

Winners of Award for Encouragement of Research in IUMRS-ICAM 2017

| Symposium | ProgramNo | Name | Affiliation | Title |
|-----------|------------|--------------------------|--|---|
| A-1 | A1-O29-002 | Ashish KULKARNI | Graduate School of Engineering, Toin University of Yokohama | Bismuth Based Light Absorbers for Lead-Free Perovskite Solar Cells. |
| A-2 | A2-P31-009 | Sakina KANEKO | Department of Materials Chemistry, Graduate School of Science and Technology, Shinshu University | Effects of Particle Size on Lithium ion conducting Behaviors of the $\text{Li}_{6.75}\text{La}_3\text{Zr}_{1.75}\text{Nb}_{0.25}\text{O}_{12}$ Crystals/ Li_3BO_3 Glass Hybrid Solid Electrolytes |
| A-3 | A3-O30-023 | Laia SOLER BRU | Materials Science Institute-ICMAB, CSIC, Spain | Ultrafast liquid assisted growth of $\text{YBa}_2\text{Cu}_3\text{O}_7$ films |
| A-4 | A4-O31-013 | Mari TAKAHASHI | School of Materials Science, Japan Advanced Institute of Science and Technology | Transition from Linear to Oscillatory Behavior of Exchange Bias Revealed with Progression of Surface Oxidation of Ag@FeCo@Ag Core@Shell@Shell Nanoparticles |
| A-4 | A4-P31-005 | Goro SHIBATA | Department of Physics, University of Tsukuba | Magnetic anisotropy and anisotropic spin-density distribution in strained $\text{La}_{1-x}\text{Sr}_x\text{MnO}_3$ thin films revealed by angle-dependent XMCD |
| A-5 | A5-O29-011 | Zhao WANG | Guangxi University | Understanding Phonon Scattering by Precipitates in Doped Thermoelectrics |
| A-5 | A5-O30-018 | Wei SHI | State Key Laboratory of High Performance Ceramics and Superfine Microstructure, Shanghai Institute of Ceramics, Chinese Academy of Sciences, Shanghai, China, University of Chinese Academy of Science, 19A Yuquan Road, Beijing 100049, China | Self-inhibited Polymerization of Micron-thick PEDOT Films with High Electrical Conductivity for Thermoelectric Application |
| A-5 | A5-O29-002 | ANUP V SANCHELA | Research Institute for Electronic Science, Hokkaido University | Thermopower modulation clarification of intrinsic carrier transport of novel transparent conducting oxide BaSnO_3 |
| A-5 | A5-O30-012 | Yosuke KUROSAKI | Hitachi Ltd., Center for Exploratory Research | Dependence of Thermal Conductivity on Ge doping amount in Nanocomposite Thin Films of $\text{MnSi}_{1.7}$ and SiGe |
| A-5 | A5-O30-021 | Warittha THONGKHAM | Energy Technology Division, School of Energy, Environment and Materials, KMUTT, Thailand | An Instant Processable Thermoelectric Foam : Influence of Polar Solvent and Anionic Surfactant |
| A-5 | A5-O29-022 | Kaiping TAI | Shenyang National Laboratory for Materials Science, Institute of Metal Research, Chinese Academy of Sciences | High-Performance Flexible and Tailorable Thermoelectrics from Bismuth Telluride/Cellulose-Fiber Paper Composite |
| A-5 | A5-O29-003 | Huiching CHANG | Institute of Atomic and Molecular Sciences, Academia Sinica, Taipei, Taiwan, Center for Condensed Matter Sciences, National Taiwan University, Taipei, Taiwan, (Graduate Institute of Electronics Engineering, National Taiwan University, Taipei, Taiwan) | Enhanced Thermoelectric Properties via Elements Manipulation in Bulk BiCuTeO |
| A-5 | A5-O31-015 | Babak ALINEJAD | Faculty of Materials science and engineering, Ibaraki University | Fabrication of highly pure, dense Mg_2Si via single-step low temperature reactive consolidation |
| A-5 | A5-O01-010 | Muhammad Akmal KAMARUDIN | Centre of Molecular Materials for Photonics and Electronics (CMMPE), Department of Engineering, University of Cambridge, Cambridge, CB30FA, United Kingdom. | Elucidating the spin crossover effect of Co(II) complex on the Seebeck coefficient via molecular modeling |

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| A-6 | A6-O30-016 | YU SU | National Institute for Materials Science, Hokkaido University | High-Pressure Synthesis and Physical Properties of fluorinated SrCrO ₃ |
