

Tuesday November 10**Room A****Session: 3D Research I Chair: John Canning**

8:00-8:25 AM	A01: 3D Imaging of Macromolecules in Nanomedicine	Holland Cheng University of California, USA
8:25-8:50 AM	A02: Corneal Imaging Techniques and Applications	Christian Nitschke Kyoto University, Japan
8:50-9:15 AM	A03: Towards Understanding the Microstructure of 3D Printed Materials	Shu Chang Rochester Institute of Technology, USA
9:15-9:40 AM	A04: Functional and Responsive 3D Printing	Shlomo Magdassi The Hebrew University of Jerusalem, Israel
9:40-9:55 AM	Session Break	
Session: Optoelectronic materials and devices I Chair: Hideki Yokoi		
9:55 -10:20 AM	A05: Circularly Polarized Light-Emitting Organic Materials	Yasuhiro Morisaki Kwansei Gakuin University, Japan
10:20-10:45 AM	A06: Molecular Design for Optical Properties of Diarylethenes	Yasuteru Shigeta Tsukuba University, Japan
10:45-11:10 AM	A07: Optical Designs of Artificial Compound Eyes for Optoelectronic Device Applications	Young Min Song (Hyun gi Park) Pusan National University, Korea
11:10-11:35 AM	A08: Characterization of resistance switching memory devices by impedance spectroscopy	Toshihiro Nakamura Osaka Electro-Communication University, Japan
11:35-12:00 AM	A09: A High Performance Low Cost Electrically Induced Surface Plasmons Source Device Based on Metal/dielectric Nanostructures	Gongli Xiao Guilin University of Electronic Technology, China
12:00-13:30 AM	Lunch Break	

Tuesday November 10**Room A****Session: Graphene Technology Chair: Ryosuke AKASHI**

(Keynote) 13:30-14:05 PM	A10: Graphene Growth Mechanism from Molten Metals	Reza Abbaschian University of California, USA
14:05 -14:30 PM	A11: First-principles Evaluation of The Oxygen Reduction Reaction on Nitrogen-doped Graphene	Jun Nakamura University of Electro-Communications, Japan
14:30 -14:55 PM	A12: Layered Water on Graphene Surfaces	Akira Akaishi University of Electro-Communications, Japan
14:55-15:10 PM	Session Break	
Session: Nanotechnology I Chair: Masami Kageshima		
15:10-15:35 PM	A13: Chemical Response of Metal Nanoparticles Synthesized by Environment-friendly Method	Hideki Tanaka Chuo University, Japan
15:35-16:00 PM	A14: Spark Plasma Sintering Used to Obtain Nanostructured Oxide Electroceramics with Improved Properties	Sophie Guillemet-Fritsch French National Research Center, France
16:00-16:25 PM	A15: Nanostructures Made from Silicone: Shape, Synthesis and Applications	Stefan Seeger University of Zurich, Switzerland
16:25-16:50 PM	A16: Morphological control of Size-Selected Iron nanoparticles during formation Sans Post-Growth mass filtration	Vernieres Jerome Okinawa Institute of Science and Technology (OIST) Graduate University, Japan
16:50-17:15 PM	A17: Universal quantum logic with silicon quantum dots	Menno Veldhorst University of New South Wales, Australia
17:15-17:40 PM	A18: Multicomponent Oxide Catalysts for Oxidation Processes.	Marco Piumetti Polytechnic University of Turin, Italy
17:40 PM	Dinner Social	

Wednesday November 11**Room A****Session: Optoelectronic materials and devices II Chair: Yasuhiro Morisaki**

8:00-8:25 AM	A19: Highly Transparent Conductive Ga-doped ZnO Films with Extremely Low Optical Loss as Alternative	Tetsuya Yamamoto Kochi University of Technology, Japan
8:25-8:50 AM	A20: Single-mode GaN Nanowire laser	Swaroop Ganguly Applied Quantum Mechanics Laboratory, India
8:50-9:15 AM	A21: Quantum Cascade Lasers: from Band-gap Engineering to Practical Devices	Arkadiy Lyakh University of Central Florida, USA
9:15-9:40 AM	A22: Ferroelectric Organic Layers for Solar Cell Applications	Malgorzata Wierzbowska Institute of Physics, Polish Academy of Science (PAS), Poland
9:40-10:05 AM	A23: Optical isolator with a-Si:H guiding layer	Hideki Yokoi Shibaura Institute of Technology, Tokyo, Japan
10:05-10:20 AM	Session Break	
Session: Semiconductor materials and devices I Chair: Yu Chang Chen		
10:20 -10:45 AM	A24: Electronic Relaxation Process in ZnO Varistors	Jiaying Li Xi'an Jiaotong University, China
10:45-11:10 AM	A25: Structural, optical and dielectric characteristics of sol-gel hybrid layers and their applications as dielectric gate in ZnO-based thin film transistors	Rafael Ramirez Bon Center for Research and Advanced Studies of the National Polytechnic Institute, Mexico
11:10-11:35 AM	A26: Dipole Formation and Chemical Bonding at Dielectric/Semiconductor Interfaces	Noriyuki Miyata National Institute of Advanced Industrial Science, Japan
11:35-12:00 AM	A27: Nanoscale selective epitaxy for III-V semiconductor integration in next generation nMOS devices	Paloma Tejedor Consejo Superior de Investigaciones Cientificas (CSIC), Spain
12:00-13:30 AM	Lunch Break	

