

2021/09/28 10:00

Sp04	2021/09/28	10:00 – 12:00	Rm1
2Rm101-03	Sp04. Flexible and stretchable liquid crystal display technologies (Organizer: H.Fujikake)		
Chairperson: Hideo Fujikake (Tohoku University), Shinichi Komura (Japan Display Inc.)			

2Rm101-03-01 10:00 – 10:30 Invited
Development of Deformable Polarizer for Flexible Devices

*Kosuke Takae[1], Toru Umemoto[2], Kazuki Kawamidori[1], Takashi Kamijo[1], Kazuya Miwa[2], Junichi Nagase[1], Takahiro Ishinabe[3], Yosei Shibata[3], Hideo Fujikake[3]

1. Research and Development Div. Information Fine Materials Sector Nitto Denko Corporation (Japan), 2. Corporate Research and Development Div. Corporate Technology Sector Nitto Denko Corporation (Japan), 3. Department of Electronic

2Rm101-03-02 10:30 – 11:00 Invited
Biaxially formable flexible liquid crystal cells: spherically curved Organic LCDs and liquid crystal optics

*May Wheeler[1], William Reeves[1], Andrew Russell[1], James Harding[1]

1. FlexEnable Ltd (UK)

2Rm101-03-03 11:00 – 11:30 Invited
Liquid Crystal Gel using Self-Assembly Dendrimer for Lifetime-Free Stretchable Display

*Yosei Shibata[1], Ryoma Sato[1], Ryosuke Saito[1], Takahiro Ishinabe[1], Hideo Fujikake[1]

1. Tohoku University (Japan)

11:30 – 12:00
Break

Sp11	2021/09/28	10:00 - 12:00	Rm2
2Rm201-05	Sp11. Electronic and optical materials for future IoT devices (Organizer: H.Kajii)		
Chairperson: Hirotake Kajii (Osaka Univ.), Akihiro Kohno (NTT)			

2Rm201-05-01 10:00 - 10:30 Invited
Flexible Sensors Driven by Piezoionic Effect

*Hidenori Okuzaki[1]

1. University of Yamanashi (Japan)

2Rm201-05-02 10:30 - 11:00 Invited
High Molecular Orientation and Selective Crystal Polymorphism in Uniaxially Bar-Coated Thin-Films of Solution-Processable Organic Materials
*Akihiko Fujii[1], Masanori Ozaki[1]

1. Osaka University (Japan)

11:00 - 11:15
Break

2Rm201-05-03 11:15 - 11:30
Different Colloidal Particle Formation Process between Conjugated Polymer and C₆₀ in Preparation of Suspension for Electrophoretic Deposition by Reprecipitation Method
*Kazuya Tada[1], Daiya Fujimoto[1]

1. University of Hyogo (Japan)

2Rm201-05-04 11:30 - 11:45
Optical Properties of Green Emissive InP-based Quantum Dots and their Application to Hybrid Organic Light-Emitting diodes
*Maowei Huang[1], Hirotake Kajii[1], Akihito Okamoto[1], Masaaki Hirakawa[2], Shintaro Toda[2], Masato Morifuji[1], Masahiko Kondow[1]

1. Osaka University (Japan), 2. Future Technology Research Laboratory, ULVAC, Inc (Japan)

2Rm201-05-05 11:45 - 12:00

Characteristics of Dielectric Film Mirrors Using Ferroelectric Polyvinylidene Fluoride Derivatives and its Application to Color Tunable AC-driven Insulated Organic Electroluminescent Devices with Microcavity

*Hirotake Kajii[1], Maowei Huang[1], Masato Morifuji[1], Masahiko Kondow[1]

1. Osaka University (Japan)

2021/09/28 16:00

Sp12 2021/09/28 16:00 - 18:00 Rm1
2Rm104-08 Sp12. Flexible electronic paper (Organizer: S.Maeda)

Chairperson:Manabu Yoshida(AIST), Yoshihiko Hotta(Chiba University)

2Rm104-08-01 16:00 - 16:25 Invited
Concept of e-Tile for Wall Decoration and its Prototyping

*Makoto Omodani[1], Hiroyuki Yaguchi[1]

1. Tokyo Denki University (Japan)

2Rm104-08-02 16:25 - 16:50 Invited
Rewritable Marking Technologies and Laser Marking System using Laser Diode

*Yoshihiko Hotta[1]

1. Hotta Technical Consultant Office (Japan)

2Rm104-08-03 16:50 - 17:05
Conducting Sheet consists of Polypyrrole and Cellulose Nanofiber

*Masanori Ozawa[1], Shuichi Maeda[2]

1. tokai university graduate student (Japan), 2. tokai university (Japan)

17:05 - 17:10

Break

2Rm104-08-04 17:10 - 17:35 Invited
Ag Electrodeposition-Based Multi-Color Electrochromic Cell Toward Flexible Electronic Paper

*Norihisa Kobayashi[1]

1. Chiba Univ. (Japan)

2Rm104-08-05 17:35 - 18:00 Invited
Organic physically unclonable function for secure 2D code on e-paper

*Kazunori Kuribara[1], Yuichi Watanabe[1], Tomoya Koshi[1], Sei Uemura[1], Manabu Yoshida[1]

1. National Institute of Advanced Industrial Science and Technology(AIST) (Japan)

Sp17 2021/09/28 16:00 - 18:00 Rm2
2Rm206-09 Sp17. Flexibe hybrid electronicis (Organizer: J.Hu/C.C.Tsai)

Chairperson:Jupiter Hu(Industrial Technology Research Institute, Taiwan), C. C. Tsai(E Ink Holdings Inc.)

