

Nov. 13, 2019 (Wed.)		
19:00-20:30	Welcome Reception	
Nov. 14, 2019 (Thu.)		
	Orion Room, 3F	Grand Ballroom, 2F
08:00-09:30	A1. Solder and Bump 1	B1. Heterogeneous Integration 1
Session chair	Hiroshi Nishikawa (Osaka University/ Japan)	Suck Won Hong (Pusan National University/ Korea)
08:00-08:25	(Invited) I1-1 Recent Advances in Underfill for Flip Chip Applications	(Invited) I1-2 Technology and Market Trends of Advanced SiP
	Osamu Suzuki (NAMICS Corp./ Japan)	Santosh Kumar (Yole Développement/ France)
08:25-08:50	(Invited) I1-3 Development of Materials Informatics Platform	(Invited) I1-4 A Perspective on Heterogeneous Integrated Edge Devices for Industry Internet of Things (IIOT) to Support Smart Manufacturing
	Yasumitsu Orii (NAGASE & CO., LTD./ Japan)	G.P. Li (University of California, Irvine/ USA)
08:50-09:10	O1-1 Microstructure and Solderability of Sn-Cu Solder Coatings Processed by Pulse Electrodeposition from a Stannate Bath	O1-2 Technical Issues and their Solutions of Laser-Assisted Bonding Technology
	Ashutosh Sharma (Ajou University/ Korea)	Jiho Joo (ETRI/ Korea)
09:10-09:30	O1-3 Advances in Metrology for Lead-free Solder Electroplating Bath	O1-4 Reactive Bonding by Integrated Nanostructured Al/Pd Multilayer Thin Film Systems for MEMS Packaging Applications
	Jong Woung Kim (ECI Technology/ USA)	El-Mostafa Bourim (National NanoFab Center/ Korea)
09:30-09:45	Coffee break	
09:45-11:00	A2. Taiwan Session 1	B2. Heterogeneous Integration 2
Session chair	Yoonchul Sohn (Chosun University/ Korea)	Sungdong Kim (Seoultech/ Korea)
09:45-10:10	(Invited) I1-5 Adhesion Enhancement through Co-Silanization-Assisted Metallic Immobilization on Flexible Polyimide	(Invited) I1-6 Manufacturing Technology Solution of Wafer / Panel Level Packaging for Heterogeneous Integration.
	Chih-Ming Chen (National Chung Hsing University/ Taiwan)	Yasuhiro Morikawa (Ulvac, Inc./ Japan)
10:10-10:35	(Invited) I1-7 Enhancement of Nano-Silver Chip Attachment by Using Transient Liquid Phase Reaction with Indium	(Invited) I1-8 Fabrication of Fine Pattern with Imprint Technique
	C. Robert Kao (National Taiwan University/ Taiwan)	Katsumi Miyama (Hokkaido University of Science/ Japan)
10:35-11:00	(Invited) I1-9 An Investigation on Scribing and Etching the Thin-Film Stainless Steel Substrate using Ultrafast Laser	(Invited) I1-10 Ultimate 3D Package Solution by FO / PLP Technology
	Hsiang-Chen Hsu (I-Shou University/ Taiwan)	Yun Mook Park (Nepes Corp./ Korea)
11:00-11:10	Break	
11:10-11:20	Opening Ceremony	
Session chair	Hee-Yeoun Kim (National NanoFab Center/ Korea)	
