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저자 Q&A 세션: 17:15-17:55

D. Thin Film Process Technology 분과

ZONE 1 (1층 전시장)

TP1-001	<p>Mimicking IR Visionary System via 0D-2D Heterojunction of InAs QD/WSe₂ Artificial Synapse Soobin Shim¹, Hyeongtae Kim¹, Seongchan Kim², Nuri Oh², and Jun Hong Park¹ ¹School of Materials Science & Engineering, Gyeongsang National University, ²Division of Materials Science & Engineering, Hanyang University</p>
TP1-002	<p>Charge Trap Engineering and Synaptic Behavior of Transition Metal Dichalcogenides Transistor, via Molecular Dynamics MiJi Kwon¹, Hyeongtae Kim¹, Suyeon Cho², and Junhong Park¹ ¹School of Materials Science & Engineering, Gyeongsang National University, ²Department of Materials Engineering and Convergence Technology, Gyeongsang National University</p>
TP1-003	<p>Van Der Waals Interface Engineering for Enhancement of Semiconductor Device Performance Su-yeon Cho¹, Do-Hyeon Lee², and Jun Hong Park¹ ¹School of Materials Science & Engineering, Gyeongsang National University, ²Department of Materials Engineering and Convergence Technology, Gyeongsang National University</p>
TP1-004	<p>Centimeter Scaled Growth and Electric Characteristics of Layered NiTe₂ Wonbeom Kim¹, Hyeongtae Kim², Yeonjin Je³, Eunjeung Kim⁴, and Junhong Park² ¹School of Materials Science & Engineering, Gyeongsang National University, ²Materials Engineering and Convergence Technology, Gyeongsang National University, ³Ceramic Engineering, Gyeongsang National University, ⁴LLNL</p>
TP1-005	<p>Investigation of Annealing Effect on Indium-Zinc-Oxide (IZO) Thin Film Transistor (TFT) by Gamma-ray Radiation Do-Kywn Kim¹, Dong-Seok Kim², Min-Ju Kim¹, Tae-Eon Kim¹, and Seung Heon Shin³ ¹Department of Semiconductor Materials and Applications, Korea Polytechnics, ²Korea Multi-Purpose Accelerator Complex, KAERI, ³Department of Semiconductor Process Equipment, Korea Polytechnics</p>
TP1-006	<p>듀얼 게이트 a-ITGZO 박막 트랜지스터의 채널 구조에 따른 전기적 특성 연구 설민혁¹, 조경아¹, 강민구¹, 김상섭², 김상식¹ ¹고려대학교 전기전자공학과, ²Samsung Display Co., Ltd.</p>
TP1-007	<p>a-ITGZO 박막트랜지스터의 성능 향상을 위한 Al₂O₃/SiO₂게이트 절연막의 적용 강민구¹, 조경아¹, 김상섭², 김상식¹ ¹고려대학교 전기전자공학과, ²Samsung Display Co., Ltd.</p>
TP1-008	<p>HfO₂/InGaZnO Double-layered Transistor with Low-powered Switching Enabled by Quasi-two-dimensional Electron Channel Seyoung Oh^{1,2} and Byungjin Cho^{1,2} ¹Department of Urban, Energy, and Environmental Engineering, Chungbuk National University, ²Department of Advanced Material Engineering, Chungbuk National University</p>
TP1-009	<p>Influence of TiO₂ Thin Film Grown by Atomic Layer Deposition on N-Type Bi₂Te₃Se_{0.3} Thermoelectric Powders Su Min Eun¹, Ji Hyeon Hwang², and Byung Joon Choi¹ ¹Department of Material Science and Engineering, Seoul National University of Science and Technology, ²Department of Optometry, Seoul National University of Science and Technology</p>

TP1-010	<p>The Enhancement of the Electrical Properties of a-ZTO Thin-Film Transistors through Metal Capping Process</p> <p>Jin Woo Lee, Se-Hyeong Lee, So-Young Bak, Dongki Baek, Chan-Yeong Park, Hyeongrok Jang, and Moonsuk Yi</p> <p>Pusan National University</p>
TP1-011	<p>Optimization for Enhanced Electrical Properties of ZrO₂/HfO₂ Laminated Structure for Metal-Insulator-Metal Capacitors</p> <p>Yoonchul Shin, Seung Won Lee, and Ji-Hoon Ahn</p> <p>Department of Materials Science and Chemical Engineering, Hanyang University</p>
TP1-012	<p>Wafer-scale Thin Film Grown WSe₂ via Molten Salt Method and Device Applications</p> <p>Sojeong Park¹, Hyeongtae Kim², Soobin Shim², and Jun Hong Park²</p> <p>¹Department of Energy and Mechanical Engineering, Gyeongsang National University, ²School of Materials Science and Engineering, Gyeongsang National University</p>
TP1-013	<p>Two Step Surface Engineering of Transition Metal Dichalcogenide Heterojunction with Metal Oxide-formation and Reduction Processes</p> <p>Mingu Kang¹ and Jun Hong Park^{1,2}</p> <p>¹School of Materials Science and Engineering, Gyeongsang National University, ²Department of Materials Engineering and Convergence Technology, Gyeongsang National University</p>
TP1-014	<p>Optically Simulated Synaptic Behaviors of HfS₂ Grown via Molten Salt Flux Method</p> <p>Seunghee Kim¹, Mi Ji Kwon², Jung Young Cho³, and Jun Hong Park^{1,2}</p> <p>¹School of Materials Science and Engineering, Gyeongsang National University, ²Department of Materials Engineering and Convergence Technology, Gyeongsang National University, ³Nano Convergence Materials Center, KICET</p>
TP1-015	<p>Low Temperature Processed, Highly Stable CMOS Inverter by integrating Zn-ON and Tellurium Thin-Film Transistors : Journal of Information Display</p> <p>Taeung Kim, Muhammad Naqi, Yongin Cho, and Sunkook Kim</p> <p>¹Multifunctional Nano Bio Electronics Lab, Sungkyunkwan University, ²School of Advanced Materials Science and Engineering, Sungkyunkwan University</p>
TP1-016	<p>Intense Pulsed Light을 이용한 선택적 어닐링을 통한 Top-gate Self-aligned 구조의 IGZO TFT 성능 개선</p> <p>김희태¹, 박서학¹, 정재중¹, 박영근¹, 김동빈¹, 조성행², 최성율¹, 조병진¹</p> <p>¹한국과학기술원 전기 및 전자공학부, ²한국전자통신연구원 플렉시블전자소자연구실</p>
TP1-017	<p>Unlocking the Functionality of Multi-phase Tungsten Disulfide for Negative Differential Resistance and Random-access Memory Devices</p> <p>Jinill Cho¹, Gunhoo Woo², Jinhyeong Lee¹, and Taesung Kim^{1,2}</p> <p>¹School of Mechanical Engineering, Sungkyunkwan University, ²SKKU Advanced Institute of Nanotechnology, Sungkyunkwan University</p>
TP1-018	<p>Multi-stack Ferroelectric Capacitor based on Fluorite Structure Materials for Neuromorphic Computing</p> <p>Hyo-Bae Kim and Ji-Hoon Ahn</p> <p>Department of Materials Science and Chemical Engineering, Hanyang University</p>
TP1-019	<p>Multilevel Block Copolymers and Polymer Colloids Composites for Sensitive Gas Sensor</p> <p>Dong Won You, Geon Gug Yang, and Sang Ouk Kim</p> <p>Department of Material Science & Engineering, KAIST</p>
TP1-020	<p>Tungsten Diselenide (WSe₂) Ambipolar Transistor with Al₂O₃ Passivation Supported by Ultrathin Al layer for High-stability Logic Device</p> <p>Joo-On OH and Sunkook Kim</p> <p>School of Advanced Materials Science & Engineering, Sungkyunkwan University</p>

TP1-021	<p>Composition-controllable Growth of GeTe Thin Films by Hollow Cathode Plasma-assisted Atomic Layer Deposition</p> <p>Min Gyoo Cho, Ju Hwan Park, Si Eun Jung, and Byung Joon Choi Department of Material Science and Engineering, Seoul National University of Science and Technology</p>
TP1-022	<p>High-performance of Hydrogenated Spinel Phase InZnSnO Thin-Film Transistors</p> <p>Gwang-Bok Kim and Jae Kyeong Jeong Department of Electronic Engineering, Hanyang University</p>
TP1-023	<p>Hydrogen Behavior in Oxide TFTs with Gate Insulator Variation by High-pressure Hydrogen Annealing</p> <p>Jin Won Bak and Jae Kyeong Jeong Department of Electronic Engineering, Hanyang University</p>
TP1-024	<p>Hydrogen Doped a-IGZTO TFTs with Excellent Reliability and High Field-effect Mobility</p> <p>Sang Won Chung and Jae Kyeong Jeong Department of Electronic Engineering, Hanyang University</p>
TP1-025	<p>Effect of Ti Interlayer on Ferroelectric HZO Thin Film</p> <p>Jaeyoung Joo, Ju-young Jeong, Yoogeun Han, and Hyunchul Sohn Department of Materials Science and Engineering, Yonsei University</p>
TP1-026	<p>Optimization of Al-doped HfO₂/ZrO₂ Layered Structure for Improving Electrical Characteristics</p> <p>Yeon-Ji Jeon, Seung Won Lee, and Ji-Hoon Ahn Department of Materials Science and Chemical Engineering, Hanyang University</p>
TP1-027	<p>Investigation of IWO TFT for Enhanced Electrical Performance and Long-term Stability Compared to IGZO TFT</p> <p>Hyun-Sik Choi, Ki-Ju Park, and Won-Ju Cho Department of Electronic Materials Engineering, Kwangwoon University</p>
TP1-028	<p>Inherent Area-selective Atomic Layer Deposition of SiO₂</p> <p>Quang Khanh Nguyen, Juyeong Lee, and Myung Mo Sung Department of Chemistry, Hanyang University</p>
TP1-029	<p>Inducing the Tetragonal-phase HfO₂ in ZrO₂/HfO₂ Stack by Introducing the Controlled Interfacial Layer</p> <p>Woo Young Park^{1,2}, In kyu Lee^{1,2}, Young Uk Ryu^{1,2}, and Woojin Jeon^{1,2} ¹Department of Advanced Materials Engineering for Information and Electronics, Kyung Hee University, ²Integrated Education Program for Frontier Science & Technology (BK21 Four), Kyung Hee University</p>
TP1-030	<p>Hybrid Reactant of HfO₂ Atomic Layer Deposition Process for Metal-insulator-metal Capacitor Applications</p> <p>In Gyu Lee^{1,2}, Woo Young Park^{1,2}, Young Uk Ryu^{1,2}, and Woojin Jeon^{1,2} ¹Department of Advanced Materials Engineering for Information and Electronics, Kyung Hee University, ²Integrated Education Program for Frontier Science & Technology (BK21 Four), Kyung Hee University</p>
TP1-032	<p>Effects of Electrode Configuration on the Electrical Properties of PEALD HZO Ferroelectric Capacitors</p> <p>Ha Jeong Kim, Won Ji Park, and Hee Chul Lee Department of Advanced Materials Engineering, Tech University of Korea</p>
TP1-033	<p>Characterization of HZO Films Prepared by Co-Plasma Atomic Layer Deposition for Ferroelectric Memory Application</p> <p>Won Ji Park, Jae Hoon Yu, and Hee Chul Lee Department of Advanced Materials Engineering, Tech University of Korea</p>

TP1-034	<p>Study of Reactant Gas Characteristics of Silicon Nitride Thin Film Deposited Using 27.12 MHz Frequency</p> <p>B.J. Lee^{1,2}, H.C. Cho^{1,2}, M.H. Cheon^{1,2}, H.S. Ru^{1,2}, H.C. Moon^{1,2}, R. Woo^{1,2}, D.W. Seo^{1,2}, and J.W. Choi^{1,2}</p> <p>¹Vacuum Equipment R&D Division, Hanwha Corporation, ²Semiconductor Research Center, Hanwha Corporation</p>
TP1-035	<p>Failure Analysis of Ovonic Threshold Switch from a Thermal Perspective</p> <p>Ju Hwan Park¹, Myeong Jun Jung¹, Hyun Wook Kim¹, Su Yeon Lee², Jae Hyuck Jang³, Gun Hwan Kim⁴, Min Kyu Yang², and Byung Joon Choi¹</p> <p>¹Department of Materials Science and Engineering, Seoul National University of Science and Technology, ²Division of AI Convergence Engineering, Sahmyook University, ³Electron Microscopy and Spectroscopy Team, KBSI, ⁴Department of Materials Science and Engineering, Yonsei University</p>
TP1-036	<p>Superior Infrared Reflectance and Sheet Resistance of ITO/Ag/ITO/Ag/ITO(IAlAl) Structure as Electrode of Transparent Photovoltaics</p> <p>Chanhyuk Choi, JungHyun Lee, and Joondong Kim</p> <p>Department of Electrical Engineering, Incheon National University</p>
TP1-037	<p>Functional Design of Optically Transparent Windows by Using Macleod Simulation</p> <p>JungHyun Lee, ChanHyuk Choi, and Joondong Kim</p> <p>Incheon National University</p>
TP1-038	<p>Implementation of Integrate-and-Fire (IF) Characteristics Using Oxide-based 1T-Neuron</p> <p>Jaehee Lee^{1,2}, Jieun Kim^{1,2}, and Jung Wook Lim^{1,2}</p> <p>¹ETRI, ²UST</p>
TP1-039	<p>Development of Visible-NIR Responsive Nanoporous Morphology on Large-scale IGZO and Realization of High-performance Image Sensor</p> <p>Jaeseong Kim, Anamika Sen, Chaeyoung Im, and Sunkook Kim</p> <p>Department of Advanced Materials Science Engineering, Sungkyunkwan University</p>
TP1-040	<p>TiO₂ Interlayer를 이용한 Al/ZnO 접촉저항 개선</p> <p>윤성빈^{1,2}, 김기영^{1,2}, 이해원^{1,2}, 김민재^{1,2}, 황현준^{1,2}, 이병훈^{1,2}</p> <p>¹CSTC, POSTECH, ²Department of Electrical Engineering, POSTECH</p>
TP1-041	<p>Enhanced Performance and Stability of 2D Sn Halide Perovskite Transistor by Incorporating Alkylammonium Halide Additives</p> <p>Hakjun Kim, Bum Ho Jeong, Jongmin Lee, and Hui Joon Park</p> <p>Department of Organic and Nano Engineering, Hanyang University</p>
TP1-042	<p>극박막 상복합 ZnO 영미분전도소자의 1/f 노이즈 특성 연구</p> <p>이해원^{1,2}, 김승모^{1,2}, 이용수^{1,2}, 김민재^{1,2}, 전재현^{1,2}, 황현준^{1,2}, 이병훈^{1,2}</p> <p>¹CSTC, POSTECH, ²Department of Electrical Engineering, POSTECH</p>
TP1-043	<p>Performance Improvement of Indium Oxide TFTs with Tungsten Doping</p> <p>Juwon Kim¹, Hyun-Sik Choi², Won-Ju Cho², and Hamin Park¹</p> <p>¹Department of Electronic Engineering, Kwangwoon University, ²Department of Electronic Materials Engineering, Kwangwoon University</p>
TP1-044	<p>플라즈마 처리를 이용한 Tellurium FET 의 히스테리시스 개선</p> <p>김규현^{1,2}, 김민재^{1,2}, 이용수^{1,2}, 김승모^{1,2}, 이해원^{1,2}, 황현준^{1,2}, 이병훈^{1,2}</p> <p>¹CSTC, POSTECH, ²Department of Electrical Engineering, POSTECH</p>
TP1-045	<p>수직 적층 공정을 이용한 ZnO/Te 상보형 전계 효과 트랜지스터</p> <p>김기영^{1,2}, 김민재^{1,2}, 이용수^{1,2}, 이해원^{1,2}, 전재현^{1,2}, 윤성빈^{1,2}, 황현준^{1,2}, 이병훈^{1,2}</p> <p>¹CSTC, POSTECH, ²Department of Electrical Engineering, POSTECH</p>