Wednesday November 11**Room B****Session: Magnetic Materials I Chair: Alexandru Stancu**

8:00-8:25 AM	B01: Ionbombardment and light irradiations induced modifications of ultrathin cobaltlayers magnetic properties	Andrzej Maziewski University of Bialystok, Poland
8:25-8:50 AM	B02: Electronic-structure Calculations for Magnetic Interfaces	Yoshihiro Gohda Tokyo Institute of Technology, Japan
8:50-9:15 AM	B03: Dynamic Hysteresis and Magnetic Domain Behavior of Co/Pt Multilayers	Dong-Hyun Kim Chungbuk National University, Korea
9:15-9:40 AM	B04: Spin Wave Characterisitits in Permalloy Films	Takashi Manago Fukuoka University, Japan
9:40-10:05 AM	B05: Nucleation and Growth of InAlN Core-shell Nano Structures by Reactive Magnetron Sputter Epitaxy	Ching-Lien Hsiao Linköping University, Sweden
10:05-10:20 AM	Session Break	
Session: 3D Research II Chair: Shu Chang		
10:20 -10:45 AM	B06: 3D printing for rock mechanics: opportunity and challenge	GaoFeng Zhao University of New South Wales, Australia
10:45-11:10 AM	B07: Phase calculation-based fast 3D shape measurement by using multiple color channels technique	Zonghua Zhang Hebei University of Technology, China
11:10-11:35 AM	B08: Generative 3D Design Inspired by Natural Forms	Yingsiu Huang National Kaohsiung Normal University, Taiwan
11:35-12:00 AM	B09: Air Floating Volumetric Image Formations	Daisuke Miyazaki Osaka City University, Japan
12:00-13:30 AM	Lunch Break	

Wednesday November 11**Room A****Session: Energy Conversion Material Chair: Takuya Matsumoto**

13:30-13:55 PM	A28: First-principles Simulation on the Electrochemical Interfaces; Electronic-double Layer and Reactions	Yasunobu Ando University of Tokyo, Japan
13:55 -14:20 PM	A29: Thermoelectric Properties of Single-Molecule junctions: Crossing From Quantum to Classical Phonon Transport	Yu Chang Chen National Chiao Tung University, Taiwan
14:20 -14:45 PM	A30: First-principles Calculation Based Design and Synthesis of Silicide Thermoelectric Conversion Material	Kaoru Nakamura Central Research Institute of Electric Power Industry, Japan
14:45-15:10 PM	A31: Iron oxide-based photoelectrode for high-efficiency solar water splitting	Munetoshi Seki University of Tokyo, Japan
15:10-15:35 PM	A32: Atomic and electronic structure at high temperature of phospho-olivines Li_xMPO_4 (M=Fe, Mn - $x = 0.2, 0.5, 0.7$) probed by XAS.	Giorgia Greco University of Roma TRE, Italy
15:35-15:50 PM	Session Break	
Session: 3D Research III Chair: Holland Cheng		
15:50-16:15 PM	A33: Structured 3D point cloud measurement using inverstetriangulation: principle and applications	Tiago Costa Pinto Federal University of Santa Catarina, Brazil
16:15-16:40 PM	A34: 3D printing of optical fibre preforms	John Canning The University of Sydney, Australia
16:40-17:05 PM	A35: 3D Radiative Transfer Modeling for Simulating Airborne and Satellite Spectroradiometer and LIDAR Acquisitions of Natural and Urban Landscapes	Jean Philippe Gastellu-Etchegorry Paul Sabatier University, France
17:05-17:30 PM	A36: 3D Imaging of Materials at the Atomic Scale	Bernald Deconihout University of Rouen, France
17:30-17:55PM	A37: Simple laser vision sensor calibration technique for surface profiling applications	Bassam Abu-Nabah American University of Sharjah, Sharjah
17:55 PM	Dinner Social	

