-17:30
Poster Session II					17:30-19:00

June 18 (Thu.)	Registration				08:30-17:00	
	Special Session 2 [Bioelectronics]					
	Plenary S2-PL-2	Gordon Wallece, University of Wollongong, Australia 3D Bioprinting - New Dimensions for Bionics			09:00-09:40	
	Invited S2-I-1	Ichiro Yamashita, Nara Institute of Science and Technology, Japan Biological Path to the Nanoelectronics and Nanodevices with Active Bio Field, Bio-Nano-Process			09:40-10:10	
	Break				10:10-10:30	
	Invited S2-I-2	Yoshitaka Kitamoto, Tokyo Institute of Technology, Japan Magnetic Porous Capsules Based on Nanoparticle Assembly for Biomedical Applications			10:30-11:00	
	Oral S2-O-1	Sirasa Yodmongkol, Mahidol University, Thailand Application of Surface Plasmon Resonance Biosensor for the Detection of Candida albicans			11:00-11:20	
	Oral S2-O-2	Rahul Bhardwaj, JAIST, Japan Electrochemical Detection of Copper Ion Using On-chip Synthesized Peptide Probe			11:20-11:40	
	Break				11:40-12:00	
	Poster Session III				12:00-13:30	
	Break				13:30-13:50	
	Oral Session A2 [Conducting Polymers, Nanoelectronics]			Oral Session B2 [Inorganic (Silicon)]		
	Invited OA2-I-1	Rigoberto Advincula, Case Western Reserve University, USA Templated Conjugated Polymers Arrays and Films	13:50-14:20	Invited OB2-I-1	Katsuhiko Nishiguchi, NTT Basic Research Laboratories, Japan What Happens in a Small Transistor with Single-electron Resolution?	13:50-14:20
	Oral OA2-O-1	Masanao Era, Saga University, Japan Optical and Electronic Properties of Polyfluorene Copolymers Having Regioregular Thiophene Oligomer Unit	14:20-14:40	invited OB2-I-2	Shun-ichiro Ohmi, Tokyo Institute of Technology, Japan Influence of Si Surface Flatness on Device Characteristics of MOSFETs with High-k Gate Insulator	14:20-14:50
Oral OA2-O-2	Kontad Ounnunkad, Chiang Mai University, Thailand Development of Label-Free Electrochemical Immunosensors Based on Graphene Oxide and Conducting Polymers for Detection of Biomarkers	14:40-15:00	Oral OB2-O-1	Chai-hsien Chuang, National Cheng Kung University, Tainan Constraint Effect of Hafnium Silicate Films on Silicon Substrate	14:50-15:10	
Oral OA2-O-3	Akhiro Tomioka, Osaka Electro-Communication University, Japan Effect of Surface-Bound Polyvinylpyrrolidone on Electrical Conductance and Antioxidation of Silver Nanowires	15:00-15:20	Oral OB2-O-2	Keisuke Ohdaira, JAIST, Japan Defect Termination on c-Si Surfaces by Hydrogen for Improvement in the Passivation Quality of Cat-CVD SiNx and SiNx/P Cat-Doped Layers	15:10-15:30	