TP1-046	<p>Stable Ferroelectric Properties of Sub-5 nm Hafnium-Zirconium-Oxide Thin Films Deposited via Atomic Layer Deposition</p> <p>Gunho Kim¹, Hyo-Bae Kim¹, Wonwoo Kho², Yoomi Kang², Seung-Eon Ahn³, and Ji-Hoon Ahn¹</p> <p>¹Department of Materials Science and Chemical Engineering, Hanyang University, ²Department of IT · Semiconductor Convergence Engineering, Tech University of Korea, ³Department of Nano & Semiconductor Engineering, Tech University of Korea</p>
TP1-047	<p>Fabrication of TiO₂ Dispersion Strengthened Nb-based Alloy by Atomic Layer Deposition</p> <p>Ji Young Park, Ji Hyeon Jeon, Sumin Eun, Eui Seon Lee, Eunho Ma, Min Seob Jeong, Byoungchul Hwang, Jongmin Byun, Sung-Tag Oh, and Byung Joon Choi</p> <p>Department of Materials Science and Engineering, Seoul National University of Science and Technology</p>
TP1-048	<p>Thermal ALD Novel Mo Precursor for Low Resistivity MoN Thin Film Formation</p> <p>Myeong-Ho Kim, Yun-Gyeong Yi, Su-min Kim, In-Jae Lee, and Jin-Sik Kim</p> <p>UP Chemical</p>
TP1-049	<p>Physical Properties of GeS_x Thin Films Deposited by RF Sputtering</p> <p>Ju Sung Kim, Wan Sun Kim, and Hyunchul Sohn</p> <p>Department of Materials Science and Engineering, Yonsei University</p>
TP1-050	<p>Threshold Switching Characteristics of (ZnTe)_x(ZnS)_{1-x} Chalcogenide Alloy Deposited by RF Sputtering</p> <p>Wansun Kim, Jusung Kim, and Hyunchul Sohn</p> <p>Department of Materials Science and Engineering, Yonsei University</p>
TP1-051	<p>Achieving Molecular Alignment in Semiconducting Polymers: A Step towards Improved Electrical Performance</p> <p>Jin Seok Yoon, Nak Hee Kang, Sam Nyung Yi, Hyung Soo Ahn, Kyung Hwa Kim, and Young Tea Chun</p> <p>Division of Electronics and Electrical Information Engineering, Korea Maritime and Ocean University</p>
TP1-052	<p>Atomic Layered Deposition of SnO₂ Thin Films Using a Novel Sn Precursor</p> <p>Jeong Eun Shin¹, Heesun Kim², Bo Keun Park², and Jeong Hwan Han¹</p> <p>¹Department of Materials Science and Engineering, Seoul National University of Science and Technology, ²Thin Film Materials Research Center, KRICT</p>
TP1-053	<p>Effect of Electrodes on (NiO)_x(La₂O₃)_{1-x} Thin Films</p> <p>Jeongwoo Lee and Hyunchul Sohn</p> <p>Department of Materials Science and Engineering, Yonsei University</p>
TP1-054	<p>40.68 & 60 MHz 주파수를 이용한 2단계 PE-ALD 공정이 적용된 Silicon Nitride 박막의 특성 비교</p> <p>Da-Eun Bae¹, Hyung Min Kim¹, Sang Ick Lee², Jae Ho Choi¹, and Jae Hak Jeong¹</p> <p>¹CN1 Co., Ltd., ²DNF Co., Ltd.</p>
TP1-055	<p>Random-Network Silicon Nanowire Channel Based High-Performance Ca²⁺ -Selective Dual-Gate Ion Sensitive Field-Effect Transistors</p> <p>Tae-Gyu Hwang, Tae-Hwan Hyun, and Won-Ju Cho</p> <p>Department of Electronic Materials Engineering, Kwangwoon University</p>
TP1-056	<p>Morphotropic Phase Boundary 구조를 갖는 Hf 유전막 특성 연구</p> <p>이찬빈, 김승모, 황현준, 이병훈</p> <p>CSTC, Department of Electrical Engineering, POSTECH</p>
TP1-057	<p>Thermal Annealing of Solution-Processed P-type NiO Transistor</p> <p>Yerim Lee¹, Tae-Gyu Hwang², Won-Ju Cho², and Hamin Park¹</p> <p>¹Department of Electronic Engineering, Kwangwoon University, ²Department of Electronic Materials Engineering, Kwangwoon University</p>

D. Thin Film Process Technology **분과**

ZONE 2 (2층 로비)

<p>TP1-058</p>	<p>Supercycle of AIO and HfO Using Atomic Layer Deposition for Nanolaminate Capacitor Hyunseok Son, Beomhee Yoon, Hyunho Lee, and Hamin Park Department of Electronic Engineering, Kwangwoon University</p>
<p>TP1-059</p>	<p>LiNbO₃ Thin Film for Photonics Devices by Sputtering Method Namhoon Kim^{1,2}, Seunghwi Koo^{1,2}, Haeri Park^{1,3}, Roju Chae^{1,3}, Heonjin Choi², and Donghee Park¹ ¹KIST, ²Department of Material Science and Engineering, Yonsei University, ³School of Electrical Engineering, Korea University</p>
<p>TP1-060</p>	<p>Study of Metal-doped Zinc Oxide-Based Electron Extraction Layer to Improved Performance of Inverted Organic Photodetectors Jaebum Jeong and Jun Young Kim Department of Semiconductor Engineering, Gyeongsang National University</p>
<p>TP1-061</p>	<p>A Study of Defect Control Through Heat Transfer in a Furnace System Daeman Seo^{1,2}, Sungman Lee¹, Sungho Jegal¹, Seungjae Baek¹, and Inho Lee² ¹Device Solution, Samsung Electronics Co., Ltd., ²Major of Electronic Engineering, Hankyong National University</p>
<p>TP1-062</p>	<p>Analysis of Growth Behavior and Electrical Property of TiO₂ Thin Film by Atomic Layer Deposition Jae Hun Hwang, Jong ho Song, and Taeyong Eom Thin Film Materials Research Center, KRICT</p>
<p>TP1-063</p>	<p>Demonstration of Atomic Layer Deposition of BeO Using Discrete Feeding Method JongHyun Bae¹, YoonSeo Jang¹, Juyung Chae¹, Christopher W. Bielawski², and Jungwoo Oh¹ ¹School of Integrated Technology, Yonsei University, ²CMCM IBS, Department of Chemistry, UNIST</p>
<p>TP1-064</p>	<p>Understanding Al₂O₃ Infiltration in PDMS via Atomic Layer Deposition Pengfei Liu¹ and In Soo Kim^{1,2} ¹KIST, ² Sungkyunkwan University</p>
<p>TP1-065</p>	<p>Accurate Regulation of Dopant Distribution in both Lateral and Vertical Directions in Sn-doped In₂O₃ Grown via Atomic Layer Deposition Tae Seok Kim^{1,2}, Han Kim^{1,2}, and Seong Keun Kim^{1,2} ¹KU-KIST Graduate School of Converging Science and Technology, Korea University, ²Electronic Materials Research Center, KIST</p>

TP1-066	<p>Growth Characteristics and Film Properties of Molybdenum Oxide Thin Films by Atomic Layer Deposition with Different Oxygen Sources</p> <p>Haram Yang¹, Hyeongjun Kim², and Woongkyu Lee¹</p> <p>¹Department of Materials Science and Engineering, Soongsil University, ²Department of Green Chemistry and Materials Engineering, Soongsil University</p>
TP1-067	<p>Novel Molybdenum N-alkoxy Carbothioamide Complexes for 2D MoS₂ Thin Films</p> <p>Sung Kwang Lee^{1,2}, Seung Uk Son², and Taek-Mo Chung^{1,3}</p> <p>¹Thin Film Materials Research Center, KRICT, ²Department of Chemistry, Sungkyunkwan University, ³Department of Chemical Convergence Materials, UST</p>
TP1-068	<p>Inhibitor Assisted Si-HfO₂ ALD Process to Improve Si Doping Uniformity</p> <p>Duck Hyeon Seo, Jae Min Kim, Ha Na Kim, Ji Yeon Han, Hyeon Sik Cho, Ju Hwan Jung, Hyun Ju Jung, Sun Young Baik, and Kyu Ho Cho</p> <p>EGTM Co. R&D Center</p>
TP1-069	<p>Characterization of Capacitors with ITO/HfAlO(HAO)/ITO Structures Deposited by RF-sputtering Operated at Low Frequency</p> <p>In-Pyo Hong, He Rui, Ma-Ro Kim, and Chung Wung Barki</p> <p>Gachon University</p>
TP1-070	<p>Improving Electrical Properties Using New Al Precursor for Doping</p> <p>Sung-Woo Ahn, Jae-Young Min, Ki-Chang Song, and Dr. Jin-Sik Kim</p> <p>UP Chemical</p>
TP1-071	<p>Characteristics of Molybdenum Dioxide Atomic Layer Deposition Process</p> <p>Hyun June Park, Min Su Cho, and Sung Woong Chung</p> <p>POSTECH</p>
TP1-072	<p>Experimental Realization Strain-induced Room Temperature Ferroelectricity in SrMnO₃ Thin Films on Si and Nb-SrTiO₃ Substrates through RF-sputtering High-Temperature Deposition</p> <p>Rui He, Maro Kim, and ChungWung Bark</p> <p>Gachon University</p>
TP1-073	<p>Delay Time Variation with Applied Voltage Pulses in Te-Based Ovonic Threshold Switching Selectors</p> <p>Sangyeop Kim^{1,2}, Young-Min Kim^{1,2}, Su-Bong Lee¹, and Jong-Souk Yeo^{1,2}</p> <p>¹School of Integrated Technology, College of Computing, Yonsei University, ²BK21 Graduate Program in Intelligent Semiconductor Technology</p>
TP1-074	<p>Growth of Scandium - doped Aluminum Nitride Thin Films by Plasma Enhanced Atomic Layer Deposition</p> <p>Seung Hoon Oh, Hyeon Roh, and Taeyong Eom</p> <p>Thin Film Materials Research Center, KRICT</p>

TP1-075	<p>Ferroelectricity of Hf_xZr_{1-x}O₂ Thin Films Deposited on Epitaxial TiN Bottom Electrodes</p> <p>Yoogeun Han, Ju-Young Jeong, Jaeyoung Joo, and Hyunchul Sohn Department of Materials Science and Engineering, Yonsei University</p>
TP1-076	<p>New Tin Sulfide Precursor for Semiconductor Materials</p> <p>Heenang Choi^{1,2} and Taek-Mo Chung^{1,3}</p> <p>¹Thin Film Materials Research Center, KRICT, ²Department of Chemistry, Sungkyunkwan University, ³Department of Chemical Convergence Materials, UST</p>
TP1-077	<p>Atomic Layer Deposition of In₂O₃ with Different Temperatures for n-Type Oxide Semiconductors</p> <p>Kyunghun Lyu¹, Jaejun Lee², and Woongkyu Lee^{1,2}</p> <p>¹Department of Materials Science and Engineering, Soongsil University, ²Department of Green Chemistry and Materials Engineering, Soongsil University</p>
TP1-078	<p>Combined Experimental and DFT Analysis of Initial Adsorption Behavior in ZrHfO₂ Thin Films on TiN Surface</p> <p>Jeong Hyeon Park, Jenam Kim, and Woojin Jeon Department of Advanced Materials Engineering for Information and Electronics, and Integrated Education Program for Frontier Science & Technology (BK21 Four), Kyung Hee University</p>
TP1-079	<p>Enhancement of Resistance Switching Behavior of Au/TiO₂/Au Memristors on PDMS Substrate with Pyramid Structure</p> <p>Jaejun Lee¹, Kyunghun Lyu², and Woongkyu Lee^{1,2}</p> <p>¹Department of Green Chemistry and Materials Engineering, Soongsil University, ²Department of Materials Science and Engineering, Soongsil University,</p>
TP1-080	<p>Effects on Electrical Properties of TiO₂-Based Capacitors by Improving Bulk and Interface Properties</p> <p>Taehyun Kim¹, Daeun Lim², Juan Hong², and Woongkyu Lee^{1,2}</p> <p>¹Department of Green Chemistry and Materials Engineering, Soongsil University, ²Department of Materials Science and Engineering, Soongsil University</p>
TP1-081	<p>Contact Resistance Improvement of a-IGZO TFT by Inserting ALD Based AZO Interlayer</p> <p>Dongseon Kim and Jae Kyeong Jeong Department of Electronic Engineering, Hanyang University</p>
TP1-082	<p>Development of High-performance Broadband Photodetectors Using Hydrogen Plasma-treated IGZO Thin Films</p> <p>Hyun 철회 ^{1,2} and SunKook Kim¹</p> <p>¹Multifunctional Nano Bio Electronics Lab, School of Advanced Materials Science and Engineering, Sungkyunkwan University, ²Swiss Federal Institute of Technology Lausanne</p>
TP1-083	<p>Growth of Highly Dense and Conformal GeSe Thin Films by Thermal Atomic Layer Deposition</p> <p>Ye Bin Weon¹, Hyunwook Kim¹, Junyoung Lim², David Ahn², and Byung Joon Choi¹</p> <p>¹Department of Materials Science and Engineering, Seoul National University of Science and Technology, ²R&D Division, SK hynix Inc.</p>
TP1-084	<p>Study on Multi-layer Stacking Effects of Oxide-Based Thin-films</p> <p>Jinyeong Lee, Sungbin Jo, and Jaewook Jeong School of Information and Communication Engineering, Chungbuk National University</p>
TP1-085	<p>Atomic Layer Deposition of Ir Thin Films with Tricarbonyl (1,2,3-η)-1,2,3-tri(tert-butyl)-cyclopropenyl Iridium (TICP) and O₃</p> <p>Han Kim^{1,2}, Hong Keun Chung^{2,3}, Tae Seok Kim^{1,2}, and Seong Keun Kim^{1,2}</p> <p>¹KU-KIST Graduate School of Converging Science and Technology, Korea University, ²Electronic Materials Research Center, KIST, ³Department of Materials Science and Chemical Engineering, Hanyang University</p>

<p>TP1-086</p>	<p>Enhancing the Electrical Properties of TiN/ZrO₂/TiN MIM Capacitor with In₂O₃ Buffer Layer by Atomic Layer Deposition</p> <p>Yoona Choi^{1,2}, Seungwoo Lee^{1,2}, Donghyun Kim³, Hansol Oh³, Yongjoo Park³, and Woojin Jeon^{1,2}</p> <p>¹Department of Advanced Materials Engineering for Information and Electronics, Kyung Hee University, ²Integrated Education Program for Frontier Science & Technology (BK21 Four), Kyung Hee University, ³Advanced Research Development Team, SK Trichem Co., Lt</p>
<p>TP1-087</p>	<p>Controlling Electrical Properties of ZrO₂-Based Metal-insulator-metal Capacitor via Gd Doping without Sacrificing Tetragonality</p> <p>Seungwoo Lee^{1,2}, Yoona Choi^{1,2}, Jonghwan Jeong^{1,2}, Jihun Nam^{1,2}, Han sol Oh³, Hanbyul Kim³, Yongjoo Park³, and Woojin jeon^{1,2}</p> <p>¹Department of Advanced Materials Engineering for Information and Electronics, Kyung Hee University, ²Integrated Education Program for Frontier Science & Technology (BK21 Four), Kyung Hee University, ³Advanced Research Development Team, SK Trichem Co., Lt</p>
<p>TP1-088</p>	<p>Thermal Atomic Layer Deposition of Aluminum Nitride Thin Film Using Tris(dimethylamido)aluminum and Ammonia</p> <p>Okhyeon Kim, Hyunmin Han, Yerim Choi, Jian Heo, Changgyu Kim, Hye-Lee Kim, and Won-Jun Lee</p> <p>Department of Nanotechnology and Advanced Materials Engineering, Sejong University</p>
<p>TP1-089</p>	<p>Thermal Atomic Layer Deposition of Gallium Nitride Films Using Tris(dimethylamido)gallium and Ammonia</p> <p>Yerim Choi, Okhyeon Kim, Jian Heo, Hye-Lee Kim, and Won-Jun Lee</p> <p>Department of Nanotechnology and Advanced Materials Engineering, Sejong University</p>
<p>TP1-090</p>	<p>Study of Electrical Properties of Vanadium Dioxide Thin Films on TiN by Reactive Sputtering</p> <p>Seunghwi Koo^{1,2}, Haeri Park^{1,3}, Namhoon Kim^{1,2}, Roju Chae^{1,3}, Heonjin Choi², and Donghee Park¹</p> <p>¹Center for Opto-Electronic Materials and Devices, Post-Silicon Semiconductor Institute, KIST, ²Materials Science and Engineering, Yonsei University, ³School of Electrical Engineering, Korea University</p>
<p>TP1-091</p>	<p>Preparation of Cubic-phase-stabilized Y-doped ZrO₂ Nanoparticles and Thin Films by Solution Methods for SOFC Application</p> <p>Taeyoon Kim¹, Yunbin Kim², and Sangmoon Park^{1,2,3}</p> <p>¹Department of Electronics-Energy Materials, Silla University, ²Division of Energy and Chemical Engineering Major in Energy and Applied Chemistry, Silla University, ³Department of Fire Protection and Safety Management, Silla University</p>
<p>TP1-092</p>	<p>Strategies for Precision Control of the Interfacial Layer in ZrO₂(or HfO₂)/TiN Structures for DRAM Capacitors</p> <p>Myoung Su Jang^{1,2}, Ji Hoon Jeon^{1,2}, Taikyu Kim², and Seong Keun Kim^{1,2}</p> <p>¹KU-KIST Graduate School of Converging Science and Technology, Korea University, ²Electronic Materials Research Center, KIST</p>
<p>TP1-093</p>	<p>Variation in Carrier Concentration and Sheet Resistance of Atomic-Layer Deposited InGaSnO Thin Films with Controlling Process Temperatures</p> <p>Jae-Hyuk Yoo¹, Shin-Ho Noh¹, Young-Ha Kwon², Nak-Jin Seong², Kyu-Jeong Choi², and Sung-Min Yoon¹</p> <p>¹Kyung Hee University, ²NCD Co., Ltd.</p>
<p>TP1-094</p>	<p>Effects of Crystal Structures of TiO_{2-x} Film on Their Thermistor Resistance</p> <p>Haeri Park^{1,2}, Jeongeun Mo^{1,3}, Won jun Choi¹, Gyutae Kim², and Donghee Park¹</p> <p>¹KIST, ²School of Electrical Engineering, Korea University, ³School of Advanced Materials Science and Engineering, Sungkyunkwan University</p>

