

# M&BE8 Time Table

	June 22 (Monday)		June 23 (Tuesday)		June 24 (Wednesday)	
	Room A	Room C	Room A	Room C	Room A	Room C
9:30			PL-2 Sung Ha Park (Plenary Hall)		PL-3 Luisa Torsi (Plenary Hall)	
10:00			Break	Break	Break	Break
11:00			A-I2 Dean Delongchamp	E-I2 Hyangmi Jung	A-I4 Tae-Woo Lee	B-I1 Jacques-E. Moser
12:00			A-O03 Roger Haeusermann	E-O04 Yanqing Li	A-O21 Jianxin Tang	B-O01 Katharina Broch
13:00			A-O04 Leszek Mazur	E-O05 Cher Lertchaiwarakul	A-O22 Yutaka Noguchi	B-O02 Hiroumi Kinjo
			A-O05 Dai Taguchi	Break	A-O23 Hirotake Kajii	B-O03 Hiroyuki Yoshida
			A-O06 Ryo Shiraishi	E-O06 Hironori Ogata	A-O24 Tomo Sakanoue	B-O04 Hiromi Ikeura-Sekiguchi
			A-O07 Fabio Bussolotti	E-O07 Olga Bubnova	A-O28 Masanao Era	Lunch
			A-O08 Yasuo Nakayama	E-O08 Kyohei Nakano	Lunch	
	Opening Address (Plenary Hall)		Lunch	Lunch	C-I2 Motonori Komura	B-I2 Masami Nakamoto
	PL-1 Antoine Kahn (Plenary Hall)		A-IL1 Toshihiro Okamoto	D-I3 Ming-Dou Ker	C-O05 Masanao Era	B-O05 Ken-ichi Nomura
14:00	Break	Break	A-O09 Masahiro Nakano	D-O05 Yuhki Yanase	C-O06 Takenori Nitta	B-O06 Yasuyuki Kusaka
	E-I1 Takao Ishida	D-I1 Qian Wang	A-O10 Koji Nakano	D-O06 Hironari Takehara	C-O07 Fabrice Mathevet	Break
15:00	E-O01 D.Wongratanaphisan	D-O01 Takumi Isogai	A-O11 Mark Nikolka	Break	Break	B-O07 Ryosuke Matsubara
	E-O02 Akira Baba	D-O02 Ryosuke Kimura	A-O12 Ayi Bahtiar	D-O07 Chie Hosokawa	A-IL2 Kenjiro Fukuda	B-O08 Kazuaki Iwasawa
	E-O03 Seiichiro Izawa	Break	A-O13 Steffen Duhm	D-O08 Kiichi Niitsu	A-O25 Pollawat Prisawong	B-O09 Takashi Isoshima
	Break	D-I2 Mitsuhiro Okuda	A-O14 Toyokazu Yamada	D-O09 Kohei Gamo	A-O26 Sotaro Ono	B-O10 Lars Smykalla
16:00	A-I1 Jun Takeya	D-O03 Toshinori Motegi	A-O15 Taishi Nishihara	D-O10 Suiki Tanaka	A-O27 Hiroshi Ito	
	A-O01 Toshinori Matsushima	D-O04 Kazuki Ito	Break	Break	Break	Closing Remark
	A-O02 Soren V. Petersen	Break	A-I3 Dae-Hyeong Kim	C-I1 Keiji Tanaka		
17:00	Break		A-O16 Dongkai Cheng	C-O01 Igor Romanov		
	Poster (Room B)		A-O17 Tatsunosuke Matsui	C-O02 Tomoya Sato		
			A-O18 Huie Zhu	C-O03 Piyarat Nimmanpipug		
			A-O19 Makoto Yamamoto	C-O04 Philaiwan Pomprasit		
			A-O20 Hiroyuki Matsui	Break		
			Break	Break		
18:00			Banquet (Room D)			
19:00						
20:00						

# Program

**Monday, June 22, 2015**

## Plenary Hall

**13:20 - 13:30 Opening Address**

Hisao Ishii (Chiba University, Japan)

**13:30 - 14:10 Plenary Session**

Chairperson: Hisao Ishii (Chiba University, Japan)

**PL-1 (Plenary Lecture)**

13:30 - 14:10 Chemical doping of organic semiconductors: applications to devices and challenges  
Antoine Kahn (Princeton University, U. S. A.)

**14:10 - 14:25 Short Break**

**Monday, June 22, 2015**

## Room A

**14:25 - 15:40 Session E (Energy Harvesting)**

Chairperson: Masayuki Chikamatsu (AIST, Japan)

**E-II (Invited)**

14:25 - 14:55 Thermoelectric properties of ordered PEDOT:PSS films for energy harvesting  
Takao Ishida (AIST, Japan)

**E-001**

14:55 - 15:10 Screening copper oxide nanofibers as a barrier in ZnO dye-sensitized solar cells for efficiency enhancement  
Duangmanee Wongratanaphisan (Chiang Mai University, Thailand)

**E-002**

15:10 - 15:25 Fabrication of nanostructured metallic gating based plasmonic organic solar cells  
Akira Baba (Niigata University, Japan)

**E-003**

15:25 - 15:40 Dominant effects of first monolayer energetics at donor/acceptor interfaces on organic photovoltaics  
Seiichiro Izawa (The University of Tokyo, Japan)

**15:40 - 15:55 Short Break**

**15:55 - 16:55 Session A (Organic Devices and Molecular Electronics)**

Chairperson: Itaru Osaka (RIKEN, Japan)

**A-II (Invited)**

15:55 - 16:25 Giant effect of structural deformation on high-mobility organic transistors  
Jun Takeya (The University of Tokyo, Japan)

**A-001**

16:25 - 16:40 Compressed organic powders as semiconductors for field-effect transistors  
Toshinori Matsushima (Kyushu University, Japan)

**A-O02**

16:40 - 16:55 Graphene derivatives as interface material in vertical solid state devices  
Soren Vermehren Petersen (University of Copenhagen, Denmark)

**Monday, June 22, 2015****Room C****14:25 - 15:25 Session D (Biomolecular Electronics and Bioanalysis)**

Chairperson: Keiko Tawa (Kwansei Gakuin University, Japan)

**D-II** (Invited)

14:25 - 14:55 Virus particles as enabling building blocks for chemistry and biomedical applications  
Qian Wang (University of South Carolina, U. S. A.)

