



Location

The Shilla Hotel
Jeju Island, Korea

Master Classes date

4 September, 2017

Conference dates

5-7 September, 2017

Exhibition dates

5-6 September, 2017

Host By

Ministry of Trade, Industry and Energy

Organized by

Korea Printed Electronics Association, ICFPE2017 Organizing Committee

Supported by

Samsung Electronics, LG Electronics, Korea Institute of Machinery and Materials, PARU, Korea Institute of Industrial Technology, Center for Advanced Photonics and Electronics, Printed Electronics Total Solution, FUJIFILM Dimatix, MAGNETAR, OE-A, Optomec, ARKEMA, PIEZOTECH, TOBA, IOP Publishing, PSTEK, GJM, Suncheon National University, LOPEC, IDtechEx, Nature Electronics, SEMES, Jeju Special Self-Governing Province, Korea Tourism Organization, Jeju Convention & Visitors Bureau

ICFPE 2017

WELCOME MESSAGE	01
FLOOR PLAN	02
GENERAL INFORMATION	03
LIST OF SESSION CHAIRS FOR ICFPE 2017	07
CONFERENCE AGENDA	08
PROGRAM SCHEDULE IN DETAILS	10
PLENARY SESSIONS	17
LIST OF ABSTRACTS	19
SPONSORS & EXHIBITIONS	43

WELCOME MESSAGE

Dear Colleagues,

It is my great pleasure and an honor to welcome you to The 2017 International Conference on Flexible and Printed Electronics (ICFPE2017), to be held September 4~7, 2017 at The Shilla Hotel in Jeju Island, Korea.

The ICFPE 2017 will underpin the need for collaboration and cooperation of individuals from a wide range of professional backgrounds. This rich program will also provide all attendees with the opportunities to meet and interact with the leading scientists, researchers and colleagues as well as sponsors.



Jeju Island is an exceptional location for the Conference. It is renowned as one of the new 7 wonders of nature with the sparkling ocean and towering Halla Mountains providing a unique and spectacular setting. The ICFPE 2017 will be held at The Shilla Hotel which is widely recognized as a resort with an exotic atmosphere and the best facilities.

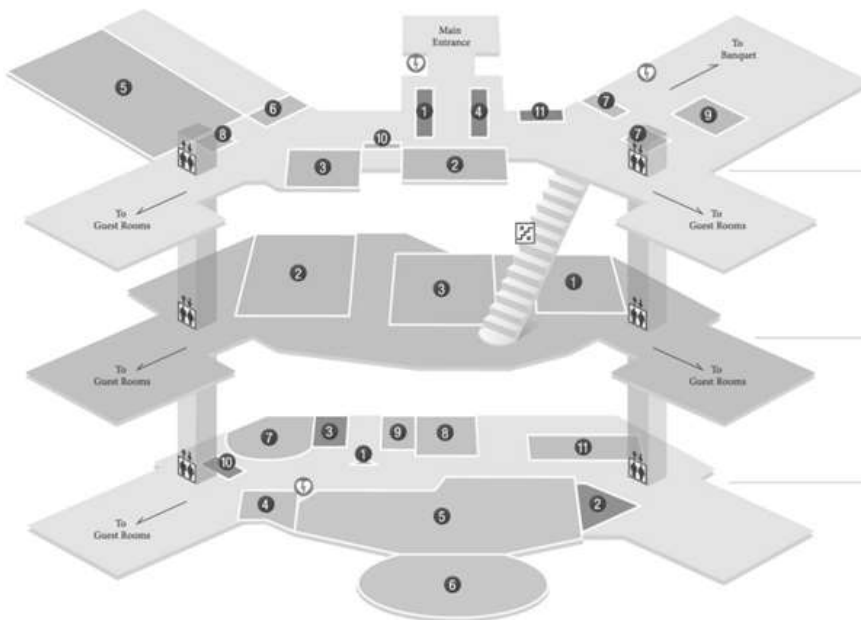
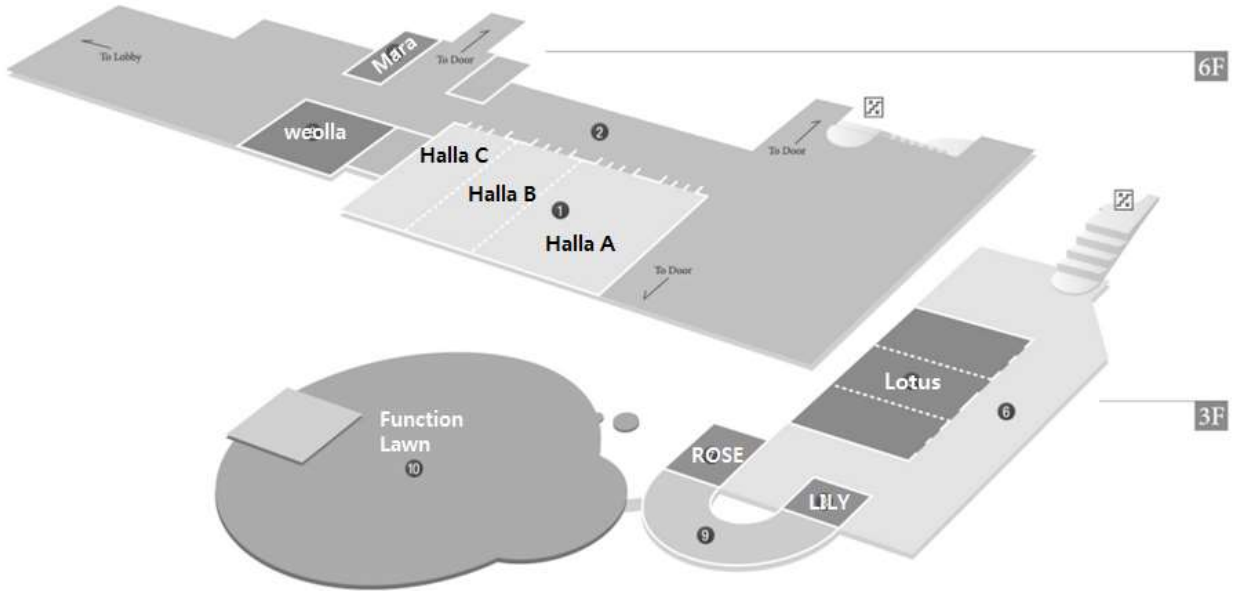
The previous ICFPEs were held in Jeju, Korea (350 participants, 2009), in Hsinchu, Taiwan (400 participants, 2010) and in Tokyo, Japan (More than 500 participants, 2012). This year, the 8th ICFPE is jointly being organized by the Korea Printed Electronics Association (KoPEA), with supports from Organic Electronics Association (OE-A), research groups in Japan, Taiwan and China. Many leading scientists and engineers invited from Asia, Europe, USA will present relevant and up-to-date overviews of the current development in this field.

On behalf of the International Conference on Flexible and Printed Electronics Organizing Committee, I thank all the sponsors for their technical and financial support; all the session chairs, speakers and reviewers for their participation and contribution; and all the committee members for their team work and follow-through.

Kinam Kim, President
Samsung Electronics
General Chair of ICFPE 2017

Kinam Kim

FLOOR PLAN



- ① Front Desk
- ② Lobby Lounge, Badang
- ③ Bar, Ollae
- ④ Concierge & Business Center
- ⑤ Casino
- ⑥ Jeju Specialities Shop
- ⑦ Sundry Shop
- ⑧ Rent-a-Car
- ⑨ Lounge S
- ⑩ Pastry Boutique
- ⑪ Guest Activity Organizer
- ⚡ AED
- ① Korean Restaurant, Chenjee
- ② All Day Dining, The Parkview
- ③ Japanese Restaurant, Hinode
- ① Fitness Club Desk
- ② Kid's Island
- ③ Gymboree Kid's Club
- ④ Gymnasium
- ⑤ Indoor Swimming Pool
- ⑥ Outdoor Swimming Pool
- ⑦ Sauna(Men)
- ⑧ Sauna(Women)
- ⑨ GX Room
- ⑩ Sony Playstation Game Zone
- ⑪ Guerlain Spa
- ⚡ AED

GENERAL INFORMATION

Onsite Registration and Information Hours

4 September Monday	12:30 pm to 4:00 pm
5 September Tuesday	9:00 am to 5:00 pm
6 September Wednesday	8:30 am to 5:00 pm
7 September Thursday	8:30 am to 2:00 pm

Master classes

There are 3 master classes on Additive manufacturing, Fabrication solutions for flexible electronics, Emerging Materials for Printed and Flexible Electronics being held on Monday, Sept. 4, 2017.

Plenary Session

Plenary sessions will be held at Halla hall from 10:25 am to 11:55 am on Tuesday, 5 September, and from 09:30 am to 11:55 am on Wednesday, 6 September.

General Session

General session is organized by conference organizers based on the abstracts submitted by general participant for ICFPE 2017.

Special Session

Special session is organized by a specific institute or a research group rather than by conference organizer.

Industrial Session

People with various experiences will discuss the challenges for the commercialization of printed electronics. This will be a great opportunity for everyone to get a sense of what is really needed to break the technological barrier and transition printed electronics from research labs to commercial production.

Exhibits

From Tuesday to Wednesday (September 5-6, 2017), about 30 exhibitors will demonstrate the latest technologies in the area of flexible and printed electronics. The Exhibits will be held from 10:00 am to 5:00 pm in the lobby area at the conference site. Exhibit area will be open from 4:00pm on Monday for installation.

Equipment in the Session Rooms

All session rooms are equipped with one laptop computer and LCD projection system with screen. A staff person is on duty at all times to deal with equipment malfunctions. Please contact the Registration Desk if you experience problems.

Audio/Video/Digital Recording Policy

For copyright reasons, recordings of any kind are strictly prohibited without prior consent of the

presenter in any conference session, course of poster presented. Individuals not complying with this policy will be asked to leave the session and asked to surrender their film or recording media.

Conference Location and Transportation

All technical sessions, committee meetings, plenary sessions, master classes, registration, and banquet will be held at the Shilla Hotel, Jeju Island, Korea. Maps of the Key Floors and meeting rooms are available on the page 4.

The Shilla Hotel, Jeju Island, Korea

www.shilla.net/jeju/

75, Jungmungwangwang-ro, 72beon-gil, Seogwipo-si, Jeju-do, Korea, 63535
(40km from Jeju Int. Airport, 50 min)

Location



Facility Map



- ① Main Entrance
- ② Main Lobby (6F)
Restaurant & Bar
Fitness Club (1F)
Indoor Pool (1F)
- ③ Rooms West Wing
- ④ Rooms East Wing
- ⑤ Banquets
- ⑥ Casino (6F)
- ⑦ Camping &
Self Barbecue Zone
- ⑧ Observatory
- ⑨ Swiri Bench
- ⑩ Private Beach House

Airport provides limousine bus between the Shilla hotel and Jeju Int. airport. In addition, the Shilla hotel also provide free shuttle bus service. Please refer to the following info.

Airport Limousine Bus

Jeju Int'l Airport → The Shilla Jeju

Operating hour	06:10 – 22:50 (The last bus leaves the airport at 22:50)
Frequency	Every 14-16 mins (The last bus leaves after the arrival of the last plane in Seoul.)
Departure point	From the exit of Gate No. 5 for domestic flights, at the airport limousine bus stop. (Bus No. 600 of Samyeong Transport)
Time required	About 50 mins
Bus Fare	About US\$5

The Shilla Jeju → Jeju Int'l Airport

Operating hour	06:40 – 22:10
Frequency	Every 14-16 mins
Departure point	In front of the 6F gate of the Shilla Jeju
Time required	About 50 mins
Bus Fare	About US\$5

Guest Pick-up Service

The hotel offers a free shuttle bus service to/from Jeju Airport for the convenience of its patrons.

Departure point	Next to gate 1 on F1, Jeju Airport
Desk service hours	10:00 – 16:30
Operating hour	Hotel → Airport 11:30, 12:10, 15:00 Airport → Hotel 13:30, 14:30, 16:30
Inquiries	+82-64-738-4466

- * This service is offered free-of-charge for hotel guests only.
- * Available a first come, first served basis. No reservations accepted.
- * Please show up at the Airport Desk 15 minutes before departure time.
- * Please check with the Airport Desk for any changes.

Instruction for Oral Presentation

	Total Time	Presentation	Discussion
Plenary	45min.	45min.	-
Invited	25min.	20min.	5min.
Regular	15min.	12min.	3min.

1. The bell will be ringed once after 15 minutes, twice after 20 minutes and three times after 25 minutes for invited oral presentation.
2. The bell will be ringed once after 10 minutes, twice after 12 minutes and three times after 15 minutes for regular oral presentation.
3. Special Session speeches have a different total time. Please refer to the program schedule in detail.

- Speakers at all sessions are requested to report their presence to the session chair before the session starts. It is important for speakers to adhere to their allotted presentation time. The chair has been instructed to enforce the schedule, i.e., to strictly limit the length of a presentation. We kindly ask you for your understanding and for your cooperation in keeping the schedule.

- A LCD projector and a computer with Windows OS, MS PowerPoint, and Adobe Acrobat Reader installed will be available in every session room for regular presentations. Please kindly bring your presentation saved on a USB memory stick and load your presentation on the computer 15 minutes prior to the session. If you want to use your own computer, please confirm display setting and compatibility of your computer.

Instruction for Poster Presentation

- The poster session will take place on Thursday, 7 September from 10:30-12:00. This includes the time to meet conference participants and answer questions. This will be the ONLY time that your poster will be on display and that other conference members will be able to see it. It will be an interactive session, so come ready to talk to your 'viewers', and to answer questions!