| A-6 | A6-P1-003 | Le WANG | Institute of Physics, CAS, School of Physical Sciences, University of Chinese Academy of Sciences | Heavy fermion behavior in the quasi-one-dimensional Kondo lattice CeCo ₂ Ga ₈ |
| A-7 | A7-P30-010 | Andrii REDNYK | National Institute for Materials Science, Tsukuba, Ibaraki | Improving of anode in solid oxide fuel cell by deposition of negligible amount of platinum group metal oxides (PtOx, PdOx, RhOx and RuOx) |
| A-7 | A7-P30-019 | Kota TAKEUCHI | Gunma University | Alkaline-durable Anion-conducting Electrolyte Membranes Containing Poly (4-vinyl-2-methyl-imidazole) Prepared By Radiation-Induced Grafting |
| A-8 | A8-O29-024 | Goeun CHOI | Center for Intelligent Nano-Bio Materials (CINBM), Department of Chemistry and Nano Science, Ewha Womans University, Seoul 03760, Korea | Injectable 2D Nanovehicle with Tumor Selectivity |
| A-8 | A8-O29-021 | Yen Nee TAN | Institute of Materials Research and Engineering, A*STAR | Metallic NanoBiosensors for Detecting p53 Tumor Suppressor Protein and Screening of its Mutant Reactivation Drugs in Cancer Cells |
| A-8 | A8-P28-035 | Kavitha RAMADASS | Future Industries Institute, University of South Australia | 3D Cubic nitrogen rich mesoporous carbon nitride derived from aminoguanidine for photocatalytic watersplitting |
| A-8 | A8-P28-047 | Toshihiro MORIGA | Graduate School of Advanced Technology and Science, Tokushima University | Convenient fabrication of red-orange nitride phosphors M ₂ Si ₅ N ₈ :Eu ²⁺ (M=Ca, Sr) |
| A-9 | A9-P28-004 | Chikara NAKAGAWA | Graduate student, The University of Kitakyushu | Effects of Heating and Cooling Cycle on the Shape Memory and Mechanical Characteristics of Tape-shaped Shape Memory Alloy Element. |
| A-9 | A9-P28-006 | Hyunwoong SEO | Faculty of Information Science and Electrical Engineering, Kyushu University | Catalytic Enhancement of Polymer Counter Electrode of Photochemical Photovoltaics based on Nano-particle Application |
| B-1 | B1-O30-007 | Junjun JIA | Graduate School of Science and Engineering, Aoyama Gakuin University | Characterization of Layered In ₂ O ₃ (ZnO) _m Films |
| B-1 | B1-P29-032 | Kaho HONDA | Graduate School of Science and Engineering, Aoyama Gakuin University | Optical, electrical, and thermophysical properties of heteroepitaxial grown Al-doped ZnO (AZO) films |
| B-1 | B1-P29-023 | Hajime MIYAMOTO | Kindai University | Vanadate Glass applied to Bifunctional Oxygen Electrodes for Metal-Air rechargeable Battery |
| B-1 | B1-P29-024 | Takanori TAKAHASHI | National Institute of Technology, Tsuruoka College | Fabrication of Amorphous SrTa ₂ O ₆ Thin Films Using RF Magnetron Sputtering for Oxide Thin Film Transistor Applications |
| B-2 | B2-O30-002 | Atsunori TANAKA | Materials Science Program, University of California San Diego | When GaN and Si Tango, Thermal Mismatches are Overcome for Thick GaN-on-Si Vertical Power Devices |
| B-2 | B2-P30-009 | Takashige AONO | College of Science and Technology, Nihon University | I-V characteristics of nanowire based resistive change memory |
| B-3 | B3-O29-008 | Chutiparn LERTVACHIRAPAI BOON | Graduate School of Science and Technology, Niigata University | Silver Nanoprisms Enhanced Propagating Surface Plasmon Resonance on Metallic Grating Structure Detected by Transmission Surface Plasmon Resonance Imaging Technique |
| B-3 | B3-P28-005 | Keitaro IKEGAMI | Graduate School of Science and Engineering, Chiba University | Direct Observation of Negative Carriers Injected into a Transistor Structure Observed by High-Sensitivity Photoelectron Yield Spectroscopy |
| B-4 | B4-P29-002 | Atsushi FUJIWARA | Graduate School of University of Kyoto | Nucleation and Growth Processes of Soft MOF (Zeolitic Imidazolate Framework-8) Particles |
| B-4 | B4-P29-012 | Yota KOSUKEGAWA | Dept. Mater. Sci. & Technol., Tokyo University of Science | Synthesis of Thermoresponsive and Biodegradable Macromonomer via Ring-Opening Radical Polymerization |