**D-O01**

14:55 - 15:10 Effect of magnesium ion concentration on the two-dimensional structure of DNA-functionalized nanoparticles on supported lipid bilayer  
Takumi Isogai (Nagoya University, Japan)

**D-O02**

15:10 - 15:25 Force measurement on pore-spanning lipid bilayer by atomic force microscope  
Ryosuke Kimura (Yokohama National University, Japan)

**15:25 - 15:40 Short Break****15:40 - 16:40 Session D (Biomolecular Electronics and Bioanalysis)**

Chairperson: Shinya Kumagai (Toyota Technological Institute, Japan)

**D-I2** (Invited)

15:40 - 16:10 Nanoscale patterning based on biomolecular-assembly  
Mitsuhiro Okuda (CIC nanoGUNE, IKERBASQUE, Spain)

**D-O03**

16:10 - 16:25 Molecular diffusion in supported lipid membrane on various substrate  
Toshinori Motegi (Toyohashi University of Technology, Japan)

**D-O04**

16:25 - 16:40 Type classification of exosome adsorption to solid surfaces by atomic force microscopy in aqueous environment  
Kazuki Ito (Yokohama National University, Japan)

**Monday, June 22, 2015****Room B****17:10 - 18:40 Poster Session**

**Tuesday, June 23, 2015**

**Plenary Hall**

**9:30 - 10:10 Plenary Session**

Chairperson: Yuji Yoshida (AIST, Japan)

**PL-2 (Plenary Lecture)**

9:30 - 10:10 DNA nanostructures and their applications  
Sung Ha Park (Sungkyunkwan University, Korea)

**10:10 - 10:25 Short Break**

**Tuesday, June 23, 2015**

**Room A**

**10:25 - 12:25 Session A (Organic Devices and Molecular Electronics)**

Chairperson: Itaru Osaka (RIKEN, Japan)

**A-I2 (Invited)**

10:25 - 10:55 Structure foundations of high performance in polymer semiconductors  
Dean Delongchamp (National Institute of Standards and Technology, U. S. A.)

**A-O03**

10:55 - 11:10 Origin of the gate voltage dependence of the contact resistance in organic FETs  
Roger Haeusermann (The University of Tokyo, Japan)

**A-O04**

11:10 - 11:25 Thermally-induced majority carrier type conversion and contact resistance kinetics in a quinoidal oligothiophene derivative.  
Leszek Mazur (Wroclaw University of Technology, Poland)

**A-O05**

11:25 - 11:40 Analysis of energy states of carriers in Au/pentacene/polyimide/ITO diode by using electroluminescence spectroscopy and EFISHG measurement  
Dai Taguchi (Tokyo Institute of Technology, Japan)

**A-O06**

11:40 - 11:55 Image potential states of phthalocyanines on HOPG studied with low-energy inverse photoemission spectroscopy  
Ryo Shiraishi (Kyoto University, Japan)

**A-O07**

11:55 - 12:10 Local electron-phonon coupling in HOMO-band dispersion of rubrene single crystals: an angle-resolved ultraviolet photoelectron spectroscopy study  
Fabio Bussolotti (Institute of Molecular Science, Japan)

**A-O08**

12:10 - 12:25 Core-levels and valence band electronic structures of the pentacene single crystal  
Yasuo Nakayama (Tokyo University of Science, Japan)

**12:25 - 13:50 Lunch**

**13:50 - 16:05 Session A (Organic Devices and Molecular Electronics)**

Chairperson: Tomohiko Mori (Toyota Central R&D Labs., Japan)

**A-IL1 (Invited Late News)**

13:50 - 14:20 Sulfur-bridged bent-shaped organic semiconductors for printed and flexible electronics

Toshihiro Okamoto (The University of Tokyo, Japan)

**A-O09**

14:20 - 14:35 Naphthodithiophene diimide (NDTI): a useful building block for the development of ambipolar and unipolar n-type polymers  
Masahiro Nakano (RIKEN, Japan)

**A-O10**

14:35 - 14:50 Benzo[1,2-b:4,5-b']difuran-fused conjugated compounds: synthesis, properties, and application to organic field-effect transistors  
Koji Nakano (Tokyo University of Agriculture and Technology, Japan)

**A-O11**

14:50 - 15:05 Approaching disorder-free transport in high-mobility conjugated polymers  
Mark Nikolka (University of Cambridge, United Kingdom)

**A-O12**

15:05 - 15:20 Enhanced charge carrier transport in the blend of P3HT:squaraine capped zinc oxide nanoparticles  
Ayi Bahtiar (Universitas Padjadjaran, Indonesia)

**A-O13**

15:20 - 15:35 Electrical doping of organic thin films by mutual molecular hybridization: Impact of side groups and electron affinity  
Steffen Duhm (Soochow University, China)

**A-O14**

15:35 - 15:50 Imaging single atom d-states on single organic molecules  
Toyokazu Yamada (Chiba University, Japan)

**A-O15**

15:50 - 16:05 Recombination dynamics of the lowest-energy excitons in single-walled carbon nanotubes under resonant and nonresonant excitation  
Taishi Nishihara (Kyoto University, Japan)

**16:05 - 16:20 Short Break**

**16:20 - 18:05 Session A (Organic Devices and Molecular Electronics)**

Chairperson: Tsuyoshi Sekitani (Osaka University, Japan)

