Poster Session I

17:00 - 18:30, Wednesday, June 19, 2024 Meeting Room 1&2

17:00 - 17:45 Presentation with odd number posters 17:45 - 18:30 Presentation with even number posters

Session	A: Fabrications and Characterization					
AP1-01	1 Electrode patterned dependency of the removable-structure organic photodiode characteristics					
	Kosei Sasaki (The University of Tokyo, Japan)					
AP1-02	Impact of the Orientation of the Rubbed Polyimide Surface on the Alignment of the Liquid Crystal					
	Molecules					
	Ryo Nakano (Chiba University, Japan)					
AP1-03	Polarized Polymer Light-emitting Electrochemical Cells using Polyfluorene and Polycaprolactone					
	Blend Film by Floating-film Transfer Method					
	Shuichi Nagamatsu (Kyushu Institute of Technology, Japan)					
AP1-04	Fundamental study of naphthalenetetracarboxylic diimide derivatives with fluorene groups for device					
	applications					
	<u>Tsubasa Yamashita</u> (University of Toyama, Japan)					
AP1-05	Preparation of OECT with temperature-responsive copolymer and PEDOT:PSS blend films					
	Kotaro Nara (Tohoku University, Japan)					
AP1-06	Sub-nanometer scale structures and reactions on single crystal of macrocyclic molecules visualized by					
	FM-AFM imaging in liquid					
1 D4 0=	Kodai Tanigawa (Kanazawa University, Japan)					
AP1-07	Growth of well-ordered PhC ₂ -BQQDI multilayer on Ag(110)					
4 D1 00	Yoshihiro Murakami (University of Tsukuba, Japan)					
AP1-08	Phase transition diagrams of ionic liquids with liquid/gas phase boundaries investigated by					
	thermogravimetry under vacuum Shahai Hariba (Kaha Haiyamity, Japan)					
AP1-09	Shohei Horike (Kobe University, Japan) Solution deposition of TIPS pentacene on HZO gate dielectrics toward organic memory applications					
AI 1-09	<u>Daiji Kitamura</u> (Osaka Institute of Technology, Japan)					
AP1-10	Prediction of molecule junction formation from the conductance behavior of the metallic junction					
711 1-10	Gaku Fukuhara (Osaka University, Japan)					
AP1-11	Fabrication of PEDOT:PSS film mixed with zwitterionic polymer					
	Wakana Takahashi (Tohoku University, Japan)					
AP1-12	• • • • • • • • • • • • • • • • • • • •					
	liquid-liquid interface					
	Ryusei Chikami (Saga University, Japan)					
AP1-13	Controlled preparation of covalent organic framework thin films via a					
	solution-deposition-polymerization approach					
	Sora Yamazaki (Osaka University, Japan)					
AP1-14	Charge-Dependent Patterning for High-Resolution Soft Devices					
	Lingying Li (National Institute for Materials Science, Japan)					

AP1-15 Vibrational Measurements on Single-Crystal Organic Semiconductors by a Linearly-Polarized Synchrotron Radiation Infrared Light Source

Yasuo Nakayama (Tokyo University of Science, Japan)

AP1-16 Investigation of Carrier Dynamics in Organic Thin-Film Transistors Using Pump-Probe Kelvin-probe Force Microscopy

Kazuki Arinaga (Kyoto University, Japan)

AP1-17 Control of crystalline forms of C₆₀ by mist deposition method Risako Taguchi (National Institute of Technology Tsuyama College, Japan)

AP1-18 Development of FHE-type SpO₂ Sensor by Multilayer Screen-Printing Ayako Yoshida (Yamagata University, Japan)

AP1-19 CNT-based Superstructure Formation via Evaporative Self-assembly Miki Ikeda (Kyoto Institute of Technology University, Japan)

AP1-20 Helically-oriented polymer semiconductor thin films prepared by polarized UV-assisted vapor deposition polymerization

Atsushi Kubono (Shizuoka University, Japan)

Session B: Functional Materials (LC, polymer, soft material, photonic material, nanomaterials, QD, carbon materials, etc.)