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| B-4 | B4-P29-014 | Kohei KIDO | Graduate School of Engineering, Osaka Institute of Technology | Powdered twin-pack adhesive developed based on dry liquid engineering |
| B-4 | B4-O28-011 | Kenta HOMMA | Department of Materials Engineering, Graduate School of Engineering, The University of Tokyo | Unidirectional Control of Chemical Waves on Micropatterned Self-Oscillating Polymer Brush |
| B-4 | B4-P29-023 | Li-Jyuan LUO | Department of Chemical and Materials Engineering, Chang Gung University | Role of Solvent-Mediated Carbodiimide Cross-Linking in Fabrication of Electrospun Gelatin Nanofibrous Membranes as Ophthalmic Biomaterials |
| B-5 | B5-O31-005 | Tomoyasu OBATA | Department of Mechanical Engineering and Materials Science, Yokohama National University | Development of high-strength Al-Mg-Si alloy bolts by ECAP and various aging treatments |
| B-5 | B5-P31-025 | Merita MERITA | Doshisha University | Nanocrystalline nickel dispersed with nano-scale WO ₃ by electrodeposition |
| B-5 | B5-P31-012 | Sukyoung HWANG | Department of Material Science and Engineering, Kyoto University | Microstructure and Mechanical Properties of 22Mn-3Si-0.6C Steel with Various Grain Sizes |
| B-6 | B6-O28-012 | Xi YU | Nagoya Institute of Technology | Fabrication of THz Antireflective Structures on Silicon Substrates by Femtosecond Laser |
| B-7 | B7-O31-007 | Keiichiro KUSHIRO | School of Engineering, The University of Tokyo | |
| B-7 | B7-O31-002 | Mari TAKAHASHI | School of Materials Science, Japan Advanced Institute of Science and Technology | Imaging and Isolation of Autophagosomes using Magnetic-Plasmonic Ag@FeCo@Ag Core@Shell@Shell Hybrid Nanoparticles |
| C-1 | C1-O31-014 | ALYA AMIRA | Tokyo Denki University | Fabrication of Boron Doped DLC Thin Films by Thermal Diffusion |
| C-1 | C1-O30-008 | SAVITHA NALINI | Department of Instrumentation, Cochin University of Science and Technology, Cochin-682022, India | Effect of growth pressure on single or few-layer graphene synthesis on copper foil with lower hydrocarbon flow rates |
| C-2 | C2-P28-004 | Kazuki SASAHARA | Department of Applied Chemistry, Kyushu University | Aggregation States of Poly(methoxycarbonylmethylene) at Air and Water Interfaces |
| C-2 | C2-P28-014 | Mami GODA | Grad. Sch. Sci. tech., Kyoto Inst. Tech. | Influence of Thermodynamics of Nucleation on Preferred Crystal Orientation in Poly(3-hydroxybutyrate-co-3-hydroxyhexanoate) Thin Films on Si Substrates |
| C-2 | C2-P28-006 | Yue CHEN | National Taiwan University | Microfluidic Approach to the Synthesis of Electroconductive Microgels |
| C-2 | C2-O30-002 | Machi TAKEUCHI | Faculty of Science and Technology, Keio University | Controlled Intercalation of Layered Organic Materials with Tunable Temperature-Responsive Color-Change Properties |
| C-3 | C3-P1-013 | Hayato OUCHI | Graduate School of Engineering, Chiba University | Helical Supramolecular Polymerization by Hydrogen-Bonding Oligothiophenes: Structure and Application to Organic Photovoltaics |
| C-3 | C3-P1-036 | Fatima Aparicio HERNANDEZ | University Autonoma of Madrid | Noncovalent Synthesis of Hydrogen-bonded Macrocyclic Assemblies from a DNA Base Toolkit |
| C-3 | C3-O31-012 | Masanari NAKAYAMA | Department of Chemistry and Biotechnology, School of Engineering, The University of Tokyo | Stimuli-Responsive Colloidal Liquid Crystals Based on Calcium Minerals |

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| C-3 | C3-O30-002 | Fengniu LU | Frontier Molecules Group, International Center for Materials Nanoarchitectonics (MANA), National Institute for Materials Science (NIMS), 1-1 Namiki, Tsukuba 305-0044, Ibaraki, Japan | Design Strategy for Thermodynamically Stable Liquid Polycyclic Aromatic Hydrocarbons by Alkyl- π Engineering |
| C-4 | C4-O30-011 | Qiang ZHANG | Center for Nanotechnology, Kochi University of Technology | Effects of Solution Concentration on the Structural and Optical Properties of Titanium Dioxide Thin Films Prepared by Mist Chemical Vapor Deposition |