**A-I3 (Invited)**

16:20 - 16:50 Stretchable inorganic devices for skin-based bio-electronics  
Dae-Hyeong Kim (Seoul National University, Korea)

**A-O16**

16:50 - 17:05 Micro heater array based on organic field-effect transistors  
Dongkai Cheng (The University of Tokyo, Japan)

**A-O17**

17:05 - 17:20 Efficient optical terahertz-transmission modulation in solution processed organic semiconductor thin films on silicon substrate  
Tatsunosuke Matsui (Mie University, Japan)

**A-O18**

17:20 - 17:35 Control of charge transfer and accumulation at ferroelectric polymer/conjugated polymer hybrid interfaces for resistive nonvolatile memories  
Huie Zhu (Tohoku University, Japan)

**A-O19**

17:35 - 17:50 Observation of molecular floating gate effects in silver nanoparticles single-electron transistors in copper phthalocyanine derivative  
Makoto Yamamoto (Chiba University, Japan)

**A-O20**

17:50 - 18:05 Wireless serial data transmission by solution-processed single-crystalline organic transistors  
Hiroyuki Matsui (The University of Tokyo, Japan)

**Tuesday, June 23, 2015**

**Room C**

**10:25 - 11:25 Session E (Energy Harvesting)**

Chairperson: Keisuke Tajima (RIKEN, Japan)

**E-I2 (Invited)**

10:25 - 10:55 Development of organic photovoltaic modules and EIPV devices  
Hyangmi Jung (Toshiba, Japan)

**E-O04**

10:55 - 11:10 Enhanced light harvesting in polymer solar cells featuring biomimetic light trapping scheme  
Yanqing Li (Soochow University, China)

**E-O05**

11:10 - 11:25 Green light absorbing organic photovoltaic cells for energy harvesting: active material with complementally absorption to chlorophylls  
Cher Lertchaiwarakul (Nara Institute of Science and Technology, Japan)

**11:25 - 11:40 Short Break**

**11:40 - 12:25 Session E (Energy Harvesting)**

Chairperson: Keisuke Tajima (RIKEN, Japan)

**E-O06**

11:40 - 11:55 The effect of solvent additives on the phase separation and crystallinity in organic bulk heterojunction films studied by solid-state NMR  
Hironori Ogata (Hosei University, Japan)

**E-O07**

11:55 - 12:10 Efficiency enhancement and performance optimization strategies of singlet fission BHJ solar cells  
Olga Bubnova (University of Cambridge, United Kingdom)

**E-O08**

12:10 - 12:25 Effect of disordered phase at organic donor/acceptor interface on photovoltaic performance  
Kyohei Nakano (RIKEN, Japan)

**12:25 - 13:50 Lunch**

**13:50 - 14:50 Session D (Biomolecular Electronics and Bioanalysis)**

Chairperson: Jun Ohta (Nara Institute of Science and Technology, Japan),  
Chie Hosokawa (AIST, Japan)

**D-I3 (Invited)**

13:50 - 14:20 The development and challenges of implantable neuro-prosthetic devices  
Ming-Dou Ker (National Chao Tung University, Taiwan)

**D-O05**

14:20 - 14:35 Multi-well SPR imaging sensor for clinical diagnosis of allergy  
Yuhki Yanase (Hiroshima University, Japan)

**D-O06**

14:35 - 14:50 A micro light pipe array with an excitation attenuation filter for lensless digital enzyme-linked immunosorbent assay  
Hironari Takehara (Nara Institute of Science and Technology, Japan)

**14:50 - 15:05 Short Break**

**15:05 - 16:05 Session D (Biomolecular Electronics and Bioanalysis)**

Chairperson: Keiko Tawa (Kwansei Gakuin University, Japan)

**D-O07**

15:05 - 15:20 Optical trapping dynamics of neurotransmitter receptors on a neuronal cell  
Chie Hosokawa (AIST, Japan)

**D-O08**

15:20 - 15:35 A low-power CMOS magnetic cell manipulation platform using charge recycling technique  
Kiichi Niitsu (Nagoya University, Japan)

**D-O09**

15:35 - 15:50 A CMOS current integration circuit with  $1.2 \mu\text{m} \times 2.05 \mu\text{m}$  electroless-plated  $1024 \times 1024$  microelectrode array for high-sensitivity bacteria detection  
Kohei Gamo (Nagoya University, Japan)

**D-O10**

15:50 - 16:05 An inverter-based CMOS level-crossing ADC for low-power biosensing  
Suiki Tanaka (Nagoya University, Japan)

**16:05 - 16:25 Short Break**

**16:25 - 17:55 Session C (Liquid Crystals, Polymers and Other Soft Materials)**

Chairperson: Koichi Sakaguchi (Saga University, Japan)

**C-II (Invited)**

16:25 - 16:55 Structure and dynamics of polymers in thin films  
Keiji Tanaka (Kyushu University, Japan)

**C-O01**

16:55 - 17:10 Charge modulation spectroscopy study of indacenodithiophene-co-benzothiadiazole polymer  
Igor Romanov (University of Cambridge, United Kingdom)

**C-O02**

17:10 - 17:25 Direct determination of density of states of several polymers including gap states studied by high sensitivity photoemission and photoelectron yield spectroscopy  
Tomoya Sato (Chiba University, Japan)

**C-O03**

17:25 - 17:40 Preparation and characterization of enhanced mechanical properties natural rubber/ZnO nanocomposite  
Piyarat Nimmanpipug (Chiang Mai University, Thailand)

**C-O04**

17:40 - 17:55 Surface morphology and chemistry alternation of natural rubber using low temperature plasma treatment  
Philaiwan Pornprasit (Maejo University, Thailand)

**Tuesday, June 23, 2015**

**Room D**

**18:20 - 20:20 Banquet**

**Wednesday, June 24, 2015**

**Plenary Hall**

**9:30 - 10:10 Plenary Session**

Chairperson: Tsuyoshi Sekitani (Osaka University, Japan)