TP1-095	<p>Dielectric Engineering for High-Performance Top Gate SnO Thin-Film Transistors toward Vertically Stacked Complementary Inverters</p> <p>MinKi Choe¹, Seung Ho Ryu^{2,3}, Taeyong Eom⁴, Taek-Mo Chung⁴, Seong Keun Kim^{2,3}, and In-Hwan Baik¹</p> <p>¹Department of Chemical Engineering, Inha University, ²KU-KIST Graduate School of Converging Science and Technology, Korea University, ³Electronic Materials Research Center, KIST, ⁴Division of Advanced Materials, KRICT</p>
TP1-096	<p>Area-selective-deposition (ASD) of Ruthenium (Ru) Thin Film Using Self-assembled Monolayer (SAM) through Surface Modification</p> <p>Ji hyeon Sim, Chae Won Kim, Hyun Jin Lim, Ki Sub Kim, Hyeong Jun Kim, Hyo Jin Ahn, and Changhwan Choi</p> <p>Division of Materials Science and Engineering, Hanyang University</p>
TP1-097	<p>Tailoring of Ferroelectric Coercive Field and Polarization of MFM Capacitors with Hf_xZr_{1-x}O₂ Bilayer Structure</p> <p>Geon Park and Rino Choi</p> <p>3D Convergence Center and Materials Science and Engineering, Inha University</p>
TP1-098	<p>Optoelectronic-synaptic Properties of ReS₂/MoS₂ Hetero-structure Synthesized by Chemical Vapor Deposition</p> <p>Dong Geun Kim, Seung Won Lee, and Ji-Hoon Ahn</p> <p>Department of Materials Science and Chemical Engineering, Hanyang University</p>
TP1-099	<p>Correlation between I-V and C-V Characteristics of InGaZnO TFTs Having AlO_x Gate Insulator</p> <p>Jaehyun Ahn, Seungkyun Ham, and Jaewook Jeong</p> <p>School of Information and Communication Engineering, Chungbuk National University</p>
TP1-100	<p>The Effect of Seed Layer Engineering on the Performance of HZO-Based Ferroelectric Field Effect Transistor (FeFET)</p> <p>JunHyeok Park¹, Chulwon Chung², Boncheol Ku¹, Seung Hyeon Yun¹, Kyungsoo Park¹, Yu Jeong Choi¹, and Changhwan Choi¹</p> <p>¹Division of Materials Science and Engineering, Hanyang University, ²Department of Energy Engineering, Hanyang University</p>
TP1-101	<p>8-inch MgO Thin Film Technology for Next-Generation Memory Applications</p> <p>Giryun Hong, Beomjoo Ham, Jongseo Park, Jehyun An, Bohyeon Kang, Sung-min Ahn, and Rock-Hyun Baik</p> <p>Department of Electrical Engineering, POSTECH</p>
TP1-102	<p>Development of ALD Based VO₂ Thin Film Formation Process Technology and Implementation of Firing Type Threshold Switching Device</p> <p>Yong Tae Kim¹, Yewon Seo², Pyeongkang Hur², Junwoo Son², and Jaeyeong Heo¹</p> <p>¹Chonnam National University, ²POSTECH</p>
TP1-103	<p>Vertical Side-Wall MoS₂ Channel Transistors : Thicknesses of 0.65nm and 6.5nm</p> <p>Ki Han Kim¹, Huimin Lee², Joonki Suh², and Byung Chul Jang¹</p> <p>¹School of Electronic and Electrical Engineering, Kyungpook National University, ²Department of Materials Science and Engineering, UNIST</p>
TP1-104	<p>Multiply and Accumulate Operation with 1 Selector 1 RRAM Device 1K Crossbar Arrays</p> <p>June Hyuk Lee, Su Yeon Lee, Hyun Kyu Seo, Se Yeon Jeong, Min Kyung Lee, and Min Kyu Yang</p> <p>Intelligent Electronic Device Lab, Sahmyook University</p>
TP1-105	<p>HfO_x-Based Synaptic Memristor for Neuromorphic Computing</p> <p>Se Yeon Jeong, Hyun Kyu Seo, Su Yeon Lee, June hyuk Lee, Min Kyung Lee, and Min Kyu Yang</p> <p>Intelligent Electronic Device Lab, Sahmyook University</p>

TP1-106	<p>High Mobility Oxide Thin Film Transistor with Amorphous In-Ga-Sn-O Fabricated by RF-magnetron Sputtering</p> <p>Hyunil Jo¹, Juhan Kim¹, Sumi Kim¹, Eunji Kim¹, Yugyu Jang¹, Myeongcheol Jo¹, Boram Shin¹, Yiryeong Choi¹, Joon-Hyung Lee¹, Byeong-Seong Jeong², and Young-Woo Heo¹</p> <p>¹School of Materials Science and Engineering, Kyungpook National University, ²Department of Hydrogen and Renewable Energy, Kyungpook National University,</p>
TP1-107	<p>Methane Gas Detection Sensors based on Carbon Nano Tube</p> <p>Da Gyo Yoo, Kyung Eun Kim, Ryang Ha Kim, and Young Lae Kim</p> <p>Department of Electronic Engineering, Gangneung-Wonju National University</p>
TP1-108	<p>Nitric Oxide Gas Detection and Analysis by Single-walled Carbon Nanotubes-Based Sensor</p> <p>Kyung Eun Kim, Ryang Ha Kim, and Young Lae Kim</p> <p>Gangneung-Wonju National University</p>
TP1-109	<p>Mechanism of Hydrogen-Induced Negative Threshold Voltage Shift in InSnZnO TFT under Positive Bias Temperature Stress</p> <p>Seong-In Cho and Sang-Hee Ko Park</p> <p>KAIST</p>
TP1-110	<p>Non-volatile Behavior in ZrO₂-Based Ferroelectric-like Memory Devices Using Asymmetric Metal Work-function Engineering</p> <p>SeungHyeon Yun¹, Chulwon Chung², Boncheol Ku¹, Junhyeok Park¹, Kyungsoo Park¹, Yu Jeong Choi¹, and Changhwan Choi¹</p> <p>¹Division of Materials Science and Engineering, Hanyang University, ²Department of Energy Engineering, Hanyang University</p>
TP1-111	<p>Improved DRAM Electrode/Dielectric Interface Properties Using Nb₂O₅ and Ta₂O₅ Ultrathin Layer</p> <p>Yong ju Kwon, Woo hyuk Kim, and Woo-Hee Kim</p> <p>Department of Materials Science and Chemical Engineering, BK21 FOUR ERICA-ACE Center, Hanyang University</p>
TP1-112	<p>Develop Behavior of Low Temperature Chemical Vapor Deposited Sn-Based Inorganic Dry Resist for Next-generation EUV Lithography</p> <p>Hye Kyung Kim and Woo-Hee Kim</p> <p>Department of Materials Science and Chemical Engineering, Hanyang University</p>
TP1-113	<p>Multilevel Switching Behavior in Physically Transient Memristor for Biodegradable Electronics</p> <p>Mohammad Tauquir Alam Shamim Shaikh^{1,2} and You Seung Rim^{1,2}</p> <p>¹Department of Semiconductor Systems Engineering, Sejong University, ²Department of Intelligent Mechatronics Engineering and Convergence Engineering for Intelligent Drone, Sejong University</p>
TP1-114	<p>Morphology Engineering in Mo-Hf_{0.5}Zr_{0.5}O₂-Mo Metal-ferroelectric-metal Capacitor with Surface Pre-treatment</p> <p>Seung Yeon Kim, Dong Hee Han, and Woojin Jeon</p> <p>Department of Advanced Materials Engineering for Information and Electronics, Integrated Education Program for Frontier Science & Technology (BK21 Four), Kyung Hee University</p>

F. Silicon and Group-IV Devices and Integration Technology 분과

ZONE 1 (1층 전시장)

TP1-115	<p>수직 적층 실리콘 나노와이어 FBFET의 메모리 특성 연구</p> <p>류승호¹, 조경아², 김상식^{1,2} ¹고려대학교 반도체시스템공학과, ²고려대학교 전기전자공학과</p>
TP1-116	<p>피드백 전계효과 트랜지스터 기반 링 오실레이터 동작 특성 연구</p> <p>손재민, 조경아, 김상식 고려대학교 전기전자공학과</p>
TP1-117	<p>나노시트 피드백 전계효과 트랜지스터의 Neural Oscillation 동작 연구</p> <p>허효주¹, 신연우¹, 류승호², 조경아¹, 김상식^{1,2} ¹고려대학교 전기전자공학과, ²고려대학교 반도체시스템공학과</p>
TP1-118	<p>Radiofrequency Switches based on Vanadium Oxide</p> <p>Dahyeon Kim¹, Jiyeon Ryu², Changwoo Pyo¹, Seung Chan Lee¹, Tae-Sik Yoon^{2,3}, and Myungsoo Kim^{1,2} ¹Department of Electrical and Computer Engineering, UNIST, ²Graduate School of Semiconductor Materials and Devices Engineering, UNIST, ³Department of Materials Science and Engineering, UNIST</p>
TP1-119	<p>Characterization Si Micro-single Crystals with Chiral Properties</p> <p>Jeongbin Heo¹, Kyoung Hwa Kim¹, Suhyun Mun¹, Seonwoo Park¹, Hyung Soo Ahn¹, Jae Hak Lee^{1,2}, Min Yang¹, Young Tea Chun¹, Sam Nyung Yi¹, Yeon-Suk Jang³, Won Jae Lee³, Myeong-Cheol Shin⁴, and Sang-Mo Koo⁴ ¹Department of Nano-Semiconductor Engineering, Korea Maritime and Ocean University, ²LNBS Co., Ltd., ³Department of Advanced Materials Engineering, Dong-Eui University, ⁴Department of Electronic Materials Engineering, Kwangwoon University</p>
TP1-120	<p>HV CMOS 공정에서 인접 소자 영향으로 인한 Parasitic Leakage 개선</p> <p>강형근, 이도현, 고대현, 황수진, 이문영, 남명희, 박정수 Department of Technology Development, SK hynix system ic</p>
TP1-121	<p>Impact of Work-function Variation in Ferroelectric Field-Effect Transistor</p> <p>Su Yeon Jung and Jang Hyun Kim Department of Intelligence Semiconductor Engineering, Ajou University</p>
TP1-122	<p>Effects of Pre-heating Zone on Dopant Activation by Continuous-wave Laser at High Scan Speed</p> <p>Dong Hyeok Choi¹, Seung Hwan Kim¹, Nak Sun Sung¹, Sung Wook Jang², and Sang Hee Yang³ ¹Laser Advanced Technology Team, AP Systems Co., Ltd., ²Laser Equipment Department, AP Systems Co., Ltd., ³Display Equipment Division, AP Systems Co., Ltd.</p>
TP1-123	<p>메쉬 타입 플로팅게이트를 이용한 시냅스 트랜지스터 제작</p> <p>정소연¹, 양정목¹, 김재민¹, 채수현¹, 구태환¹, 장문규^{1,2} ¹School of Nano Convergence Technology, Hallym University, ²Center of Nano Convergence Technology, Hallym University</p>
TP1-124	<p>금 나노 입자 양자점을 이용한 플래시 메모리 기반 시냅스 단일 소자 전기적 특성 연구</p> <p>Jae Min Kim¹, Jeong Mok Yang¹, So Yeon Jung¹, Su Hyeon Chae¹, Tae Hwan Koo¹, and Moon Gyu Jang^{1,2} ¹School of Nano Convergence Technology, Hallym University, ²Center of Nano Convergence Technology, Hallym University</p>
TP1-125	<p>Large-LRS Vertical ReRAM with Network Semiconductor CNT-Edge Electrodes for Large-scale Array Size</p> <p>Sungmin Eum¹, Haksoon Jung², Hyunho Gu¹, and Jimin Kwon¹ ¹Department of Electrical Engineering, UNIST, ²Department of Chemical Engineering, POSTECH</p>

TP1-126	<p>Achieving Both Enhancement-mode Operation and Large On-current in Bottom-gate Indium Tin Oxide Transistors</p> <p>Hyeonho Gu¹, Haksoon Jung², and Jimin Kwon¹</p> <p>¹Department of Electrical-Engineering, UNIST, ²Department of Chemical Engineering, POSTECH</p>
TP1-127	<p>The Impact of Interconnect Resistance on DC Measurement of Test Vehicle at Sub-3nm Technology Node</p> <p>Jung Su Kim and Changhwan Shin</p> <p>School of Electrical Engineering, Korea University</p>
TP1-128	<p>Quantitative Analysis on Read/Write Performance in GAAFET-Based 6T-SRAM Bit Cell</p> <p>Changwoo Han¹, Yejoo Choi², and Changhwan Shin¹</p> <p>¹School of Electrical Engineering, College of Engineering, Korea University, ²Department of Electrical and Computer Engineering, Sungkyunkwan University</p>
TP1-129	<p>밀리미터파 III-V/Si 단일 3차원 (M3D) 집적을 위한 고성능 Si 수동소자 집적기술 개발</p> <p>성민경¹, 박민식², 정재용³, 임정택⁴, 송재혁⁴, 송종현^{1,4}, 이원철^{1,4}, 심갑섭^{1,4}, 서동주¹, 임유리¹, 고희호⁴, 김철영⁴, 설우석¹, 김상현³, 이종원¹</p> <p>¹나노융합기술원, ²한밭대학교, ³한국과학기술원, ⁴충남대학교</p>
TP1-130	<p>Investigation of Oxygen-Scavenging Effect on Hf_{0.5}Zr_{0.5}O₂ Metal-Ferroelectric-Insulator-Semiconductor (MFIS) Stack with CMOS Compatible Gate Structure</p> <p>Jinhwan Jung, Seonggeun Kim, and Sangwan Kim</p> <p>Department of Electronic Engineering, Sogang University</p>
TP1-131	<p>Charge Storage Memory Utilizing Ge Quantum Dots</p> <p>Gyu Bin Lee, Gyeong Min Seo, and Byoung Don Kong</p> <p>Department of Electrical Engineering, POSTECH</p>
TP1-132	<p>Impact of RTA on the Way of Forming Filaments in Oxide RRAM Bit Cell</p> <p>Gwon Kim¹ and Changhwan Shin²</p> <p>¹Department of Electrical and Computer Engineering, Sungkyunkwan University, ²School of Electrical Engineering, Korea University</p>
TP1-133	<p>Optimization of T-CMOS Based Ternary Content-Addressable Memory Cell for High-density Application</p> <p>Jun Young Park¹, Young-Eun Choi¹, Woo-Seok Kim¹, Myoung Kim¹, Yesong Jeong¹, Sang Hun Yeo¹, Kwan Yong Lee¹, In Jun Jang¹, Min Woo Ryu^{1,2}, and Kyung Rok Kim^{1,2}</p> <p>¹Department of Electrical Engineering, UNIST, ²Ternell Corp.</p>
TP1-134	<p>Study of Spacer Material Effects on 3D NAND Flash Memory Characteristics in Retention State</p> <p>Yun-Jae Oh¹, Yunejae Suh², Inyoung Lee¹, Daewoong Kang³, and Il Hwan Cho¹</p> <p>¹Department of Electronic Engineering, Myongji University, ²Department of Electronic Engineering, Soongsil University, ³Department of Next Generation Semiconductor Convergence and Open Sharing System, Seoul National University</p>
TP1-135	<p>Analysis of Interface Trap Density in Metal-Ferroelectric-Insulator-Semiconductor (MFIS) Capacitor with High-k Dielectrics</p> <p>Chankoo Kim¹, Dong Keun Lee¹, Seonggeun Kim¹, Tae-Hyeon Kim², Sihyun Kim¹, and Sangwan Kim¹</p> <p>¹Department of Electronic Engineering, Sogang University, ²School of Electrical and Computer Engineering, Georgia Institute of Technology</p>
TP1-136	<p>모오스 구동 싸이리스터 기반 전기자동차용 전자식 프리차지 스위치 모듈</p> <p>정동윤¹, 박건식¹, 김상인², 원종일¹, 장현규¹, 이용하³</p> <p>¹한국전자통신연구원 반도체소부장기술센터, ²갑승파워시스템, ³주와이테크</p>