11:20-12:10	Plenary Talk 1 (Grand Ballroom, 2F) The Future of Electronic Packaging Industry Sayoon Kang (Samsung Electro-Mechanics/ Korea)	
12:10-13:30	Lunch	
Session chair	Taek-Soo Kim (KAIST/ Korea)	
13:30-14:10	Keynote Talk 1 (Grand Ballroom, 2F) Advanced Packaging Technologies and Reliability Challenges for Exa-Era Applications Kang-Wook Lee (SK Hynix/ Korea)	
14:10-14:50	Keynote Talk 2 (Grand Ballroom, 2F) Electroplated Cu Bump with Ultra-Large Grain without Thermal Annealing and Kirkendall Void at the Interface of Cu/Sn Joint Wei-Ping Dow (National Chung Hsing University/ Taiwan)	
14:50-15:05	Coffee break	

15:05-16:20	A3. Flexible & LED Packaging	B3. Wearable Electronics 1
Session chair	Byoung Joon Kim (Andong National University/ Korea)	C. Robert Kao (National Taiwan University/ Taiwan)
15:05-15:30	(Invited) I1-11 Silicon-Based Flexible Electronics Enabled by HANAFlex	(Invited) I1-12 A Study on the Dynamic Bending Reliability of Chip-in-Flex (CIF) Packages using Anisotropic Conductive Films (ACFs) Materials for Wearable Electronic Applications
	Jae-Sung Lim (HANA Micron Inc./ Korea)	Kyung W. Paik (KAIST/ Korea)
15:30-15:55	(Invited) I1-13 LED Packaging Trend & Super Strong + Ultra Tough LED	(Invited) I1-14 Soft, Thin Skin-Mounted Power Management Systems for Healthcare Monitoring
	Onishi Tetsuya (Grand Joint Technology Ltd./ Japan)	Jung Woo Lee (Pusan National University/ Korea)
15:55-16:20	(Invited) I1- 15 Recent Microdisplay Technology Status for AR/VR Applications	(Invited) I1-16 Transient Electronics
	Hyunkoo Lee (ETRI/ Korea)	Suk-Won Hwang (Korea University/ Korea)
16:20-16:35	Coffee break	
16:35-17:25	A4. Solder and Bump 2	B4. Wearable Electronics 2
Session chair	Sehoon Yoo (KITECH/ Korea)	Katsumi Miyama (Hokkaido University of Science/ Japan)
16:35-17:00	(Invited) I1-17 Transient Liquid Phase Bonding using Sn-coated Cu Particles for High-Temperature Applications	(Invited) I1-18 Unventional Bio-integrated Electronics towards Human-machine Interface (HMI) Applications
	Hiroshi Nishikawa (Osaka University/ Japan)	Ki Jun Yu (Yonsei University/ Korea)
17:00-17:25	(Invited) I1-19 Micro-Nano Joining by Nano Silver Sintering in Power Electronic Packaging	(Invited) I1-20 Nanocrystal Based Electronic Devices and Wearable Sensors
	Mingyu Li (Harbin Institute of Technology/ China)	Soong Ju Oh (Korea University/ Korea)
17:25-18:30	Poster Presentation Session 1 (Jupiter Room, 3F) Session chair: Sungdong Kim (Seoultech/ Korea)	
18:30-21:00	Banquet (Grand Ballroom, 2F)	
Nov. 15, 2019 (Fri.)		