**PL-3 (Plenary Lecture)**

9:30 - 10:10 Printable bioelectronics to investigate functional biological interfaces  
Luisa Torsi (Universita degli Studi di Bari, Italy)

**10:10 - 10:25 Short Break**

**Wednesday, June 24, 2015**

**Room A**

**10:25 - 11:55 Session A (Organic Devices and Molecular Electronics)**

Chairperson: Tomohiko Mori (Toyota Central R&D Labs., Japan)

**A-I4 (Invited)**

10:25 - 10:55 Organic/inorganic perovskite optoelectronics using self-organized conducting polymer layers  
Tae-Woo Lee (Pohang University of Science and Technology, Korea)

**A-O21**

10:55 - 11:10 High-efficiency flexible organic light-emitting diodes with novel light outcoupling structures  
Jianxin Tang (Soochow University, China)

**A-O22**

11:10 - 11:25 The roles of interface charge in organic light-emitting diodes doped by a thermally activated delayed fluorescence emitter  
Yutaka Noguchi (Meiji University, Japan)

**A-O23**

11:25 - 11:40 Degradation analysis of near-infrared phosphorescence organic light-emitting diodes based on Pt-complex  
Hirotake Kajii (Osaka University, Japan)

**A-O24**

11:40 - 11:55 Light-emitting electrochemical cell aiming for polymer injection laser  
Tomo Sakanoue (Waseda University, Japan)

**A-O28**

11:55 - 12:10 Optical properties of PbI<sub>2</sub>-based layered perovskite having high photoluminescence efficiency  
Masanao Era (Saga University, Japan)

**12:10 - 13:20 Lunch**

**13:20 - 14:35 Session C (Liquid Crystals, Polymers and Other Soft Materials)**

Chairperson: Hiroaki Iino (Tokyo Institute of Technology, Japan)

**C-I2 (Invited)**

13:20 - 13:50 Anomalous regular nanophase separation in liquid crystalline block copolymer film and its templating processes  
Motonori Komura (National Institute of Technology, Numazu College, Japan)

**C-O05**

13:50 - 14:05 High hole mobility of benzo-2,1,3-thiadiazole polycrystalline film formed by utilizing self-organizing nature of liquid crystalline mesophase

Masanao Era (Saga University, Japan)

**C-O06**

14:05 - 14:20 Carrier transport properties of highly ordered smectic phase in wide temperature range  
Takenori Nitta (Tokyo Institute of Technology, Japan)

**C-O07**

14:20 - 14:35 Intertwined co-assemblies in liquid-crystalline  $\pi$ -conjugated materials: towards a new class of nanostructured supramolecular organic semiconductors  
Fabrice Mathevet (University of Pierre and Marie Curie, France)

**14:35 - 14:50 Short Break**

**14:50 - 16:20 Session A (Organic Devices and Molecular Electronics)**

Chairperson: Tsuyoshi Sekitani (Osaka University, Japan)

**A-IL2** (Invited Late News)

14:50 - 15:20 Printed organic thin-film transistors with excellent electrical uniformity  
Kenjiro Fukuda (Yamagata University, Japan)

**A-O25**

15:20 - 15:35 Self-assembled monolayer micropatterning by UV treatment for organic field-effect transistors  
Pollawat Prisawong (The University of Tokyo, Japan)

**A-O26**

15:35 - 15:50 Benzophenone-terminated SAM as interfacial layer of ITO and HTL  
Sotaro Ono (Tokyo University of Agriculture and Technology, Japan)

**A-O27**

15:50 - 16:05 Critical regime for the insulator-metal transition in highly-ordered conjugated polymers gated with ionic liquid  
Hiroshi Ito (Nagoya University, Japan)

**16:05 - 16:15 Short Break**

## Wednesday, June 24, 2015

### Room C

**10:25 - 11:55 Session B (Fabrication Technique and Characterization)**

Chairperson: Akihiro Furube (Tokushima University, Japan)

**B-II** (Invited)

10:25 - 10:55 Dynamics of photoinduced charge separation at donor-acceptor heterojunctions  
Jacques-E. Moser (Ecole Polytechnique Fédérale de Lausanne, Switzerland)

**B-O01**

10:55 - 11:10 Singlet fission in small molecule organic semiconductors: The role of homo- and heteromolecular charge transfer  
Katharina Broch (University of Cambridge, United Kingdom)

**B-O02**

11:10 - 11:25 Negative ion photoemission as a tool to investigate unoccupied states of organic EL materials  
Hiroumi Kinjo (Chiba University, Japan)

**B-O03**

11:25 - 11:40 Origin of the orientation dependence of the ionization energy and electron affinity in organic molecular films  
Hiroyuki Yoshida (Chiba University, Japan)

**B-O04**

11:40 - 11:55 Electronic structure of sulfur containing conjugated polymer using X-ray absorption and electron spectroscopy

Hiromi Ikeura-Sekiguchi (AIST, Japan)

**11:55 - 13:20 Lunch**

**13:20 - 14:20 Session B (Fabrication Technique and Characterization)**

Chairperson: Shin-ichiro Nakajima (Japan Aviation Electronics, Japan)

**B-I2** (Invited)

13:20 - 13:50 Micro/nano-fabrication leading on to printed electronics

Masami Nakamoto (Osaka Municipal Technical Research Institute, Japan)

**B-O05**

13:50 - 14:05 Simultaneous formation of fine and large-area electrode patterns using screen-offset printing

Ken-ichi Nomura (National Institute of Advanced Industrial Science and Technology, Japan)

**B-O06**

14:05 - 14:20 Rapid prototyping of printed electronic devices: Planographic reverse offset printing

Yasuyuki Kusaka (National Institute of Advanced Industrial Science and Technology, Japan)

**14:20 - 14:35 Short Break**

**14:35 - 15:50 Session B (Fabrication Technique and Characterization)**

Chairperson: Atsushi Kubono (Shizuoka University, Japan)