TP1-137	<p>Analysis on the Impact of Charge Traps in FeTFET</p> <p>Yun Seo Choi¹, Seungwon Go¹, Tae-Hyeon Kim², Sihyun Kim¹, and Sangwan Kim¹</p> <p>¹Department of Electronic Engineering, Sogang University, ²School of Electrical and Computer Engineering, Georgia Institute of Technology</p>
TP1-138	<p>A Simulation Study of Heterojunction FeFET with SiGe Body for Efficient Erase Operation</p> <p>Taegun Kim, Dong Keun Lee, Sihyun Kim, and Sangwan Kim</p> <p>Department of Electronic Engineering, Sogang University</p>
TP1-139	<p>Multi-bit Vertical Ferroelectric-Metal Field-Effect Transistor (V-FeMFET) Weight Cell for Neuromorphic Computing</p> <p>Heebum Kang¹, Seungmin Kang¹, Tae-Hyeon Kim², Sangwan Kim¹, and Sihyun Kim¹</p> <p>¹Department of Electronic Engineering, Sogang University, ²School of Electrical and Computer Engineering, Georgia Institute of Technology</p>
TP1-140	<p>The Impact of Annealing Conditions on the Switching Performance and Grain Size of Metal-Ferroelectric (Hf_{0.5}Zr_{0.5}O₂)-Metal Capacitor</p> <p>Jiyeong Yoon and Changhwan Shin</p> <p>School of Electrical Engineering, Korea University</p>
TP1-141	<p>Impact of Vertical Core Oxide on the Electrical Characteristics of Junctionless Nanosheet FET</p> <p>Hyeonjung Park¹ and Changhwan Shin²</p> <p>¹Department of Electrical and Computer Engineering, Sungkyunkwan University, ²School of Electrical Engineering, Korea University</p>
TP1-142	<p>Simulation Studies of Gate-injection Ferroelectric Flash (GI FeFlash)</p> <p>Yelim Jeon¹, Hyungju Noh¹, Tae-Hyeon Kim², Sihyun Kim¹, and Sangwan Kim¹</p> <p>¹Department of Electrical Engineering, Sogang University, ²School of Electrical and Computer Engineering, Georgia Institute of Technology</p>
TP1-143	<p>An Artificial Multimodal Neuron with Associative Learning Capabilities: Acquisition, Extinction, and Spontaneous Recovery</p> <p>Sangheon Kim^{1,2}, Unhyeon Kang^{1,3}, Young Woong Lee¹, Seungmin Oh^{1,3}, Jaewook Kim^{1,3}, Daseung Jeong¹, Jinyeong Hwang¹, and Suyoun Lee^{1,5}</p> <p>¹Center for Neuromorphic Engineering, KIST, ²Department of Materials Science and Engineering, Korea University, ³Materials Science & Engineering, Seoul National University, ⁴Department of Materials Science & Engineering, Seoul National University of Science and Technology, ⁵Division of Nano & Information Technology, Korea University of Science and Technology</p>
TP1-144	<p>T-CMOS SPICE Compact Modeling for Low Power Ternary-SRAM Design</p> <p>Young-Eun Choi¹, Woo-Seok Kim¹, Myoung Kim^{1,2}, Sang Hun Yeo¹, Kwan Yong Lee¹, Jun Young Park¹, Yesong Jeong¹, Min Woo Ryu^{1,2}, and Kyung Rok Kim^{1,2}</p> <p>¹Department of Electrical Engineering, UNIST, ²Ternell Corp.</p>
TP1-145	<p>Simulation Study on Accumulation Mode GAAFET with Low Threshold Voltage</p> <p>Eungyo Jang and Changhwan Shin</p> <p>School of Electrical Engineering, Korea University</p>
TP1-146	<p>Machine-learning Model to Predict the LER (line-edge-roughness)-induced Random Variation in GAAFET</p> <p>Myongjin Kim and Changhwan Shin</p> <p>Department of Electrical Engineering, Korea University</p>
TP1-147	<p>Analysis of Photoresponse with Asymmetry Ratio for High-performance based on Trantenna</p> <p>Min Jae Kim¹, Sang Hyo Ahn¹, Yoo Bin Song¹, Min Woo Ryu^{1,2}, and Kyung Rok Kim^{1,2}</p> <p>¹Department of Electrical Engineering, UNIST, ²Ternell Corp</p>

TP1-148	<p>Non-uniform Interface Trap Density by Halo Ion-implantation Process for Flicker Noise Estimation</p> <p>Yoo Bin Song, Sang Hyo Ahn, Min Jae Kim, Min Woo Ryu, and Kyung Rok Kim Department of Electrical Engineering, UNIST</p>
TP1-149	<p>Roadmap for Ferroelectric NAND Flash Memory</p> <p>Taebaek Lee and Chae 철회 Department of Semiconductor System Engineering, Korea University</p>
TP1-150	<p>Comparative TCAD Analysis of Single-event Transients in Forksheet FETs and Bottom Dielectric Isolation-integrated Forksheet FETs</p> <p>Gunhee Choi and Jongwook Jeon Department of Electrical and Computer Engineering, Sungkyunkwan University</p>
TP1-151	<p>Effects of Tunnel Oxide on Reliability in Charge Trap Flash Memory Devices</p> <p>Jaekyun Son¹, Jae Yeon Park¹, Tae-Hyeon Kim², Sihyun Kim¹, and Sangwan Kim¹ ¹Department of Electronic Engineering, Sogang University, ²School of Electrical and Computer Engineering, Georgia Institute of Technology</p>
TP1-152	<p>Analysis of Memory Characteristics in Charge Trap Flash Devices Depending on Tunnel Oxide</p> <p>Jinhong Lee¹, Jae Yeon Park¹, Jaekyun Son¹, Tae-Hyeon Kim², Sihyun Kim¹, and Sangwan Kim¹ ¹Department of Electronic Engineering, Sogang University, ²School of Electrical and Computer Engineering, Georgia Institute of Technology</p>
TP1-153	<p>High-Speed THz Imager for Low-Noise THz Imaging Applications</p> <p>Sang Hyo Ahn¹, Min Jae Kim¹, Yoo Bin Song¹, Myoung Kim¹, Min Woo Ryu^{1,2}, and Kyung Rok Kim^{1,2} ¹Department of Electrical Engineering, UNIST, ²Ternell Corp.</p>
TP1-154	<p>Characteristics of Molybdenum and Molybdenum Dioxide Thin Films for IGZO-Based Transistors</p> <p>Min-Su Cho, Hyun-June Park, and Sung-Woong Chung POSTECH</p>
TP1-156	<p>M3D Hybrid Inverter Using Si p-FETs and Indium-Based Oxide Semiconductor n-TFTs</p> <p>Sun Bum Kim¹, Chan Seul Lee¹, Gyu Lee Kim¹, Jae Seok Hur², Ho Young Lee³, Jae Kyeong Jeong², and Changhwan Choi¹ ¹Division of Materials Science and Engineering, Hanyang University, ²Department of Electronic Engineering, Hanyang University, ³Department of Nanoscale Semiconductor Engineering, Hanyang University</p>
TP1-157	<p>A Novel Hybrid Ferroelectric Charge Trap Layer Gate-Injection Flash</p> <p>Hyungju Noh, Yelim Jeon, Sihyun Kim, and Sangwan Kim Department of Electrical Engineering, Sogang University</p>
TP1-158	<p>A 28-nm Ternary Dual-Port SRAM Cell for Area and Power Efficient On-chip Memory</p> <p>Myoung Kim^{1,2}, Young Eun Choi¹, Woo-Seok Kim¹, Yesong Jeong¹, Jun Young Park¹, Sang Hun Yeo¹, Kwan Yong Lee¹, In Jun Jang¹, Min Woo Ryu^{1,2}, and Kyung Rok Kim^{1,2} ¹Department of Electrical Engineering, UNIST, ²Ternell Corp.</p>
TP1-159	<p>Binary-to-Ternary and Ternary-to-Binary Data Converters for Ternary Memory Interface</p> <p>Yesong Jeong¹, Myoung Kim^{1,2}, Young-Eun Choi¹, Woo-Seok Kim¹, Jun Young Park¹, Sang Hun Yeo¹, Kwan Yong Lee¹, In Jun Jang¹, Min Woo Ryu^{1,2}, and Kyung Rok Kim^{1,2} ¹Department of Electrical Engineering, UNIST, ²Ternell Corp.</p>
TP1-160	<p>Heterogeneous Inverter Using N-type IGTO TFT Prepared by Atomic-layer Deposition with Various Channel Compositions on the P-type Si FET</p> <p>Chan Seul Lee, Sun Bum Kim, Gyu Ri Kim, and Changhwan Choi Division of Materials Science and Engineering, Hanyang University</p>

TP1-161	<p>Investigation of Self-heating Effects in SOI L-shaped MOSFET with Various Position of the Al₂O₃ Heat Sink Using 3-D TCAD Simulation</p> <p>Un-hyun Im¹, Dogyun Ahn¹, Tae-young Yun¹, Jang Hyun Kim¹, and Sangwan Kim² ¹Ajou University, ²Sogang University</p>
TP1-162	<p>Implementing Excitatory and Inhibitory Properties in a Neuron Circuit Using Feedback Field Effect Transistor</p> <p>Minseon Park, Junhyeong Lee, and Min-Woo Kwon Department of Electronic Engineering, Gangneung-Wonju National University</p>
TP1-163	<p>TCAD-Based Analysis and Modeling of Process Variations in 28-nm Ternary-CMOS Technology</p> <p>Kwan Yong Lee¹, Woo-Seok Kim¹, Young-Eun Choi¹, Myoung Kim^{1,2}, Sang Hun Yeo¹, Ye song Jeong¹, Jun Young Park¹, In Jun Jang¹, Min Woo Ryu^{1,2}, and Kyung Rok Kim^{1,2} ¹Department of Electrical Engineering, UNIST, ²Ternell Corp.</p>
TP1-164	<p>A Novel Variation Tolerant Silicon-Based Source/Channel Junctionless Ternary Tunnel FET for Energy Efficient Logic and Memory Applications</p> <p>Sang Hun Yeo¹, Woo-Seok Kim¹, Young-Eun Choi¹, Myoung Kim^{1,2}, Kwan Yong Lee¹, In Jun Jang¹, Jun Young Park¹, Yesong Jeong¹, Min Woo Ryu^{1,2}, and Kyung Rok Kim^{1,2} ¹Department of Electrical Engineering, UNIST, ²Ternell Corp.</p>
TP1-165	<p>Foundry Platform Demonstration of Ternary Logic Circuits by Exploiting Halo Implantation for Ternary-Binary Hybrid System Integration</p> <p>Woo-Seok Kim¹, Young-Eun Choi¹, Myoung Kim^{1,2}, Sang Hun Yeo¹, Kwan Yong Lee¹, In Jun Jang¹, Jun Young Park¹, Yesong Jeong¹, Min Woo Ryu^{1,2}, and Kyung Rok Kim^{1,2} ¹Department of Electrical Engineering, UNIST, ²Ternell Corp.</p>
TP1-166	<p>Highly Scalable Nanosheet Based Ternary-CMOS Technology</p> <p>In jun Jang¹, Woo-Seok Kim¹, Young-Eun Choi¹, Myoung Kim¹, Sang Hun Yeo¹, Kwan Yong Lee¹, Jun Young Park¹, Yesong Jeong¹, Min Woo Ryu^{1,2}, and Kyung Rok Kim^{1,2} ¹Department of Electrical Engineering, UNIST, ²Ternell Corp.</p>
TP1-167	<p>Nanohole Patterning by Inner-Sidewall Spacer through Time-Controlled Dry Etching</p> <p>Soomin Kim¹, Gyuhoon Lee², Yeji Lee³, Sungjun Kim², and Seongjae Cho¹ ¹Department of Electronic and Electrical Engineering, Ewha Womans University, ²Department of Electronics and Electrical Engineering, Dongguk University, ³Department of Electrical and Electronic, and Control Engineering, Hankyong National University</p>
TP1-168	<p>A Single-Body Integrated Ultra-Low-Power Logic-Memory Cell</p> <p>Gyuhoon Lee¹, Soomin Kim², Yeji Lee³, Myounggon Kang⁴, Sungjun Kim¹, and Seongjae Cho² ¹Department of Electronics and Electrical Engineering, Dongguk University, ²Department of Electronic and Electrical Engineering, Ewha Womans University, ³Department of Electrical and Electronic, and Control Engineering, Hankyong National University, ⁴Department of Electronics Engineering, Korea National University of Transportation</p>

I. MEMS & Sensors Systems 분과

ZONE 1 (1층 전시장)

TP1-169	<p>A Microfabrication Technology Platform of MEMS Actuating Structure and its Pull-in Voltage Characteristics</p> <p>Ju Chan Choi, Kwan Soo Kim, Seung Han Ryu, Ji Do Kim, Kwang Woong Jeong, Tae Won Lee, Jung Hun Choi, Myung Hee Nam, and Jeong Soo Park</p> <p>SK hynix system ic</p>
TP1-170	<p>MEMS Microphone의 Wafer Level Pull-in Voltage 측정 안정화를 위한 Probe Station의 Wafer Edge Vacuum 방식 Chuck 적용 효과</p> <p>Keun Hye Choi, Ju Chan Choi, Jung Hun Choi, Myung Hee Nam, and Jeong Soo Park</p> <p>SK hynix system ic</p>
TP1-171	<p>Wafer Level Test에서 Probe Tip의 Contact 압력 및 위치에 따른 MEMS Microphone의 Pull In Voltage 특성 변화</p> <p>Se Been Jung, Ju Chan Choi, Jung Hun Choi, Myung Hee Nam, and Jeong Soo Park</p> <p>SK hynix system ic</p>
TP1-172	<p>Ultra-Sensitive Charge Based Antibiotics Detection Inside a Micro-Dielectrophoretic Device</p> <p>Young Woo Gwak, Gyeong Jun Min, Jin Seon Park, and Sang Woo Lee</p> <p>Department of Biomedical Engineering, Yonsei University</p>
TP1-173	<p>HMDSO Poisoning Prevention with CeO₂-rGO/Pd/ZnO MOS Film</p> <p>Rajesh Gudala, Seung Jun Jeon, Gab Joong Jeong, and Yun Sik Lee</p> <p>SensorWithU Co., Ltd.</p>
TP1-174	<p>Nanoporous MoS₂ FET-Based Bioelectric Sensor Capable of Highly Selective and Sensitive Detection of Ethanol by Mimicking Drosophila Olfactory System</p> <p>Junoh Shim, Anamika Sen, Heekyeong Park, Arindam Bala, Mincheol Park, and Sunkook Kim</p> <p>Department of Advanced Materials Science and Engineering, Sungkyunkwan University</p>
TP1-175	<p>Effective Detection of BSA with High-performance DG-ISFET and Surface Treated Sensing Membranes</p> <p>Dong-Gyun Mah, Yeong-Ung Kim, and Won-Ju Cho</p> <p>Department of Electronic Materials Engineering, Kwangwoon University</p>
TP1-176	<p>pH-dependent Tunable Sensitivity in Electric-Double-Layer Transistors with Extended-Gate for Neuromorphic Biosensors</p> <p>Dong Hee Lee, Hwi-Su Kim, and Won-Ju Cho</p> <p>Department of Electronic Materials Engineering, Kwangwoon University</p>
TP1-177	<p>Nano-physical Unclonable Function Created by Nanopatterns from Block Copolymer Self-assembly</p> <p>Hyeon Ju Ko, Jang Hwan Kim, and Sang Ouk Kim</p> <p>Department of Material Science & Engineering, KAIST</p>
TP1-178	<p>High-current, Large-area Organic Photovoltaics for Indoor Applications</p> <p>Jooyeong Kim¹, Hyeonjeong Choi², Selim Han², Biswas Swarup², and Hyeok Kim²</p> <p>¹Department of Intelligent Semiconductor Engineering, University of Seoul, ²School of Electrical and Computer Engineering, University of Seoul</p>
TP1-179	<p>Magnetic Hydrogel를 활용한 초소형 생분해성 로봇 구동</p> <p>이어진, 정구윤, 유정민, 박윤석</p> <p>경희대학교 정보전자신소재공학과</p>