- Paper numbers (e.g. G02-P05) will be placed on the poster boards in alphabetic and numerical orders; please find your paper number and put up your poster in the designated spaces in Halla Hall (6th Floor) from 9:00 to 10:30 am.

- Participants in this session will be provided with a poster board (about 1,000 mm wide and 1,800 mm high) on which to represent their research in whatever form they choose. Poster size should be equal or smaller than 900mm in width and 1,400mm in height. If you have no access to a large-size printer, you can use A4 sheets in strips.

- All materials should be prepared prior to the conference. The ICFPE will not have access to reproduction or graphic design facilities on site. Availability of power supply will be very limited for your poster session - as such, we would ask that you use a fully charged notebook for multimedia presentations, if necessary.

LIST OF SESSION CHAIRS FOR ICFPE 2017

September 5, Tuesday DAY1

	Halla A(6F)	Halla B(6F)	Halla C(6F)	Lotus A(3F)	Lotus B(3F)	Weolla(6F)
10:20 ~ 11:50	Plenary Session 1					
	Prof. Gyoujin Cho (Suncheon National University, Korea)					
13:20 ~ 17:50	[G01] Sensing Innovations : Sensors & Detectors I	[G02] 2D Materials toward Flexible Electronics	[G03] Organic Transistors : Materials, Devices and Circuits I	[S01] Technologies for the Internet of Things.	[G04] Materials Harnessing Light : Displays and Detectors	[S02] Soft Electronics
	Dr. Heisuke Sakai (JAIST, Japan)	TBA	Prof. Jiyoul Lee (Pukyong National Univ., Korea)	Dr. Jurgen Daniel (TCS, USA)	TBA	Prof. Kilwon, Cho (Pohang University of Science and Technology, Korea)
	[S03] Flexible Sensor & Smart textile	[G05] Energy Solution for Flexible Electronics	[G06] Tailoring Materials for Printed Electronics	[G07] Flexible Electronics : Outlook, Challenges and New Approaches	[S04] Solution Processable OLED	
	Prof. Toshihide Kamata (AIST, Japan)	TBA	Dr. Hagen Klauk (Max Planck Institute for Solid State Research, Germany)	Dr. Simon Ogier (Neudrive, UK)	Prof. Lixiang Wang (Chang Chun Institute Of Applied Chemistry, Chinese Academy of Science, China)	

September 6, Wednesday DAY2

	Halla A(6F)	Halla B(6F)	Halla C(6F)	Lotus A(3F)	Lotus B(3F)
09:30 ~ 11:55	Plenary Session 2				
	Dr. Zhang Xiachang (Changzhou Institute of Printed Electronics Industry, China)				
13:20 ~ 15:10	[S05] New Technologies and Applications for Printed Electronics	[G08] Road to Wearable Electronics	[G09] Organic Transistors : Materials, Devices and Circuits II	[S06] Materials for Printed Electronics	[G10] Roll to Roll - Manufacturing Engine of Printed Electronics I
	Dr. Kenji Shinozaki (NovaCentrix, USA)	Prof. Seokwoo Jeon (KAIST, Korea)	Prof. Steve Park (KAIST, Korea)	Dr. Patrick R. L. Malenfant (NRC, Canada)	Dr. Dongwoo Kang (KIMM, Korea)
15:40 ~ 18:15	[S07] Silicon Chip Hybridized Printed Electronics	[G11] Novel Nanomaterials Empowering Electrodes	[G12] Organic Transistors : Materials, Devices and Circuits III	[S08] Biotronics	[G13] Roll to Roll - Manufacturing Engine of Printed Electronics II
	Prof. Jukka Hast (VTT, Finland)	Prof. Hyunhyub Ko (UNIST, Korea)	Dr. Michaela Agari (BASF, Germany)	Prof. Gordon G. Wallace (Univ. of Wollongong, Australia)	Mr. Thomas Bastuck (Fraunhofer Institute for Production Technology IPT, Germany)

September 7, Thursday DAY3

	Halla A(6F)	Halla B(6F)	Halla C(6F)	Lotus A(3F)	Lotus B(3F)
09:00 ~ 10:30				[S09] R&D Activities of Organic and Printed Electronics in ROEL, Yamagata University	[S10] R2R Processing, Equipment and Devices
				Prof. Takeo Shiba (Yamagata Univ., Japan)	Dr. Byung-Oh Choi, (KIMM, Korea)
13:30 ~ 15:25	[G14] Sensing Innovations : Sensors & Detectors II	[S11] TC119 Standardization for Flexible and Printed Electronics	[G15] Jetting - based printing technologies	[S12] Global Leading Technology 2020 (Korean National Projects)	[G16] Functional Printed Devices
	Prof. Sooman Lim (Chonbuk National Univ., Korea)	Dr. Kyung-Tae, KANG (Korean NC of IEC TC119, Korea)	Prof. Kye-Si Kwon (Soonchunhyang Univ., Korea)	Dr. Yong Uk, Lee (Samsung Electronics, Korea)	Dr. Ju Hwan Choi (KETI, Korea)

CONFERENCE AGENDA

Sept. 5(TUE)						
	Halla A(6F)	Halla B(6F)	Halla C(6F)	Lotus A(3F)	Lotus B(3F)	weolla(6F)
10:00~10:20	Opening Ceremony					
10:05~10:15	Welcoming Speech General Chair of ICFPE 2017 Dr. Kinam Kim President, Samsung Electronics, Korea					
10:20~11:05	Plenary Speech 1 Prof. Stephen R. Forrest University of Michigan, USA					
11:05~11:50	Plenary Speech 2 Prof. Takao Someya University of Tokyo, Japan					
11:50~13:20	Lunch					
13:20~18:30	[G01] Sensing Innovations: Sensors & Detectors I	[G02] 2D Materials toward Flexible Electronics	[G03] Organic Transistors: Materials, Devices and Circuits I	[S01] Technologies for the Internet of Things.	[G04] Materials Harnessing Light : Displays and Detectors	[S02] Soft Electronics
	Break Time					
	[S03] Flexible Sensor & Smart textile	[G05] Energy Solution for Flexible Electronics	[G06] Tailoring Materials for Printed Electronics	[G07] Flexible Electronics: Outlook, Challenges and New Approaches	[S04] Solution Processable OLED	[S02] Soft Electronics
18:30~	Banquet					

Sept. 6 (WED)					
	Halla A(6F)	Halla B(6F)	Halla C(6F)	Lotus A(3F)	Lotus B(3F)
	Plenary Session II				
09:30~10:15	Plenary Speech 1 Dr. Sangyoon Lee, Senior Vice President Samsung Electronics, Korea				
10:15~11:00	Plenary Speech 2 Dr. Chae Deok, Lee, Senior Vice President LG Electronics, Korea				
11:00~11:10	Break Time				
11:10~11:55	Plenary Speech 3 Dr. Paul L. Heremans imec, Belgium				
11:55~13:20	Lunch				
13:20~18:15	[S05] New Technologies and Applications for Printed Electronics	[G08] Road to Wearable Electronics	[G09] Organic Transistors: Materials, Devices and Circuits II	[S06] Materials for Printed Electronics	[G10] Roll to Roll-Manufacturing Engine of Printed Electronics I
	Break Time				
	[S07] Silicon Chip Hybridized Printed Electronics	[G11] Novel Nanomaterials Empowering Electrodes	[G12] Organic Transistors: Materials, Devices and Circuits III	[S08] Biotronics	[G13] Roll to Roll-Manufacturing Engine of Printed Electronics II

Sept. 7(THU)					
	Halla A(6F)	Halla B(6F)	Halla C(6F)	Lotus A(3F)	Lotus B(3F)
09:00~10:30				[S09] R&D Activities of Organic and Printed Electronics in ROEL, Yamagata University	[S10] R2R Processing, Equipment and Devices
10:30~12:00	Poster Session				
12:00~13:30	Lunch				
13:30~15:25	[G14] Sensing Innovations: Sensors & Detectors II	[S11] TC119 Standardization for Flexible and Printed Electronics	[G15] Jetting - Based Printing Technologies	[S12] Global Leading Technology 2020 (Korean National Projects)	[G16] Functional Printed Devices

PROGRAM SCHEDULE IN DETAILS

ICFPE 2017 Master Classes Schedule

September 4, Monday DAY0

Room	Halla B	Halla C	Weolla
Topic	Master Class 1 : Additive Manufacturing	Master Class 2 : Fabrication Solutions For Flexible Electronics	Master Class 3 : Emerging Materials For Printed And Flexible Electronic
Time			
~14:00	Registration in front of Halla Hall (6F)		
14:00~15:30	Current Development of Metal 3D Printing Technology Dr. Hyonkee Sohn (Korea Institute of Machinery and Materials, Korea)	Stable conjugated polymer formulation for high performance organic devices Prof. Yong-Young Noh (Dongguk University, Korea)	Metal Halide Perovskite Light-Emitting Diodes Prof. Tae Woo Lee (Seoul National University, Korea)
15:30~15:45	Break Time		
15:45~17:15	3D Printing Technology for Biomedical Applications Dr. Suk-Hee Park (Korea Institute of Industrial Technology, Korea)	Human error and Design of Experiment skill for successful Printed Electronics Items. -Practical exercise Dr. Myung-Won Lee (LG Electronics, Korea)	Semiconductor Quantum Dots for Light-Emitting Devices Prof. Heesun Yang (Hongik University, Korea)

ICFPE 2017 Schedule

September 5, Tuesday DAY1

Halla A(6F)	Halla B(6F)	Halla C(6F)	Lotus A(3F)	Lotus B(3F)	weolla(6F)
10:00~10:20	Opening Ceremony				
10:05~10:15	Welcoming Speech General Chair of ICFPE 2017 Dr. Kinam Kim President, Samsung Electronics, Korea				
10:20~11:05	Plenary Speech 1 Prof. Stephen R. Forrest University of Michigan, USA				
11:05~11:50	Plenary Speech 2 Prof. Takao Someya University of Tokyo, Japan				
11:50~13:20	Lunch				

ICFPE 2017 Schedule
September 5, Tuesday DAY1

Halla A(6F)	Halla B(6F)	Halla C(6F)	Lotus A(3F)	Lotus B(3F)	weolla(6F)
[G01] Sensing innovations: Sensors & Detectors I	[G02] 2D Materials toward Flexible Electronics	[G03] Organic Transistors: Materials, Devices and Circuits I	[S01] Technologies for the Internet of Things.	[G04] Materials Harnessing Light : Displays and Detectors	[S02] Soft Electronics
13:20~13:45	13:20~13:45	13:20~13:45	13:20~13:40	13:20~13:35	13:30~14:00
G01-I01_Invited Dr. Fabrice Domingues Dos Santos (Arkema-Piezotech, France)	G02-I01_Invited Dr. Seongjun Park (Samsung Advanced Institute of Technology, Korea)	G03-I01_Invited Dr. Hagen Klauk (Max Planck Institute for Solid State Research, Germany)	S01-I01_Invited Dr. Jurgen Daniel (Tedination Consulting Services, USA)	G04-O01 Dr. Seok gyu Ham (Samsung Advanced Institute of Technology, Korea)	S02-I01_Invited Prof. Yunqi Liu (Institute of Chemistry Chinese Academy of Sciences, China)
13:45~14:10	13:45~14:10	13:45~14:10	13:40~14:00	13:35~13:50	14:00~14:30
G01-I02_Invited Dr. Gerwin Gelinck (Holst Centre, The Netherlands)	G02-I02_Invited Prof. Seon-Kuk Kim (Sungkyunkwan University, Korea)	G03-I02_Invited Dr. Simon Ogier (Neudrive, UK)	S01-I02_Invited Mr. Alex Rose (NovaCentrix, USA)	G04-O02 Dr. Tae-Gon Kim (Samsung Advanced Institute of Technology, Korea)	S02-I02_Invited Prof. Moon Sung Kang (Soongsil University, Korea)
14:10~14:35	14:10~14:35	14:10~14:35	14:00~14:20	13:50~14:05	14:30~15:00
G01-I03_Invited Dr. Jianping Chen (Visionox, China)	G02-I03_Invited Prof. Jae-Young Choi (Sungkyunkwan University, Korea)	G03-I03_Invited Dr. Mike Cowin (SmartKem, UK)	S01-I03_Invited Dr. Jeff Morse (University of Massachusetts Amherst USA)	G04-O03 Dr. Dong-Seok Leem (Samsung Advanced Institute of Technology, Korea)	S02-I03_Invited Prof. Jun Takeya (Osaka University, Japan)
14:35~14:50	14:35~14:50	14:35~15:00	14:20~14:40	14:05~14:20	15:00~15:30
G01-O01 Ms. Yan Wang (Monash University, Australia)	G02-O01 Ms. Viviane Forsberg (Mid Sweden University, Sweden)	G03-I04_Invited Dr. Giles Lloyd (Merck, Germany)	S01-I04_Invited Prof. Kyung-In Jang (Daegu Gyeongbuk Institute of Science and Technology, Korea)	G04-O04 Dr. Tomoyuki Kikuchi (Samsung Advanced Institute of Technology, Korea)	S02-I04_Invited Prof. Sungjune Jung (Pohang University of Science and Technology, Korea)
14:50~15:05	14:50~15:05	15:00~15:15	14:40~15:00	14:20~14:35	
G01-O02 Mr. Assawapong Sappat (National Science and Technology Development Agency, Thailand)	G02-O02 Prof. Tae Hoon Lee (Kwangwoon University, Korea)	G03-O01 Mr. Ho Cheon Yoo (Pohang University of Science and Technology, Korea)	S01-I05_Invited Prof. Jesse Jur (NC State University, USA)	G04-O05 Mr. Sunho Kim (Sungkyunkwan University, Korea)	
15:05~15:20	15:05~15:20	15:15~15:30	15:00~15:20		
G01-O03 Mr. Kiran Shrestha (Sunchon National University, Korea)	G02-O03 Mr. Theodore Z Gao (Stanford University, USA)	G03-O02 Dr. Mael Charbonneau (CEA-LITEN, France)	S01-I06_Invited Mr. Pascal Pierra (Optomec Inc, Singapore)		
Break Time					