2Rm206-09-01 16:00 - 16:30
Multi-physical Design and Modeling of Flexible Hybrid Electronics Validated by E-textile EMG Prototype

*Chen-Tsai Yang[1], Te-Hsun Lin[1], Yen-Ting Wu[1], Heng-Yin Chen[1], CHUNG-I Li[1]

1. Electronic and Optoelectronic System Research Laboratories (EOSL), Industrial Technology Research Institute (ITRI) (Taiwan)

2Rm206-09-02 16:30 - 17:00 Invited
Stretchable Conductive Material for Formable Display Application

*Po Lun Chen[1], Chun Ta Chen[1], Po Ching Lin[1], Ya Chu Hsu[1]

1. General Interface Solution (Taiwan)

2Rm206-09-03 17:00 - 17:30 Invited
R2R Metal Mesh Printing Process Development With G-Leaf (50um Ultra-Thin Glass)

*Naotoshi Inayama[1], Takahide Fujii[1], Hiroki Mori[1], Cheng-Yi Shih[2], Shih-Ming Lin[2], Kuo-Hua Tseng[2]

1. Nippon Electric Glass Co., Ltd. (Japan), 2. Industrial Technology Research Institute (Taiwan)

2Rm206-09-04 17:30 - 18:00 Invited
Optimum Development of Electrophoretic Foldable eBook Device

*KEISUKE HASHIMOTO[1]

1. E Ink Holdings Inc. (Taiwan)

Sp23	2021/09/28	16:00 - 17:50	Rm3
2Rm301-05	Sp23. International standardization of Printable Electronics (Organizer: T.Kamata)		
Chairperson:Naoki Matsuda(AIST), Nobuko Fukuda(AIST)			

2Rm301-05-01 16:00 - 16:20 Invited
Introduction of IEC TC 119 - Printed Electronics Standardization

*Andreas Willert[1]

1. Fraunhofer ENAS (Germany)

2Rm301-05-02 16:20 - 16:40 Invited
Standardization activity of Printed Electronics Materials

*Takehito Kodzasa[1]

1. AIST (Japan)

2Rm301-05-03 16:40 - 17:00 Invited
Standardization Activity of Equipment for Printed Electronics

*TAIK-MIN LEE[1]

1. Korea Institute of Machinery and Materials (Korea)

17:00 - 17:10
Break

2Rm301-05-04 17:10 - 17:30 Invited
Standardization activity of printability of Printed Electronics

*Chung-Hwan Kim[1]

1. Chungnam National University (Korea)

2Rm301-05-05 17:30 - 17:50 Invited
IEC TC 119 WG 5 - Standardization activity of quality assessment of Printed Electronics

*Leszek A. Majewski[1]

1. The University of Manchester (UK)

Oral1	2021/09/28	16:00 - 18:00	Rm4
2Rm401-08	Regular session - Flexible and printed devices and processes		
	Chairperson: Munehiro Kimura(Nagaoka University of Technology), Manabu Ito(Toppan)		

2Rm401-08-01 16:00 - 16:15
Printed Sensor Deployment Enabled by Flexible Hybrid Electronics (FHE)

*Matthew Dyson[1]

1. IDTechEx (UK)

2Rm401-08-02 16:15 - 16:30
Improvement of printed electrodes disconnection after 3D thermoforming by optimizing print process on PC film

*Yuki Kawamura[1], Tatsuhiko Takahashi[1], Tadahiro Furukawa[1]

1. Yamagata University (Japan)

2Rm401-08-03 16:30 - 16:45
Ultrastretchable and Durable Conductive Wiring with Liquid Metal Injected in 3D-Printed Spring-type Channel

*Chihiro Okutani[1], Tomoyuki Yokota[1]

1. The University of Tokyo (Japan)

2Rm401-08-04 16:45 - 17:00

Development of pH Sensor for Heat Stroke Detection based on PDMS Nanosheet

*Ryota Kitamura[1], Ganesh Kumar Mani[1], Kazuyoshi Tsuchiya[1]

1. Tokai Univ. (Japan)

2Rm401-08-05 17:00 - 17:15

Fabrication of Roll-to-Roll Printed Cantilever Type Touch Sensors by Transfer and Bonding Method

*Sang Hoon Lee[1], Xuan Chong[2], Sangyoon Lee[3]

1. Department of Chemical and Biomolecular Engineering, University of California, Irvine (United States of America), 2. Department of Mechanical Design and Production Engineering, Konkuk University (Korea), 3. Department of Mechanical

2Rm401-08-06 17:15 - 17:30

Improvement of cool plasma sintering and its application to the screen offset printing of copper fine traces

*Shunsuke Irino[1], Yuji Kasashima[1], Makoto Yoshida[1], Naoki Shirakawa[1], Yoshinori Horii[1], Ken-ichi Nomura[1], Yasuyuki Kusaka[1], Kai Wang[2], Takeshi Kono[2]

1. AIST (Japan), 2. NMM (Japan)

2Rm401-08-07 17:30 - 17:45

Development of a Simple Contact-Type Printable Physically Unclonable Function Device

*Yuichi Watanabe[1], Kouji Suemori[1], Kazunori Kuribara[1], Nobuko Fukuda[1], Ken-ichi Nomura[1], Sei Uemura[1]

1. AIST (Japan)

2Rm401-08-08 17:45 - 18:00

Paper Battery and its Application in Healthcare

*Xiachang ZHANG[1], Anja Talo[1]

1. Enfucell Flexible Printed Electronics Ltd. (China)