TP1-180	Bioinspired Artificial Photonic Synapses based on β-Ga₂O₃ for Neuromorphic Computing Youngbin Yoon, Youngki Kim, Wan Sik Hwang, and Myunghun Shin Korea Aerospace University
TP1-181	환경 반응형 마이크로 액추에이터 허연희, 유정민, 박윤석 경희대학교 정보전자신소재공학과
TP1-182	인체 움직임 감지를 위한 압저항 PDMS 스펀지 김수현, 허연희, 박윤석 경희대학교 정보전자신소재공학과
TP1-183	마이크로 칩의 선택적 전사를 위한 다공성 스탬프 강가은, 박윤석 경희대학교 정보전자신소재공학과
TP1-184	Versatile Motion Feedback Systems via Epidermal Device Networks Sang Uk Park and Sang Min Won Electrical and Computer Engineering, Sungkyunkwan University
TP1-185	Magnetically Actuated TENG for Wireless Energy Transfer Junyeop Kim ¹ , Hongjoon Yoon ² , and Yoonseok Park ¹ ¹ Department of Advanced Materials Engineering for Infomation & Electronics, Kyunghee University, ² Department of Electronic Engineering, Gachon University
TP1-186	자기 구동식 생체 영감 심장판막 시스템 유정민, 정구윤, 박윤석 경희대학교 정보전자신소재공학과
TP1-187	가변적 강성 구조의 3차원 자성 기계적 메타물질 정구윤, 김준엽, 최태훈, 박윤석 경희대학교 정보전자신소재공학과
TP1-188	Piezoresistive 2-dimensional In₂Se₃ Nanosheets for Flexible Pressure Sensor Shenawar Ali Khan and Woo Young Kim Department of Electronic Engineering, Jeju National University
TP1-189	Effect of Forming Gas Annealing on Reliability of Embedded Poly-silicon Micro-heater Jinwoo Park, Gyuweon Jung, Wonjun Shin, Chayoung Lee, Donghee Kim, Kangwook Choi, Hunhee Shin, Min-Kyu Park, Joon Hwang, Jae-Joon Kim, and Jong-Ho Lee Department of Electrical and Computer Engineering and ISRC Seoul National University
TP1-190	Dry EEG Electrodes Integrated with Earphones Byeong Woon Lee and Sang Min Won Department of Electrical and Computer Engineering, Sungkyunkwan University
TP1-191	Wireless, Epidermal Platform for Diagnosing Pulmonary Disease Hee Kyu Lee and Sang Min Won Department of Electrical and Computer Engineering, Sungkyunkwan University
TP1-192	인체부착형 마찰전기 기반 움직임 감지 센서 한윤승 ¹ , 윤희준 ² , 박윤석 ¹ ¹ 경희대학교 정보전자신소재공학과, ² 가천대학교 전자공학부
TP1-193	Enhancement of Gas Sensing Performance in CuO Resistor-type Gas Sensors via Pre-Bias Voltage Kangwook Choi, Gyuweon Jung, Wonjun Shin, Jinwoo Park, Chayoung Lee, Donghee Kim, Hunhee Shin, Woo Young Choi, and Jong-Ho Lee Department of Electrical and Computer Engineering and Inter-university Semiconductor Research Center, Seoul National University

TP1-194	<p>Thermally Mediated Capacitive Assisted Wireless Body Temperature Sensor</p> <p>Doyoung Kim 첼희</p> <p>Department of Electrical and Computer Engineering, Sungkyunkwan University</p>
TP1-195	<p>Self-driven Resistive Pulse Sensing System for Point-of-care Diagnostic</p> <p>Hyunjun Kim, June Soo Kim, Jae Yong Lee, Seung Deok Kim, Noah Jang, Jiajie Wang, Da Ye Kim, Yujin Nam, Jinkyung Kim, Maeum Han, and Seong Ho Kong</p> <p>Kyungpook National University</p>
TP1-196	<p>Wearable Capacitive Type Hydration Sensor Packaged in Porous PDMS for Breathability</p> <p>Hyejun Kim, Seongu Kim, and Jeonghyun Kim</p> <p>Department of Electronics Convergence Engineering, Kwangwoon University</p>
TP1-197	<p>Development of Flexible and Transparent Bilayer Electrodes for Aptamer Biosensors Using Graphene and PEDOT:PSS</p> <p>Sookyong Kim and Dong-Wook Park</p> <p>School of Electrical and Computer Engineering, University of Seoul</p>
TP1-198	<p>IZO/ZnO Nanowire Heterostructure for Enhanced Biomolecule Sensing Performance of Heterostructure-Based TFT</p> <p>June Soo Kim, Jae Yong Lee, Seung Deok Kim, Da Ye Kim, Hyunjun Kim, Noah Jang, Jiajie Wang, Yujin Nam, Jinkyung Kim, Maeum Han, and Seong Ho Kong</p> <p>School of Electronics and Electrical Engineering, Kyungpook National University</p>
TP1-199	<p>Nanostructured Zinc Oxide Thin Film : An Innovative pH Sensing Solution</p> <p>Noah Jang, June Soo Kim, Maeum Han, Seung Deok Kim, Jae Yong Lee, Jiajie Wang, Hyunjun Kim, Da Ye Kim, Yujin Nam, Jinkyung Kim, and Seong Ho Kong</p> <p>School of Electronic and Electrical Engineering, Kyungpook National University</p>
TP1-202	<p>SPAD-Based LiDAR Sensor with Adaptive Power Saving Scheme</p> <p>Dahwan Park, Eun-chang Lee, Min-Kyu Kim, Sang-Young Lee, Yong-Seop Lee, Min-Seok Shin, and Hoesam Jeong</p> <p>SK hynix</p>
TP1-203	<p>A Smart Ring for Real-Time Blood Pressure Monitoring</p> <p>Junyeong Lee, Minjoo Lee, and Jeonghyun Kim</p> <p>Department of Electronic Convergence Engineering, Kwangwoon University</p>
TP1-204	<p>Non-Invasive Real-Time Blood Glucose Monitoring for Reducing Variations in Diabetes Care</p> <p>Seongu Kim and Jeonghyun Kim</p> <p>Department of Electronic Convergence Engineering, Kwangwoon University</p>
TP1-205	<p>Integration of Semiconductor Components Using 3D Stacking Technology and Sensory-Neuromorphic Application</p> <p>Se Gi Lee and Sang Min Won</p> <p>Sungkyunkwan University</p>
TP1-206	<p>Application of Innovative Wiring Method of In-vivo Experiments</p> <p>Janghoon Joo and Sang Min Won</p> <p>Sungkyunkwan University</p>
TP1-207	<p>Flexible Artificial Tactile System Using Morphotropic Phase Boundary of $Hf_xZr_{1-x}O_2$ Thin Film by Low-Temperature Annealing</p> <p>Seungyeob Kim, Minhyun Jung, Jinwook Ha, and Sanghun Jeon</p> <p>School of Electrical Engineering, KAIST</p>

<p>TP1-208</p>	<p>단일 벽 탄소 나노튜브를 이용한 황화수소 가스 센서의 제작과 검출 Ryang Ha Kim, Kyung Eun Kim, Beom Jun Jung, and Young Lae Kim Electronic Engineering, Gangneung-Wonju National University</p>
<p>TP1-209</p>	<p>Wireless, Battery Free Temperature Sensor based on Morphotropic Phase Boundary of $Hf_xZr_{1-x}O_2$ Thin Film Ketong Yang, Seungyeob Kim, Minhyun Jung, and Sanghun Jeon KAIST</p>
<p>TP1-210</p>	<p>In-Situ Electron Density Measurement in Inductively Coupled Plasma Using Microwave Reflectometer by Wi-Fi Antenna on Wafer Seong-Yong Lim, Gi-Won Shin, Woo-Jae Kim, Hee-Tae Kwon, Ji-Hwan Kim, In-Young Bang, Jae-Hyeon Kim, Hyeon-Jo Kim, Seong-Hee Cho, Seo-Yeon Kim, and Gi-Chung Kwon Department of Electrical and Biological Physics, Kwangwoon University</p>
<p>TP1-211</p>	<p>P-Type Copper Oxide-Based Solar-blind Ultraviolet (UV) Photodetector Capable of Low-Photocurrent Operation with Plasma-Enhanced Atomic Layer Deposition (PEALD) Minah Park¹, Jaewook Yoo¹, Hyeonjun Song¹, Soyeon Kim¹, Hongseung Lee¹, Seongbin Lim¹, Seohyeon Park¹, Peide D. Ye², and Hagyoul Bae¹ ¹Jeonbuk National University, ²Purdue University</p>

TP1-212	Two-step Classification Neuron Circuits for Highly Integrated SNN Systems Dahyeon Youn and Soo Youn Kim Department of Semiconductor Science, Dongguk University
TP1-213	An Automatic Salt-water-spray Roadway-deicing System with Surface Detection Ki-Duk Kim ¹ and Hyung-Min Lee ² ¹ C&Tech Co., Ltd., ² Korea University
TP1-214	Aggregator Hardware Design for Preventing Backdoor Attacks in Federated Learning YeJi Lee, JoonSeok Kim, KyuMin Cho, and SeokHyung Kang Department of Electrical Engineering, POSTECH
TP1-215	50G-PON 용 LDPC 부호기 FPGA 구현 최정원 ¹ , 김광옥 ² , 두경환 ² , 정환석 ² , 이영주 ¹ ¹ 포항공과대학교 전자전기공학과, ² 한국전자통신연구원 입체통신연구소 네트워크연구본부 광네트워크연구실
TP1-216	HDL Code Coverage Verification Method 엄유진, 양희훈, 김도훈, 유호영 충남대학교 전자공학과
TP1-217	GPS CRC-24Q 디코더 구현 황용택, 황지우, 유호영 충남대학교 전자공학과
TP1-218	노외중성자속 감시계통 검증을 위한 FPGA 신호생성기 개발 신건, 양희훈, 박요한, 노윤진, 유호영 충남대학교 전자공학과
TP1-219	링 오실레이터 인버터 수에 따른 PUF 성능 분석 박지호, 양희훈, 유호영 충남대학교 전자공학과
TP1-220	Verification Methodology for Rate Control Unit in VDC-M Decoder Jiyoung Lee, Huijin Roh, Sohyeon Kim, Saeyeon Kim, Hannah Yang, and Ji-Hoon Kim Department of Electronic and Electrical Engineering, Ewha Womans University
TP1-221	Multi-Stage Rate Control Architecture for VDC-M Decoder Huijin Roh, Jiyoung Lee, Sohyeon Kim, Saeyeon Kim, Hannah Yang, and Ji-Hoon Kim Department of Electronic and Electrical Engineering, Ewha Womans University
TP1-222	Design of Custom DRAM Memory Controller for ALPG Testing Seoyeon Park, Saeyeon Kim, Eunkyung Ham, Sunyoung Park, and Ji-Hoon Kim Department of Electronic and Electrical Engineering, Ewha Womans University

Q. Metrology, Inspection, Analysis, and Yield Enhancement 분과

ZONE 3 (2층 로비)

TP1-223	<p>비 균일 격자 마크를 이용한 라지 오버레이 문제 개선 방법</p> <p>Hyun Chul Lee^{1,3}, Hyun Jin Chang¹, Ho Sung Woo², and Won Gyu Lee³ ¹AUROS Technology, Inc., ²Korea National Open University, ³Korea University</p>
TP1-224	<p>Power Spectral Density Analysis for SEM Line Pattern Roughness</p> <p>Ra Seong Ki¹, Jong Hoi Cho¹, Sung Hun Lim¹, Jun Ho Lee¹, Hyun Jin Lee¹, Ran Alkoken², You Jin Kim², Jeong Ho Yeo², Jung Woo Sung³, Kyung Ju Han³, and Kyu Young Kim¹ ¹SK hynix, ²PDC Business Group, Applied Materials, Israel, ³PDC Business Group, Applied Materials, Korea</p>
TP1-225	<p>Fourier Transform Infrared Spectroscopy(FTIR) in Characterizing Borophosphosilicate Glass(BPSG)</p> <p>MinYoung Lee Semilab Korea Co., Ltd.</p>
TP1-226	<p>Development of Dual-rotating Polarizer Spectroscopic Ellipsometry</p> <p>Jongkyoon Park, Sukhyun Choi, Yong Jai Cho, Junho Choi, and Chegal Won Division of Advanced Instrumentation Institute, KRISS</p>
TP1-227	<p>CMOS Image Sensors의 암 전류를 감소시키는 Shallow Trench Isolation(STI) Sac Oxide Process Module 적용</p> <p>Cheoleon Park, Jea Young Park, Ki Young Kim, Sun Choi, and Won Ho Lee R&D Division, SK hynix system ic</p>
TP1-228	<p>Determination of Outdoor Airborne Nano-particle Impact on Defect by Development of New Data Processing Algorithm</p> <p>Jongmin Lee^{1,2}, Jungtae Park^{1,2}, Il-Jin Kim², Haeun Lee², and Sehoon Park² ¹Department of Materials Science & Engineering, Yonsei University, ²Samsung Electronics Co., Ltd.</p>
TP1-229	<p>CIS (CMOS Image Sensor) BSI 제품 ML (Micro Lens) Stripe Defect 개선 방법</p> <p>Joo Young Jeong, Ki Young Kim, Han Yi Jin, Sun Choi, and Won Ho Lee R&D Division, SK hynix system ic</p>
TP1-230	<p>Real-time 3D Surface Reconstruction of Deflectometry Using Deep Learning</p> <p>In-Kyu Park^{1,2}, Young-Sik Ghim^{1,2}, and Hyug-Gyo Rhee^{1,2} ¹KRISS, ²Department of Precision Measurement, UST</p>
TP1-231	<p>In-depth DOS Profiles in Solution-processed IZO Semiconductor Depending on the In Doping Using Photocurrent Spectroscopy</p> <p>Dongwook Kim¹, Hyeonju Lee¹, Soo-Kyoung Cha², Chanho Jeong², Youngjun Yun², and Jaehoon Park² ¹School of Information Science, Hallym University, ²School of Semiconductor-Display Technology, Hallym University</p>
TP1-232	<p>Contact Holes in Vertical Electrode Structures Analyzed by GISAXS</p> <p>Gyungtae Kim¹, Tae Gun Kim¹, Young Jun Chang², and Young Yong Kim³ ¹NNFC, ²University of Seoul, ³Pohang Accelerator Laboratory</p>
TP1-233	<p>Physically Unclonable Functions via Disordered Heteronanostructure of 2D Semiconducting Material: Enhancing Entropy and Parameter Space</p> <p>Jaeseo Park¹, Jun Oh Kim¹, Won Chegal¹, and Sang-Woo Kang^{1,2} ¹Advanced Instrumentation Institute, KRISS, ²Precision Measurement, UST</p>
TP1-234	<p>Enhancement of Electrical Properties in MOCVD-Grown MoS₂-Based Field-Effect Transistors: A Comparative Study of Contact Strategies</p> <p>Junghyun Lee^{1,2}, Jaeseo Park¹, Hyeonji Kim^{1,3}, Bongjoong Kim², Sang-Woo Kang^{1,4}, and Jun Oh Kim¹ ¹KRISS, ²Hongik University, ³Kyungpook National University, ⁴UST</p>