BP1-01 Effective Enhancement of Thermal Stability in p-doped Carbon Nanotubes *via* Soft-Anion Coordination

Kaho Kawasaki (Kobe University, Japan)

BP1-02 Simultaneous Dynamic/Static Detection of Infrared Radiation Using Organic Pyroelectric Polymers
 Stacked with Thermoelectric Carbon Nanotubes
 Momoyo Oyama (Kobe University, Japan)

BP1-03 Efficient photosensitized luminescence from Eu³⁺ in inert nanocrystals via ligand coordination Kenichi Goushi (Kyushu University, Japan)

BP1-04 Visualization of Charge Transport in DPP-TTT/C3N4 Blended Organic Thin Films Fabricated by Unidirectional Floating Film Transfer Method through Optical Second-Harmonic Generation Radhe Shyam (Indian Institute of Technology (BHU) Varanasi, India)

BP1-05 Dielectric properties of alkane- α , ω -dinitriles based on configurational and rotational degrees of freedom

Nozomi Onodera (Tohoku University, Japan)

BP1-06 Synthesis, Structures, and Physical Properties of Bistriazole-*p*-benzoquinone and Its Alkali Metal Salts Shiori Harada (Tohoku University, Japan)

BP1-07 Rashba-Dresselhaus spin-orbit coupling in an organic crystal microcavity Reo Ohkura (Kyoto Institute of Technology, Japan)

BP1-08 Synthesis of graphite intercalation compounds with hydrophilic microwave treated graphite oxide Yuto Matsuo (Saga University, Japan)

BP1-09 Single crystal photonics based on phenyl-/pyridyl-appended stilbene derivatives <u>Mahiro Nakabayashi</u> (Kochi University of Technology, Japan)

BP1-10 Length-controllable silver nanowire probe for high TERS activity <u>Jiangtao Li</u> (Hokkaido University, Japan)

Session C: Organic Devices and Applications (FET, EL, memory, sensors and actuators)

CP1-01 Performance Improvement of Vertical Organic FET Based on Reduced Graphene Oxide with Self-Alignment Structure

Naoyuki Kosaka (Osaka University, Japan)

CP1-02 Highly Efficient Organic Light-Emitting Diodes Using a Heptazine-Carbazole Derivative Reo Kurihara (Osaka University, Japan)

CP1-03 Tuning structure and electron transport properties of graphene by chemical modification using ion-beam irradiation

Kazuyuki Takai (Hosei University, Japan)

CP1-04 Modulation of Oxygen Molecular doping in two dimensional materials by applying gate voltage <u>Takumi Yoshida</u> (Hosei University, Japan)

CP1-05 Numerical electromagnetic field analysis for the development of broadband metamaterial absorber by screen printing of conducting polymer ink

Sho Yoshikawa (Mie University, Japan)

CP1-06 Low-voltage organic light-emitting diodes with solution-processed donor/acceptor interfaces

Moeto Okuda (Osaka Metropolitan University, Japan)

CP1-07 Liquid crystalline organic semiconductors having high solubility by chemical modification in side chain and their organic transistor application

Hiroaki Iino (Tokyo Institute of Technology, Japan)

CP1-08 Investigation of SAMO around metal embraced C₇₀: A DFT Study Tomohiro Nobeyama (Tsukuba University, Japan)

CP1-09 Device characteristics of flexible top-gate pentacene transistor memories with self-organized organic floating gates

Yuting Shi (Osaka Metropolitan University, Japan)

CP1-10 Detection of alkyl halides using an organic field-effect transistor-based chemical sensor functionalized with a tetrazole derivative

Kohei Ohshiro (The University of Tokyo, Japan)

CP1-11 Improvement of device performance of solution-processed multilayered LEDs with QD/polymer blend as the emission layer

Eiji Itoh (Shinshu University, Japan)

CP1-12 Site-selective fabrication of organic nanocrystals using nanoscale electrocrystallization and their physical properties

Taichi Oribe (Shimane University, Japan)

CP1-13 Current density-voltage characteristics of exciplex-type OLEDs with hole transport/electron transport bilayer

Takeshi Yasuda (National Institute for Materials Science, Japan)