ICFPE 2017 Schedule
September 5, Tuesday DAY1

Halla A(6F)	Halla B(6F)	Halla C(6F)	Lotus A(3F)	Lotus B(3F)	weolla(6F)
[S03] Flexible sensor & Smart textile	[G05] Energy Solution for Flexible Electronics	[G06] Tailoring Materials for Printed Electronics	[G07] Flexible Electronics: Outlook, Challenges and New Approaches	[S04] Solution Processable OLED	[S02] Soft Electronics
15:40~16:00 S03-I01_Invited Prof. Hirotake Kajii (Osaka University, Japan)	15:40~16:05 G05-I01_Invited Dr. Zhang Xiachang (Changzhou Institute of Printed Electronics Industry, China)	15:40~16:05 G06-I01_Invited Prof. Byung Mok Wœn (Sungkyunkwan University, Korea)	15:40~16:05 G07-I01_Invited Dr. Herve Vandekerckhove (FlexEnable, UK)	15:40~16:00 S04-I01_Invited Dr. Lei Wang (South China University of Technology, China)	15:50~16:20 S02-I05_Invited Prof. Myung-Gil Kim (Chung-Ang University, Korea)
16:00~16:20 S03-I02_Invited Dr. Syusuke Kanazawa (National of Advanced Industrial Science and Technology, Japan)	16:05~16:30 G05-I02_Invited Prof. Chiwon Kang (Sungkyunkwan University, Korea)	16:05~16:30 G06-I02_Invited Dr. Brett Walker (electroniks, USA)	16:05~16:30 G07-I02_Invited Prof. Yongtaek Hong (Seoul National University, Korea)	16:00~16:20 S04-I02_Invited Dr. Junyou Pan (TCL Corporate Research, China)	16:20~16:50 S02-I06_Invited Prof. Unyong Jeong (Pohang University of Science and Technology, Korea)
16:20~16:40 S03-I03_Invited Dr. Heisuke Sakai (Japan Advanced Institute of Science and Technology, Japan)	16:30~16:55 G05-I03_Invited Prof. Seungbum Hong (Korea Advanced Institute of Science and Technology, Korea)	16:30~16:45 G06-O01 Mr. Jaewan Mun (Stanford University, USA)	16:30~16:55 G07-I03_Invited Dr. Zhang Jie (Changzhou Institute of Printed Electronics Industry, China)	16:20~16:35 S04-O01 Prof. Lixiang Wang (Chang Chun Institute Of Applied Chemistry, Chinese Academy of Science, China)	16:50~17:20 S02-I07_Invited Prof. Hanying Li (Zhejiang University, China)
16:40~17:00 S03-I04_Invited Dr. Euichul Kwon (TOYOBOU, Japan)	16:55~17:10 G05-O01 Mr. Chakrit Sriprachuabwong (National Science and Technology Development Agency, Thailand)	16:45~17:00 G06-O02 Prof. Myung-Gil Kim (Chung-Ang University, Korea)	16:55~17:20 G07-I04_Invited Dr. Chuang-Chuang Tsai (E-ink holdings, Taiwan)	16:35~16:50 S04-O02 Prof. Yandun Han (Chang Chun Institute Of Applied Chemistry, Chinese Academy of Science, China)	17:20~17:50 S02-I08_Invited Prof. Tae-il Kim (Sungkyunkwan University, Korea)
17:00~17:20 S03-I05_Invited Prof. Mutsumi Kimura (Shinshu University, Japan)	17:10~17:25 G05-O02 Dr. Adisorn Tuantranont (National Science and Technology Development Agency, Thailand)	17:00~17:15 G06-O03 Mr. Sung Mo Yang (Ajou University, Korea)	17:20~17:45 G07-I05_Invited Prof. SangHo Kim (Kongju National University / N&B, Korea)	16:50~17:05 S04-O03 Prof. Dongge MaSouth (South China University of Technology, China)	
17:20~17:35 S03-O01 Mr. Toru Miyoshi (Japan Advanced Institute of Science and Technology, Japan)	17:25~17:40 G05-O03 Mr. Sangyeon Hwang (Sungkyunkwan University, Korea)		17:45~18:10 G07-I06_Invited Dr. Guillaume Chansin (IDTechEx, UK)	17:05~17:20 S04-O04 Prof. Yanhou Geng (Tianjin University, China)	
17:35~17:50 S03-O02 Dr. Taiki Nobeshima (National Institute of Advanced Industrial Science and Technology, Japan)				17:20~17:35 S04-O05 Prof. Chuluo Yang (Wuhan University, China)	
				17:35~17:50 S04-O06 Prof. Jinyong Zhuang (Suzhou Institute of Nano-Tech and Nano- Bionics, Chinese Academy of Sciences, China)	
18:30 ~	Banquet				

ICFPE 2017 Schedule
September 6, Wednesday DAY2

Halla A(6F)	Halla B(6F)	Halla C(6F)	Lotus A(3F)	Lotus B(3F)
Plenary Session II				
09:30~10:15 Plenary Speech 1 Dr. Sangyoon Lee, Senior Vice President Samsung Electronics, Korea				
10:15~11:00 Plenary Speech 2 Dr. Chae Deok, Lee, Senior Vice President LG Electronics., Korea				
11:00~11:10 Break Time				
11:10~11:55 Plenary Speech 3 Dr. Paul L. Heremans IMEC, Belgium				
Lunch				
[S05] New Technologies and Applications for Printed Electronics	[G08] Road to Wearable Electronics	[G09] Organic Transistors: Materials, Devices and Circuits II	[S06] Materials for Printed Electronics	[G10] Roll to Roll-Manufacturing Engine of Printed Electronics I
13:20~13:50 S05-I01_Invited Dr. Kenji Shinozaki (NovaCentrix, USA)	13:20~13:45 G08-I01_Invited Prof. Hyunhyub Ko (Ulsan National Institute of Science and Technology, Korea)	13:20~13:45 G09-I01_Invited Dr. Michaela Agari (BASF, Germany)	13:20~14:00 S06-I01_Invited Dr. Patrick R. L. Malenfant (The National Research Council, Canada)	13:20~13:45 G10-I01_Invited Mr. Thomas Bastuck (Fraunhofer Institute for Production Technology IPT, Germany)
13:50~14:20 S05-I02_Invited Dr. Andreas Willert (Fraunhofer ENAS, Germany)	13:45~14:00 G08-O01 Mr. Shiuian-Ying Peng (National Taiwan University, Taiwan)	13:45~14:10 G09-I02_Invited Dr. Cheng-Liang Liu (National Central University, Taiwan)	14:00~14:40 S06-I02_Invited Dr. Arnold J. Kell (The National Research Council, Canada)	13:45~14:10 G10-I02_Invited Mr. Joseph Jaeil Kim (Bosch, The Netherlands)
14:20~14:50 S05-I03_Invited Dr. Martin Busch (Coatema Coating Machinery, Germany)	14:00~14:15 G08-O02 Mr. Yuki Lee (Seoul National University Korea Institute of Science and Technology, Korea)	14:10~14:25 G09-O01 Prof. Jiyoul Lee (Pukyong National University, Korea)	14:40~15:20 S06-I03_Invited Dr. Neil Graddage (The National Research Council, Canada)	14:10~14:25 G10-O01 Mr. J.S. Kang (DAEJOO IND.CO., Korea)
14:50~15:20 S05-I04_Invited Dr. Mike Clausen (CPI, UK)	14:15~14:30 G08-O03 Mr. Partha Sarati Das (Kwangwoon University, Korea)	14:25~14:40 G09-O02 Prof. Wi Hyoung Lee (Konkuk University, Korea)		14:25~14:40 G10-O02 Dr. Jaehoon Jung (GJM Co.,Ltd., Korea)
	14:30~14:45 G08-O04 Dr. Milind Vyankatesh Kulkarni (Centre for Materials for Electronics Technology (C-MET), Ministry of Electronics and Information Technology (MeitY) Govt. of India)	14:40~14:55 G09-O03 Dr. Jeong-il Park (Samsung Advanced Institute of Technology, Korea)		14:40~14:55 G10-O03 Mr. Sang Hoon Lee (Konkuk University, Korea)
		15:55~15:10 G09-O04 Dr. Ajeong Choi (Samsung Advanced Institute of Technology, Korea)		

ICFPE 2017 Schedule
September 6, Wednesday DAY2

Halla A(6F)	Halla B(6F)	Halla C(6F)	Lotus A(3F)	Lotus B(3F)
Break Time				
[S07] Silicon Chip Hybridized Printed Electronics	[G11] Novel Nanomaterials Empowering Electrodes	[G12] Organic Transistors: Materials, Devices and Circuits III	[S08] Biotronics	[G13] Roll to Roll- Manufacturing Engine of Printed Electronics II
15:40~16:05 S07-I01_Invited Dr. Ari Alastalo (VTT Technical Research Centre of Finland Ltd., Finland)	15:40~16:05 G11-I01_Invited Prof. Seokwoo Jeon (Korea Advanced Institute of Science and Technology, Korea)	15:40~16:05 G12-I01_Invited Prof. Ji-Seon Kim (Imperial College London, UK)	15:40~16:00 S08-I01_Invited Prof. David Officer (University of Wollongong, Australia)	15:40~16:05 G13-I01_Invited Dr. Chunhui Kuo (The Society of Imaging Science and Technology, USA)
16:05~16:30 S07-I02_Invited Dr. Corne Rentrop (TNO, The Netherlands)	16:05~16:30 G11-I02_Invited Dr. Byungil Hwang (BASF, Germany)	16:05~16:20 G12-O01 Prof. Steve Park (Korea Advanced Institute of Science and Technology, Korea)	16:00~16:20 S08-I02_Invited Prof. Kwanwoo Shin (Sogang University, Korea)	16:05~16:20 G13-O01 Mr. Ji Hun Ahn (MAGNETAR Inc., Korea)
16:30~16:45 S07-O01 Prof. Ed Lester (Promethean Particles/ University of Nottingham, UK)	16:30~16:45 G11-O01 Mr. Wanli Li (Osaka University, Japan)	16:20~16:35 G12-O02 Mr. Tobias Rödlmeier (Karlsruher Institute of Technology, Germany)	16:20~16:35 S08-O01 Prof. Gyoujin Cho (Sunchon National University, Korea)	16:20~16:35 G13-O02 Dr. Hsiang Chun Wei (Industrial Technology Research Institute, Taiwan)
16:45~17:00 S07-O02 Dr. Gerardo Hernandez-Sosa (Karlsruhe Institute of Technology, Germany)	16:45~17:00 G11-O02 Dr. Cai-Fu Li (Osaka University, Japan)	16:35~16:50 G12-O03 Prof. Xubing Lu (South China Normal University, China)		16:35~16:50 G13-O03 Dr. Duc Ho Anh Nguyen (Toba Co., Ltd., Korea)
17:00~17:15 S07-O03 Dr. Andreas Willert (Fraunhofer Institute for Electronic Nanosystems ENAS, Germany)	17:00~17:15 G11-O03 Prof. Jinwei Gao (South China Normal University, China)	16:50~17:05 G12-O04 Dr. Sungyeop Jung (Pohang University of Science and Technology, Korea)		
17:15~17:30 S07-O04 Dr. Roland Steim (Sefar AG, Switzerland)	17:15~17:30 G11-O04 Prof. Longhai Piao (Kongju National University, Korea)	17:05~17:20 G12-O05 Prof. Vincenzo Pecunia (Soochow University, China)		
17:30~17:45 S07-O05 Dr. Kimmo Keränen (VTT Technica Research Centre of Finland Ltd., Finland)	17:30~17:45 G11-O05 Prof. Jinho Bae (Jeju National University, Korea)	17:20~17:35 G12-O06 Mr. Boris Galkin (TENflex, Russia)		
	17:45~18:00 G11-O06 Mr. Gwang Mook Choi (Seoul National University, Korea)			
	18:00~18:15 G11-O07 Dr. Jong-Hwan Kim (BSP Inc., Korea)			

ICFPE 2017 Schedule
September 7, Thursday DAY3

Halla A(6F)	Halla B(6F)	Halla C(6F)	Lotus A(3F)	Lotus B(3F)
			[S09] R&D activities of organic and printed electronics in ROEL, Yamagata University	[S10] R2R processing, Equipment and Devices
09:00~			09:00~09:25	09:00~09:20
Halla hall will be open for poster preparation.			S09-I01_Invited Prof. Isao Shitanda (Tokyo University of Science, Japan)	S10-I01_Invited Dr. Kyung-Tae Kang (Korea Institute of Industrial Technology, Korea)
			09:25~09:50	09:20~09:40
			S09-I02_Invited Dr. Tomohito Sekine (Yamagata University, Japan)	S10-I02_Invited Dr. Byung-Oh Choi (Korea Institute of Machinery and Materials, Korea)
			09:50~10:15	09:40~10:00
			S09-I03_Invited Dr. Kuniaki Nagamine (Yamagata University, Japan)	S10-I03_Invited Dr. Dongwoo Kang (Korea Institute of Machinery and Materials, Korea)
			10:15~10:40	10:00~10:20
			S09-I04_Invited Prof. Takeshi Sano (Yamagata University, Japan)	S10-I04_Invited Dr. Sunho Jeong (Korea Research Institute of Chemical Technology, Korea)
				10:20~10:35
				S10-O01 Ms. Olga Puchkova (Korea Institute of Machinery and Materials, Korea)
10:30~12:00	Poster Session			
12:00~13:30	Lunch			