**B-O07**

14:35 - 14:50 Growth of organic thin films by ultra-high-speed vacuum deposition and fabrication of organic thin-film transistors

Ryosuke Matsubara (Nara Institute of Science and Technology, Japan)

**B-O08**

14:50 - 15:05 Growth of pentacene thin film on wiring-pattern Cu-SiO<sub>2</sub> substrate studied by photoelectron emission microscopy

Kazuaki Iwasawa (Chiba University, Japan)

**B-O09**

15:05 - 15:20 Influence of surface roughness to spontaneous polar molecular orientation in vacuum-deposited Alq<sub>3</sub> thin films showing giant surface potential

Takashi Isoshima (RIKEN, Japan)

**B-O10**

15:20 - 15:35 Interplay between hydrogen bonding and molecule-substrate interaction in self-assembled structures of porphyrin molecules and manipulation of their electronic structure by dehydrogenation

Lars Smykalla (Technische Universitat Chemnitz, Germany)

**Wednesday, June 24, 2015**

**Room A**

**16:15 - 16:25 Closing Remark**

# Poster Presentations

17:10 - 18:40, Monday, June 22, 2015

## Room B

### Session A (Organic Devices and Molecular Electronics)

- A-P01** Synthesis and characterization of spiro type host material for blue organic light-emitting diodes  
Min Hye Seo (KITEHC, Korea)
- A-P02** Organic crystal light-emitting transistors combined with a metal oxide layer  
Keiji Obara (Kyoto Institute of Technology, Japan)
- A-P03** Synthesis of organic semiconductor copolymers with polydimethylsiloxane as side chains for application to organic electronic devices  
Inori Onishi (The University of Tokyo, Japan)
- A-P04** States at interfaces in metal/pentacene/SiO<sub>2</sub>/Si studied by hard X-ray photoelectron spectroscopy under applied bias voltage  
Ichiro Hirose (Japan Synchrotron Radiation Research Institute, Japan)
- A-P05** The surface-plasmon polariton energy extraction method using thin-film light extraction layers for high efficiency of organic light-emitting diodes  
Doo-Hoon Kim (Soonchunhyang University, Korea)
- A-P06** Transparent organic light-emitting devices with ethoxylated polyethylenimine as electron injection layer  
Hironao Sano (University of Toyama, Japan)
- A-P07** Wettability properties of substituted-benzenethiol monolayers on silver and gold surfaces  
Shingo Tatara (Kobe University, Japan)
- A-P08** Dinaphthothienothiophen thin-film transistors with threshold voltage shift induced by oxygen plasma  
Asahi Kitani (Kobe University, Japan)
- A-P09** Flexible OFET fabricated by ultrasonic welding method aiming at solvent-free and low temperature process  
Tatsuhiko Sasaki (Chiba University, Japan)
- A-P10** Write once memory effects observed in Ga-doped ZnO/organic semiconductor/MoO<sub>3</sub>/Au structures  
Junya Hasegawa (Osaka Prefecture University, Japan)
- A-P11** A TSC method coupled with EFISHG measurement for studying carrier trap energies and detrapped carrier behaviors in IZO/polyimide/pentacene/Au MIS diode  
Hideki Hosokawa (Tokyo Institute of Technology, Japan)
- A-P12** Copper phthalocyanine synthesized by microwave irradiation and the application to thin-film transistors  
Shota Mizuka (Kobe University, Japan)
- A-P13** Extraction of contact resistance and channel parameters from the electrical characteristics of a single bottom-gate/top-contact organic transistor  
Shunsuke Takagaki (Kyoto University, Japan)
- A-P14** Electrical measurement of organic charge transfer complex crystal by using sticking electrodes  
Yusaku Tada (Chiba University, Japan)

- A-P15** Electronic structures and magnetic properties of multi-decker phthalocyanines  
Atsushi Suzuki (The University of Shiga Prefecture, Japan)
- A-P16** Investigation of optical losses in BP3T-based light emitting transistors  
Masumi Miyazaki (Waseda Univ, Japan)
- A-P17** 70% increase of mobility in strained organic crystals  
Takayoshi Kubo (The University of Tokyo, Japan)
- A-P18** Hall effect and high mobility in highly aligned polymer semiconductors  
Yu Yamashita (The University of Tokyo, Japan)
- A-P19** Performance of poly(3-hexylthiophene) organic field-effect transistors fabricated by mist-vapor deposition  
Shigetaka Katori (Tsuyama College, Japan)
- A-P20** Carrier injection and accumulation in double-layer OLED with secondary doped PEDOT:PSS anode  
Takako Otsuka (Tokyo Institute of Technology, Japan)
- A-P21** Model of exciton quenching of Ir(ppy)<sub>3</sub> with hole measured by time-resolved luminescence spectroscopy  
Shiho Oyama (Japan Advanced Institute of Science and Technology, Japan)
- A-P22** Role of alkyl side chains at self-assembly, electronic structure and charge arrangement in alkyl-substituted sexithiophene thin films  
Steffen Duhm (Soochow University, China)
- A-P23** Inverted organic light-emitting diodes using different transparent conductive oxide films as a cathode  
Makoto Takada (Osaka Prefecture University, Japan)
- A-P24** Carrier behavior in highly oriented organic semiconductor thin film studied by visualized carrier motion  
Takaaki Manaka (Tokyo Institute of Technology, Japan)
- A-P25** Improved electroluminescence with reversed bilayer of thiophene/phenylene co-oligomer derivatives  
Shohei Dokiya (Nara Institute of Science and Technology, Japan)
- A-P26** Organic nonvolatile resistive memory devices with polyisocyanide bearing origo thiophene  
Yasushi Sakuragawa (Japan Advanced Institute of Science and Technology, Japan)
- A-P27** Passivation process on electro-optics polymer using Al<sub>2</sub>O<sub>3</sub> thin films fabricated by atomic layer deposition  
Yukihiro Tominari (National Institute of Information and Communications Technology, Japan)
- A-P28** Development of photoswitching devices consisting of an metal-nanoparticle  
Sou Ryuzaki (Kyushu University, Japan)
- A-P29** Synthesis, properties, and organic device performances of naphthobischalcogenadiazole-based polymers  
Kazuaki Kawashima (RIKEN, Japan)
- A-P30** Effects of magnetic field and gold nanoparticles on photocurrents of zinc porphyrin-viologen linked compound-gold nanoparticle composite films  
Hiroaki Yonemura (Kyushu University, Japan)
- A-P31** Double chemically anchored Au nanoparticle single-electron transistor  
Yasuo Azuma (Tokyo Institute of Technology, Japan)
- A-P32** Dispersibility improvement of graphite derivatives by Fenton reaction  
Seiko Uchino (Saga University, Japan)
- A-P33** Preparation of PbBr-based layered perovskite superlattice films having p-conjugated polymer as an organic layer by using Langmuir-Blodgett technique and their optical nonlinearity  
Yuta Sakuma (Saga University, Japan)