CP1-14 Resistive random access memory based on organic-metallic hybrid polymer Norio Onojima (University of Yamanashi, Japan)

CP1-15 Charge behaviors in compressed Alq3-based organic MIS diodes observed by displacement current measurement

Aoi Ito (Gunma University, Japan)

CP1-16 Effects of acidity of the surface of supporting SiO_2 substrate on the structure and electronic properties of graphene

Taisei Takasuka (Tokyo Institute of Technology, Japan)

Session D: Biotechnology and Biomedical Applications

DP1-01	Dynamics of Lipid Molecules in Heavy Water under Optical Trapping
	Shunya Moriyama (Osaka Metropolitan University, Japan)
DP1-02	Femtosecond laser-induced electrophysiological properties in single neurons
	Yumi Segawa (Osaka Metropolitan University, Japan)
DP1-03	Towards Epiomics by using Single-Molecule Electrical Identification Method
	<u>Takahito Ohshiro</u> (Osaka University, Japan)
DP1-04	Fabrication of DNA Nanostructures for Functionalized AFM Tip
	Ryusuke Wada (Kyoto University, Japan)
DP1-05	Solvent effect of photochemical reaction of a photoresponsive molecule exposed to visible light on a
	plasmonic chips
	Kyohei Asano (Kwansei Gakuin University, Japan)
DP1-06	Single-particle translocation dynamics in High viscosity fluid
	Taiga Kawaguchi (Osaka University, Japan)
DP1-07	Direct transfer of intracellular molecules between source and target cells through a double-sided
	nanotube membrane
	Yuiko Mizuguchi (Waseda University, Japan)
DP1-08	A comparison of how branched and linear polyethyleneimine affects plasma membrane structure by
	nonlinear optical microscopy
	Takeru Hara (Meiji University, Japan)
DP1-09	Evaluation System for Structural Changes of Lipid Bilayers under the Application of Vertical and
	Lateral Membrane Voltages
	Hironori Kageyama (Tohoku University, Japan)
DP1-10	Sensitive detection of biomolecules by surface-enhanced Raman scattering in giant unilamellar vesicles
	Yurika Inoue (University of Hyogo, Japan)
DP1-11	Neural activity analysis in depressive disorder model mouse by Toyohashi-probe

Session E: Organic photovoltaics and Energy Harvesting

EP1-01	Curcumin: a natural non-fullerene acceptor			
	Yutaro Ono (University of Tsukuba, Japan)			

EP1-02 Benzo[d]imidazole-Based Nonfullerene Acceptors for Organic Photovoltaics <u>Tsubasa Mikie</u> (Hiroshima University, Japan)

Joichiro Muramatsu (Toyohashi University of Technology, Japan)

EP1-03 Spontaneous Exfoliation of a Thermoelectric Coordination Polymer Poly(nickel-ethenetetrathiolate) in Aqueous-organic Mixed Solvents

Yu-Chen Kuo (Kyoto Institute of Technology, Japan)

$Session \ F: Perovskites \ and \ Hybrid \ Materials \ (Solar \ Cells \ and \ related \ devices)$

FP1-01	Pb Recovery from Perovskite Solar Cells Using Ion-Exchange Resin				
	Ruka Yazawa (Kanazawa University, Japan)				
FP1-02	Optimization of spin-coating conditions of the SnO2 electron transport layer for higher-performance				
	perovskite solar cells				
	<u>Dai Semba</u> (Kyushu University, Japan)				
FP1-03	Observation of surface morphological progression in CsPbBr ₃ polycrystalline thin films				
	Kohei Uezono (Kyoto Institute of Technology, Japan)				
FP1-04	Fabrication of Polystyrene-Added Perovskite Solar Cell				
	Koichi Okamoto (Aichi Institute of Technology, Japan)				
FP1-05	Orientation control of CH ₃ NH ₃ PbI ₃ deposited by two-step method on organic semiconductor buffer				
	layers				
	Ikumi Kamikawa (National Institute of Advanced Industrial Science and Technology, Japan)				
FP1-06	Antimony Chalcohalide Photovoltaics with Unique Color-Sensing Property				
	Ryosuke Nishikubo (Osaka University, Japan)				
FP1-07	Fabrication of Charge-transfer complex-Perovskite composite films by one step solution process				
	Shusei Hattori (Yamagata University, Japan)				
FP1-08	Small molecule blend near-infrared perovskite nanocrystal light-emitting diodes				
	Takayuki Chiba (Yamagata University, Japan)				