TP1-235	<p>EUV 펠리클에 포집된 임계 크기의 입자가 마스크 이미지 전사특성에 미치는 영향에 대한 실험적 연구</p> <p>문승찬^{1,3}, 이동기^{2,3}, 홍준호^{2,3}, 안진호^{1,2,3}</p> <p>¹한양대학교 나노반도체공학과, ²한양대학교 신소재공학과, ³EUV-IUCC</p>
TP1-236	<p>Parameter Optimization for Precision Improvement in Thickness Measured with Spectroscopic Ellipsometry</p> <p>Inhee Joh, Seojin Park, Myeongrok Oh, Hwanseong Moon, Mita Park, Kyusik Kim, and Tae Dong Kang</p> <p>AUROS Technology, Inc.</p>
TP1-237	<p>Imaging Spectroscopic Ellipsometer based on One-piece Polarizing Interferometer: Characterization of the 2D Van Der Waals Materials</p> <p>Suk Hyun Choi^{1,2}, Guk Hyeon Hwang¹, Saeid Kheiryzadehkhaghah¹, Yong Jai Cho², Junho Choi², Jongkyoon Park², Won Chegal², and Dae Suk Kim¹</p> <p>¹Jeonbuk National University, ²KRISS</p>
TP1-238	<p>Optical Simulation of Measurement Sensitivity on Critical Dimension of Cu Micro-bumps for Semiconductor Packaging Process</p> <p>Shinyoung Ryu¹, Jiwon Lee¹, Minhyeok Lee¹, Kwangwoo Kim², Jongjeong Kim², and Tae Dong Kang¹</p> <p>¹AUROS Technology, Inc., ²Haedosa, Inc.</p>
TP1-239	<p>Development of High Precision Micro-ellipsometer Enhanced by Pixelated Polarizing Camera</p> <p>Dong-Geun Yang^{1,2}, Young-Sik Ghim^{1,2}, and Hyug-Gyo Rhee^{1,2}</p> <p>¹Optical Imaging and Metrology Team, KRISS, ²Department of Measurement Engineering, UST</p>
TP1-240	<p>반사형 대물렌즈를 이용한 분광 타원계측기 편광상태 변화 보정</p> <p>서선일, 주기남</p> <p>조선대학교</p>
TP1-241	<p>고분해능 3차원 패턴 조사 현미경</p> <p>조민서, 박종규, 주기남</p> <p>조선대학교</p>
TP1-242	<p>In-situ Liquid Cell TEM Study for Water Splitting Using Mesoporous Graphitic Carbon Nitride Hetero-structures</p> <p>V. Navakoteswara Rao, Jung Ho Yoo, and Jun-Mo Yang</p> <p>Nano-convergence Technology Division, NNFC, KAIST</p>
TP1-243	<p>Reverse Engineering Case Study Using Atomic Layer Ion Beam Delayer</p> <p>Jon Won Koh, Myung Keun Lee, Seung Joon Cha, and Yun Chang Park</p> <p>NNFC</p>
TP1-244	<p>터보분자펌프 성능 평가 지표의 신뢰성 향상을 위한 계측기 보정 및 분산 데이터의 통계학적 프로세싱 방법에 관한 연구</p> <p>민병현^{1,3}, 임성규², 문지훈¹, 강상우^{1,3}</p> <p>¹한국표준과학연구원 첨단측정장비연구소, ²나노융합기술연구원 나노공정기술부, ³과학기술연합대학원대학교 정밀측정전공</p>
TP1-245	<p>벽면 오염에 따른 식각 드리프트 제어 운전 알고리즘 개발</p> <p>이인규, 유상원, 권지원, 박지훈, 김근호</p> <p>서울대학교 공과대학 에너지시스템공학부</p>
TP1-246	<p>TLB Coalescing Using Page Table Compression</p> <p>Tran Dai Duong and Jae Young Hur</p> <p>Department of Electronic Engineering, Jeju National University</p>
TP1-247	<p>점진적 패리티로 대용량 NAND Flash Memory의 Open Block 문제 완화</p> <p>Min-Jin Oh¹ and Jaeho Kim^{1,2}</p> <p>¹School of Aerospace and Software Engineering, Gyeongsang National University, ²Department of AI Convergence Engineering, Gyeongsang National University</p>

<p>TP1-248</p>	<p>Deep Learning Computation Acceleration through Automatic Tuning of Execution Code Yongin Kwon^{1,2} ¹ETRI, ²UST</p>
<p>TP1-249</p>	<p>ZNS SSD의 자원 경쟁 분석 Gyupin Moon and Donghyun Kang Gachon University</p>
<p>TP1-250</p>	<p>Improved Mobile Application Performance through Database Redesign Jung Kyu Park¹, and Eun Young Park² ¹Changshin University, ²Shinhan University</p>
<p>TP1-251</p>	<p>PoP-Cache: Hit Ratio 예측과 사전 퇴출에 의한 캐시 교체 정책의 성능 향상 Hyemi Jeong¹, Kyeongmin Kim¹, and Jeaho Kim^{1,2} ¹School of Aerospace and Software Engineering, Gyeongsang National University, ²Department of AI Convergence Engineering, Gyeongsang National University</p>

S. Chip Design Contest 분과

ZONE 1 (1층 전시장)

TP1-252	<p>An Arbitrary-Waveform-Capable Neural Stimulator in Standard CMOS</p> <p>Jeongyoon Wie and Junhyup Lee Electrical Engineering and Computer Science, DGIST</p>
TP1-253	<p>A Pulse Counting Digital FOCV-Based 41ms Fast Startup Compact Boost Converter for TEG in 28 nm CMOS</p> <p>Seong-Yeon Moon, R. M. I. U. Rajapaksha, and Jong-Wook Lee Department of Electronics and Information Convergence Engineering, Kyung Hee University</p>
TP1-254	<p>Object Tracking Lensless Light Field Image Sensor through a Parallel Bank of Pulse Computational Blocks and Post DNN Using Robot Arm-Based Data Collection</p> <p>Sang Hoon Hong, Eon Gyeong Lee, and Han Joon Kim Kyung Hee University</p>
TP1-255	<p>Wide Bandwidth Continuous-time Noise Shaping SAR ADC</p> <p>Sein Oh, Gichan Yun, and Minkyu Je School of Electrical Engineering, KAIST</p>
TP1-256	<p>Wide Bandwidth and High PSR Capacitorless LDO Regulator based on Flipped-voltage Follower</p> <p>Jaerim Baek, Daejeong Kim, and Hyun sun Mo Kookmin University</p>
TP1-257	<p>Design of a Phase-locked Loop with Improved Jitter Performance Using Phase-lock Detector</p> <p>Young Hun Kim, Dae Jeong Kim, and Hyun Sun Mo Kookmin University</p>
TP1-258	<p>A 1.4-8 Gb/s Low Power Quarter-rate Single-loop Reference-less Clock and Data Recovery Circuit with Unlimited Capture Range</p> <p>Jin-Ho Kim, Yujin Na, and Jin-Ku Kang Department of Electrical and Computer Engineering, Inha University</p>
TP1-259	<p>부채널 신호 분석을 위한 하드웨어 백도어 IC 칩 설계</p> <p>Sun Bhin Kim, Jun Hui Nam, and Dong Kyue Kim Department of Electronics Engineering, Hanyang University</p>
TP1-260	<p>Power Management IC for Supercapacitor Applications</p> <p>Donghyun Kim, Jaehyeong Lee, Jinwoo Oh, Seungyeon Lee, Jeonghee Jeon, and Joongho Choi University of Seoul</p>
TP1-261	<p>Portable Functional Brain Imaging Chip for Frequency-Domain NIRS Method</p> <p>Bumjun Koh, Kyeongha Kwon, and Hyeon-Min Bae KAIST</p>
TP1-262	<p>A Mobile 3D-CNN Processor with Dual-Grained Sparsity-Aware Computation Utilizing Inter-Frame Variation</p> <p>Seungbin Kim, Hoichang Jeong, Wuyoung Jang, Keonhee Park, Bokyoung Seo, Jueun Jung, and Kyuho Lee UNIST</p>
TP1-263	<p>A 8GHz Delay Locked Loop with 16 Multi-phases in 65nm CMOS for BOST Skew Compensation</p> <p>Jinsoo Bae, Jongchan An, Gwangmyeong An, Hyunsu Jang, Taeho Kim, Myeongju Park, Yoonsang Lee, Songi Cheon, Hyanghee Park, Yunseo Song, and Junyoung Song Department of Electronics Engineering, Incheon National University</p>

TP1-265	<p>Dual-band CMOS Down-conversion Mixer for 5G NR FR2 Applications</p> <p>Eunsoo Kim, Segyeong Kim, Gyuwon Kim, and Junghwan Han Chungnam National University</p>
TP1-266	<p>A Temperature Insensitive 4GS/s 7-bit Time-domain ADC Using Replica Feedback Loop</p> <p>Gyuchan Cho and Jintae Kim Konkuk University</p>
TP1-267	<p>Binary Neural Networks Using Nanoelectromechanical Memory Switches</p> <p>Geun Tae Park^{1,2} and Woo Young Choi^{1,2} ¹Department of Electrical and Computer Engineering, Seoul National University, ²ISRC, Seoul National University</p>
TP1-268	<p>Switching Voltage Analysis of Nanoelectromechanical Memory Switches</p> <p>Jin Wook Lee^{1,2} and Woo Young Choi^{1,2} ¹Department of Electrical and Computer Engineering, Seoul National University, ²ISRC, Seoul National University</p>
TP1-269	<p>Energy-efficient Computing-in-memory Based System-on-chip Controlled by RISC-V Processor</p> <p>Jihoon Park¹, Hyunmyung Oh², Jehun Lee¹, Jaeyong Jang¹, Sanghyeok Han¹, and Jae-Joon Kim¹ ¹Seoul National University, ²POSTECH</p>
TP1-270	<p>Upper-mid Band 6G향 커플러 기반 차동 신호 보상 기법이 적용된 전압제어 발진기 소형화 연구</p> <p>윤태영^{1,2}, 오정석^{1,2} ¹서울대학교 전기정보공학부, ²서울대학교 뉴미디어통신공동연구소</p>
TP1-271	<p>Seamless Noise Buck-boost Converter with Continuous Input/Output Current</p> <p>Seokhee Han, Jaewon Ryu, and Chulwoo Kim Department of Electrical Engineering, Korea University</p>
TP1-272	<p>Efficient CNN Accelerator: Enabling Inference and Training</p> <p>Geonhui Jang, SangBo Park, GiTae Park, Thaising Taing, Bogeun Jung, and Hyungwon Kim Chungbuk National University</p>
TP1-273	<p>A 4-GS/s 6-bit PVT-Variation Tolerant Time-Domain ADC with Delay Locked Loop</p> <p>Doona Song, Gyuchan Cho, and Jintae Kim Konkuk University</p>
TP1-274	<p>Triple-stacked Distributed Amplifiers Using CMOS 28 nm Process</p> <p>Hosung Kang, Cheonsang Song, and Jihoon Kim Kyonggi University</p>
TP1-275	<p>Area Efficient DAC with Switched Capacitor Amplifier Scheme for AMOLED Source Driver IC</p> <p>Min-Woo Kim, Sang-Min Lee, Yu-Guan Kim, Won-Jo Lee, Yun-Su Kim, and Byung-do Yang Department of Electronics Engineering, Chungbuk National University</p>
TP1-276	<p>A D-band Low Noise Amplifier based on 28-nm CMOS Technology</p> <p>Wooyong Keum, Jaeman Lee, Giyeong Nam, Jaewon Jang, Minsuk Choi, and Jae-Sung Rieh School of Electrical Engineering, Korea University</p>

TP1-277	<p>180nm 공정을 사용한 최대 1.6A의 전류를 구동할 수 있는 다상 통합 전압 레귤레이터 설계</p> <p>김기원, 김경민, 정현준, 김소영 성균관대학교 정보통신대학</p>
TP1-278	<p>A Single-TL, Simultaneous, Bi-directional, Skew-compensated and Multi-access Transceiver Link System</p> <p>Seong-Min Ko, Jun-Hyeok Park, and Dong-Woo Jee Ajou University</p>
TP1-279	<p>시스템 EMI 노이즈 분석을 위한 On-chip Embedded 오실로스코프의 설계</p> <p>Kyung Hoon Lee and Jin Gook Kim UNIST</p>
TP1-280	<p>LR-SoC: A Lightweight RISC-V SoC</p> <p>Min Young Lee¹, Soo Min Rho¹, Chan Hoon Kim¹, Dae Eun Wi¹, Sang Soo Park², and Ki-Seok Chung¹ ¹Hanyang University, ²Device Solutions, Samsung Electronics Co., Ltd.</p>
TP1-281	<p>다중 분할 병렬 결합 변압기를 사용한 5G 고효율 전력증폭기 설계</p> <p>김근태, 오규택, 유상진, 이옥구 부산대학교 전기전자공학과</p>
TP1-282	<p>Highly Sensitive Plasmonic Terahertz Detector with Integrated Sub-wavelength Aperture based on Trantenna</p> <p>Min Jae Kim¹, Sang Hyo Ahn¹, Yoo Bin Song¹, Min Woo Ryu^{1,2}, and Kyung Rok Kim^{1,2} ¹Department of Electrical Engineering, UNIST, ²Ternell Corp.</p>
TP1-283	<p>저전력 37uW 10-bit 모노톤닉 축차비교형 아날로그-디지털 변환기</p> <p>신술몬¹, 최예광¹, 권미정¹, 박유현¹, 이원제², 장성민², 김영식¹ ¹한동대학교 전산전자공학부, ²한동대학교 전산전자공학과</p>
TP1-284	<p>A 28-Gb/s ISI-Resistant Digital CDR with Extended Pattern Utilization</p> <p>Suil Kang and Kwansoo Park Yonsei University</p>
TP1-285	<p>A 57-66 GHz Up-converter in 65-nm CMOS for WiGig Applications</p> <p>Geon Woo Park, Jin Man Myung, Ho Kim, Seungjik Lee, and Ilku Nam Pusan National University</p>
TP1-286	<p>Two-stage Operational Transconductance Amplifier with Controllable Reference Voltage</p> <p>Jiwon Lee and Byoung-ho Kim Hanyang University</p>
TP1-287	<p>저전력 센서 어플리케이션을 위한 Glitch-free 포스트 디바이더를 포함한 광대역 주파수 생성기</p> <p>정상돈, 전정훈 Department of Semiconductor and Display Engineering, Sungkyunkwan University</p>
TP1-288	<p>A 230-GHz ×12 Frequency Multiplier Chain in 250-nm InP HBT Technology</p> <p>Giyeong Nam, Wooyong Keum, Jaeman Lee, Jaewon Jang, Minseok Choi, Myeongjae Kim, and Jae Sung Rieh School of Electrical Engineering, Korea University</p>
TP1-289	<p>Electromagnetic Analysis Countermeasure Circuit for AES Crypto Module</p> <p>Dongmin Lee and Byong-Deok Choi Department of Electronic Engineering, Hanyang University</p>