- A-P34** Electronic structures of the pentacene single crystal clean surface prepared by vacuum cleavage  
Yuta Mizuno (Chiba University, Japan)
- A-P35** Interaction of alkyl radicals with fullerene (C<sub>60</sub>): density functional theory (DFT) study  
Shigeaki Abe (Hokkaido University, Japan)
- A-P36** THz and far-infrared spectroscopy of electro-optic polymers  
Toshiki Yamada (National Institute of Information and Communications Technology, Japan)
- A-P37** Molecular rectification of ferrocenyl-terminated self-assembled monolayers formed on Au (111) and Si (111)  
Anchun Cheng (Kyoto University, Japan)
- A-P38** Orientation polarization in doped OLED: the formation of interface charge and deep trap  
Ryuta Ishino (Chiba University, Japan)
- A-P39** Electronic structure of copper phthalocyanine/alkanethiol/Au interface investigated by low energy ultraviolet photoelectron spectroscopy  
Koki Dote (Chiba University, Japan)
- A-P40** Photoconversion of pentacenediketone derivatives in the crystalline phase - Shape change of a single crystal during the photoconversion -  
Yuya Miyamoto (Kwansei Gakuin University, Japan)
- A-P41** Control of multiexciton dynamics of a single quantum dot using an Ag tip  
Hiroki Takata (Kwansei Gakuin University, Japan)
- A-P42** Size controlled synthesis of ZnSe nanoparticles in apoferritin  
Ae Ri Lee (Gachon University, Korea)

## **Session B (Fabrication Technique and Characterization)**

- B-P01** Oriented organic semiconductors revealed using photo-electron emission microscopy with linearly polarized light and X-rays  
Tetsuhiro Sekiguchi (Japan Atomic Energy Agency, Japan)
- B-P02** Optimization of conductive cantilevers for the AFM potentiometry measurements of high-ionization-potential organic semiconductors  
Satoshi Nakajima (Nara Institute of Science and Technology, Japan)
- B-P03** Numerical evaluation of dispersibility for GO with long alkyl chain  
Asami Ohtake (Saga University, Japan)
- B-P04** Electromagnetic field analyses using finite-difference time-domain method of OFET-type THz-wave sensors  
Kotaro Kimoto (Nara Institute of Science and Technology, Japan)
- B-P05** Structure change of titanyl phthalocyanine (TiOPc) semiconducting thin film investigated by soft X-ray spectroscopies  
Chia-Hsin Wang (National Synchrotron Radiation Research Center, Taiwan)
- B-P06** Surface potential measurement of  $\alpha$ -NPD thin film fabricated by mist-vapor deposition and vacuum evaporation methods  
Shigetaka Katori (National Institute of Technology, Tsuyama College, Japan)
- B-P07** Observation of electric state in organic thin-film transistor by bias applied - hard X-ray photoemission spectroscopy  
Takeshi Watanabe (JASRI, Japan)

- B-P08** Spontaneous mixing of molecules at the organic semiconductor pn junction fabricated by sequential deposition  
Toshihiro Shimada (Hokkaido University, Japan)
- B-P09** Growth of multi-layered graphene films on BaF<sub>2</sub> by alcohol CVD  
Yan Tan (Shizuoka University, Japan)
- B-P10** Wavelength dependence of free electron laser on chirality of single-walled carbon nanotubes  
Keisuke Yoshida (Nihon University, Japan)
- B-P11** Selective growth of in-plane oriented single-walled carbon nanotubes with specific chirality by free electron laser irradiation  
Daiki Kawaguchi (Nihon University, Japan)
- B-P12** Ultrathin films by electrophoretic deposition of diamond nanoparticles  
Yosuke Goto (Tokyo University of Agriculture and Technology, Japan)
- B-P13** Porous polyurea thin films prepared by water-assisted vapor deposition polymerization  
Kenichi Horai (Shizuoka University, Japan)
- B-P14** Chemical reaction process and nanorod growth of octacyanometalphthalocyanine on ultrathin metal films  
Yasuko Koshiba (Kobe University, Japan)
- B-P15** Mixture film fabrication of Fe or Fe<sub>3</sub>O<sub>4</sub> nanoparticles with palmitic acid for vertically-aligned carbon nanotube growth using Langmuir-Blodgett technique  
Kentaro Nakamura (Chiba University, Japan)
- B-P16** Solution-processed organic devices fabrication using biomass-derived greener solvent  
Shuichi Nagamatsu (Kyushu Institute of Technology, Japan)
- B-P17** Simulation of spectral properties of self-assembled anisotropic gold nanorods  
Ryotaro Ozaki (Ehime University, Japan)
- B-P18** Isolation of C<sub>76</sub>, C<sub>78</sub> and C<sub>84</sub> from high-order fullerene mixture  
Kuang-Shun Liu (National Taiwan University, Taiwan)
- B-P19** Oriented bulk heterojunction films prepared by friction transfer method  
Nobutaka Tanigaki (AIST, Japan)
- B-P20** Development of organic dyes having intramolecular energy transfer structure for liquid scintillator  
Yuta Sakuma (Saga University, Japan)
- B-P21** Porphyrin functionalized SWCNT: Photoinduced electron transfer characterization  
Elizabeth Katinka Galvan-Miranda (Universidad Nacional Autonoma de Mexico, Mexico)
- B-P22** Low band gap copolymers for organic photovoltaics  
Tsuyoshi Muto (Lintec Corporation, Japan)
- B-P23** Electronic structure of organolead halide perovskite thin films fabricated by a two-step vapor deposition method  
Tsuyoshi Kajikawa (Kinki University, Japan)
- B-P24** Formation chemistry of perovskite solar cell materials studied by photoelectron spectroscopy  
Yaw-Wen Yang (National Tsing Hua University, Taiwan)
- B-P25** Multilayer organic light-emitting diodes fabricated by needle electrode assisted ultrasonic deposition  
Takeshi Fukuda (Saitama University, Japan)
- B-P26** Temperature dependence of pyroelectric coefficient in vinylidene fluoride oligomer thin films  
Akimitsu Mori (Kobe University, Japan)
- B-P27** Molecular self-assembly and structure of difluorobenzenethiols on Au(111) surfaces  
Jaegun Noh (Hanyang University, Korea)

