

2021/09/27 14:00

Sp02	2021/09/27	14:00 – 18:00	Rm1
1Rm101-10	Sp02. Printable electrochemistry for smart life and smart community (Organizer: I.Shitanda)		
Chairperson: Isao Shitanda (Tokyo University of Science), Kuniaki Nagamine (Yamagata University)			

1Rm101-10-01      14:00 – 14:30      Invited

Skin-Interfaced Wearable Sweat Biosensors

\*Wei Gao[1]

*1. California Institute of Technology (United States of America)*

1Rm101-10-02      14:30 – 15:00      Invited

Flexible biofuel cells for point-of-care biosensing and wearable bioenergy harvesting

\*Ming Zhou[1]

*1. Northeast Normal University (China)*

1Rm101-10-03      15:00 – 15:30      Invited

Flexible Printed Organic Sensors and Their IoT Applications

\*Shizuo Tokito[1]

*1. Yamagata University (Japan)*

1Rm101-10-04      15:30 – 15:45

Development of the Lactate Biosensor using the Poly-GMA-modified Porous Carbon and Chitosan Film

\*Yuro Ozone[1], Yuko Yoshihara[1], Noya Loew[1], Tsutomu Mikawa[2], Masahiro Motosuke[1], Momoko Kobayashi[1], Tatsunori Suzuki[1], Kensuke Matsuo[1], Takahiro Mukaimoto[1], Shinya Yanagita[1], Hikari Watanabe[1], Isao Shitanda[1], Masayuki Itagaki[1]

*1. Tokyo University of Science (Japan), 2. RIKEN (Japan)*

1Rm101-10-05      15:45 – 16:00

Improvement of Output Power of Paper-based Diaper Biofuel Cell using Poly-GMA-modified Porous Carbon Electrodes

\*Kazuhiro Ishigoori[1], Yukiya Yokoi[1], Noboru Katayama[1], Hikari Watanabe[1], Isao Shitanda[1], Masayuki Itagaki[1]

*1. Tokyo University of Science (Japan)*

16:00 – 16:15

Break

1Rm101-10-06 16:15 – 16:45 Invited

POCT Electrochemical Biosensor for Healthcare

\*Eiichi TAMIYA[1]

*1. AIST, OIL-PhotoBIO (Japan)*

1Rm101-10-07 16:45 – 17:15 Invited

Ultrathin organic solar cells: performance, stability, and applications

\*Kenjiro Fukuda[1], Takao Someya[1,2]

*1. RIKEN (Japan), 2. Univ. Tokyo (Japan)*

1Rm101-10-08 17:15 – 17:30

Biofuel Cells Using Screen Printing as a New Energy Harvester for Smart Life and Smart Community

\*Isao Shitanda[1], Yuko Yoshihara[1], Mizuzki Satake[1], Yuki Fujimura[1], Yukiya Morigayama[1], Seiya Tsujimura[2], Tsutomu Mikawa[3], Noya Loew[1], Hikari Watanabe[1], Masayuki Itagaki[1]

*1. Tokyo University of Science (Japan), 2. University of Tsukuba (Japan), 3. RIKEN (Japan)*

1Rm101-10-09 17:30 – 17:45

Fabrication and Evaluation of Acetaldehyde Biosensor using PQQ-ALDH and 1-Methoxy PMS

\*Taisei Oshimoto[1], Yuko Yoshihara[1], Hikari Watanabe[1], Noya Loew[1], Masahiro Motosuke[2], Tutomu Mikawa[3], Isao Shitanda[1], Masayuki Itagaki[1]

*1. Faculty of Science and Technology of TUS (Japan), 2. Faculty of Engineering of TUS (Japan), 3. RIKEN (Japan)*

1Rm101-10-10 17:45 – 18:00

Development of Chloride Ion Sensor by Heat Transfer Printing and Monitoring Chloride Ion in Sweat