ICFPE 2017 Schedule
September 7, Thursday DAY3

Halla A(6F)	Halla B(6F)	Halla C(6F)	Lotus A(3F)	Lotus B(3F)
[G14] Sensing Innovations: Sensors & Detectors II	[S11] TC119 Standardization for Flexible and Printed Electronics	[G15] Jetting - based printing technologies	[S12] Global Leading Technology 2020 (Korean National Projects)	[G16] Functional Printed Devices
13:30~13:55 G14-I01_Invited Prof. Sang-Hee Park (Korea Advanced Institute of Science and Technology, Korea)	13:30~14:00 S11-I01_Invited Prof. Jae-yeong Park (Kwangwoon University, Korea)	13:30~13:55 G15-I01_Invited Prof. Doyoung Byun (Sungkyunkwan University, Korea)	13:30~13:55 S12-I01_Invited Mr. Seunghyun Youk (LG Display, Korea)	13:30~13:45 G16-O01 Mr. Rajaram Kaveti (Kongju National Univeristy, Korea)
13:55~14:20 G14-I02_Invited Prof. Tae-il Kim (Sungkyunkwan University, Korea)	14:00~14:30 S11-I02_Invited Dr. Minsu Lee (Korea Printed Circuit Association, Korea)	13:55~14:10 G15-O01 Prof. Yebo Lu (Jiaxing University, China)	13:55~14:20 S12-I02_Invited Mr. Kyuhwang Lee (LG Display, Korea)	13:45~14:00 G16-O02 Mr. Natthapo Wattthanawisuth (Thailand Organic & Printed Electronics Innovation Center, Thailand)
14:20~14:35 G14-O01 Dr. Sungjun Park (RIKEN, Korea)	14:30~15:00 S11-I03_Invited Dr. Kyung-Tae Kang (Korea Institute of Industrial Technology, Korea)	14:10~14:25 G15-O02 Prof. Kye-Si Kwon (Soonchunhyang University, Korea)	14:20~14:35 S12-O01 Dr. Junfeng Sun (Sunchon National University, Korea)	14:00~14:15 G16-O03 Mr. Murali Bissannagari (Kongju National University, India)
14:35~14:50 G14-O02 Mr. Memoon Sajid (Jeju National University, Korea)		14:25~14:40 G15-O03 Mr. Thanh Huy Phung (Soonchunhyang University, Korea)	14:35~14:50 S12-O02 Dr. Hyun-surk Kim (Unijet, Korea)	14:15~14:30 G16-O04 Prof. Yu Liu (Jiangnan University, China)
14:50~15:05 G14-O03 Mr. Maddala Seshu Giri Rao (Ministry of Electronics and Information Technology, Government of India, India)		14:40~14:55 G15-O04 Mr. Thanh Huy Phung (Soonchunhyang University, Korea)	14:50~15:05 S12-O03 Prof. Yong-Hoon Kim (Sungkyunkwan University, Korea)	14:30~14:45 G16-O05 Mr. Yong hee Jang (Sungkyunkwan University, Korea)
		14:55~15:10 G15-O05 Mr. Bin Zhang (Sungkyunkwan University, Korea)	15:05~15:20 S12-O04 Prof. Haeseong Lee (Jeonju University, Korea)	14:45~15:00 G16-O06 Prof. Seung Tae Choi (Chung-Ang University, Korea)
		15:10~15:25 G15-O06 Ms. Sungyeon Kim (Korea Advanced Institute of Science and Technology, Korea)		15:00~15:15 G16-O07 Mr. Yong hee Jang (Sungkyunkwan University, Korea)

PLENARY SESSIONS

05 September Tue, DAY1, 10:20-11:50 Halla(6F)

**Prof. Stephen R. Forrest**

Professor, Materials Science & Engineering,
University of Michigan, USA

"The Big Challenges Ahead for OLED Displays and Lighting"

At Bell Labs, he investigated photodetectors for optical communications. In 1985, Prof. Forrest joined the Electrical Engineering and Materials Science Departments at USC where worked on optoelectronic integrated circuits, and organic semiconductors. A Fellow of the APS, IEEE and OSA and a member of the National Academy of Engineering, he received the IEEE/LEOS Distinguished Lecturer Award in 1996-97, and in 1998 he was co-recipient of the IPO National Distinguished Inventor Award as well as the Thomas Alva Edison Award for innovations in organic LEDs. In 1999, Prof. Forrest received the MRS Medal for work on organic thin films. In 2001, he was awarded the IEEE/LEOS William Streifer Scientific Achievement Award for advances made on photodetectors for optical communications systems. In 2006 he received the Jan Rajchman Prize from the Society for Information Display for invention of phosphorescent OLEDs, and is the recipient of the 2007 IEEE Daniel Nobel Award for innovations in OLEDs. Prof. Forrest has been honored by Princeton University establishing the Stephen R. Forrest Endowed Faculty Chair in Electrical Engineering in 2012. He was inducted into the National Academy of Inventors in 2014. Prof. Forrest has authored ~565 papers in refereed journals, and has 267 patents, with an h-index of 114.

**Prof. Takao Someya**

Professor, Electrical and Electronic Engineering,
University of Tokyo, Japan

"Stretchable electronic skins"

Takao Someya received his Ph.D. degree in Electrical Engineering from the University of Tokyo in 1997. Since 2009, he has been a professor of the Department of Electrical and Electronic Engineering at The University of Tokyo. From 2001 to 2003, he worked at the Nanocenter (NSEC) of Columbia University, and at Bell Labs and Lucent Technologies as a Visiting Scholar. Since 2009, he has been a Global Scholar at Princeton University and currently serves as the Project Leader of the NEDO/JAPER Project (from March 2011) and as a Research Director of a JST/ERATO Project (from March 2011).

His current research interests include organic transistors, flexible electronics, plastic integrated circuits, large-area sensors, and plastic actuators.

06 September Wed, DAY2, 09:30-11:55 Halla(6F)



Dr. Sangyoon Lee

Senior Vice President, Center Director(Material Research Center),
Samsung Electronics, Korea

"Printed Electronics for High-end Applications"

Dr. Sangyoon Lee is currently senior vice president and general manager of Material Research Center at Samsung Electronics. He obtained his Ph.D. degree in Materials Science and Engineering from Stanford University in 1998. He joined Samsung Advanced Institute of Technology in 2002, where he led developments of various technologies related to next generation display including flexible full color e-paper, printable display, foldable AMOLED and ultra-definition LCD as well as such as printable organic/inorganic TFT, oxide TFTs, Nano-wire TFT, and so on. He currently serves as the national project leader of the printed electronics total solution (PETS) which receives the government subsidy of 197M USD for total 6 years of development period. His current research interests include organic electronics, flexible and stretchable electronics, and organic sensors.



Dr. Chae Deok, Lee

Senior Vice President,
MPRI Sensor Solution Lab.,
LG Electronics, Korea

"FPE progress in LG"

Dr. Chae Lee is senior vice president and director of the Sensor Solution Laboratory in LG Electronics. He currently leads LG-wide sensor application, focusing on Industrial IoT/IoT R&D areas. With his extensive technical experiences, he has worked on system-level sensor integration, from nanomaterials synthesis and devices to embedded edge computing. His interests include energy harvesting for battery-less sensor operations, low power management, wireless sensor networks, and deep learning. While working at the Korea Research Institute of Standards and Science, Carnegie Mellon University, and Raytheon company after finishing his PhD in Physics from Yonsei University in Korea, he led various R&D programs for 2D nanomaterials synthesis, 2D/3D additive manufacturing, Phys/Chem/Bio sensors, and RF electronic devices in Korea, Japan and the US.



Dr. Paul L. Heremans

Fellow, IMEC, Belgium

"present and future technologies and applications for thin-film circuitry on flexible substrates"

Paul's research interest today is on thin-film electronics using organic and oxide thin-film semiconductors. Applications include flexible AM-OLED displays and their use for virtual and augmented reality, X-ray imagers using organic photodetectors, and thin-film circuits applied to wireless communication, sensor readout and data processing.

LIST OF ABSTRACTS

General Sessions

[G01] Sensing Innovations: Sensors & Detectors I

05. 09. 2017, Tue 13:20~15:20 Halla A 6F	
G01-I01	Fluorinated Electroactive Polymers For Printed Electronics: Sensors, Actuators and other Applications Dr. Fabrice Domingues Dos Santos (Arkema-Piezotech, France)
G01-I02	Flexible, printed organic photodetectors and their use in medical X-ray detectors, pulse oximetry and retina implants Dr. Gerwin Gelinck (Holst Centre, The Netherlands)
G01-I03	Latest development on flexible touch sensor for flexible AMOLED display Dr. Jianping Chen (Visionox, China)
G01-O01	Volume-invariant Ionic Liquids Microbands as Highly Durable Wearable Biomedical Sensors Ms. Yan Wang (Monash University, Australia)
G01-O02	Smart-potentiostat and Screen-printed Graphene-based Electrochemical Sensor for Aflatoxin Detection Mr. Assawapong Sappat (National Science and Technology Development Agency, Thailand)
G01-O03	Flexible NFC Sensor Platform for Printed Sensor Application Mr. Kiran Shrestha (Sunchon National University, Korea)

[G02] 2D Materials toward Flexible Electronics

05. 09. 2017, Tue 13:20~15:20 Halla B 6F	
G02-I01	Graphene for Electronic Devices Dr. Seongjun Park (Samsung Advanced Institute of Technology, Korea)
G02-I02	Multifunctional 2D Multilayer Devices Prof. Seon-Kuk Kim (Sungkyunkwan University, Korea)
G02-I03	Future Research Direction of Graphene for Real Industrial Applications : Large-Area Single Crystalline Graphene Prof. Jae-Young Choi (Sungkyunkwan University, Korea)
G02-O01	Towards stable 2D materials inkjet inks: a study of stabilizers and MoS ₂ grades Ms. Viviane Forsberg (Mid Sweden University, Sweden)
G02-O02	Organic-2D heterostructure based devices for flexible electronics Prof. Tae Hoon Lee (Kwangwoon University, Korea)
G02-O03	Large-Scale and Low-Cost Sorting of Semiconducting Carbon Nanotubes for Flexible and Stretchable Electronics Mr. Theodore Z Gao (Stanford University, USA)

[G03] Organic Transistors: Materials, Devices and Circuits I

05. 09. 2017, Tue 13:20~15:30 Halla C 6F	
G03-I01	Small-Molecule p-Channel and n-Channel Thin-Film Transistors for High-Frequency Flexible Organic Complementary Circuits Dr. Hagen Klauk (Max Planck Institute for Solid State Research, Germany)
G03-I02	High Performance OTFT Circuits and Ink-Jet Printed Vias for Low Cost Circuit Customisation Dr. Simon Ogier (Neudrive, UK)
G03-I03	Lower Power Displays Enabled by OTFT Backplane Drivers Dr. Mike Cowin (SmartKem, UK)
G03-I04	Organic semiconductor materials: the next wave in the revolution! Dr. Giles Lloyd (Merck, Germany)
G03-O01	Split-Gate Ambipolar Organic Thin-Film Transistors and Circuits Mr. Ho Cheon Yoo (Pohang University of Science and Technology, Korea)
G03-O02	Dimensional and Electrical scaling of Printed OTFT fabricated by Gravure Printing for Smart Surface Application Dr. Micael Charbonneau (CEA-LITEN, France)

[G04] Materials Harnessing Light: Displays and Detectors

05. 09. 2017, Tue 13:20~14:35 Lotus B 3F	
G04-O01	Fabrication of Organic TFT Backplane based on High Performance Heteroacene-type Semiconductors for Flexible OLED Display Dr. Seok gyu Ham (Samsung Advanced Institute of Technology, Korea)
G04-O02	Highly Luminescence Indium-based Quantum Dots through Surface Fluorination; New Mechanism and Applications Dr. Tae-Gon Kim (Samsung Advanced Institute of Technology, Korea)
G04-O03	Green-Light-Sensitive Organic Photodetectors for Hybrid CMOS Image Sensors Dr. Dong-Seok Leem (Samsung Advanced Institute of Technology, Korea)
G04-O04	High stabilized Quantum Dots color converting film with solution processable hybrid double-layered barrier of perhydropolysilazane and thiol-ene Dr. Tomoyuki Kikuchi (Samsung Advanced Institute of Technology, Korea)
G04-O05	Au coating on Ag nanowires for work function improvement of OLED Mr. Sunho Kim (Sungkyunkwan University, Korea)