	Orion Room, 3F	Grand Ballroom, 2F
08:00 - 09:45	C1. Advanced Packaging	D1. Electronic Materials
Session chair	Ben-Je Lwo (National Defense University/ Taiwan)	Changhwan Choi (Hanyang University/ Korea)
08:00-08:25	(Invited) I2-1 FOWLP-based Flexible Hybrid Sensor Systems with Dielets and 3D-IC	O2-1 Good Wettability and Mechanical Strength of Sn-3Ag-0.5Cu Solders on Ni Plated ZnS Ceramics
	Takafumi Fukushima (Tohoku University/ Japan)	Shuye Zhang (Harbin Institute of Technology/ China)
08:25-08:45	O2-2 Compact Yagi-Uda-Shaped and Array Antenna in Ka-Band Using Compressed EBG Unit Cells	O2-3 Crystallinity Dependence of Grain and Grain Boundary Strength in Polycrystalline Copper Interconnections
	Jae-Yeong Lee (Pohang University of Science and Technology/ Korea)	Ken Suzuki (Tohoku University/ Japan)
08:45-09:05	O2-4 New Paradigm in Silicon Capacitors Assembly used as Decoupling Capacitors	O2-5 Study on mold gap fill association factor of epoxy molding compound for thin package
	Muller Charles (KOREA MURATA Electronics Co.,Ltd/ France)	Jun Shin Lee (SK Hynix/ Korea)
09:05-09:25	O2-6 A Study on Improving Flexibility for Chip Stackable Flexible Package	O2-7 Low Dielectric Materials for High-Speed Transmission
	Kyoungtae Eun (SK Hynix/ Korea)	Shin TERAKI (NAMICS Corp./ Japan)
09:25-09:45	O2-8 Role of Wafer Support System for Advanced Packaging	O2-9 Comprehensive Stress Effects Induced by Through Silicon Via Integrated with Local S/D Stressor on Performances of Nano-Scaled Devices in Silicon Interposer Architecture
	KiYeul Yang (Amkor technology korea/ Korea)	Yan-Cian Lin (National Tsing Hua University/ Taiwan)

09:45-10:00	Coffee break	
Session chair	Kwang-Seong Choi (ETRI/ Korea)	
10:00-10:50	Plenary Talk 2 (Grand Ballroom, 2F) Wafer Level 3D Application for Tera-byte Node Takayuki Ohba (Tokyo Tech/ Japan)	
10:50-11:30	Keynote Talk 3 (Grand Ballroom, 2F) From Monolithic to Polyolithic Integrated Circuits: A New Age for Moore's Law Muhannad S. Bakir (Georgia Tech/ US)	
11:30-12:10	Keynote Talk4 (Grand Ballroom, 2F) Could the Reliability of Solder Joints be Assessed Accurately by Using the Weibull Distribution? Sung Yi (Portland State University/ US)	
12:10-13:30	Lunch	
13:30-15:30	C2. Young Scientists	D2. Taiwan Session 2
Session chair	Ken Suzuki (Tohoku University/ Japan)	Sung-Hoon Choa (Seoultech/ Korea)
13:30-13:50	(Y/S) O2-10 A First Principle Study on the Localized Electronic Band Structure of a Single Long Graphene Nanoribbon with Graphene Electrodes	O2-11 Electrospinning Opportunity for Wearable Thermoelectric Generator
	Qinqiang Zhang (Tohoku University/ Japan)	Ben-Je Lwo (National Defense University/ Taiwan)
13:50-14:10	(Y/S) O2-12 Convolution Neural Network Based Diagnosis of Temperature Sensors in a Bake Module	O2-13 AI-Assisted Design-on-Simulation Technology for Advanced Packaging
	Jinwoo Lee (Sungkyunkwan University/ Korea)	Bo-Ruei Lai (National Tsing Hua Univ./ Taiwan)
14:10-14:30	(Y/S) O2-14 Photoresponsivity of a Graphene Nanoribbon based Field Effect Transistor for the Development of a Multi-Junction Solar Cell using a Single Material	(Y/S) O2-15 Process-induced Warpage Characterization of Flip Chip Package on Packaging
	Jowesh Goundar (Tohoku University/Japan)	Ling-Ching Tai (Feng Chia University/Taiwan)
14:30-14:50	(Y/S) O2-16 Effect of Surface Treatments on the Interfacial Adhesion of Cu RDL for FOWLP	(Y/S) O2-17 Thermally-Induced Curvatures and Warpings of 2.5D Packages Measured by Strain Gauge