Wednesday November 11

Room B

Session: Nanotechnology II Chair: Sophie Guillemet-Fritsch

13:30-13:55 PM	B10: Optical pump-probe scanning tunneling microscopy and its applications	Hidemi Shigekawa University of Tsukuba, Japan
13:55 -14:20 PM	B11: AFM for Probing Dynamical Properties of Nanometer-scale Systems	Masami Kageshima Kansai Medical University, Japan
14:20 -14:45 PM	B12: NC-AFM Identification of Different Al Atoms on Al ₂ O ₃ /NiAl(110) Surface	Yanjun Li Osaka University, Japan
14:45-15:10 PM	B13: Atomic-scale Imaging of Electronic properties of the Surface by Electrostatic Force Microscopy	Yasuhiro Sugawara Osaka University, Japan
15:10-15:35 PM	B14: Tuning of Magnetic Phases in Nanowires by Size Reduction	Barnali Ghosh (Saha) S.N. Bose National Centre for Basic Sciences, India
15:35-16:05 PM	Poster Session	
Session: Organic Polymers Materials I Chair: Yasuteru Shigeta		
16:05-16:30 PM	B15: Nano-scale Nonlinear Charge Transport of DNA Supramolecular Networks	Takuya Matsumoto Osaka University, Japan
16:30-16:55 PM	B16: Synthesis of organic solvent soluble and biodegradable conducting polyaniline composite: Fabrication of honeycomb-patterned thin film using the composite	Do Sung Huh Inje University, Korea
16:55-17:20 PM	B17: Local Order and Long Range Correlations in Imidazolium Halide Ionic Liquids	Valentina Migliorati Sapienza University of Rome, Italy
17:20-17:35 PM	B18: Bio-inspired reusable adhesives based on hierarchical electrospun fibers	Rahul Sahay Singapore University of Technology and Design, Singapore
17:55 PM	Dinner Social	

Thursday November 12**Room A****Session: Semiconductor materials and devices II Chair: Rafael Ramirez Bon**

8:00-8:25 AM	A38: Ba ₂ IrO ₄ : Spin-Orbit Mott State and its Carrier Doping Effect	Masaaki Isobe National Institute for Materials Science, Japan
8:25-8:50 AM	A39: Tuning of the Terahertz Response of SrTiO ₃ /DyScO ₃ Heterostructures	Christelle Kadlec Institute of Physics, Academy of Sciences of the Czech Republic, Czech Republic
8:50-9:15 AM	A40: Topological Superconductivity in Dirac Semimetals	Shingo Kobayashi Nagoya University, Japan
9:15-9:30 AM	Session Break	
Session: Magnetic Materials II Chair: Yoshihiro Gohda		
9:30 -9:55 AM	A41: Multiscale simulation of polycrystalline multiferroic composite materials	Yasutomo Uetsuji Osaka Institute of Technology, Japan
9:55-10:20 AM	A42: Characterizing hysteretic processes in magnetic nanostructures with FORC diagram technique	Alexandru Stancu Alexandru Ioan Cuza University, Romania
10:20-10:45 AM	A43: Bi-substituted Nd-Based Magnetic Garnet Films for MO Imaging Plates	Takayuki Ishibashi Nagaoka University of Technology, Japan
10:45-11:10 AM	A44: Gravitational Collapse in Confined Geometries	Hirotsada Okawa Waseda University, Japan
11:10-11:35 AM	A45: New characterization technique of dynamic hysteresis in magnetic wires	Dorin Cimpoesu Alexandru Ioan Cuza University, Romania
12:00-13:30 AM	Lunch Break	

Thursday November 12		
Room B		
Session: Two-dimensional Materials Chair: Reza Abbaschian		
8:00-8:25 AM	B19: First-principles Simulation of Capacitance at The Nanoscale: Dead Layer Effect and Negative Capacitance	Shusuke Kasamatsu University of Tokyo, Japan
8:25-8:50 AM	B20: Stacking-geometry-based control of electron interlayer dynamics: MoS2 and other materials	Ryosuke AKASHI University of Tokyo, Japan
8:50-9:15 AM	B21: Influence of Edge Roughness on Graphene Nanoribbons Field-Effect Transistors	Kengo Takashima Tokyo University of Science, Japan
9:15-9:30 AM	Session Break	

Thursday November 12		
Room A		
Session: Optoelectronic materials and devices III Chair: Swaroop Ganguly		
13:30-13:55 PM	A46: Ge LED	Susumu Fukatsu University of Tokyo, Japan
13:55 -14:20 PM	A48: Hybrid Perovskites as A New Class of Photovoltaic and Optoelectronic Materials	Tao Wu King Abdullah University of Science and Technology (KAUST), Saudi Arabia
14:20 -14:45 PM	A49: Giant photostriction in MAPbI3 and it's possible correlation with the long carrier lift time	Junling WANG School of Materials Science and Engineering Nanyang Technological University, Singapore
14:45-15:10 PM	A21: Study of TMDs nanosheets based saturable absorber used for Q-switching and mode lock laser system	Chun Yin Tang Hong Kong Polytechnic University, Hong Kong
15:10-15:25 PM	Session Break	
Session: Organic Polymers Materials II Chair: Do Sung Huh		
15:25-15:50 PM	A50: Compatibilized polymer nanocomposites	R. Rajasekar Kongu Engineering College, India
15:50-16:15 PM	A51: Rock-Rubber Wear Mechanism	Samir Kumar Pal Indian Institute of Technology, India
16:15-16:40 PM	A52: Nanocarbon Element Blocks for Light Energy Conversion	Tomokazu Umeyama Kyoto University, Japan
16:40-17:05 PM	A53: Design of Solid-emissive Materials Based on Organoboron Complexes	Kazuo Tanaka Kyoto University, Japan
17:30 PM	Dinner Social	