[G05] Energy Solution for Flexible Electronics

05. 09. 2017, Tue 15:40~17:40 Halla B 6F	
G05-I01	Paper battery technology and its commercialization Dr. Zhang Xiachang (Changzhou Institute of Printed Electronics Industry, China)
G05-I02	3-dimensional carbon nanostructure-based electrode materials for flexible lithium ion batteries Prof. Chiwon Kang (Sungkyunkwan University, Korea)
G05-I03	Mechanical Annealing and Scraping of Ferroelectric Polymers at the Nanoscale Prof. Seungbum Hong (Korea Advanced Institute of Science and Technology, Korea)
G05-O01	All Printed Flexible Micro-supercapacitors based on Electrolytic Exfoliated Graphene with High Area Capacitance Mr. Chakrit Sriprachuabwong (National Science and Technology Development Agency, Thailand)
G05-O02	Printed RuO ₂ /Nitrogen-doped Reduced Graphene Oxide for High Performance Coin Cell Supercapacitor Dr. Adisom Tuantranont (National Science and Technology Development Agency, Thailand)
G05-O03	Fabrication of metal-grids using electrohydrodynamic jet printing and its application in solid oxide fuel cells Mr. Sangyeon Hwang (Sungkyunkwan University, Korea)

[G06] Tailoring Materials for Printed Electronics

05. 09. 2017, Tue 15:40~17:15 Halla C 6F	
G06-I01	Physics for Uniform Nanoparticle Coating Prof. Byung Mook Weon (Sungkyunkwan University, Korea)
G06-I02	Particle-free Chemistries for High-Performance Printed Electronics Dr. Brett Walker (electroninks, USA)
G06-O01	Intrinsically Stretchable Polymer Semiconductors using Molecularly Engineered Conjugation Breakers Mr. Jaewan Mun (Stanford University, USA)
G06-O02	Rational Design of Molecular Precursor and Processing Method for High Performance Solution-Processed Oxide Electronics Prof. Myung-Gil Kim (Chung-Ang University, Korea)
G06-O03	Wavelength dependent in-plane birefringence of transparent flexible substrates determined by using transmission spectroscopic ellipsometer Mr. Sung Mo Yang (Ajou University, Korea)

[G07] Flexible Electronics: Outlook, Challenges, and New Approaches

05. 09. 2017, Tue 15:40~18:10 Lotus A 3F	
G07-I01	Flexible electronics: From lab to fab to the next generation of products Dr. Herve Vandekerckhove (FlexEnable, UK)
G07-I02	Printing-based Stretchable Hybrid Electronic System Prof. Yongtaek Hong (Seoul National University, Korea)
G07-I03	Printed and flexible electronics: the turning point from lab to fab Dr. Zhang Jie (Changzhou Institute of Printed Electronics Industry, China)
G07-I04	Advancement of Flexible Electronic Paper Technology and Potential IoT Applications Dr. Chuang-Chuang Tsai (E-ink holdings, Taiwan)
G07-I05	Fully Flexible "Flexionet" Film technology Prof. SangHo Kim (Kongju National University / N&B, Korea)
G07-I06	Success Stories and Future Commercial Applications of Printed Electronics Dr. Guillaume Chansin (IDTechEx, UK)

[G08] Road to Wearable Electronics

06. 09. 2017, Wed 13:20~14:45 Halla B 6F	
G08-I01	Multifunctional and Flexible Electronic Skins for Wearable Devices Prof. Hyunhyub Ko (Ulsan National Institute of Science and Technology, Korea)
G08-O01	Printed elastic thin film heater for thermochromic applications Mr. Shiuan-Ying Peng (National Taiwan University, Taiwan)
G08-O02	New Architectural Design for Stretchable and Deformable Electronics Mr. Yuki Lee (Seoul National University / Korea Institute of Science and Technology, Korea)
G08-O03	Micro-Pillars Based Flexible and Stretchable Dry Electrode for Long-Term ECG Measurement Mr. Partha Sarati Das (Kwangwoon University, Korea)
G08-O04	Development of Polypyrrole Nanofibers and Nanofibers Coated Conducting/Smart Fabric for Wearable Electronic Devices Dr. Milind Vyankatesh Kulkarni (Centre for Materials for Electronics Technology (C-MET), Ministry of Electronics and Information Technology (MeitY) Govt. of, India)

[G09] Organic Transistors: Materials, Devices and Circuits II

06. 09. 2017, Wed 13:20~15:10 Halla C 6F	
G09-I01	High Performance OFET Materials for Printed Organic Electronics Dr. Michaela Agari (BASF, Germany)
G09-I02	Solution-processable organic semiconductors for high performance organic field effect transistor application Dr. Cheng-Liang Liu (National Central University, Taiwan)
G09-O01	Effects of Acceptor Units Substituted with Electrophilic Atoms on Charge Transport Properties in Conjugated Donor-Acceptor Type Polymer Films Prof. Jiyoul Lee (Pukyong National University, Korea)
G09-O02	Growth Mechanism of TIPS-pentacene Crystals in TIPS-pentacene/Insulating Polymer Blends Prof. Wi Hyung Lee (Konkuk University, Korea)
G09-O03	High-performance small-molecule organic semiconductors for field-effect transistors Dr. Jeong-il Park (Samsung Advanced Institute of Technology, Korea)
G09-O04	A study on the vertical growth of organic semiconductor thin films: di-phenyl-dibenzothiopheno [6,5-b:6',5'-f]thieno[3,2-b] thiophene Dr. Ajeong Choi (Samsung Advanced Institute of Technology, Korea)

[G10] Roll to Roll - Manufacturing Engine of Printed Electronics I

06. 09. 2017, Wed 13:20~14:55 Lotus B 3F	
G10-I01	Roll-to-roll approach for flexible hybrid electronics Mr. Thomas Bastuck (Fraunhofer Institute for Production Technology IPT, Germany)
G10-I02	Modular motion solutions for Production Systems of Flexible and Printed Electronics Mr. Joseph Jaeil Kim (Bosch, The Netherlands)
G10-O01	Challenging developments for advanced R2R printing application for organic electronics Mr. J.S. Kang (DAEJOO IND.CO., Korea)
G10-O02	Development of Roll-to-Roll thermal vacuum evaporation system for organic light-emitting devices on the plastic substrate Dr. Jaehoon Jung (GJM Co.,Ltd., Korea)
G10-O03	Application of calendering for improving electrical characteristics of printed top-gate, bottom-contact OTFT Mr. Sang Hoon Lee (Konkuk University, Korea)

[G11] Novel Nanomaterials Empowering Electrodes

06. 09. 2017, Wed 15:40~18:15 Halla B 6F	
G11-I01	Uniform Porous Three-Dimensional Nano-Architectures toward Highly Stretchable Electrode Systems Prof. Seokwoo Jeon (Korea Advanced Institute of Science and Technology, Korea)
G11-I02	Realization of Patterned Silver Nanostructure Electrodes on Flexible Paper Substrate by Simple Dry Transfer Method Dr. Byungil Hwang (BASF, Germany)
G11-O01	High reliable Cu-Ag hybrid electrode for flexible electronics Mr. Wanli Li (Osaka University, Japan)
G11-O02	Pattern Design of Stretchable Conductors Composed of Ag Flakes and PDMS Dr. Cai-Fu Li (Osaka University, Japan)
G11-O03	Sputtering/evaporation-free Processing of a Flexible Metallic Nanonetwork Prof. Jinwei Gao (South China Normal University, China)
G11-O04	Stretchable Conducting Nanocomposite from 1-Dimensional Silver Nanomaterials Prof. Longhai Piao (Kongju National Univeristy, Korea)
G11-O05	Transparent and Flexible Electrodes Based on Silver Nanoparticles Prof. Jinho Bae (Jeju National University, Korea)
G11-O06	Water-Stable PEDOT:PSS/PAAm Nanofiber for transparent electrode Mr. Gwang Mook Choi (Seoul National University, Korea)
G11-O07	New solution for a patterned Cu layers on flexible films by photonic curing Dr. Jong-Hwan Kim (BSP Inc., Korea)

[G12] Organic Transistors: Materials, Devices and Circuits III

06. 09. 2017, Wed 15:40~17:35 Halla C 6F	
G12-I01	Impact of molecular order on optical and charge transport properties Prof. Ji-Seon Kim (Imperial College London, UK)
G12-O01	Solution-processed semiconducting single-walled carbon nanotube and small molecule organic semiconductor-based thin-film transistors and sensors Prof. Steve Park (Korea Advanced Institute of Science and Technology, Korea)
G12-O02	Aligned and Ordered Semiconductor by Inkjet Printing Mr. Tobias Rödlmeier (Karlsruher Institute of Technology, Germany)
G12-O03	Low Temperature Solution processable High-K Dielectric Films for Flexible Organic Thin Film Transistors Prof. Xubing Lu (South China Normal University, China)
G12-O04	Bi-Staggered Dual-Gate Organic Field-Effect Transistors Dr. Sungyeop Jung (Pohang University of Science and Technology, Korea)
G12-O05	Trap Healing for Low-Voltage Polymer Transistors and Differential Analogue Amplifiers on Foil Prof. Vincenzo Pecunia (Soochow University, China)
G12-O06	OTFT and IGZO TFT GEN2.5 production deployment: challenges of getting technology from lab to fab Mr. Boris Galkin (TENflects, Russia)

[G13] Roll to Roll - Manufacturing Engine of Printed Electronics II

06. 09. 2017, Wed 15:40~16:50 Lotus B 3F	
G13-I01	Journal of Imaging Science and Technology Editor Talk Dr. Chunhui Kuo (The Society of Imaging Science and Technology, USA)
G13-O01	Design and Experiment of High-precision Roller for Printed Electronics with Hybrid Magnetic Bearings Mr. Ji Hun Ahn (MAGNETAR Inc., Korea)
G13-O02	Multi-channel anti-vibration thin film thickness in-line measurement for roll-to-roll deposition of ITO film Dr. Hsiang Chun Wei (Industrial Technology Research Institute, Taiwan)
G13-O03	A Study on High-Precision Register Error Control Using Active Motion-Based Roller (AMB-R) in Roll-to-Roll Gravure Printing Dr. Duc Ho Anh Nguyen (Toba Co., Ltd., Korea)

[G14] Sensing Innovations: Sensors & Detectors II

07. 09. 2017, Thu 13:30~15:05 Halla A 6F	
G14-I01	Sensors Based on Oxide TFT Prof. Sang-Hee Park (Korea Advanced Institute of Science and Technology, Korea)
G14-I02	Flexible, Printed Microscale Optoelectronics for Wireless Optogenetic Applications Prof. Tae-il Kim (Sungkyunkwan University, Korea)
G14-O01	Skin-attachable Near-IR Photo Responsive Organic Oximeter Dr. Sungjun Park (RIKEN, Korea)
G14-O02	Flexible near-linear humidity sensor based on bi-layer Ti ₂ CN/PAM active region Mr. Memoon Sajid (Jeju National University, Korea)
G14-O03	Missing ECG Beat Detector Design on Flexible Electronics Patch Mr. Maddala Sessa Giri Rao (Ministry of Electronics and Information Technology, Government of India, India)

[G15] Jetting - Based Printing Technologies

07. 09. 2017, Thu 13:30~15:25 Halla C 6F	
G15-I01	High Resolution Electrohydrodynamic Jet Printing for Flexible Electronics and Nanoscale 3-Dimensional Structuring Prof. Doyoung Byun (Sungkyunkwan University, Korea)
G15-O01	Controlling an Electrospinning Jet of Polyvinyl Alcohol Using Positive Charge Prof. Yebo Lu (Jiaxing University, China)
G15-O02	Inkjet jetting failure detection method for SG1024 head Prof. Kye-Si Kwon (Soonchunhyang University, Korea)
G15-O03	A vector printing method for electrohydrodynamic jet printing using encoder position sensors Mr. Thanh Huy Phung (Soonchunhyang University, Korea)
G15-O04	Laser integrated EHD printing system for in-situ sintering of printed conductive patterns Mr. Thanh Huy Phung (Soonchunhyang University, Korea)
G15-O05	High-Resolution Electrohydrodynamic 3D Printing for Metallic Conductor Mr. Bin Zhang (Sungkyunkwan University, Korea)
G15-O06	Solvent-free fabrication of functional flexible organic devices via organic vapor-jet printing (OVJP) Ms. Sungyeon Kim (Korea Advanced Institute of Science and Technology, Korea)

[G16] Functional Printed Devices

07. 09. 2017, Thu 13:30~15:15 Lotus B 3F	
G16-O01	2D and 2.5D Printing of Ag-coil/Magnetic Layer for Resonant Inductively Coupled Wireless Power Transfer Module Mr. Rajaram Kaveti (Kongju National Univeristy, Korea)
G16-O02	3D Printed Wireless Power Receiver based on Graphene Conductive Filament Mr. Natthapol Watthanawisuth (Thailand Organic & Printed Electronics Innovation Center, Thailand)
G16-O03	Flexible wireless power transfer module printed by inkjet printing with a configuration of Ag-inductor coil/soft magnetic ferrite layer Mr. Murali Bissannagari (Kongju National University, India)
G16-O04	Precision Direct Writing for Fabrication of Flexible RC Filter Prof. Yu Liu (Jiangnan University, China)
G16-O05	Fabrication of Smart-phone Antennas on 3D Curved Surface by Electrohydrodynamic(EHD) Jet Printing Mr. Yong hee Jang (Sungkyunkwan University, Korea)
G16-O06	Ultrasonic Transducers with Increased Sensitivity and Thermal Stability Fabricated with a Highly Crystalline P(VDF-TrFE) Film Prof. Seung Tae Choi (Chung-Ang University, Korea)
G16-O07	Development of Flexible and Transparent Heater Fabricated by Electrohydrodynamic(EHD) Jet Printing Mr. Yong hee Jang (Sungkyunkwan University, Korea)