Poster Session II

10:15 - 11:45, Friday June 21, 2024 Meeting Room 1&2

10:15 -	11:00	Presentation with odd number posters
11.00	11.45	Procentation with even number nectors

AP2-13 Pitched π -Stacking Crystal Structure

AP2-14

Acenaphtho[1,2-k]fluoranthene Analogues Seiya Yokokura (Hokkaido University, Japan)

Keishiro Goshima (Aichi Insutitute of Technology, Japan)

Session	A: Fabrications	and Characteriz	ation					
AP2-01		observation othieno[3,2-b]napht		-	band BTNT) crystal	dispersion s	in	
AP2-02	<u>Tomoya Tasaki</u> (Tokyo University of Science, Japan) Light Source Dependence on Quantitative Measurement for Dispersibility of Dark-colored Colloida Dispersions <u>Kento Kojiro</u> (Saga University, Japan)							
AP2-03	Real-Time Chemical Reaction Analysis during Polyurea Formation Studied by Time-Resolved Infrared Spectroscopy							
AP2-04	<u>Yasuko Koshiba</u> (Kobe University, Japan) Ultrahigh-pressure polymerization of nitrogen-containing aromatic molecules <u>Toshihiro Shimada</u> (Hokkaido University, Japan)							
AP2-05	Optimization of Spray Treatment after Active Layer Deposition for Perovskite Solar Cells Kensei Ueyama (Aichi Institue of Technology, Japan)							
AP2-06	toward bio-sensing device							
AP2-07	Yoshiki Tate (Osaka Institute of Technology, Japan) Evaluation of dispersion properties of Eu-doped benzoguanamine and thin film preparation by electrostatic-spraying deposition method							
AP2-08	Naoki Ohtani (Doshisha University, Japan) Electronic Structure of Lithium Endohedral Fullerene Thin Films Yuki Kono (University of Tsukuba, Japan)							
AP2-09	•							
AP2-10	Anisotropic nucle	eation growth in the it izuoka University, J	initial stage		in film at low	temperature		
AP2-11	•	on rate and substrate a (Osaka Institute of	-		l growth in ult	rathin DNTT films		
AP2-12		IOF Growth Asseml be (Tohoku Univers		OOT:PSS Films				

Two-Dimensional

and

Highly Luminescent of CsPbCl₃ Perovskite Nanocrystal with optimized Ligand and Chloride

Electronic

Structure

of

- AP2-15 Effects of UV-Vis Exposure on Organic Thin Film investigated by GIXS and NEXAFS Measurements Takeshi Watanabe (Japan Synchrotron Radiation Research Institute, Japan)
- AP2-16 Effect of end group on J-aggregates formation in bisazo dye thin films Jian Yu (RIKEN, Japan)
- **AP2-17** Fabrication of bacteriorhodopsin visual filters and their optoelectrical characteristics Takahiro Kodama (Shimane University, Japan)
- **AP2-18** Kinetic analysis of hydrogen bond formation in polyurea polymerization by infrared spectroscopy Moeka Osumi (Shizuoka University, Japan)
- AP2-19 Chain length dependence of the formation processes of paraffin thin films during vacuum deposition Ryosuke Matsubara (Shizuoka University, Japan)
- AP2-20 Development of Integrated Nanocapacitor based on Stochastic Filling of "Copper" into Aluminum Anodic Oxide Template

 <u>Hinako Ebe</u> (Yamagata University, Japan)

Session B: Functional Materials (LC, polymer, soft material, photonic material, nanomaterials, QD, carbon materials, etc.)