	Kirak Son (Andong National University/ Korea)	Ms. Y. W. Wang (Chang Gung University/ Taiwan)
14:50-15:10	(Y/S) O2-18 Low Temperature Wafer-Scale Si Layer Transfer by Wafer Bonding for the 3D Integration	(Y/S) O2-19 Reliability Prediction of WLCSP using RF Regression Model
	Hoonhee Han (Hanyang University/ Korea)	Mr. T.H. Tsai (National Tsing Hua University/ Taiwan)
15:10-15:30	(Y/S) O2-20 Advanced Nanofilm Transfer Methods by Water	(Y/S) O2-21 Determination of Thin Silicon Die Strength by Three-Point Bending
	Sumin Kang (KAIST/ Korea)	Mr. H. Y. Liu (Chang Gung University/ Taiwan)
15:30-16:30	Poster Presentation Session 2 (Jupiter Room, 3F) Session chair: Daeil Kwon (Sungkyunkwan University/ Korea)	
16:30-17:00	Award Ceremony and Closing Remark (Lucky Draw) (Grand Ballroom, 2F)	

※ **EMAP Steering Committee Meeting:** Nov.14, 2019 (Thu.) PM12:00, Venus Room (3rd Floor)

※ **Annual Meeting:** Nov.15, 2019 (Fri.) PM12:10, Venus Room (3rd Floor)

Poster Presentation Session I - Nov. 14, 2019 (Thu.), Jupiter Room, 3F

No.	Topic	First Author	Affiliation (First Author)	Country	Paper Title
P1-01	1. Advanced Packaging Technologies	Youngil Kim	Seoul National University of Science and Technology	kr	Low Temperature Bonding using a Laser for Flexible Electronic Devices
P1-02	1. Advanced Packaging Technologies	Min kyu Kang	SK Hynix	kr	Study on Viscoelastic Material Properties of Epoxy Mold Compound to Improve the Accuracy of Package Warpage Simulation
P1-03	1. Advanced Packaging Technologies	Gahui Kim	Andong National University	kr	Ar/N ₂ Plasma Treatment Effect on Quantitative Interfacial Adhesion Energy of Sputtered Cu Direct Bonding for 3-D Integration
P1-04	1. Advanced Packaging Technologies	Kwang Ho Ahn	Korea Advanced Institute of Science and Technology (KAIST)	kr	Effect of Femtosecond Laser Machining Environment on Mechanical Behaviors of Thinned Silicon
P1-05	10. Design Tools and Modeling	Sungdong Kim	Seoul National University of Science and Technology	kr	Panel Level Warpage Analysis with Various RDL Layouts
P1-06	2. Electronic Materials for Interconnects and Packaging	Dain Lim	Korea Institute of Industrial Technology (KITECH)	kr	Characterization of the Viscosity Behavior of Electronic Packaging Adhesives
P1-07	2. Electronic Materials for Interconnects and Packaging	Jae-Hyeong Park	Korea Advanced Institute of Science and Technology (KAIST)	kr	Flexible Ultrasonic Transducer Packaging using Solder ACFs (Anisotropic Conductive Films)
P1-08	2. Electronic Materials for Interconnects and Packaging	HanMin Lee	Korea Advanced Institute of Science and Technology (KAIST)	kr	A Study of the Curing Behaviors and Viscosities of Non-Conductive Films (NCFs) on Flip Chip Solder Bump Joint Morphology and Reliability
P1-09	2. Electronic Materials for Interconnects and Packaging	Genta Nakauchi	Tohoku University	jp	Micro texture Dependence of Mechanical Damage Mechanism of Electroplated Gold Thin Film Used for Semiconductor Device Interconnections
P1-10	3. Emerging Process for Interconnects and Packaging	Sungdong Kim	Seoul National University of Science and Technology	kr	Plasma Pre-treatment for Low-Temperature Cu-Cu Direct Bonding
P1-11	3. Emerging Process for Interconnects and Packaging	Sungdong Kim	Seoul National University of Science and Technology	kr	Planarization of Polymeric Dielectrics for FOWLTP