Special Sessions

[S01] Technologies for the Internet of Things

05. 09. 2017, Tue 13:20~15:20 Lotus A 3F	
Organizer	Dr. Jurgen Daniel
Organized by	Teclination Consulting Services, USA
S01-I01	Flexible and Printed Devices for the Internet of Things Dr. Jurgen Daniel (Teclination Consulting Services, USA)
S01-I02	Advanced Inkjet Capabilities: Challenging Screen-print Performance Mr. Alex Rose (NovaCentrix, USA)
S01-I03	Printing High Integration Density Structures and Components for Intelligent Autonomous Devices Dr. Jeff Morse (University of Massachusetts Amherst, USA)
S01-I04	Spring-like interconnect design for soft, wireless electronics Prof. Kyung-In Jang (Daegu Gyeongbuk Institute of Science and Technology, Korea)
S01-I05	Textile Electronics for the Connected Body Prof. Jesse Jur (NC State University, USA)
S01-I06	3D Printing of Flexible Circuits and Sensors Mr. Pascal Pierra (Optomec Inc., Singapore)

[S02] Soft Electronics

05. 09. 2017, Tue 13:30~17:50 Weolla 6F	
Organizer	Prof. Kilwon Cho
Organized by	Center for Advanced Soft Electronics
S02-I01	Polymeric semiconductors with high mobility for high-performance field-effect transistors and circuits Prof. Yunqi Liu (Institute of Chemistry Chinese Academy of Sciences, China)
S02-I02	Assemblies of colloidal CdSe tetrapod nanocrystals for flexible electronics Prof. Moon Sung Kang (Soongsil University, Korea)
S02-I03	Phonons and Mechano-electronics in Soft Semiconductors Prof. Jun Takeya (Osaka University, Japan)
S02-I04	3D Integration of organic printed transistors and circuits Prof. Sungjune Jung (Pohang University of Science and Technology, Korea)
S02-I05	Multifunctional Organic Semiconductor Interfacial Layers for Solution-processed Oxide Semiconductor Thin-Film Transistor Prof. Myung-Gil Kim (Chung-Ang University, Korea)
S02-I06	Printed Stretchable Tactile Sensors Prof. Unyong Jeong (Pohang University of Science and Technology, Korea)
S02-I07	Solution-grown organic semiconductor single crystals and single-crystalline heterojunctions Prof. Hanying Li (Zhejiang University, China)
S02-I08	Ultra-Sensitive, Flexible Strain-Gauge Sensor Inspired by Spider's Sensory Organ Prof. Tae-il Kim (Sungkyunkwan University, Korea)

[S03] Flexible sensor & Smart textile

05. 09. 2017, Tue 15:40~17:50 Halla A 6F	
Organizer	Prof. Toshihide Kamata
Organized by	National Institute of Advanced Industrial Science and Technology, Japan
S03-I01	Polymer Light-Emitting Transistors for Flexible Printed Micro-Light Sources Prof. Hirotake Kajii (Osaka University, Japan)
S03-I02	Fully printed MEMS structures and its sensor application Dr. Syusuke Kanazawa (National of Advanced Industrial Science and Technology, Japan)
S03-I03	Development of flexible pressure sensors for the detection of pressure distribution Dr. Heisuke Sakai (Japan Advanced Institute of Science and Technology, Japan)
S03-I04	Smart Clothing Using Stretchable Conductive Paste Dr. Euichul Kwon (TOYOBOU, Japan)
S03-I05	Foldable Textile Electronics by Assembling of Functional Nanomaterials Prof. Mutsumi Kimura (Shinshu University, Japan)
S03-O01	Multifunctional Flexible Sensor Sheet using Active Matrix TFTs fabricated by Printing Technology Mr. Toru Miyoshi (Japan Advanced Printed Electronics Technology Research Association, Japan)
S03-O02	Electrospun Polymer Fibrous Mats Showing Piezoelectricity and Its Applications Dr. Taiki Nobeshima (National Institute of Advanced Industrial Science and Technology, Japan)

[S04] Solution Processable OLED

05. 09. 2017, Tue 15:40~17:50 Lotus B 3F	
Organizer	Prof. Lixiang Wang
Organized by	Chang Chun Institute Of Applied Chemistry, Chinese Academy of Science, China
S04-I01	Full Color AMOLED Display Fabricated by Ink-jet Printing Technique Dr. Lei Wang (South China University of Technology, China)
S04-I02	New Material Concepts for Printed OLEDs Dr. Junyou Pan (TCL Corporate Research, China)
S04-O01	Electroluminescent Polymers for Solution-Processed PLEDs Prof. Lixiang Wang (Chang Chun Institute Of Applied Chemistry, Chinese Academy of Science, China)
S04-O02	Systematic Design of Jettable Inkjet Inks for Printed PLED Prof. Yanchun Han (Chang Chun Institute Of Applied Chemistry, Chinese Academy of Science, China)
S04-O03	<i>TBA</i> Prof. Dongge Ma (South China University of Technology, China)
S04-O04	Molecular Design of Organic Semiconductors for High Mobility Organic Thin-Film Transistors Prof. Yanhou Geng (Tianjin University, China)
S04-O05	<i>TBA</i> Prof. Chuluo Yang (Wuhan University, China)
S04-O06	Cross-linkable Charge Transport Materials for Spin-coated and Inkjet-printed OLEDs and QLEDs Prof. Jinyong Zhuang (Suzhou Institute of Nano-Tech and Nano-Bionics, Chinese Academy of Sciences, China)

[S05] New Technologies and Applications for Printed Electronics

06. 09. 2017, Wed 13:20~15:20 Halla A 6F	
Organizer	Dr. Kenji Shinozaki (NovaCentrix, USA)
Organized by	OE-A, Germany
S05-101	Merging Design and Function: Advancing PE Capabilities Through New Inkjet Ink Formulations and Photonic Curing Dr. Kenji Shinozaki (NovaCentrix, USA)
S05-102	OE-A Roadmap for Organic and Printed Electronics Dr. Andreas Willert (Fraunhofer ENAS, Germany)
S05-103	Recent progress in R2R manufacturing of large area printed electronics Dr. Martin Busch (Coatema Coating Machinery, Germany)
S05-104	An introduction to CPIs National Printable Electronics Centre -Hybrid Electronics-realising the Internet of Things (IOT) Dr. Mike Clausen (CPI, UK)

[S06] Materials for Printed Electronics

06. 09. 2017, Wed 13:20~15:20 Lotus A 3F	
Organizer	Dr. Patrick R. L. Malenfant
Organized by	The National Research Council, Canada
S06-101	Nanomaterials for Printable Electronics Dr. Patrick R. L. Malenfant (The National Research Council, Canada)
S06-102	Versatile Molecular Ink Platforms for Printed Electronics Dr. Arnold J. Kell (The National Research Council, Canada)
S06-103	Process Control Challenges for Printed Dielectrics – Optimisation of Coffee Ring Effect for Ultra-Thin Layers Dr. Neil Graddage (The National Research Council, Canada)

[S07] Silicon Chip Hybrid Printed Electronics

06. 09. 2017, Wed 15:40~17:45 Halla A 6F	
Organizer	Prof. Jukka Hast
Organized by	VTT Technical Research Centre of Finland Ltd., Finland
S07-101	Metal oxide Thin Film Transistors in Roll-to-Roll Printed Electronics Dr. Ari Alastalo (VTT Technical Research Centre of Finland Ltd., Finland)
S07-102	Open-access pilot line to accelerate industrial uptake of hybrid printed electronics Dr. Come Rentrop (TNO, The Netherlands)
S07-001	Industrial Scale Synthesis of Nanoparticles for Inkjet Printable Inks Prof. Ed Lester (Promethean Particles/University of Nottingham, UK)
S07-002	Fully Printed Organic Photodiode Arrays Dr. Gerardo Hernandez-Sosa (Karlsruhe Institute of Technology, Germany)
S07-003	Printed Batteries and Conductive Patterns on Technical Textiles Dr. Andreas Willert (Fraunhofer Institute for Electronic Nanosystems ENAS, Germany)
S07-004	Highly-conductive flexible electrodes for large area R2R processed OLEDs and photovoltaics Dr. Roland Steim (Sefar AG, Switzerland)
S07-005	LUMENTILE H2020 project- R2R processed large area LED lighting element Dr. Kimmo Keränen (VTT Technical Research Centre of Finland Ltd., Finland)

[S08] Biotronics

06. 09. 2017, Wed 15:40~16:35 Lotus A 3F	
Organizer	Prof. Gordon G. Wallace
Organized by	University of Wollongong, Australia
S08-101	Facilitating Communication With Excitable Cells – New Materials and New Dimensions Prof. David Officer (University of Wollongong, Australia)
S08-102	Paper Based Electronic Chips for Chemical Automation and POC Devices Prof. Kwanwoo Shin (Sogang University, Korea)
S08-001	R2R gravure printed artificial neuron for a signal transmission in a robot Prof. Gyoujin Cho (Suncheon National University, Korea)

[S09] R&D activities of organic and printed electronics in ROEL, Yamagata University

07. 09. 2017, Thu 09:00~10:40 Lotus A 3F	
Organizer	Prof. Takeo Shiba
Organized by	Yamagata University, Japan
S09-101	Paper-based Biofuel Cells: New Power Source for Printed Electronics Devices Prof. Isao Shitanda (Tokyo University of Science, Japan)
S09-102	Printed Wearable Physical Sensor using Ferroelectric Polymer Dr. Tomohito Sekine (Yamagata University, Japan)
S09-103	Development of an Organic Field-Effect Transistor-Based Biosensor for Application in Personal Healthcare Dr. Kuniaki Nagamine (Yamagata University, Japan)
S09-104	Small-molecule-based organic photovoltaic cell Prof. Takeshi Sano (Yamagata University, Japan)

[S10] R2R processing, Equipment and Devices

07. 09. 2017, Thu 09:00~10:35 Lotus B 3F	
Organizer	Dr. Taik-Min, Lee
Organized by	Korea Institute of Machinery and Materials, Korea
S10-101	Printed Oxide Thin Film Transistor for Organic Image Sensor Application Dr. Kyung-Tae Kang (Korea Institute of Industrial Technology, Korea)
S10-102	Introduction to Research on the Printed Electronic Devices, Processes, and Equipment at KIMM Dr. Byung-Oh Choi (Korea Institute of Machinery and Materials, Korea)
S10-103	Development of reverse-offset printing equipment to achieve precision overlay Dr. Dongwoo Kang (Korea Institute of Machinery and Materials, Korea)
S10-104	Inorganic-Organic Composite Materials for 3D Printed Electronics Dr. Sunho Jeong (Korea Research Institute of Chemical Technology, Korea)
S10-001	Effect of solution acidity on structural and electrical properties of combustion chemistry derived indium tin oxide thin films densified via intense pulse light sintering Ms. Olga Puchkova (Korea Institute of Machinery and Materials, Korea)

[S11] Standardization for Flexible and Printed Electronics

07. 09. 2017, Thu 13:30~15:00 Halla B 6F	
Organizer Dr. Kyung-Tae Kang	
Organized by Korean NC of IEC TC119, Korea	
S11-I01	Standardization Activities of Wearable Electronics in IEC TC124 Prof. Jae-yeong Park (Kwangwoon University, Korea)
S11-I02	Printed Electronics Standard Activities at IPC Dr. Minsu Lee (Korea Printed Circuit Association, Korea)
S11-I03	Standardization Activities of Printed Electronics in IEC TC-119 Dr. Kyung-Tae Kang (Korea Institute of Industrial Technology, Korea)

[S12] Global Leading Technology 2020(Korean National Projects)

07. 09. 2017, Thu 13:30~15:20 Lotus A 3F	
Organizer Dr. Yong Uk Lee	
Organized by Samsung Electronics, Korea	
S12-I01	Roll to Roll PECVD Process for Flexible Display Backplane Mr. Seunghyun Youk (LG Display, Korea)
S12-I02	Fabrication of Flexible Display Backplane using Fully R2R Patterning process Mr. Kyuhwang Lee (LG Display, Korea)
S12-O01	Fully R2R gravure printed TFTs active matrix based e-paper Dr. Junfeng Sun (Sunchon National University, Korea)
S12-O02	Full and side coating using inkjet for EMI shielding in EMC package Dr. Hyun-surk Kim (Unijet, Korea)
S12-O03	Low-temperature solution processable oxide functional materials for high-performance printed electronics Prof. Yong-Hoon Kim (Sungkyunkwan University, Korea)
S12-O04	Development of Kelvin probe force microscopy as an analytical tool for next-generation electronic industry Prof. Haeseong Lee (Jeonju University, Korea)