TP1-290	<p>교차 쌍대의 증폭 구조를 활용한 소형화된 Upper-mid 대역 이득 가변 가능한 능동형 양방향 위상천이기 박의찬^{1,2}, 오정석^{1,2} ¹서울대학교 전기정보공학부, ²서울대학교 뉴미디어통신공동연구소</p>
TP1-291	<p>실시간 저면적 BDS B1C 수신기 구현 황용택, 황지우, 이유석, 유호영 충남대학교 전자공학과</p>
TP1-292	<p>A Low Power and Compact 12bit 17MS/s SAR-ADC with Dual-Split Capacitor DAC Taell Hwang, Malik Summair Asghar, and HyungWon Kim Department of Electronic Engineering, Chungbuk National University</p>
TP1-293	<p>A Low-Power, Low-Noise 3rd-Order Delta-Sigma ADC Using an Inverter-Based Pseudo-Pseudo Differential Integrator Dong-Jick Kim and Jae Hoon Shim Kyungpook National University</p>
TP1-294	<p>A Bandwidth and Resolution Reconfigurable Noise-Shaping SAR ADC for PIM Applications Dongwook Kim, Donggu choi, Junghyup Lee, and Jong-hyeok Yoon DGIST</p>
TP1-295	<p>Charge Sharing Based Computation-In-Memory for Energy Efficient Machine Learning Algorithm Jaehyeon Woo¹, Dongho Kim¹, Seokhun Kim¹, Hongwon Kim¹, Taesung Kim¹, Sangheon Lee¹, Junseo Lee¹, Jihwan Park¹, Inseong Jeon¹, Ijun Jang¹, Jisu Kang¹, Jaeseung Baik¹, and Hanwool Jeong^{1,2} ¹Kwangwoon University, ²Articron Inc.</p>
TP1-296	<p>Efficient Pillar-Based 3D Object Detection Accelerator Minjae Lee, Dowon Kim, and Jungwook Choi Hanyang University</p>
TP1-297	<p>A 7-Bit 32x Time-Interleaved SAR ADC with 2-Then-1-Bit/Cycle Conversion Kyungmin Lee, Jonghyun Kim, and Hyungil Chae Konkuk University</p>
TP1-298	<p>Low-voltage Charge Pump based on Internal Gate-bias Boosting for Energy Harvesting Systems So-Bin Lee and Ickjin Kwon Department of Electrical and Computer Engineering, Ajou University</p>
TP1-299	<p>A Low-Power IR-UWB CMOS Transmitter for Energy Harvesting Application Dong-Won Lee and Ickjin Kwon Department of Electrical and Computer Engineering, Ajou University</p>
TP1-300	<p>A Scalable Dual-chip Neural Interface System Joonyoung Lim, Chae-Eun Lee, Chieun Choi, and Yoon-Kyu Song Graduate School of Convergence Science and Technology, Seoul National University</p>
TP1-301	<p>A Low-power 8-b 500MS/s Loop-unrolled SAR ADC with Comparator Offset Calibration Seunghyun Kim and Minjae Lee School of Electrical Engineering and Computer Science, GIST</p>
TP1-302	<p>A 500-kSPS Split-SAR ADC for Foreground Calibration Myeong Gyu Gil¹ and Byoung Ho Kim¹ Hanyang University</p>
TP1-303	<p>A Wideband LO Generator for 5G FR1 Using a Single LC-VCO-Based SSPLL and a Ring-VCO-Based Fractional-Resolution Frequency Multiplier Yongwoo Jo¹, Juyeop Kim¹, Yuhwan Shin¹, and Jaehyouk Choi² ¹KAIST, ²Seoul National University</p>

TP1-304	<p>Dedicated Processing Engines for Depth-wise Separable Convolution Hyeon Seok Hong^{1,2} and Hyun Kim^{1,2}</p> <p>¹Department of Electrical and Information Engineering, Seoul National University of Science and Technology, ²Research Center for Electrical and Information Technology, Seoul National University of Science and Technology</p>
TP1-305	<p>SRAM-Based Near-Memory Computing for Accelerators for Efficient and Accurate Floating Point Computations Myeong Eun Kwon, Je Hun Lee, and Jae-Joon Kim</p> <p>Seoul National University</p>
TP1-306	<p>웨이블릿 계수 분포를 활용한 Fast Domain Generalization Jin Shin^{1,2} and Hyun Kim^{1,2}</p> <p>¹Department of Electrical and Information Engineering, Seoul National University of Science and Technology, ²Research Center for Electrical and Information Technology, Seoul National University of Science and Technology</p>
TP1-307	<p>정확하고 효율적인 부동소수점 행렬-곱 연산을 위한 정수 기반 이상치 인지 시스템릭 배열 뉴럴 네트워크 가속기 Jehun Lee and Jae-Joon Kim</p> <p>Seoul National University</p>
TP1-308	<p>A CNN Accelerator based on 3D NAND Flash Memory with Input Reuse In-Seok Lee, Jae-Joon Kim, and Jong-Ho Lee</p> <p>Department of Electrical and Computer, Seoul National University</p>
TP1-309	<p>Analog 기반 Triplet-Based STDP 학습 알고리즘 On-chip Learning 구조 설계 Hyeon-Seong Im and Jung-Hoon Chun</p> <p>Department of Semiconductor and Display Engineering, Sungkyunkwan University</p>
TP1-310	<p>Neural Network Framework – SW Architecture and Implementation for a Hardware Accelerator for Deep Reinforcement Learning Dohyun Kim, Junghwan Choi, and Shiho Kim</p> <p>¹School of Integrated Technology, Yonsei University, ²BK21 Graduate Program in Intelligent Semiconductor, Yonsei University</p>
TP1-311	<p>플래시 메모리 기반의 SNN 인공지능칩 연구 이왕주, 이성현, 김진하, 김상훈, 박정우, 박민아, 정순규, 손민균, 서동우</p> <p>한국전자통신연구원</p>
TP1-312	<p>Optimizing Cu-CMP via Deep Learning to Predict Polyurethane Pad Durability Seunghwan Lee¹, Jaewon Lee¹, Pengzhan Liu¹, Sanghuck Jeon¹, and Taesung Kim^{1,2}</p> <p>¹School of Mechanical Engineering, Sungkyunkwan University, ²SKKU Advanced Institute of Nano Technology, Sungkyunkwan University</p>
TP1-313	<p>Highly Linear Charge Trap/Detrap of Charge Trap FET Using Regulated Pulse Jeong-In Choi and Kee-Won Kwon</p> <p>Department of Electrical and Computer Engineering, Sungkyunkwan University</p>
TP1-314	<p>Training-Aware Fixed-Point Simulation for Deep Learning Model Seung Hwan Yoon and Young Ho Seo</p> <p>Kwangwoon University</p>

TP1-315	Effects of Nonlinear Conductance Update of Synaptic Devices on On-Chip Learning in Hardware Neural Network Seung Whan Kim, Jae-Joon Kim, and Jong-Ho Lee Seoul National University
TP1-316	CNN Preprocessing Based Embedded AI Strawberry Classifier Jinyeol Kim, Jongwon Oh, Joungmin Park, and Seung Eun Lee Department of Electronic Engineering, Seoul National University of Science and Technology
TP1-317	keti.re.kr Neural Network Accelerator with Quantization for Edge Computing Ji Hun Joe, Min Geon Shin, Han Ul Ryu, and Sung Ho Lee KETI

TP1-318	<p>Granular Adhesive for Injection-on-skin Interface</p> <p>Jaepyo Jang¹, Sungjun Yoon², and Donghee Son^{1,2}</p> <p>¹Department of Electrical and Computer Engineering, Sungkyunkwan University, ²Department of Artificial Intelligence System Engineering, Sungkyunkwan University</p>
TP1-319	<p>Enhanced Sensitivity of Si BioFETs with Ag Nanowire for CHIKV Virus Detection</p> <p>Jongmin Son, Wonyoung Choi, Seonghwan Shin, Jeonghyeon Do, and Jeong-Soo Lee</p> <p>Department of Electrical Engineering, POSTECH</p>
TP1-320	<p>임피던스 바이오센싱 응용 분야를 위한 ECIS 기반의 Multi-well Array Impedance Biosensor 제작 및 연구</p> <p>Seok Gyu Kim¹, Da Hyun Kang¹, Su Gwon Nam¹, and Moon Gyu Jang^{1,2}</p> <p>¹School of Nano Convergence Technology, Hallym University, ²Center of Nano Convergence Technology, Hallym University</p>
TP1-321	<p>An Implantable UVC Sterilization Capsule Device for Biomedical Applications</p> <p>Keodan Kim, Sangho Park, and Gunchul Shin</p> <p>School of Materials Science & Engineering, University of Ulsan</p>
TP1-323	<p>Adhesive Hydrogel-integrated Soft Wearable Liquid Metal Composite Electrode by Direct Laser Patterning</p> <p>Jaehyon Kim¹ and Donghee Son^{1,2}</p> <p>¹Department of Electrical and Computer Engineering, Sungkyunkwan University, ²Department of Artificial Intelligence System Engineering, Sungkyunkwan University</p>
TP1-324	<p>Injectable and Conductive Hydrogels for Neural Interfacing and Regeneration of Biological Tissues</p> <p>Subin Jin, Heewon Choi, Donghee Son, and Mikyung Shin</p> <p>Sungkyunkwan University</p>
TP1-325	<p>Comparison of NIH/3T3 Cell Capacitance according to Impedance Pattern Size</p> <p>Da Hyun Kang¹, Seok Gyu Kim¹, Su Gwon Nam¹, and Moon Gyu Jang^{1,2}</p> <p>¹School of Nano Convergence Technology, Hallym University, ²Center of Nano Convergence Technology, Hallym University</p>
TP1-326	<p>A Highly Power-efficient LDO with Reliable Low Input Voltage Operation</p> <p>Woojin Jang and Junghyup Lee</p> <p>DGIST</p>
TP1-327	<p>Self-healing Bioelectronic Artificial Vascular Graft with Antithrombotic Capability</p> <p>Soojung An, Heewon Choi, and Donghee Son</p> <p>Department of Electrical and Computer Engineering, Sungkyunkwan University</p>

TP1-328	Quantum Monte Carlo Simulation for Predicting Radiation Therapy Dose Hyeon Seong Jung, Ui Min Lee, Pamul Yadav, Jun Yong Lee, and Shi Ho Kim School of Integrated Technology, Yonsei University
TP1-329	Efficient Node Search in Binary Tree Using Quantum Walk Pamul Yadav, Junyong Lee, Uimin Lee, Hyeonseong Jung, and Shiho Kim School of Integrated Technology, Yonsei University
TP1-330	Implementation of Five-qubit Quantum Information Processing in Silicon Device: A Preliminary Investigation Junghee Ryu and Hoon Ryu KISTI
TP1-331	Constructing Ytterbium Ion Trap System for Quantum Computing Using Cryostat Junhee Cho, Myunghun Kim, Sehyeon Gwon, Keumhyun Kim, Hyegoo Lee, Sangsoo Han, and Moonjoo Lee Department of Electrical Engineering, POSTECH

TP1-332	<p>A PVT-Compensated 14-Bit Time-to-Digital Converter for LiDAR Applications</p> <p>Yongjin Kwon, Yeseung Choi, and Shinwoong Kim Department of Electrical and Electronic Engineering, Handong Global University</p>
TP1-333	<p>Skin-adhesive Hydrocolloid Based OLED for Enhanced Light Therapeutics</p> <p>Yujin Kwak¹, Seohyeon Kim¹, Youngwoo Kim², DongWoon Lee², Yeji Shin¹, Eou-Sik Cho², Sang Jik Kwon², HyoungSoon Youn³, JinHong Jeong³, and Yongmin Jeon¹</p> <p>¹Department of Biomedical Engineering, Gachon University, ²Department of Electronic Engineering, Gachon University, ³T&L Company</p>
TP1-334	<p>Thickness-dependent Electrical Properties of SnSe₂ Field-Effect Transistors Using Reactive Ion Etching</p> <p>HanWoong Choi¹, Jin-Hoo Seong^{1,2}, Hyo-Chang Lee³, Sang-il Kim⁴, and TaeWan Kim¹</p> <p>¹Department of Electrical Engineering and Smart Grid Research Center, Jeonbuk National University, ²Advanced Instrumentation Institute, KRISS, ³Department of Semiconductor Science, Engineering and Technology, Korea Aerospace University, ⁴Department of Materials Science and Engineering, University of Seoul</p>
TP1-335	<p>Adaptability of 4D Radar in Autonomous Driving: A PointNet-Based Point Cloud Data Analysis</p> <p>In Su Lee, Min Jun Kwon, Won Jun Choi, Ki Chan Kim, and Tae Ik Kang Department of Electronic Engineering, Myongji University</p>
TP1-336	<p>Double Gate MOSFET 에서의 HKMG 의 적용과 두께 조절을 통한 성능 최적화 연구</p> <p>최훈¹, 김대술¹, 김도엽¹, 전영우², 김동현², 김진우³</p> <p>¹중앙대학교 전자전기공학부, ²중앙대학교 화학신소재공학부, ³광운대학교 전자공학과</p>
TP1-338	<p>웨이퍼 레벨 3D 적층 메모리 제조의 수율 효율성에 관한 연구</p> <p>정광휘, 권윤후, 김서영, 황찬우, 김사라은경 서울과학기술대학교 지능형반도체공학과</p>
TP1-339	<p>1200V급 β-Ga₂O₃ Schottky Barrier Diode의 Edge Termination에 대한 연구</p> <p>이태은, 송창우, 박준영, 우솔아 부경대학교 전자공학과</p>
TP1-340	<p>Gate Controlled Thyristor 1T-DRAM의 Retention Time에 대한 연구</p> <p>손지민, 우솔아 부경대학교 전자공학과</p>
TP1-341	<p>구리/옥사이드 하이브리드 본딩 전 다양한 플라즈마 영향 연구</p> <p>임동현, 김민재, 권범성, 김혜교, 안종현, 김사라은경 서울과학기술대학교 지능형반도체공학과</p>
TP1-342	<p>2D PN (Te-MoS₂) Semiconductor-Based High-performance Infrared Photodetector</p> <p>Shinhoi Kim¹ and Byungjin Cho^{1,2}</p> <p>¹Department of Advanced Material Engineering, Chungbuk National University, ²Department of Urban, Energy, and Environmental Engineering, Chungbuk National University</p>
TP1-343	<p>Modulation of Lattice Structure and Electrical Properties of Graphene and MoS₂ through Surface Plasma Treatments</p> <p>Yoona Hwang¹, Taehyeon Kim¹, Seongho Kim¹, Danbi Lee¹, Yasir Hassan¹, Minji Kang², Hyeong-U Kim², and Min Sup Choi¹</p> <p>¹Chungnam National University, ²KIMM</p>

TP1-344	<p>Comparison of Electrical Characteristics of MoS₂ Transistors with Different h-BN Stacking and Contact Methods</p> <p>Sungbin Lee, Wonseop Lee, Taehwan Lee, Minju Kim, and Min Sup Choi Department of Materials Science and Engineering, Chungnam National University</p>
TP1-345	<p>Effect of Oxidation on Doping Concentration of ZnSnN₂ Grown by Reactive RF Magnetron Sputtering</p> <p>Dohyun Kim¹, Juchan Hwang¹, and Kwangwook Park^{1,2} ¹Division of Advanced Materials Engineering, Jeonbuk National University, ²Hydrogen and Fuel Cell Research Center, Jeonbuk National University</p>
TP1-346	<p>Ferroelectric-metal Field-effect Transistor의 Metal Work Function Variation 특성에 대한 연구</p> <p>하병주¹, 김동영², 윤택한², 우솔아² ¹부경대학교 물리학과, ²부경대학교 전자공학과</p>
TP1-347	<p>Ferroelectric-metal Field-effect Transistor의 Memory Window 특성에 대한 연구</p> <p>김동영¹, 하병주², 윤택한¹, 우솔아¹ ¹부경대학교 전자공학과, ²부경대학교 물리학과</p>
TP1-348	<p>Oxidized MoS₂-Based Synapse with Robust and Low Power Operation</p> <p>Changwoo Pyo, Hyunsoo Kim, Juyeong Jung, and Myungsoo Kim UNIST</p>
TP1-349	<p>Interplay between Optoelectronic and Structural Changes during Thermal Annealing of 3D Multi-cation Metal Halide Perovskite Thin Films</p> <p>Taehyun Kong¹, Yongjin Kim¹, Heebeom Ahn¹, Hyeonmin Choi¹, Eunje Park¹, Youhyun Nam¹, Takhee Lee², and Keehoon Kang¹ ¹Department of Materials Science and Engineering, Seoul National University, ²Department of Physics and Astronomy, Seoul National University</p>
TP1-350	<p>Xe-LPP 방식에서의 EUV 광원 생성 효율의 최적화 연구를 위한 다중물리(열-기계-광학 연계) 해석</p> <p>오세형¹, 전호성¹, 오성현¹, Dong Gun Lee³, Haekweon Jung³, 이은호^{1,2} ¹Department of Mechanical Engineering, Sungkyunkwan University, ²Department of Smart Fab. Technology, Sungkyunkwan University, ³RnD Center, Esol Inc.</p>
TP1-351	<p>High Responsive InSe Based Photodetector Using RF Magnetron Sputtering</p> <p>Yedam Kim¹, Minyoung Choi¹, and Byungjin Cho^{1,2} ¹Department of Advanced Material Engineering, Chungbuk National University, ²Department of Urban, Energy, and Environmental Engineering, Chungbuk National University</p>
TP1-352	<p>Reduction of Contact Resistance in Tellurium Field-Effect Transistor Achieved by Graphene Interlayer</p> <p>Yeongeun Kwon¹ and Byungjin Cho^{1,2} ¹Department of Advanced Material Engineering, Chungbuk National University, ²Department of Urban, Energy, and Environmental Engineering, Chungbuk National University</p>
TP1-353	<p>Dielectric Properties of MIS Capacitors Utilizing the Nb₂O₅ Oxidized from 2D NbS₂</p> <p>Minhee Kim¹ and Byungjin Cho^{1,2} ¹Department of Advanced Material Engineering, Chungbuk National University, ²Department of Urban, Energy, and Environmental Engineering, Chungbuk National University</p>
TP1-354	<p>Enhancing Schottky Diodes Performance with MSM-structured Organic Semiconductors for High-performance Electronics</p> <p>Bum Hwan Kim, Ji Hyeok Hwang, Jae Eun Kim, Da Un Jeong, Jin Seok Yoon, Nak Hee Kang, Sam Nyung Yi, Hyung Soo Ahn, Kyoung Hwa Kim, and Young Tea Chun Division of Electronics and Electrical Information Engineering, Korea Maritime and Ocean University</p>