P1-12	4. PCB, Solder, and Assembly Process	Jungsoo Kim	Korea Institute of Industrial Technology (KITECH)	kr	Effects of Reaction Time and Pd Layer Type on Interfacial Reactions and IMC Morphologies of Thin-Au/Pd/Ni Surface Finished PCBs with Sn-3.0Ag-0.5Cu Solder Joints
P1-13	4. PCB, Solder, and Assembly Process	HyeJun Kang	University of Seoul	kr	Effect of Sn-Ni Solder on TLP Joint Properties of SiC for Power Module
P1-14	5. Power Electronic Packaging	HYUNCHEOL BAE	Electronics and Telecommunications Research Institute (ETRI)	kr	High Thermal Conductive Cu Sintering Paste for xEV Power Module
P1-15	5. Power Electronic Packaging	Seungju Baek	Korea Institute of Industrial Technology (KITECH)	kr	Effect of Preform with Plasma Treatment on Joint of TLP Bonding
P1-16	5. Power Electronic Packaging	Dong Yun Jung	Electronics and Telecommunications Research Institute (ETRI)	kr	Switching Performances by Chip Interconnections in Power Semiconductor Discrete Packages
P1-17	6. Sensors, LED, and Emerging Packaging Technology	Sang-Pil Han	Electronics and Telecommunications Research Institute (ETRI)	kr	Novel Optical Biomedical Image Sensing Technique for Three-Dimensional Biological Inspection
P1-18	6. Sensors, LED, and Emerging Packaging Technology	Duyoung Choi	Korea Institute of Industrial Technology (KITECH)	kr	Biodegradably Coated Magnetic Nanocapsules for On-off Switchable Drug Release with Reduced Leakage
P1-19	6. Sensors, LED, and Emerging Packaging Technology	Sang Hyun Jung	Korea Advanced Nano Fab Center	kr	Transfer of Hall Sensor Materials using Low Temperature Gallium Arsenide-Silicon Wafer Eutectic Bonding
P1-20	6. Sensors, LED, and Emerging Packaging Technology	Jongkyu Won	Dankook University	kr	Improvement of Indirect X-ray Detector Performance by Applying Additive Solvent to the Organic Active Layer
P1-21	7. Wearable and Printed Electronics	Jong-Woong Kim	Chonbuk National University	kr	Stretchable and Thermally-healable Transparent Electrode Based on Diels-Alder Adducts for Stretchable Electronic Packages
P1-22	7. Wearable and Printed Electronics	se-hoon Park	Korea Electronics Technology Institute (KETI)	kr	A Wearable Photoplethysmogram (PPG) Sensor Using Flexible and Stretchable Substrate

P1-23	7. Wearable and Printed Electronics	Jang-Woo Han	Korea Institute of Industrial Technology (KITECH)	kr	A Study on the Coating Characteristics of VO ₂ Nanoparticle Film with Various Conditions of Ultrasonic Spray Coater
P1-24	7. Wearable and Printed Electronics	Ji Hun Yuk	Seoul National University of Science and Technology	kr	Stretchable and Flexible Transmission Line Based on Highly Conductive Silver Paste for Wearable Applications
P1-25	7. Wearable and Printed Electronics	Nam Hyun Jin	Dept. of Manufacturing Systems and Design Engineering	kr	Development of Mechanical Characteristics of Possible Stretchable Electrodes Applied to Stretchable/Flexible Display
P1-26	7. Wearable and Printed Electronics	Junhyuk Son	Korea Institute of Industrial Technology (KITECH)	kr	A Study on the Adhesion Characteristics between Polyimide and Metal Film by CO ₂ Laser Treatment
P1-27	7. Wearable and Printed Electronics	SangWoo Kim	Sungkyunkwan University	kr	Flexible and Stretchable Radio Frequency Antenna based on Silver Nanowires