Poster Sessions

07. 09. 2017, Thu 10:30~12:00 Halla 6F	
P001	An electrohydrodynamic printhead design with external ring electrode Prof. Kye-Si Kwon (Soonchunhyang University, Korea)
P002	Experimental study on the change of Aluminum pouch after forming process Ms. Min Sook Yu (TOPnC Co.,Ltd., Korea)
P003	Development of a Roll-to-Roll Processing System for Printing and Coating Electronic Devices Dr. Xuechuan SHAN (Large Area Processing Programme, SIMTech, Singapore)
P004	Laser sintering of near field electrospinning (NFES) printed conductive lines on PET film Prof. Kye-Si Kwon (Soonchunhyang University, Korea)
P005	Multi-nozzle heads for near field electrospinning printing Prof. Kye-Si Kwon (Soonchunhyang University, Korea)
P006	Inkjet printing technique as a coating method for micro gas sensor using Zn ₂ SnO ₄ sol-gel as sensing materials Mr. Jun-gu Kang (Sungkyunkwan University, Korea)
P007	Fabrication of Poly (DL-lactic acid) Nanosheets Using Micro Gravure Printing Mr. Shinichi Tajima (Tokai University, Japan)
P008	Hydrophilic Control for Flexible Device Manufacture Using Print Technology Mr. Yuta Ikeda (Tokai University, Japan)
P009	Fabrication of Imaging DOAP for Tension Distribution of Flexible Substrate in Real Time Ms. Sera Hong (Ajou University, Korea)
P010	Large-area R2R Slot-Die Coating of Silver Nanowires and Its Application Ms. Hakyung Jeong (Konkuk University, Korea)
P011	Jetting characterization of non-contact dispensers for ink with wide range of viscosity Prof. Kye-Si Kwon (Soonchunhyang University, Korea)
P012	Wavy electrode printing using electrospinning printing Prof. Kye-Si Kwon (Soonchunhyang University, Korea)
P013	UV pulsed laser selective ablation and sintering for electrospinning printed lines on PET Prof. Kye-Si Kwon (Soonchunhyang University, Korea)
P014	Laser sintering for metal ink printed patterns with large area Prof. Kye-Si Kwon (Soonchunhyang University, Korea)
P015	The studies on silicone blanket composition showing excellent printing pattern using gravure offset printing Ms. Na Rea Shin (KNW Co., Ltd., Korea)

P016	A Novel Method to Improve Register Error Control Using Registerfeeder for Roll-to-Roll Gravure Printing Process Dr. Duc Ho Anh Nguyen (Toba Co., Ltd., Korea)
P017	Printing layer-by-layer structured Silver electrodes for highly flexible electronics Mr. Hyungdong Lee (Sungkyunkwan University, Korea)
P018	The effect of tension deviation of transverse direction of the web on a sessile drop in roll-to-roll inkjet printing Prof. Changwoo Lee (Changwon National University, Korea)
P019	Prediction of radial stress in coated layer wound roll using finite element analysis Prof. Changwoo Lee (Changwon National University, Korea)
P020	Design of Slot-die Head for Thin-film Uniform Coating Ms. Yejin Shin (Korea Institute of Machinery and Materials, Korea)
P021	Precision in-line control system of slot coating using machine vision monitoring Mr. Jin-Woo Seong (Sung An Machinery, Korea)
P022	Development of Roll-to-Roll Direct Etching Process for Ag Nano Coated Film Mr. Yong-Sung Kim (Sung An Machinery, Korea)
P023	Improvement of Register Error with Decreasing Tailing Defects in Register Mark Ms. Hakyung Jeong (Konkuk university, Korea)
P024	Measurement of engraving accuracy in plate roller for roll-to-roll printing system Mr. Cheol Kim (Chungnam National University, Korea)
P025	Thickness Uniformity Adjustment of Inkjet Printed Light-emitting Polymer Films Dr. Xinhong Yu (Changchun Institute of Applied Chemistry, China)
P026	High-mobility Ambipolar and Unipolar n-Type Donor-Acceptor Conjugated Polymers Based on Isoindigo via Multifluorination Dr. Hongkun Tian (Changchun Institute of Applied Chemistry, China)
P027	Synthesis and Characterization of crosslinkable electron-transport materials for OLEDs Ms. MIN HYE SEO (Korea Institute of Industrial Technology, Korea)
P028	N-Unsubstituted thienoisoindigo derivatives: preparation, molecular packing, and ambipolar organic field-effect transistors Mr. Dongho Yoo (Tokyo Institute of Technology, Japan)
P029	Oxidation behaviour of printed Copper-silver alloy wirings Mr. HU DAWEI (Osaka University, Japan)
P030	Halogen Bond Intensifies Metal-Enhanced Fluorescence of an Azodye Dr. yinjie Chen (Beijing Institute of Graphic Communication, China)
P031	Enhancement of electrical characteristics by applying Xenon Flash Lamp to oxide semiconductor TFT and comparative analysis Mr. Tae-yil Eom (Sungkyunkwan University, Korea)

P032	Cross-linked small molecular buffer layer for solution-processed organic photodetector Mr. Jong-Chan Choe (Korea Institute of Industrial Technology, Korea)
P033	Inkjet Printing of Silver Electrodes on an Printed InGaZnO Layer for Thin-Film Transistors Mr. Younghak Song (Sungkyunkwan University, Korea)
P034	Controlling singlet and triplet energy splitting : OXD based thermally activated delayed fluorescence emitters Ms. SuJin Hwang (Kongju National Univeristy, Korea)
P035	Describing excited-state intramolecular proton transfer in three arm base HPI system : A density functional theory based analysis Mr. Kamaraj Eswaran (Kongju National Univeristy, Korea)
P036	2-Naphthol And Thiazole-based Novel Molecules for ESIPT Fluorescent Zinc Sensors Mr. Somasundaram Sivaraman (Kongju National Univeristy, Korea)
P037	Modulation of Lens Shapes by Reflow Process in Nanoimprint Lithography Mr. SeongGil Heo (3D EYES, Korea)
P038	Investigate the surface characteristics of ZnO/Ag grid/ZnO flexible transparent electrodes. Mr. Chen Tao Wang (National Cheng Kung University, Taiwan)
P039	Thickness effects on the thermoelectric properties of Bismuth Telluride films Ms. Haesun Shin (Sungkyunkwan University, Korea)
P040	Preparation of all-solution-based Ag/WO ₃ /W-doped In ₂ O ₃ conductive bridge ReRAM for nonvolatile memory devices. Mr. Cheol Park (Kongju National Univeristy, Korea)
P041	Stable copper complex ink for highly conductive copper film Ms. Wen Xu (Tsinghua University, China)
P042	Solution Processed Titanium Oxide Nanoparticles as Efficient Scatters for Light Extraction in Organic Lighting Devices Prof. Zingway Pei (National Chung Hsing University, Taiwan)
P043	Low-temperature deposited a quality silicon oxynitride barrier film for encapsulating the organic light emitting diode Dr. Tai-Hung Chen (Industrial Technology Research Institute, Taiwan)
P044	Wavelength Dependent Stress-Optic Coefficients of Transparent Flexible Films and their Anisotropic Behaviours Determined by Using a Transmission Spectroscopic Ellipsometer Equipped with a Push-pull Stand and a Stress Gauge Mr. Sung Mo Yang (Ajou University, Korea)
P045	Transparent high-performance of SiN _x /SiO _x N _y hybrid barrier films for organic photovoltaic cells with high durability Dr. keunyong lim (Korea Institute of Science and Technology, Korea)
P046	Bending Experiment and Resistance evaluation of Zinc Oxide Thin Films Grown on Cyclo Olefin Polymer Substrates Mr. Oliver Kaltstein (Osaka Institute of Technology, Japan)
P047	Mean-time-to-failure study on electrohydrodynamic-jet printed Ag lines Ms. Chaeri Yu (Kongju National Univeristy, Korea)

P048	Surface Engineering of Ferroelectric Polymer for the Enhanced Electrical Performance of Organic Transistor Memory Mr. Do-Kyung Kim (Kyungpook National University, Korea)
P049	Unraveling the Issue of Ag Migration in Printable Source/Drain Electrodes Compatible to Versatile Solution-Processed Oxide Semiconductors for Printed Thin-Film Transistor Applications Ms. Gyu Ri Hong (Korea Research Institute of Chemical Technology, Korea)
P050	3D Printable Composite Dough for Stretchable, Ultrasensitive and Body-Patchable Strain Sensors Ms. Ju Young Kim (Korea Research Institute of Chemical Technology, Korea)
P051	3D-printable, highly conductive hybrid composites employing chemically-reinforced, complex dimensional fillers and thermoplastic triblock copolymers Ms. Yejin Jo (Korea Research Institute of Chemical Technology, Korea)
P052	Self-Capacitance Touch Panel on Layer-by-Layer Assembled Functionalized Multi-walled Carbon Nanotubes Mr. Youngwook Noh (Konkuk University, Korea)
P053	Scalable Room-Temperature Chemical Synthesis of Amine-Functionalized Carbon-Sulfur Composites as Lithium-Sulfur Battery Cathodes Ms. Changju Chae (Korea Research Institute of Chemical Technology, Korea)
P054	The Development of Photonic Sintered, Printable Cu Electrodes on PET Substrate: Anti-Oxidation Stability under High Temperature and Humidity Conditions Ms. Hyejin Park (Korea Research Institute of Chemical Technology, Korea)
P055	Influence of copper-ligand complexation regime on topology of the copper microstructures created by laser-induced deposition Mr. Ilya Tumkin (Saint Petersburg State University, Russia)
P056	Thermal Degradation behaviour of Fluorine-doped Tin Oxide Thin films on glass in a Reliability Testing Ms. Ji-Young Yoon (Korea Institute of Ceramic Engineering & Technology, Korea)
P057	Flexible Substrate with Metal Grids for Opto-electronic Devices Mr. Sunghoon Jung (Korea Institute of Materials Science, Korea)
P058	Study on the metal electrode manufactured by the process elements of Aerosol Jet Deposition method Mr. Ki-Bum Park (Korea Electronics Technology Institute, Korea)
P059	A Study on Electrical and Mechanical Properties of Low Melting Solder Paste for Flexible Flip Chip Package Ms. Min-Jung Son (Korea Institute of Machinery and Materials, Korea)
P060	Fabrication of flexible TFT electrode using reverse offset printing Mr. Tae-Hee Ku (Korea Institute of Machinery and Materials, Korea)
P061	Stitching of Free Standing Interconnects to a PDMS Substrate Ms. Shivani Joshi (Delft University of Technology, Netherlands)
P062	Synthesis of Few-Layer WO ₃ Flakes from Exfoliated WS _x O _y Flake for Electrochromic Devices Mr. Ashraful Azam (Korea Advanced Institute of Science and Technology, Korea)
P063	Printing elastomeric ink based porous membrane and its application for stretchable sensor Mr. Hyungdong Lee (Sungkyunkwan University, Korea)

P064	Preparation of AZO films using a slot-die printing Ms. Jeonryang Lee (Korea Electronics Technology Institute, Korea)
P065	Computational Modelling of Microparticle Growth in a Taylor-Couette Crystallizer Mr. Janggyun Lim (Sungkyunkwan University, Korea)
P066	Reliability and durability studies on flexible films for Protecting Printed Electronics Devices Mr. Chul-Ho Choi (Korea Electronics Technology Institute, Korea)
P067	Fabrication of an electrically conducting paper using single-walled carbon nanotubes and the cellulose obtained from paper mulberry Mr. Inseob Im (Cheonbuk National University, Korea)
P068	A KPFM Study on surface treated graphite sheets Mr. Inseob Im (Cheonbuk National University, Korea)
P069	Silazane derived SiO ₂ Gate Insulator for Metal-Oxide Thin Film Transistors at Low Temperature Ms. Hyeonjoo Seul (Hanyang University, Korea)
P070	Enhanced Electrical Properties of Electrospun Cu/C Core-Shell Nanofibers for Transparent Electrode via Combustion of Carbon Layer Mr. Jae-Chan Lee (Seoul National University, Korea)
P071	Band gap measurement of the flexible materials for the printed electronics using TEM Ms. Jeong Eun Chae (Gumi Electronics & Information Technology, Korea)
P072	Effects of Oxygen Pulse on Modulation of Electrical Properties of Zinc Oxide Thin Films Grown by Atomic Layer Deposition for Thin-film Transistors Mr. Yong Tae Kim (Chonnam National University, Korea)
P073	In-situ Crystallization of InGaZnO ₄ Thin Films by rf-sputtering Mr. Jae Yu Cho (Chonnam National University, Korea)
P074	Operation mechanism of printable non-volatile transistor memory based on a DNA-CTMA lipid complex as gate dielectric Dr. Lijuan Liang (Beijing Institute of Graphic Communication, China)
P075	Temperature and Light Intensity Study of Hybrid Solar Cells Based on Poly(phenylene vinylene):ZnO Nanoparticles with Added Surfactants Dr. Jun Young Kim (Korea Institute of Industrial Technology, Korea)
P076	Development of Force Sensing Arrays Using Roll-to-Roll Processing Dr. Budiman Salam (Singapore Institute of Manufacturing Technology, Singapore)
P077	Fabrication of solution-processed flexible polymer light-emitting diodes with ITO / PEDOT:PSS bilayer transparent electrodes Mr. Geonhee Kim (Seoul National University, Korea)
P078	Solution-Processed White OLEDs with Double-Emitting Layers based on Blue Self-Host Iridium Dendrimer and Alcohol-Soluble Yellow Phosphor Dr. Shumeng Wang (Changchun Institute of Applied Chemistry, China)
P079	Transfer of Hydroxyl Group for High-performance Solution-Processed InGaZnO Thin-Film Transistors Prof. Jin-Hyuk Bae (Kyungpook National University, Korea)