| C-4 | C4-O30-003 | Gyuyeon LEE | Department of Energy Systems Research, Ajou University | Palladium deposited MoO ₃ nanosheet for superior gasochromic hydrogen sensor |
| C-5 | C5-P31-011 | Hyunwoong SEO | Kyushu University | Next Generation Photovoltaics Based on Si Nano-particles Fabricated by Advanced Plasma Process |
| C-5 | C5-O31-006 | Shusaku TERAKAWA | Nagoya Institute of Technology | Fabrication of Molybdenum Carbide Nanoparticles by Femtosecond Laser Ablation of Molybdenum in Hexane |
| C-5 | C5-O30-012 | Rui HU | Graduate School of Science and Technology, Shizuoka University, Institute of Plasma Physics, Chinese Academy of Sciences | Controlled synthesis of carbon-based nanomaterials by an arc discharge method |
| C-6 | C6-O30-006 | Kazuya FURUSAWA | Faculty of Advanced Life Science; Global Station for Soft Matter, Global Institution for Collaborative Research and Education, Hokkaido University | Phase behavior of collagen solution |
| C-6 | C6-P31-005 | Saori SASAKI | IMCE, Kyushu University | Effect of Gamma Ray Irradiation on Friction Property of PVA Hybrid Gel |
| C-7 | C7-P31-001 | Martin FRIEDL | Laboratory of Semiconductor Materials, Ecole Polytechnique Federale de Lausanne, Lausanne | Horizontally-Oriented InAs Nanowires Grown by MBE on GaAs |
| C-7 | C7-O30-010 | Valerio PIAZZA | C2N, UMR9001 CNRS, University Paris Sud, University Paris Saclay | Correlated electroluminescence, cathodoluminescence and electron beam induced current mapping of core-shell nanowire InGaN/GaN LEDs |
| D-1 | D1-P28-008 | Hiroharu HIRAI | Graduate School of Engineering, Nagoya University | Crystallographic Orientation Dependence of Sputtering Yield of FCC Metals Determined using Polycrystalline Targets |
| D-2 | D2-P31-011 | Masaki YAMAMOTO | Graduate School of Comprehensive Scientific Research, Prefectural University of Hiroshima | Contribution of Condensed Structures in Native Lignin Derivatives on Photo-excited Electron Transfers |
| D-3 | D3-P28-014 | Jun Mu PARK | Division of Marine Engineering, Korea Maritime & Ocean University, Korea | Effective Characteristics of Calcareous Deposit Films on Steel Substrate Prepared by Cathodic Current Process in Marine Environment |
| D-3 | D3-O29-008 | Tomoyuki ISHII | Department of Materials and Surface Engineering, Kanto Gakuin University, Materials and Surface Engineering Research Institute, Kanto Gakuin University, Toppan Technical Research Institute, TOPPAN PRINTING CO., LTD. | Influences of Seed Layer on LCP Film on High-speed Signal Transmission Characteristics |
| D-4 | D4-O31-012 | Nicola H PERRY | WPI-I2CNER, Kyushu University, Department of Materials Science and Engineering, Massachusetts Institute of Technology | Microstructural Tailoring of Oxygen Surface Exchange Kinetics: Mixed Conducting Sr(Ti,Fe)O _{3-δ} Case Study |

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| D-4 | D4-O01-012 | Nipa DEBNATH | Graduate School of Science and Technology, Shizuoka University | Phase separation via spinodal decomposition in epitaxial spinel ferrite thin films grown by Dynamic Aurora PLD |
| D-5 | D5-O30-012 | Michiyo HONDA | School of Science and Technology, Meiji University | Acceleration of osteogenesis and angiogenesis by CTGF-containing apatite- fiber scaffold |
| D-5 | D5-O29-005 | Ryo HAMAI | Graduate School of Life Science and Systems Engineering, Kyushu Institute of Technology | Comparative study of apatite formation on the copolymer modified with different phosphate groups in simulated body environment |
| D-6 | D6-O30-007 | Mei NAGASE | School of Engineering, University of Tokyo, Japan | Prediction formula for determination of the best condition to remove printed circuit boards from home appliances using DEM simulation |
| D-7 | D7-O29-007 | Takahiro YAMAZAKI | Graduate School of Yokohama National University | Magnetostriction and domain wall movement behavior in heat-treated Fe-Co wire for application of stress sensor |