P1-28	7. Wearable and Printed Electronics	Sungdong Kim	Seoul National University of Science and Technology	kr	Comparison of Interconnection Methods for E-textile Applications
P1-29	7. Wearable and Printed Electronics	Choong-Jae Lee	Sungkyunkwan University	kr	Fabrication of Printed Ag Circuits with Plasma Assisted-sintering Process and its Electrochemical Migration Behaviors
P1-30	7. Wearable and Printed Electronics	SangWoo Kim	Sungkyunkwan University	kr	Design of Cu Circuit for Stretchable Electronic Circuits using Finite Element Analysis
P1-31	8. MEMS/NEMS Packaging and Applications	ChungMo Yang	National NanoFab Center	kr	Fabrication of MEMS Gyro Sensor with Wafer Level Vacuum Packaging
P1-32	9. Reliability of Electronic Devices and Systems	Youngil Kim	Seoul National University of Science and Technology	kr	Analysis of Temperature Rise and Flexibility of Flexible Highly Efficient Compound Solar Module
P1-33	9. Reliability of Electronic Devices and Systems	Geum-Yong Park	Andong National University	kr	Mechanical Reliability of Conductive Yarn during Repeated Bending Deformation
P1-34	9. Reliability of Electronic Devices and Systems	Yong-Wook Kwon	Andong University Flexible Electronic Materials Laboratory	kr	Twisting Test of Interconnect on Flexible Polymer Substrate
P1-35	1. Advanced Packaging Technologies	Yu-Jin Li	National Chiao Tung University	tw	High Reliability Fan-Out Redistribution Layer with Nano-scaled Twinning Structure
P1-36	1. Advanced Packaging Technologies	Chang Chih Hsieh	National Chiao Tung University	tw	Anisotropic grain growth in Cu joints at low temperatures by 111-oriented nanotwinned copper films
P1-37		Jun-Seok Ha	Chonnam National University	kr	Porous Copper-Graphene-Graphene Oxide Composite for Thermal Management of Nanoelectronics
P1-38	9. Reliability of Electronic Devices and Systems	Yeong-Kook Kim	Inha University	kr	Stress Development Analyses of PBGA Chip under Random Vibration
P1-39	7. Wearable and Printed Electronics	Jungpil Kim	Korea Institute of Industrial Technology (KITECH)	kr	Distinguishing Zigzag and Armchair Edges on Graphene Nanoribbons by X-ray Photoelectron and Raman Spectroscopies
P1-40	6. Sensors, LED, and Emerging Packaging Technology	Kwang-Seok Kim	Korea Institute of Industrial Technology (KITECH)	kr	Effects of Cu-CNT Nanocomposite TIM on Optical Spectra of LED Lighting Applications

Poster Presentation Session II - Nov. 15, 2019 (Fri.), Jupiter Room, 3F

No.	Topic	First Author	Affiliation (First Author)	Country	Paper Title
P2-01	1. Advanced Packaging Technologies	Bo kung Joung	Hanyang University	kr	Electromagnetic Interference Shielding Effect of Double Layer Copper Patterns with Moisture Ventilation at Package Level
P2-02	1. Advanced Packaging Technologies	Soonyong Kwon	Korea Institute of Industrial Technology (KITECH)	kr	Effect of Reducing Agent on the Sinterability of Cu Paste
P2-03	1. Advanced Packaging Technologies	Sarah Eunkyung Kim	Seoul National University of Science and Technology	kr	Comparative Study of Plasma Treatment on Sputtered and Electroplated Cu Surfaces for Cu-to-Cu Bonding

P2-04	1. Advanced Packaging Technologies	Sarah Eunkyung Kim	Seoul National University of Science and Technology	kr	Copper Nitride Passivation by Ar-N ₂ Two Step Plasma Treatments for Low-Temperature Copper Bonding