P080	Roll-to-Roll fabrication of Large Area Double-Sided Printed Lighting Dr. Wai Tat Kerk (Singapore Institute of Manufacturing Technology, Singapore)
P081	Electrical Reliability Enhancement in Organic Thin-film Transistors and Circuits Using a Hydroxyl-containing Polymer Blend as Gate Dielectric Mr. Hyunjin Park (Pohang University of Science and Technology, Korea)
P082	Epidermal pH-sensor capable of operating only with NFC energy harvesting Mr. Shun Miyabayashi (Iwata Hiroyasu Lab., Waseda University, Japan)
P083	Effect of Living Body on Performance of RF Identifier Antenna Printed on Ultrathin Polymer Film Mr. Hiroki Hayata (Waseda University, Japan)
P084	SCREEN PRINTED ULTRATHIN AND HIGHLY FLEXIBLE CIRCUIT INTEGRATED WITH BLUETOOTH CHIP FOR WEARABLE APPLICATIONS Dr. Weibing Gu (Suzhou Institute of Nano-Tech and Nano-Bionics, China)
P085	Fabrication of Nano Spring CNT Embedded PDMS Composite Film for Energy Harvesting Mr. Yun Jae Lee (Korea Institute of Science and Technology, Korea)
P086	Low temperature solution processed amorphous oxide TFT of IGZO by hydrogen annealing Mr. Minwoo Cho (Sungkyunkwan University, Korea)
P087	Low-temperature solution-processed IGZO thin-film transistors by halogen lamp rapid thermal annealing Ms. Hyena Kwak (Sungkyunkwan University, Korea)
P088	Solution Processed OLEDs Using Novel Phosphorescent Orange Emitter Dr. Jung-Yu Liao (Industrial Technology Research Institut, Taiwan)
P089	Bipolar resistive switching characteristics of solution-based Ag/Mn:ZnO/W:In ₂ O ₃ memory devices Ms. Jiyeon Yang (Kongju National Univeristy, Korea)
P090	Smart Window by Using Magnetic Nanoparticles Mr. Hyung Gyu Lee (Seoul National University of Science & Technology, Korea)
P091	Electrospun PVDF-TrFE nanofiber flexible energy harvesting with self-electrode Mr. Jung Hyuk Kim (Korea Institute of Science and Technology, Korea)
P092	Flexible Audible Quantum Dot Light Emitting Diode Based on PVDF Film Mr. Hong Hee Kim (Korea Institute of Science and Technology & Yonsei University, Korea)
P093	Flexible Temperature Sensor Module using Pt Thin Film on Polymer Film Dr. Joon-Shik Park (Korea Electronics Technology Institute, Korea)
P094	Fabrication of flexible copper-based electronics via roll-to-roll process Prof. Dongchul Suh (Hoseo University, Korea)
P095	Solution-Processed Printed Organic Thin Film Transistor with Stretchability Dr. Hsien-Lung Chiu (National Taiwan University, Taiwan)

P096	Printed Dual-gate Organic Transistors on a Flexible Substrate Mr. Jimin Kwon (Pohang University of Science and Technology, Korea)
P097	Printed capacitive air-gap touch sensor Mr. Sang Hoon Lee (Konkuk University, Korea)
P098	Printed strain sensors for early damage detection in engineering structures Dr. Daniel Zymelka (NMEMS Technology Research Organization, Japan)
P099	Quantum Dot Light Emitting Diode for High Efficiency and Flexibility Dr. Yao-Tang Chang (National Tsing Hua University, Taiwan)
P100	Analysis of the performance of metal oxide TFT by using IPL based sintering for roll-to-roll process Mr. Daehwan Chae (Konkuk University, Korea)
P101	Performance of zinc-oxide nanorods nano-generator on carbon fibers Ms. Jieun Park (Konkuk University, Korea)
P102	Printed Electronics for an Artificial Neuron Mr. Ashish Sapkota (Sunchon National University, Korea)
P103	Printed IGZO Rectifier for NFC Applications Ms. Grishmi Rajbhandari (Sunchon National University, Korea)
P104	R2R Gravure Printed Antenna Interfaced with Si-chip to Demonstrate Temperature Sensor Integrated NFC Tag for Food Packaging Mr. Bijendra Bishow Maskey (Sunchon National University, Korea)
P105	Roll Coated Flexible PEDOT:PSS Electrodes for NFC-pH Sensor Mr. Yushin Kim (Sunchon National University, Korea)
P106	Fully Roll-to-Roll Gravure Printed Flexible Thin Film Transistor Active Matrix With 40 PPI Resolution Mr. Hyebin Kim (Sunchon National University, Korea)
P107	Fully R2R gravure printed TFT-array for developing a digital column chromatography Dr. Younsu Jung (Sunchon National University, Korea)
P108	Fully R2R gravure printed 4 bit NFC tags as ID cards of a board game Ms. Hyejin Park (Sunchon National University, Korea)
P109	Improving Low Temperature Solution-processed ZnO Thin Film Transistor by the Suppression of OH- Impurities Mr. Hyeonwoo Shin (Seoul National University, Korea)
P110	Patch-type carbon-based sensors for electromyogram Prof. Tae-Jun Ha (Kwangwoon University, Korea)
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P112	Flag Type Nanogenerator for Harvesting Wind Energy Dr. Jinhyoung Park (Korea Institute of Industrial Technology, Korea)
P113	The functional fluorine effect of carbon fiber felts for gas sensor Mr. SangJin Kim (Gumi Electronics & Information Technology Research Institute, Korea)
P114	High-Performance Transparent Heater based on metal micromesh for observation of convection phenomenon Dr. Yoonkap Kim (Gumi Electronics & Information Technology Research Institute, Korea)
P115	Short-channel organic inverter circuits with high gain and high noise margin Mr. Sunghoon Lee (The University of Tokyo, Japan)
P116	All Printed Strain Sensor Depositing Graphene on Polyurethane Substrate Prof. Jinho Bae (Jeju National University, Korea)
P117	All Printed Humidity Sensor Based on Graphene/ZnO composite Prof. Jinho Bae (Jeju National University, Korea)
P118	An enzyme-based wearable lactate sensor incorporating complementary organic field effect transistors for high sensitivity Mr. Sanghoon Baek (Pohang University of Science and Technology, Korea)
P119	Electrical property Enhancement of White OLED using Tandem Structure Prof. Dong-Eun Kim (Pohang University of Science and Technology, Korea)
P120	Ultralow voltage operation of biologically assembled all carbon nanotube nanomesh transistors with ion-gel gate dielectrics Ms. Hye-Hyeon Byeon (Korea University, Korea)
P121	Influence of Oxygen Proportion on Contact Resistance in A-IGZO Thin-film Transistor Ms. Nuri On (Hanyang University, Korea)
P122	Multilayer Coating of Thin Polymer on Flexible ITO Substrate by Solution Processes Mr. Myong-ki Kim (Deviceeng, Korea)
P123	Short-channel organic thin-film and electrochemical transistor for multi-electrode array application Mr. Wonryung Lee (The University of Tokyo, Japan)
P124	Three-Dimensional Bicontinuous Conductive Nanonetwork for Highly Stretchable Electrode System Mr. Donghwi Cho (Korea Advanced Institute of Science and Technology, Korea)
P125	TFT performance of IZO Semiconductor Thin Films Prepared by Photo-Assisted Sol-Gel Processing Mr. Takehito Kodzasa (National Institute of Advanced Industrial Science and Technol, Japan)
P126	Textile Resistance Switching Memory for Fabric Electronics Mr. Chaewon Kim (Kookmin University, Korea)
P127	Solution-processed photodetector using high-purity semiconducting single-walled carbon nanotube/n-type polymer heterojunction Mr. Hyeon-Seok Lee (Korea Advanced Institute of Science and Technology, Korea)

P128	<p>Porous pressure sensor with high-sensitivity and low hysteresis based emulsion process Ms. Junchang Yang (Korea Advanced Institute of Science and Technology, Korea)</p>
P129	<p>Metal-Organic Framework Derived Complex Catalysts Decorated on Hollow Metal-Oxide Nanotubes for Improved Acetone Detection Mr. Won-Tae Koo (Korea Advanced Institute of Science and Technology, Korea)</p>
P130	<p>Galvanic Replacement Reactions Derived P-N Transition in MOF Templated Metal Oxide for Exceptional Chemiresistor Mr. Ji-Soo Jang (Korea Advanced Institute of Science and Technology, Korea)</p>
P131	<p>Liquid volume measurement using a piezoelectric PVDF sensor Mr. Jeongjae Ryu (Korea Advanced Institute of Science and Technology, Korea)</p>
P132	<p>Train Seat Occupancy Detection by RFID Ms. Soo Jin Jeon (Seoul National University of Science And Technology, Korea)</p>
P133	<p>Morphology Control of Inkjet Printed Quantum Dot Layer for Improving Quantum Dot Light Emitting Diodes Ms. Yeseul Park (Seoul National University, Korea)</p>
P134	<p>Increasing efficiency of Quantum-dot Light Emitting Diodes which fabricated by contact imprinting process Mr. Kyunghwan Kim (Seoul National University, Korea)</p>
P135	<p>FABRICATION OF PIEZOELECTRIC TOUCH SENSOR VIA ELECTROHYDRODYNAMIC JET PRINTING Mr. Sangyeon Hwang (Sungkyunkwan University, Korea)</p>
P136	<p>Electrochemical properties of Electrospun Polymer Gel electrolyte for Lithium ion Battery Mr. Ilhwan Kim (Korea Institute of Machinery and Materials, Korea)</p>
P137	<p>Bank Engineering for High Resolution Inkjet-printed Quantum Dot Light-Emitting Diodes Mr. Heebum Roh (Inter-University Semiconductor Research Center, Seoul National University, Korea)</p>
P138	<p>Flexible pressure sensor for sleep monitoring Dr. Yeon Hwa Kwak (Korea Electronics Technology Institute, Korea)</p>
P139	<p>Development of Transparent LED Smart Window Mr. Yong hee Jang (Sungkyunkwan University, Korea)</p>
P140	<p>Solution-Processed Hybrid Metal-Oxide/CNT Thin-Film Phototransistors for Wide-Range Ultra-Flexible Photosensors Mr. Jaehyun Kim (Chung Ang University, Korea)</p>
P141	<p>Correlation of Photocurrent with Grain Formation in Perovskite Solar Cells Mr. Kunsik An (Seoul National University, Korea)</p>
P142	<p>Development of smart textile fabrication technology using e-stripes Mr. Kyuhong Yi (Korea Electronics Technology Institute, Korea)</p>
P143	<p>Non-hydrazine and High performance Quantum dot Thin Film Transistors with Metal Chalcogenide Mr. Su Min Jung (Chung-Ang University, Korea)</p>

P144	Fiber Typed Soft Strain-Pressure Sensor Based on Conductive Elastome Mr. Hyuk Hur (Korea Advanced Institute of Science and Technology, Korea)
P145	Residual solvent-free in emitting layer for solution OLEDs Dr. Dai Geon Yoon (Korea Institute of Industrial Technology, Korea)
P146	Align angle and structure controlled electro-spun metal fibers as flexible and stretchable electrodes for wearable electronics Dr. Doo Hyeob Youn (Electronics and Telecommunications Research Institute, Korea)
P147	Highly Flexible Organic Nanofiber-Based Phototransistors on a Textile Composite and Their Applications in Wearable Photosensors Mr. Moo Yeol Lee (Pohang University of Science and Technology, Korea)
P148	A Flexible Organic Transistor Array with a Chemically Robust Ambipolar Polymer Semiconductor and Its Patterning Using Photolithography Dr. Eun Kwang Lee (Pohang University of Science and Technology, Korea)
P149	Abnormal Behavior under Positive Bias Stress in Amorphous InGaZnO Transistors Fabricated on Flexible Polyimide Mr. Han Sol Lee (Yonsei University, Korea)
P150	Inspection and Measurement System Applicable to Continuous Printing Process Mr. Sungsik Park (MIRU SYSTEMS, Korea)
P151	A study on fabrication of Poly-ITO pattern at low temperature using Excimer Laser annealing technology Mr. Il-Gu Kim (Korea Electronics Technology Institute, Korea)
P152	A study on fabrication of a strain gauge sensor using printing technology Mr. Il-Gu Kim (Korea Electronics Technology Institute, Korea)
P153	A highly sensitive pressure and torsion sensor with ionic gel Mr. Daehwan Choi (Yonsei University, Korea)
P154	High Sensitive Piezocapacitive Pressure Sensor in Real skin Sensing Range Mr. Sukjin Jang (Yonsei University, Korea)
P155	Effect of Curvature Radius on Electrical and Optical Properties of Flexible OLEDs Mr. Tae-Yong Kim (Soonchunhyang University, Korea)
P156	Developing of Roll to Roll maskless lithography equipment for Flexible display Mr. Won Choul Choi (LG Electronics, Korea)
P157	Ultra-High Barrier Film Suitable for TFT Roll to Roll Process Mr. Sung Il Kim (i-components, Korea)
P158	Temperature-Controlled Direct Imprinting Based on Two-Step Heating for Improving Electromechanical Durability of Flexible Metal Grid Structures Mr. Jaeha Ryu (Korea Advanced Institute of Science and Technology, Korea)
P159	OLED lighting module based on printing / deposition by hybrid process Mr. Kwangman Ko (Jusung Engineering, Korea)

P160	Synthesis and Characterization of New Aryamine-based Cross-linkable Hole-transporting Materials Mr. Shahid Ameen (Korea Research Institute of Chemical Technology, Korea)
P161	Development of 20inch OTFT Backplane for Digital Signage Mr. Seunghyun Lee (Korea Electronics Technology Institute, Korea)
P162	A Study on the application of a disposable Cliché in the Reverse Offset Printing system Mr. Jinseung Kim (SFA, Korea)
P163	MultilayerCoating of Thin Polymer on Flexible ITO Substrate by Solution Processes Mr. Myong-ki Kim (Deviceeng, Korea)
P164	Paper-based DMF chip with integrated heater and temperature sensor by all-in-one inkjet materials printing Mr. Yunpyo Kim (Sogang University, Korea)
P165	3D printing of moldless flexible pressure sensor using bingham plastic Ms. Soomin Jo (Sogang University, Korea)
P166	Direct printing pen-based for paper-based analytical sensors Mr. Veasna Soum (Sogang University, Korea)

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