- B-P28** Photochemical grafting of ferrocenyl polyethylene glycol monolayers on Si(111) and its electrochemical analysis  
Takashi Ichii (Kyoto University, Japan)
- B-P29** Atomic layer deposition (ALD) and sol-gel grown bare, Ni- and Li/Ni-doped ZnO thin films for gas sensor applications  
Stefan Boyadjiev (MTA-BME Technical Analytical Research Group, Hungary)

### **Session C (Liquid Crystals, Polymers and Other Soft Materials)**

- C-P01** Pd-NP/polythiophene conducting polymer nanocomposite  
Seong Huh (Hankuk University of Foreign Studies, Korea)
- C-P02** Photoluminescence properties of hybrid Langmuir-Blodgett films of amphiphilic iridium complexes with the exfoliated nanosheets on Al coated glass substrate  
Ryotaro Ozaki (Ehime University, Japan)
- C-P03** Optical anisotropy and H-aggregation formation of poly(3-alkylthiophene) in 2-D confined surface monolayer  
Fanji Wang (University of Tokyo, Japan)
- C-P04** Carrier transport property of truxene discotic liquid crystals with three different ring substituents  
Hirosato Monobe (National Institute of Advanced Industrial Science and Technology, Japan)
- C-P05** In-plane orientation of long-chain molecules in the isotropic molten phase on a rubbed polymer surface  
Shun Suyama (Shizuoka University, Japan)
- C-P06** Response time improvement of aligned nanofibers/nematic liquid crystal composite device by adjusting nanofiber concentration  
Toan Quoc Duong (National Defense Academy, Japan)

### **Session D (Biomolecular Electronics and Bioanalysis)**

- D-P01** Changes in the diffusion coefficient by dielectric barrier discharge irradiation of the lipid bilayer membrane  
Ryuma Yamashita (Toyohashi University of Technology, Japan)
- D-P02** Reconstitution of proteoliposome containing human *ether-a-go-go*-related gene channel into supported lipid bilayer  
Kohei Fukumoto (Toyohashi University of Technology, Japan)
- D-P03** AFM observation of voltage-dependence K<sup>+</sup> channel KAT1 reconstructed to asolectin supported lipid bilayer  
Yuya Suzuki (Toyohashi University of Technology, Japan)
- D-P04** Modification with water-soluble silane coupling agent on SiO<sub>2</sub>/Si substrate  
Yuya Niiyama (Toyohashi University of Technology, Japan)
- D-P05** Au nanoparticle incorporation into supported lipid bilayer membranes and its characterization by atomic force microscopy  
Naotoshi Sakaguchi (Yokohama National University, Japan)
- D-P06** Improvements in stability and conductivity of two dimensional Ag nanoparticles sheets by cross-linking structure using alkanedithiol  
Noboru Saito (Kyushu University, Japan)