P2-05	2. Electronic Materials for Interconnects and Packaging	Dal-Jin Yoon	Korea Advanced Institute of Science and Technology (KAIST)	kr	Effects of Surface Activated Monolayer (SAM) Treatment on Conductive Particles in Anchoring Polymer Layer (APL) Anisotropic Conductive Films (ACFs) for Chip-on-Glass (COG) Interconnection
P2-06	2. Electronic Materials for Interconnects and Packaging	Jong-Hyun Lee	Seoul National University of Science and Technology	kr	Novel Die-Attach Method on Cu-Finish Metallization by Pressure-Assisted Sinter-Bonding in Air Using Cu Formate Paste
P2-07	2. Electronic Materials for Interconnects and Packaging	Minsu Park	Andong National University	kr	Bendability Test and Bending Fatigue Test of Metal Film on Flexible Substrate
P2-08	2. Electronic Materials for Interconnects and Packaging	Sri Harini Rajendran	University of Seoul	kr	Structural and Mechanical Properties of Eutectic Sn-Bi-Te Temperature Solder
P2-09	2. Electronic Materials for Interconnects and Packaging	Byeong-Uk Hwang	Sungkyunkwan University	kr	Effect of Epoxy Contents in Cu Hybrid Paste on the Mechanical and Electrical Properties of Cu-Cu Joint
P2-10	2. Electronic Materials for Interconnects and Packaging	Seung Jun Hwang	University of Seoul	kr	Mechanical Properties of Al ₂ O ₃ /Cu Active Metal Brazing for Electric Vehicle
P2-11	3. Emerging Process for Interconnects and Packaging	AESUN OH	Electronics and Telecommunications Research Institute (ETRI)	kr	Sealing Process for Transparent Solar Cell based on Thin Film of Silicon
P2-12	4. PCB, Solder, and Assembly Process	Haksan Jeong	Sungkyunkwan University	kr	Mechanical Reliability of Flip Chip Package with Cu-core Solder Ball under Thermal Shock Test
P2-13	4. PCB, Solder, and Assembly Process	Wook Sang Jeon	University of Seoul	kr	Effect of Graphene Nanoplatelets on the Mechanical Properties of SAC Alloy
P2-14	4. PCB, Solder, and Assembly Process	Ki-Seok Jang	Electronics and Telecommunications Research Institute (ETRI)	kr	Laser Assisted Bonding Process Using with Hybrid Underfill Technology for Flexible PET Application
P2-15	4. PCB, Solder, and Assembly Process	HyeJun Kang	University of Seoul	kr	Fabrication of SiC Power Module by TLP Solders and Its Characteristics
P2-16	5. Power Electronic Packaging	Kwang-Ho Jung	Sungkyunkwan University	kr	Pressureless TLPS Bonding with Cu and Sn-58Bi Particles and its Corrosion Behavior
P2-17	5. Power Electronic Packaging	Byung-Suk Lee	Korea Institute of Industrial Technology (KITECH)	kr	Sintering Study of Cu Micro/Nano-Particle Mixed Pastes for Power Semiconductor Bonding Applications
P2-18	5. Power Electronic Packaging	Kyung Deuk Min	Sungkyunkwan University	kr	Transient Liquid Phase Sintering Bonding in Air using Cu and Sn-58Bi and its Bonding Reliability under High Temperature Condition
P2-19	6. Sensors, LED, and Emerging Packaging Technology	Tae Young Lee	Korea Institute of Industrial Technology (KITECH)	kr	Effect of Interfacial Intermetallic Compound on Thermal Resistance of Flip-Chip LED
P2-20	6. Sensors, LED, and Emerging Packaging Technology	Nam Hyun Jin	Dept. of Manufacturing Systems and Design Engineering	kr	Development and Research of Universally Applicable Stretchable Strain Sensor
P2-21	6. Sensors, LED, and Emerging Packaging Technology	Hailiang Liu	Dankook University	kr	Improved Sensitivity of Organic Photodetector by Adding Polar Solvent to the Hole Transport Layer for Indirect X-ray Detection