- BP2-01 Electrical characterization of conductive fillers made from alloy leaves and multilayered leaves

 Jikai Hu (Japan Advanced Institute of Science and Technology, Japan)
- BP2-02 Cross-linked organic superbases as efficient dopant for creating humidity-, thermally stable n-type carbon nanotubes

 Mayuko Nishinaka (Kobe University, Japan)
- BP2-03 Application of hydrophilic graphite ink to the back electrode of inorganic electroluminescence device Asami Ohtake (Saga University, Japan)
- BP2-04 Fabrication of printed electrodes using hydrophilic carbon materials and their application to electrochemistry

 Saya Matsumoto (Saga University, Japan)
- BP2-05 Nonlinear Electrical Characteristics of Conducting Polymer Monolayer and Multilayer Networks Formed by the Co-spread Method with Liquid Crystal Molecules
 Naoki Hara (Rikkyo University, Japan)
- **BP2-06** Formation of a single liquid droplet in a temperature-responsive ionic liquid by optical tweezers Rai Kobayashi (Osaka Metropolitan University, Japan)
- **BP2-07** Exploration of three-dimensional conducting organic semiconductor molecules using a crystal structure database
 - Ken-ichi Nakayama (Osaka University, Japan)
- **BP2-08** Evaluation of photoinduced surface potential decay for evaporated Alq₃ film Ayato Jingu (Gunma University, Japan)
- BP2-09 Development of polar molecules exhibiting spontaneous orientation polarization using fluoroalkyl and phthalimide units
 Masaki Tanaka (Tokyo University of Agriculture and Technology, Japan)
- **BP2-10** Temperature Dependence of Kinetic Properties of Self-propelled Ion Gel Kazuaki Furukawa (Meisei University, Japan)

Session C: Organic Devices and Applications (FET, EL, memory, sensors and actuators)

- CP2-01 Conductive elastomers for self-adhesive nanosheet electrodes
 <u>Chiaki Ushimaru</u> (The University of Tokyo, Japan)

 CP2-02 A self-adhesive on-skin electrode based on conductive elastomer for biosignal measurements
 Ryota Fukuzawa (The University of Tokyo, Japan)
- **CP2-03** Device structure-optimized organic photoresistor for the sub-micron photodetector Nao Sumi (The University of Tokyo, Japan)
- CP2-04 Vacant
- **CP2-05** Comparison of bias-stress effects of PBTTT- and PCDTPT-OFETs with the same gate dielectric under vacuum conditions
 - Kenji Sakamoto (National Institute for Materials Science, Japan)
- CP2-06 Long-term stability of a radiation detector using organic semiconductor Eri Miyata (Ashikaga UniversityJapan)
- CP2-07 Development of low-cost super-resolution microscope using microbeads and 3D-printed flexure stages Akihiro Tsuji (Mie University, Japan)
- **CP2-08** Optoelectronic organic floating-gate memories for analog synapse devices Shusei Hattori (Osaka Metropolitan University, Japan)
- CP2-09 Fabrication of bulk heterojunction organic photodiode using physical vapor deposition Atsuya Watabe (University of Toyama, Japan)
- CP2-10 Resonant tunneling through purely organic radicals in molecular tunneling devices for spintronics applications

 Jayanta Bera (National Institute for Materials Science, Japan)
- CP2-11 Formation of InP-based Quantum Dot Thin Film Utilizing Electrophoretic Deposition Method Toward Light-Emitting Diodes

 Maowei Huang (Osaka University, Japan)
- CP2-12 Orientation Behavior of Liquid Crystals on Surface with Gradient Wettability using UV-Irradiated Polyimide Film
 - Yuji Tsukamoto (Ehime University, Japan)
- CP2-13 Operation mechanism of n-channel organic floating-gate memories using naphthalenediimide-based polymer semiconductors

 Takashi Nagase (Osaka Metropolitan University, Japan)
- CP2-14 Preparation and Evaluation of Pentacene Phototransistor with Plasmonic Organic Solar Cell Kazunari Shinbo (Niigata University, Japan)