Oral OA2-O-4	Amer Mahmoud Amer Hassan, JAIST, Japan Laying-down Configuration of 4,4" Diamino-p-Terphenyl on Si(001)-2 x 1 Observed by Scanning Tunneling Microscopy	15:20-15:40	Break	15:30-16:00	
Break		15:40-16:00			
Oral Session A3 [Organic-Inorganic Hybrid Materials]			Oral Session B3 [Inorganic (Compound Semiconductors, Nanostructure)]		
Oral OA3-O-1	Takashi Sagawa, Kyoto University, Japan Improvement of the Device Performance with Zinc Oxide for Hybrid Organic-Inorganic Solar Cells	16:00-16:20	Invited OB3-I-1	Masaaki Kuzuhara, University of Fukui, Japan GaN-based Power Devices	16:00-16:30
Oral OA3-O-2	Hitoshi Asano, Tokyo University of Science, Yamaguchi, Japan Development of Ethenetetrathiolate Hybrid Thermoelectric Materials Consisting of Cellulose Acetate and Semiconductor Nanomaterials	16:20-16:40	Oral OB3-O-1	Takashi Masuda, JAIST, Japan Amorphous Silicon Carbide Film Prepared from a Polymeric Precursor Solution	16:30-16:50
Oral OA3-O-3	Yi Long, Nanyang Technological University, Singapore Progress in Thermochromic Materials	16:40-17:00	Oral OB3-O-2	Karuna Nanda, Indian Institute of Science, India Design of Dual Emission in ZnO Nanostructures	16:50-17:10
Oral OA3-O-4	Yusuke Aoki, Mie University, Japan Electrophoretic Deposition of Al ₂ O ₃ Coatings on Metal Substrates Using Polydimethylsiloxane-based Organic-inorganic Hybrid Materials as Binders	17:00-17:20	Oral OB3-O-3	Satish Shinde, Indian Institute of Science, India Charge Transfer from Narrow-Band-Gap CdTe/PbS Quantum Dots to Broad-Luminescent-Wide-Band-Gap GeO ₂ for Enhanced Brightness	17:10-17:30
Break		17:20-18:15	Break		17:30-18:15
Banquet				18:15-20:00	

June 19 (Fri.)	Registration			08:30-13:00	
	Special Session 3 [Photovoltaics]				
	Plenary S3-PL-1	Hironori Katagiri, National Institute of Technology, Nagaoka College, Japan Pioneering Work of Earth-Abundant CZTS Thin Film Solar Cells	09:00-09:40		
	Invited S3-I-1	Tsutomu Miyasaka, Toin University of Yokohama, Japan Progresses in Hybrid Perovskite-based Photovoltaic and Optoelectric Devices	09:40-10:10		
	Break			10:10-10:30	
	Invited S3-I-2	Tzung-Fang Guo, National Cheng Kung University, Taiwan Preparations of Nickel Oxide Electrode Interlayer in CH ₃ NH ₃ PbI ₃ Perovskite/Fullerene Planar-heterojunction Hybrid Solar Cells	10:30-11:00		
	Invited S3-I-3	Dechun Zou, Peking University, China Efficient Fiber-shaped Devices for Energy Conversion and Storage	11:00-11:30		
	Oral S3-O-1	Atsushi Masuda, AIST, Japan Consideration to Na Diffusion and Recovery Phenomena in Potential-Induced Degradation for Crystalline Si Photovoltaic Modules	11:30-11:50		
	Oral S3-O-2	Hironori Ogata, Hosei University, Japan Characterization and Photovoltaic Properties of Methyl Ammonium Lead Halide Perovskite Films on Mesoporous Silica (MCM-41)	11:50-12:10		
	Break			12:10-13:20	
	Oral Session A4 [TFT]				
	Invited OA4-I-1	Elvira Fortunato, New Univ Lisbon, Portugal Oxide Based Thin Film Transistors	13:20-13:50		
	Invited OA4-I-2	Mamoru Furuta, Kochi University of Technology, Japan Highly Reliable In-Ga-Zn-O Thin-film Transistor for Next-generation Displays	13:50-14:20		
	Oral OA4-O-1	Atsushi Ando, AIST, Japan Fabricating Field Effect Transistors with MoS ₂ Nanosheets Prepared by Liquid Phase Exfoliation	14:20-14:40		
Oral OA4-O-2	Thomas Bielewicz, University of Hamburg, Germany Two-dimensional Lead Sulfide Nanosheets and Their Application as Electronic Devices	14:40-15:00			
Closing Remarks (Director, JSAP Hokuriku-Shinetsu Chapter) Kiichi Kamimura, Shinshu University			15:00-15:10		