- D-P07** Polyelectrolyte/carbon nanotube composite microcapsules and drug release triggered by laser irradiation  
Haruyuki Saito (Meiji University, Japan)
- D-P08** Theoretical study on application of peptide nanoring to chiral recognition of amino acids  
Jo Takeuchi (Waseda University, Japan)
- D-P09** A redox-controllable molecular switch based on weak recognition of BPX26C6 at a diphenylurea station  
Jia-Cheng Chang (National Taiwan University, Taiwan)
- D-P10** Anionic binding induced sol-gel transition and fluorescence in organgels of glycopeptide gelator  
Wen-Shiuan Wang (National Synchrotron Radiation Research Center, Taiwan)
- D-P11** Light induced rectification property using hydro gel on amorphous silicon film  
Yutaka Tsujiuchi (Akita University, Japan)
- D-P12** Electronic structure of chlorophyll-a solution observed by photoelectronic yield spectroscopy  
Yuki Takeda (Chiba University, Japan)
- D-P13** Development of single-walled carbon nanotubes-based composites from an aqueous solution containing peptide aptamer below the critical micelle concentration  
Zha Li (RIKEN, Japan)
- D-P14** Tolerance of biomolecular recognition ability of RecA proteins against hybrids of DNA and single-walled carbon nanotubes  
Shusuke Oura (Tokyo University of Science, Japan)
- D-P15** Regulation of adsorption of DNA and protein molecules on single-walled carbon nanotubes  
Yu Ishibashi (Tokyo University of Science, Japan)
- D-P16** Mechanism of amperometric biosensor with electronically type-controlled carbon nanotube  
Hiroki Hidaka (Shibaura Institute of Technology, Japan)
- D-P17** Electrochemical biosensor with electronically type-controlled carbon nanotube and glucose dehydrogenase  
Yuki Inoue (Shibaura Institute of Technology, Japan)
- D-P18** Amperometric biosensor with nanocarbon and electron transfer mediator for lower detection potential  
Hajime Furutaka (Shibaura Institute of Technology, Japan)
- D-P19** Molecularly imprinted electrochemical sensing of kynurenic acid in urine  
Yu-Chia Chang (I-Shou University, Taiwan)
- D-P20** Electrochemical sensing of protein secreted by *Escherichia coli* via the epitope imprinting of peptide on molecularly imprinted poly(ethylene-co-vinyl alcohol) coated electrode  
Chun-Lin Liao (I-Shou University, Taiwan)
- D-P21** Imaging of biointerface by use of metal nanoparticle films and their cytotoxicity test  
Shihomi Masuda (Kyushu University, Japan)
- D-P22** Fluorescence imaging of cells on the plasmonic dish integrally molded  
Keiko Tawa (Kwansei Gakuin University, Japan)
- D-P23** Live-cell, label free identification of excitatory-inhibitory neurons on micropatterned surfaces  
Sho Kono (Waseda University, Japan)
- D-P24** Micro cell isolation column for allergic diagnosis  
Koichiro Kobayashi (Kyusyu Institute of Technology, Japan)
- D-P25** Collecting biological samples for accurate optical absorption spectroscopy  
Yuichiro Matsuura (Toyota Technological Institute, Japan)
- D-P26** A low-voltage two-dimensional CMOS electrophoresis platform with 32×32 sample/hold cell array  
Yuuki Yamaji (Nagoya University, Japan)

- D-P27** A 1.8V-input-range voltage-to-current converter using source degeneration for low-noise multimodal CMOS biosensor array  
Keita Muto (Nagoya University, Japan)
- D-P28** Non-optical frequency-shift based testing of electrode formation using LC-VCO for high-reliability CMOS biosensor array  
Kiichi Niitsu (Nagoya University, Japan)
- D-P29** Implantable imaging device for brain functional imaging system using flavoprotein fluorescence  
Yoshinori Sunaga (Nara Institute of Science and Technology, Japan)
- D-P30** Facile fabrication of electrochemical biosensor via self-assembled monolayer on single crystalline Au nanoplate  
Kkochchorong Park (KAIST, Korea)

### Session E (Energy Harvesting)

- E-P01** Bio-analytic system based on organic photovoltaics  
Soonmin Seo (Gachon University, Korea)
- E-P02** Synthesis of fullerene attached thiophene-selenophene block copolymers for single-component organic solar cells  
Peihong Chen (The University of Tokyo, Japan)
- E-P03** Impedance analysis of carrier behavior in organic photovoltaics  
Tomohiro Mayumi (The University of Tokyo, Japan)
- E-P04** Small molecule tandem solar cell using all-solution process  
Quang-Duy Dao (Osaka University, Japan)
- E-P05** Charge carrier transport in PTB7:PC71BM polymer:fullerene organic solar cells of varying active layer composition  
Takuya Sugiyama (Osaka Prefecture University, Japan)
- E-P06** Complete material/device design of thermoelectric fabrics using carbon nanotube fibers with partial n-type doping  
Mitsuhiro Ito (Nara Institute of Science and Technology, Japan)
- E-P07** Effect of PbI<sub>2</sub> precursor crystallization control upon organometal hybrid CH<sub>3</sub>NH<sub>3</sub>PbI<sub>3</sub> perovskite solar cells  
Bing long Lei (Aichi Institute of Technology, Japan)
- E-P08** Dependence of droplet residence time on photovoltaic characteristics by electrospray deposition  
Asuki Toda (Saitama University, Japan)
- E-P09** Semitransparent organic solar cells using the carbon nanotube sheet electrode fabricated under atmospheric pressure  
Naoya Urakawa (Kinki University, Japan)
- E-P10** Determination of hole drift mobility in organic solar cells based on a low-bandgap polymer by modulation spectroscopy  
Takashi Kobayashi (Osaka Prefecture University, Japan)
- E-P11** Irregularly large Seebeck coefficients and their temperature dependence observed in pure organic semiconducting materials  
Ryo Abe (Nara Institute of Science and Technology, Japan)
- E-P12** Fabrication of photo cathode and anode based on p- and n-type oxide semiconductors for high voltage tandem dye sensitized solar cells  
Yuki Mogi (Chiba University, Japan)

- E-P13** Simultaneous increases in Seebeck coefficient and electrical conductivity of single wall carbon nanotube by addition of ionic liquid  
Shohei Horike (Kobe University, Japan)
- E-P14** Fabrication and characterization of perovskite-type photovoltaic devices  
Takeo Oku (The University of Shiga Prefecture, Japan)
- E-P15** Multilayered MoS<sub>2</sub> nanoflakes bound to carbon nanotubes as electron acceptors in bulk heterojunction inverted organicsolar cells  
Toshihiro Shimada (Hokkaido University, Japan)
- E-P16** Preparation of chlorophyll-imprinted poly(ethylene-co-vinyl alcohol) coated anode for biofuel cells  
Ching Ping Shih (National University of Kaohsiung, Taiwan)
- E-P17** Enhanced thermopower of single-walled carbon nanotubes by loading into ionic liquid-derived polymers  
Motohiro Nakano (Nara Institute of Science, Japan)
- E-P18** High efficient and highly stable solar cells based on thiazolothiazole and naphthobisthiadiazole copolymers  
Masahiko Saito (Hiroshima University, Japan)
- E-P19** Depleted-heterojunction solar cell based on PbS colloidal quantum dot – Device performance depending on the surface treatments –  
Naoya Tsujii (Kwansei Gakuin University, Japan)