\*Naoki Muramatsu[1], Hikari Watanabe[1], Noya Loew[1], Isao Shitanda[1,2], Masahiro Motosuke[1], Shinya Yanagita[1], Tatsunori Suzuki[1], Masayuki Itagaki[1,2], Takahiro Mukaimoto[1], Momoko Kobayashi[1], Kensuke Matsuo[1]

*1. Tokyo University of Science (Japan), 2. RIST TUS (Japan)*

Sp09                    2021/09/27                    14:00 – 16:00                    Rm2  
1Rm201-04    Sp09. Outstanding topics from Thin Film Materials &  
Devices Meeting (Organizer: M.Kimura)  
Chairperson:Mutsumi Kimura(Ryukoku University)

1Rm201-04-01                    14:00 – 14:30                    Invited  
High Mobility Metal Oxide Thin Film Transistors fabricated by solution process

\*Yukiharu Uraoka[1], Juan Paolo Bermundo[1]

*1. Nara Institute of Science and Technology (Japan)*

1Rm201-04-02                    14:30 – 15:00                    Invited  
Flexible and Stretchable Thermoelectric Generators Using Carbon Nanotube Yarn

\*Masakazu Nakamura[1]

*1. Nara Institute of Science and Technology (Japan)*

1Rm201-04-03                    15:00 – 15:30                    Invited  
Organic Thin-Film Transistors Using Solution-Processable Organic Materials for Printed Memory and Image Sensor Applications

\*Takashi Nagase[1,2], Reitaro Hattori[1], Naoyuki Nishida[1], Takashi Kobayashi[1,2], Hiroyoshi Naito[1,2]

*1. Osaka Pref. Univ. (Japan), 2. Res. Inst. Mole. Electron. Dev. (Japan)*

1Rm201-04-04                    15:30 – 16:00                    Invited  
Presentation from TFMD -AI Electronics using Thin-Film Devices-

\*Mutsumi Kimura[1], Sumio Sugisaki[1], Ayata Kurasaki[1], Yuki Shibayama[1]

*1. Ryukoku University (Japan)*

Sp16                    2021/09/27                    14:00 – 15:50                    Rm3  
1Rm301-05    Sp16. Liquid metal for flexible and printed electronics  
(Organizer: Z.Cui)  
Chairperson:Zheng Cui(Suzhou Institute of Nano-Tech & Nano-Bionics, CAS)

1Rm301-05-01      14:00 – 14:30      Invited  
Liquid Metal Printed Electronics towards Ubiquitous Electrical Engineering

\*Jing Liu[1,2]

*1. Tsinghua University (China), 2. Technical Institute of Physics and Chemistry, Chinese Academy of Sciences (China)*

1Rm301-05-02      14:30 – 14:50      Invited  
Micro/Nano Liquid Metal Particles based Flexible Electronic Ink and Technology

\*Wei Rao[1]

*1. Technical Institute of Physics and Chemistry, CAS (China)*

1Rm301-05-03      14:50 – 15:10      Invited  
Liquid Metal Electronics Fabricated by Transfer Printing

\*Qian Wang[1]

*1. Technical Institute of Physics and Chemistry, CAS (China)*

1Rm301-05-04      15:10 – 15:30      Invited  
A minimized liquid metal-based electrochemical sensing system on fabric for glucose detection in sweat

\*LIANG HU[1]

*1. Beihang University (China)*

1Rm301-05-05      15:30 – 15:50      Invited  
DREAM Ink: Industrial Practices of Liquid Metal Printings and Breaking the Boundary of Electronic Manufacturing

\*Yang Yu[1]

*1. Beijing DREAM Ink Technologies Co. Ltd. (China)*

Sp05	2021/09/27	14:00 – 16:00	Rm4
1Rm401-05	Sp05. Novel solution process using particular properties of organic semiconductor molecules (Organizer: H.Iino)		
	Chairperson:Hiroaki Iino(Tokyo Institute of Technology)		