Session D: Biotechnology and Biomedical Applications

- **DP2-01** Ion coordination structure in lipid bilayers using X-ray absorption spectroscopy in water Yu Kinjo (Toyohashi University of Technology, Japan)
- **DP2-02** Resonance Optical Trapping of Glutamate Receptors on Neuronal Cell Tatsumu Miyazaki (Osaka Metropolitan University, Japan)
- **DP2-03** Basic study to detect the chlorophyll fluorescence of plant leaf using an industrial color sensor Ko-ichiro Miyamoto (Tohoku University, Japan)
- DP2-04 An efficient process for the fabrication of an artificial cell membrane platform for the application of membrane lateral voltages
 Tatsuya Nomoto (Tohoku Unibersity, Japan)
- **DP2-05** Lipid membrane Formation on h-BN modified by Self-Assembled Peptides Soichiro Kato (Tokyo Institute of Technology, Japan)
- **DP2-06** Preparation of Pillar Array-type Plasmonic Chips for Fluorescence Enhancement Riku Shimosaka (Kwansei Gakuin University, Japan)
- **DP2-07** Lateral diffusion of lipids in artificial membranes containing polyethylene-glycol-modified lipid Azusa Oshima (NTT, Japan)
- DP2-08 Discrimination between L-DOPA and Dopamine molecules in Acidic Condition using Single-Molecule
 Measurement
 Jiho Ryu (Osaka University, Japan)
- **DP2-09** Enhanced luminescence of a firefly luciferin by luciferase immobilized to the plasmonic chip Hitomi Yamanaka (Kwansei Gakuin University, Japan)
- **DP2-10** Fabrication and characterization of a differential-measurement creatinine sensor using extended-gate field-effect transistors
 - Taichi Higo (Osaka Institute of Technology, Japan)
- **DP2-11** The viscoelastic parameter by acoustic microscopy reveals the physiological transition of brain immune cells
 - Sharumadhi Veloo (Toyohashi University of Technology, Japan)
- DP2-12 In silico modeling of reservoir-based predictive coding in biological neuronal networks on multielectrode arrays
 - Yuya Sato (Tohoku University, Japan)

Session E: Organic photovoltaics and Energy Harvesting

- **EP2-01** Large thermoelectric power factor from semiconducting carbon nanotubes nanocomposite with poly(3-alkylthiophene)
 - Keigo Ishihara (Kyoto Institute of Technology, Japan)
- EP2-02 Improvement of Non-fullerene Organic Solar Cells by Using the Localized Surface Plasmon Resonance Effect of Metal Nanoparticles

 Yuting Miao (Niigata Universit, Japan)

Session F: Perovskites and Hybrid Materials (Solar Cells and related devices)

- **FP2-01** Low-Temperature Annealing of Inkjet-Printed CsPbBr₃ Perovskite Nanocrystal Film for Light-Emitting Diodes
 - Kohei Narazaki (Yamagata University, Japan)
- FP2-02 Unleashing the Potential of Roll-to-Roll Viable Ionic Liquid-Assisted Ambient Air Fabrication of Perovskite Film for High Stable Solar Cells
 Yugo Nakahara (Kanazawa University, Japan)
- **FP2-03** Improved perovskite solar cell performance with alkali metal hydroxide <u>Toshinori Matsushima</u> (Kyushu University, Japan)
- **FP2-04** Suppression of photo-induced phase segregation in all-inorganic mixed-halide perovskite crystals <u>Daigo Minamitani</u> (Kyoto Institute of Technology, Japan)
- FP2-05 High-quality CsPbBr₃ single crystals microcavity fabricated by a high-temperature vapor-phase growth process

 Ryohei Shibano (Kyoto Institute of Technology, Japan)
- **FP2-06** Advances in Perovskite Solar Technology: Developing Efficient 2D/3D Structures for Enhanced Performance
 - Naoyuki Shibayama (Toin University of Yokohama, Japan)
- FP2-07 Aromatic 2,2-diphenylethylamine ligand exchange of FA_{0.9}Cs_{0.1}PbBr₃ perovskite nanocrystals for high efficiency pure green light-emitting diodes

 Shoki Mizoguchi (Yamagata University, Japan)
- **FP2-08** Synthesis of Perovskite Surface Coated Polymer Brush by Photo Atom Transfer Radical Polymerization Rintaro Ishikawa (Yamagata University, Japan)