P2-22	6. Sensors, LED, and Emerging Packaging Technology	Saehong Kim	Dankook University	kr	Sensitivity Improvement of Quantum Dot-blended Hybrid Detector for indirect-type X-ray Imaging
P2-23	7. Wearable and Printed Electronics	Yan Pan	Korea Advanced Institute of Science and Technology (KAIST)	kr	Bending Properties of Anchoring Polymer Layer (APL) Anisotropic Films (ACFs) for Ultra-Fine Pitch Chip-on-Flex (COF) Packages
P2-24	7. Wearable and Printed Electronics	Park Jun hwan	Korea Institute of Industrial Technology (KITECH)	kr	Ag-PDMS Printing Process for Stretchable Electrodes
P2-25	7. Wearable and Printed Electronics	Nam Hyun Jin	Dept. of Manufacturing Systems and Design Engineering	kr	Large-Scale Rapid Laser Sintering of Highly Stretchable Electrode Using a Homogenized Rectangular Laser Beam
P2-26	7. Wearable and Printed Electronics	Nam Hyun Jin	Dept. of Manufacturing Systems and Design Engineering	kr	Intense Pulse Light Sintering of an Ag Microparticle-based, Highly Stretchable, and Conductive Electrode

P2-27	7. Wearable and Printed Electronics	Hae Jin Kim	Korea Electronics Technology Institute	kr	Implementation of the Array Antenna for 77 GHz Band Using T-junction and Series-fed Structure
P2-28	7. Wearable and Printed Electronics	Seung Jin Oh	Korea Advanced Institute of Science and Technology (KAIST)	kr	Mechanical Properties of Indium Tin Oxide (ITO) Transparent Conductors for Flexible Applications
P2-29	7. Wearable and Printed Electronics	Ji Hun Kim	Korea Advanced Institute of Science and Technology (KAIST)	kr	Enhancement of Movement Speed of Soft Actuator Utilizing Diamagnetic Levitation
P2-30	8. MEMS/NEMS Packaging and Applications	Youngmoon Jang	Seoul National University of science and technology	kr	Deformation of Package and Changes of Natural Frequency in MEMS Accelerometer at Elevated Temperatures.
P2-31	8. MEMS/NEMS Packaging and Applications	Cha Ji-Hoon	Seoul National University of Science and Technology	kr	Numerical Analysis of Pad Deformation and Penetration with Fine Pitch MEMS Vertical Probe Tip
P2-32	9. Reliability of Electronic Devices and Systems	Eunsol Jo	Kangnam University	kr	Study on Flame-retardant Coating of PET-based Module to Prevent Embers
P2-33	9. Reliability of Electronic Devices and Systems	Jaegeun Seol	Andong National University	kr	Fatigue Resistance and the Adhesion Properties of Cu Films on Polyimide Substrate Treated by Oxygen Plasma
P2-34		Myung Yung Jeong	Pusan National University	kr	Characteristics of Diffusive Transport with use of Metasurfaces for the Spatial Resolution Enhancement of fNIRS
P2-35		Myung Yung Jeong	Pusan National University	kr	Multiple Solutions of Thin Film Coating on Horizontal Rotating Cylindrical Mold by Drop-Casting Method: Roll-to-roll Nanoimprint Lithography
P2-36	10. Design Tools and Modeling	Yong-Won Ma	Pusan National University	kr	Multiple Laser Interference Exposure: Simulations and Experiments for the Fabrication of Wavy Patterns
P2-37	2. Electronic Materials for Interconnects and Packaging	Namhyun Kang	Pusan National University	kr	Interlayer materials to reduce transient liquid phase bonding time
P2-38	9. Reliability of Electronic Devices and Systems	SangHee Lee	Dankook University	kr	Preparation and Properties of Passivation Films Spray Coated on the Flexible Plastic Substrates
P2-39	9. Reliability of Electronic Devices and Systems	Seok Hwan Huh	Changwon National University	kr	SMT process effects on reliability of PCBs during biased HAST