1Rm401-05-01      14:00 – 14:25  
Two-Dimensional Crystals of Organic Semiconductors

\*Wenping Hu[1]

*1. Tianjin University (China)*

1Rm401-05-02      14:25 – 14:45      Invited  
Fabrication of Large Area Oriented Thin Films by Floating Film Transfer and their 2D Profiling for Organic Electronic Devices  
\*Shyam S. Pandey[1]

*1. Graduate School of LSSE, Kyushu Institute of Technology (Japan)*

1Rm401-05-03      14:45 – 15:10      Invited  
Understanding the limit of solution processing monolayer organic field effect transistors

\*Paddy K. L. Chan[1]

*1. The University of Hong Kong (Hong Kong)*

1Rm401-05-04      15:10 – 15:30      Invited  
Layered Organic Semiconductors for Advanced Printed Electronics

\*Tatsuo Hasegawa[1]

*1. Dept. Appl. Phys., The Univ. of Tokyo (Japan)*

1Rm401-05-05      15:30 – 15:55      Invited  
Highly Oriented Liquid Crystal Semiconductor for Organic Field Effect Transistors

\*DONG KI YOON[1]

*1. KAIST (Korea)*

15:55 – 16:00  
Break

2021/09/27 16:00

Sp29	2021/09/27	16:00 – 18:00	Rm2
1Rm205-10	Sp29. Printed Electronics–New Technologies and Applications (Organizer: T.Kamata, K. Hecker)		
Chairperson:Klaus Hecker(OE-A), Toshihide Kamata(AIST)			

1Rm205-10-01 16:00 – 16:20

How to upscale the production technologies for printed electronics into higher TRL level by using industry 4.0, automation and artificial intelligence

\*Thomas Kolbusch[1]

*1. Coatema Coating Machinery GmbH (Germany)*

1Rm205-10-02 16:20 – 16:40

Industrialization of sustainable, flexible, hybrid, R2R-printed electronics

\*Chloé Bois[1]

*1. ICI (Canada)*

1Rm205-10-03 16:40 – 17:00

Photonic Soldering Temperature Sensitive Components with High Temperature Solder Alloys

\*Stan Farnsworth[1], Vahid Akhavan[1], Rudy Ghosh[1], Ian Rawson[1], Harry Chou[1], Nikhil Pillai[1]

*1. NovaCentrix (United States of America)*

1Rm205-10-04 17:00 – 17:20

31" Flexible Printed OLED TV Display Technology

\*James Lee[1]

*1. TCL (China)*

1Rm205-10-05 17:20 – 17:40

Large-Area Sensing Surfaces and Human Machine Interfaces Enabled by Hybrid Printed Electronics

\*Peter Zalar[1]

*1. Holst Centre / TNO (Netherlands)*

1Rm205-10-06 17:40 - 18:00  
Organic PV - the truly green solar retrofit solution

\*Robert Nitsche[1]

*1. Heliatek GmbH (Germany)*

Sp07	2021/09/27	16:00 - 18:00	Rm4
1Rm406-10	Sp07. Organic semiconductors; new materials and applications (Organizer: K.Takimiya)		
	Chairperson: Kazuo Takimiya(Riken), Hiroaki Iino(Tokyo Institute of Technology)		

1Rm406-10-01 16:00 - 16:25 Invited  
Design and Synthesis of Organic Functional Polymers for OFET Applications

\*Yen-Ju Cheng[1]

*1. National Yang Ming Chiao Tung University (Taiwan)*

1Rm406-10-02 16:25 - 16:45 Invited  
Azulene-Based Materials for Organic Field-Effect Transistors

\*Hiroshi Katagiri[1]

*1. Yamagata Univ. (Japan)*

1Rm406-10-03 16:45 - 17:10 Invited  
Optically Tunable Field-Effect Transistors with Conjugated Polymers Entailing Azo Groups in the Side Chains

\*Deqing Zhang[1]

*1. Institute of Chemistry, Chinese Academy of Sciences (China)*

1Rm406-10-04 17:10 - 17:30 Invited  
"Manipulation" of crystal structures of pyrene-based organic semiconductors enabling ultrahigh mobility

\*Kazuo Takimiya[1], Kirill Bulgarevich [1]

*1. RIKEN (Japan)*

1Rm406-10-05      17:30 - 17:55      Invited  
Solution-Processable High-Performance Organic Semiconductor Single-Crystalline Films

\*Toshihiro Okamoto[1]

*1. The University of Tokyo (Japan)*

17:55 - 18:00  
Break

2021/09/27 18:40

Sp08	2021/09/27	18:40 - 21:10	Rm4
1Rm411-16	Sp08. Sharp on/off switching in organic TFTs (Organizer: T.Hasegawa)		
	Chairperson:Jun-ichi Hanna(Tokyo Institute of Technology)		

1Rm411-16-01      18:40 - 19:05      Invited  
Flexible Nanoscale Organic Thin-Film Transistors

\*Hagen Klauk[1], Ute Zschieschang[1]

*1. Max Planck Institute for Solid State Research (Germany)*

1Rm411-16-02      19:05 - 19:30      Invited  
Ultralow Power TFT Sensor Interfaces for Wearables

\*Arokia Nathan[2], Chen Jiang[1]

*1. Department of EE, Tsinghua University (China), 2. Darwin College, Cambridge University (UK)*

1Rm411-16-03      19:30 - 19:55      Invited  
Steep Subthreshold OFET for Power-constrained Flexible Hybrid Integration

\*Xiaojun Guo[1]

*1. Shanghai Jiao Tong University (China)*



1Rm411-16-04      19:55 – 20:20      Invited  
High-quality transistors fabricated with solution-processed polycrystalline thin films of liquid crystals  
\*Hiroaki Iino[1], Jun-ichi Hanna[1]

*1. Tokyo Institute of Technology (Japan)*

1Rm411-16-05      20:20 – 20:45      Invited  
Low-Voltage Flexible and Printed Organic Transistors and Their Application to Proximity Sensors  
\*Hiroyuki Matsui[1], Itsuki Shoji[1], Hideki Wada[1], Rei Shiwaku[2], Kodai Uto[1], Yasunori Takeda[1], Toshiyuki Sugimoto[1], Shizuo Tokito[1]

*1. Yamagata University (Japan), 2. Tosoh Corporation (Japan)*

1Rm411-16-06      20:45 – 21:10      Invited  
Towards trap-free and printed organic TFTs  
\*Gyo Kitahara[1], Satoru Inoue[1], Toshiaki Higashino[2], Mitsuhiro Ikawa[1], Satoshi Matsuoka[1], Shunto Arai[1], Tatsuo Hasegawa[1]

*1. The University of Tokyo (Japan), 2. AIST (Japan)*

2021/09/27 19:00

Sp02	2021/09/27	19:00 – 21:00	Rm1
1Rm111-13	Sp02. Printable electrochemistry for smart life and smart community (Organizer: I.Shitanda)		
	Chairperson: Isao Shitanda (Tokyo University of Science), Kuniaki Nagamine (Yamagata University)		

1Rm111-13-01      19:00 – 19:30      Invited  
Multimodal Flexible and Wearable Sensor Systems  
\*Kuniharu Takei[1]

*1. Osaka Prefecture University (Japan)*

1Rm111-13-02      19:30 – 20:00      Invited  
Porous carbon materials for enzymatic biofuel cells  
\*Seiya Tsujimura[1]

*1. University of Tsukuba (Japan)*

1Rm111-13-03

20:00 - 20:30

Invited

Tissue-Interfaced Electronics for Monitoring and Directing Biological Functions

\*Toshinori Fujie[1]

*1. Tokyo Institute of Technology (Japan)*

20:30 - 21:00

Break