TP1-355	<p>Solution-processed MoS₂ Based Robust RRAM with Low Power Switching and High Uniformity for Large-scale Fabrication</p> <p>Seungchan Lee, Changwoo Pyo, Dahyeon Kim, Seunghyeon Seo, and Myungsoo Kim UNIST</p>
TP1-356	<p>열처리 분위기에 따른 CuI 기반 반도체 박막의 특성 연구</p> <p>정혜린, 전희설, 홍기현 Chungnam National University</p>
TP1-357	<p>InAs 나노와이어의 전기적 특성 측정과 분석</p> <p>Choi Yuri, Yeon Hak Mu, and Jae Cheol Shin Dongguk University</p>
TP1-359	<p>금-은 나노입자 혼합 잉크 및 3차원 나노프린팅 기반 복합 플라즈모닉 구조 제작 및 특성 분석</p> <p>남관문, 김현우, 허다문, 구선화, 이예원, 이종민 Hallym University</p>
TP1-360	<p>Optimum Design of InGaAs/InGaAsP/InP SAGCM APD with a Hybrid Absorption Layer Structure</p> <p>Min Ju Moon, Sung Un Baek, and Jae Chul Shin Dongguk University</p>
TP1-361	<p>Study on the Electrical Properties of Monolayer MoS₂ PN Junction</p> <p>Min Su Kim¹, Won Jun Lee², and Jae Cheol Shin¹ ¹School of Electronic and Electrical Engineering, Dongguk University, ²School of Electrical Engineering, Korea University</p>
TP1-362	<p>AI-Based SRAM Design and Performance Analysis for Cache Memory</p> <p>Junhyeok Kim¹, Eunseo Kwon¹, Jiyong Kim², Sanggil Park¹, Eunjin Choi¹, and Taigon Song³ ¹School of Electronic and Electrical Engineering, Kyungpook National University, ²Department of Chemistry, Kyungpook National University, ³School of Electronics Engineering, Kyungpook National University</p>
TP1-363	<p>Measurement of Wafer Edge Profiles Using Telecentric Illumination and Imaging Optics for Semiconductor Machine Vision</p> <p>Younghoo Kim^{1,2}, Taehyup Kim^{1,2}, Lee Jun^{1,2}, Taeil Han^{1,2}, Sang Jeon Hong^{2,3}, and Garam Kim^{1,2} ¹Department of Electronics Engineering, Myongji University, ²Semiconductor Equipment Engineering Program, Myongji University, ³Department of Semiconductor Engineering, Myongji University</p>
TP1-364	<p>Growth of Rutile TiO₂ Thin Film by Plasma-Enhanced Atomic Layer Deposition and Its Impact on Capacitance</p> <p>Su Min Eun¹, Ji Hyeon Hwang², Ha Hyeon Yoon¹, and Byung Joon Choi¹ ¹Department of Material Science and Engineering, Seoul National University of Science and Technology, ²Department of Optometry, Seoul National University of Science and Technology</p>
TP1-365	<p>3D 나노프린팅 기반 금/은 하이브리드 나노구조 제작 및 특성 분석</p> <p>은강민, 강문수, 허다문, 이예원, 구선화, 이종민 Hallym University</p>
TP1-366	<p>Optical and Electrical Characteristics of InGaAs APD with Different Types of Structures</p> <p>백성운¹, 문민주¹, 이윤재², 김홍학², 신재철¹ ¹동국대학교 전자전기공학부, ²KOPTI</p>
TP1-367	<p>Proper GTECH Cells for Balanced Ternary Logic Synthesis</p> <p>Hanmok Park, Seounghoon Kim, Hyeonjin Kim, Inhye Hur, Hyungpyo Kim, and Taigon Song School of Electronics Engineering, Kyungpook National University</p>

TP1-368	<p>A Wearable and Stretchable Gold Nanomembrane Electrode with Adhesive Hydrogel for Electrocardiogram Monitoring</p> <p>Hyelim Lee¹, and Donghee Son²</p> <p>¹School of Electronic and Electrical Engineering, Sungkyunkwan University, ²Department of Electrical and Computer Engineering, Sungkyunkwan University</p>
TP1-369	<p>Achieving Low Resistivity and Superior Thermal Stability of Sub-5 nm Atomic Layer Deposited Ru Films by Introducing Ultrathin Oxide Capping Layers</p> <p>Eun Ji Joo, Jae Hyeon Lee, and Jeong Hwan Han</p> <p>Department of Materials Science and Engineering, Seoul National University of Science and Technology</p>
TP1-370	<p>Facile Formation of Multicolored Quantum Dot Stack Films for Efficient White Light-Emitting Diodes</p> <p>Eun A Kim¹ and Seong-Yong Cho²</p> <p>¹Department of Materials Science and Engineering, Myongji University, ²Department of Photonics and Nanoelectronics, Hanyang University</p>
TP1-371	<p>An 8-bit Low Power Asynchronous SAR ADC for Sensor Node Application</p> <p>Ji-Hun Son, Min-Seok Kim, Hong-Sung Kim, and Jimin Cheon</p> <p>Kumoh National Institute of Technology</p>
TP1-372	<p>Contact Resistance in Emerging Semiconductors: A Comparative Study on GaN, In₂O₃, and ZnO Using Quantum and Semiclassical Methods</p> <p>Hyeongjun Jang, KiHoon Lee, GeonWoo Kim, Taehyun Kim, and Changwook Jeong</p> <p>UNIST</p>
TP1-373	<p>Vacancy Engineering for Improvement of GaN Power Semiconductor</p> <p>Min Ji Sun, Se Young Jang, and Sangwoo Ryu</p> <p>Department Advanced Material Engineering, Kyonggi University</p>
TP1-374	<p>A 12-bit Single Slope ADC with Dual CDS for a CMOS Image Sensor</p> <p>Ji-Min Ye, Du-San Baek, Yun-Ha Jeong, Jun-Soo Park, and Jimin Cheon</p> <p>Kumoh National Institute of Technology</p>
TP1-375	<p>패키지 별 솔더 보이드 비율에 따른 전력반도체의 접합온도 수치 해석 연구</p> <p>Yun-Jae Lee and Sung-Uk Zhang</p> <p>Digital Twin Laboratory, Dong-eui University</p>
TP1-376	<p>Tailoring Composition of N-doped In₂O₃ Grown by Atomic Layer Deposition for Optimizing the Ferromagnetic and Semiconductor Properties</p> <p>Na Yeon Lee and Jeong Hwan Han</p> <p>Department of Material Science and Engineering, Seoul National University of Science and Technology</p>
TP1-377	<p>Optimization of Red, Green, and Blue Top-emitting Tandem Quantum Dot Light-emitting Diodes on Silicon for Microdisplay Applications</p> <p>Suyun Kim¹, Sohee Kim¹, Sumin Kim¹, Soobin Sim¹, Chun-Won Byun², and Hyunkoo Lee¹</p> <p>¹Department of Electrical Engineering, Sookmyung Women's University, ²Reality Display Research Section, ETRI</p>
TP1-378	<p>Enhancing Retention Time in Capacitor-less 2T DRAM Using IGZO</p> <p>Hee Su Kim, Chang Young Lim, Yeon Seok Kim, and Min-Woo Kwon</p> <p>Department of Electric Engineering, Gangneung-Wonju National University</p>
TP1-379	<p>Theoretical Analysis on the Surface Reactions Governing Composition of Atomic Layer Deposited Multicomponent Zinc Chalcogenides</p> <p>Chi Hun Kang and Bonggeun Shong</p> <p>Hongik University</p>

TP1-380	Theoretical Analysis on the Effect of Organic Sulfur Sources for ALD of MoS₂ Myeong Kyun Nam and Bonggeun Shong Hongik University
TP1-381	셀룰로오스 기반 고분자 전하트랩층을 이용한 생분해성 단기 저장 트랜지스터 메모리의 전기적 특성 이정인, 성백상, 이종희, 김민회 Department of Creative Convergence Engineering, Hanbat National University
TP1-382	상부 금속 도입을 통한 넓은 밴드갭 반도체 기반 전하트랩 메모리의 효율적인 전기적 지우기 동작 Hayoung Kim ¹ , Amos A. Boampong ^{2,3} , Chang-Hyun Kim ⁴ , and Min-Hoi Kim ¹ ¹ Department of Creative Convergence Engineering, Hanbat National University, ² Research Institute of Printed Electronics & 3D Printing, Hanbat National University, ³ Industry University Cooperation, Hanbat National University, ⁴ School of Electronic Engineering, Gachon University
TP1-383	다양한 일함수의 전극을 활용한 전하트랩 메모리의 지우기 동작 전압 크기 감소 김우석 ¹ , 권진혁 ^{2,3} , 김민회 ^{1,2,3} ¹ Department of Creative Convergence Engineering, Hanbat National University, ² Research Institute of Printed Electronics & 3D Printing, Hanbat National University, ³ Industry University Cooperation Foundation, Hanbat National University
TP1-384	저항변화메모리를 이용한 가변 커패시터 Hui-Su Yang and Min-Hoi Kim Department of Creative Convergence Engineering, Hanbat National University
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TP1-389	Area-selective Atomic Layer Deposition of Al₂O₃ Thin Films for Metal versus Dielectric Selectivity Using Vapor-dosed Alkanethiols Jiwoo Oh, Jinseon Lee, Donghyeon Im, and Woo-Hee Kim Department of Materials Science and Chemical Engineering, Hanyang University
TP1-390	The Effect of Edge Termination on the Performance of 4H-SiC Schottky Barrier Diode: The TCAD Study Seok Hyun Byun ¹ , Hoyoung Cho ² , Sungsik Lee ¹ , and Jeongkyun Roh ² ¹ Department of Electronics Engineering, Pusan National University, ² Department of Electrical Engineering, Pusan National University
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TP1-392	Current Fluctuation in Ambipolar Tellurium Thin Film Transistors: Hole versus Electron Min Cheong, Dahyun Choi, Eunji Sim, Minji Chae, and Min-Kyu Joo Department of Applied Physics, Sookmyung Women's University

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TP1-395	<p>Enhanced Ferroelectricity of $Hf_{1-x}Zr_xO_2$ Deposited via Atomic Layer Deposition Using a Novel Precursor with Improved Thermal Stability</p> <p>Hye-Won Cho¹, Hyo-Bae Kim¹, Seung-Eon Ahn^{2,3}, and Ji-Hoon Ahn¹ ¹Department of Materials Science and Chemical Engineering, Hanyang University, ²Department of IT·Semiconductor Convergence Engineering, Tech University of Korea, ³Department of Nano & Semiconductor Engineering, Tech University of Korea</p>
TP1-396	<p>가비지 컬렉션 및 압축 기법에 의한 아파치 카프카 생성자 성능 분석</p> <p>Hyunwoo Kim and Donghyun Kang Gachon University</p>
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TP1-400	<p>Electrical Properties of P-MoS₂ by Using Transmission Line Model</p> <p>Gyeong Min Kim¹, Guen Hyung Oh², Tae Wan Kim², Tae Jin Jeong³, Sung Kim³, and Jae Cheol Shin¹ ¹Dongguk University, ²Jeonbuk National University, ³Kyunghee University</p>
TP1-401	<p>2D MoS₂ Field Effect Transistor with Asymmetric Contact</p> <p>Jinhyeok Pyo and Sangyeon Pak School of Electronic and Electrical Engineering, Hongik University</p>
TP1-402	<p>Chiplet Placement with Sequence Pair Based Tree and Branch-and-bound Method Considering Chiplet Ordering</p> <p>Gang-Min Jeon and Heechun Park Kookmin University</p>
TP1-403	<p>Cr 기반 음성 접촉 확보를 위한 열처리 공정 최적화</p> <p>박창준¹, 방수빈¹, 차정혁¹, 김도균², 김종원¹, 최성규², 손남기² 김용수¹ ¹울산대학교, ²다다코리아</p>
TP1-404	<p>Improvement of BEOL Compatible Indium-based-oxide TFT for DRAM</p> <p>Dahui Jeon, InHong Hwang, and In-Hwan Baek Department of Chemical Engineering, Inha University</p>
TP1-405	<p>Electrical and Optical Properties of 2D TMD Heterojunction Structures</p> <p>Jae Hyeop Lee¹, Dong Hwi Choi¹, Guen Hyung Oh², Tae Wan Kim², and Jae Cheol Shin¹ ¹Dongguk University, ²Jeonbuk National University</p>

TP1-406	<p>Fabrication of Atomic-layer-deposited Ru/Mo₂N Bilayer as Bottom Electrode for Next-generation DRAM Capacitor</p> <p>Seon Gu Choi², Wangu Kang¹, and Jeong Hwan Han¹</p> <p>¹Department of Materials Science and Engineering, Seoul National University of Science and Technology, ²Department of Materials Science and Engineering, Kangwon National University</p>
TP1-407	<p>3D 나노프린팅 기반 양자점 나노구조체 제작 및 특성 분석</p> <p>채형진, 김진원, 허다문, 이예원, 구선화, 이종민</p> <p>Hallym University</p>
TP1-408	<p>Solution-Phase Synthesis of 1D Cs₃Cu₂I₅ Single Crystal for Device Applications</p> <p>Hyunmi 철희 Kang</p> <p>Hanyang University</p>
TP1-409	<p>Enhanced Efficiency of GaN Light-Emitting Diodes with a Si Hole Injector</p> <p>Min Su Kim, Kyungmi Yang, Ju Mi Go, Yoolim Han, Go Eun Ham, and Kwangeun Kim</p> <p>School of Electronics and Information Engineering, Korea Aerospace University</p>
TP1-410	<p>반도체 테스트 장비의 DPS 데이터 전송 효율 개선을 위한 FPGA 기반 SPI 모듈 설계</p> <p>Jonghee Park¹, Hwarang Baek¹, Jiseok Lee¹, Junhyeong Ji¹, and Youbean Kim²</p> <p>¹Department of Electronic Engineering, Myongji University, ²Department of Semiconductor Engineering, Myongji University</p>
TP1-411	<p>Investigation of Ferroelectric Properties of ALD-(Hf,Zr)O₂ Thin Films from Cryogenic to Room Temperatures</p> <p>Yeseo Choi, Hye Ryeon Park, Seongbin Park, Jongmug Kang, Juntak Jeong, and Si Joon Kim</p> <p>Kangwon National University</p>
TP1-412	<p>Sub-1V Operation of Memristor Devices via Vacancy Controlled MoS₂</p> <p>Sohyeon Park, Seonyou Park, and Sangyeon Pak</p> <p>Hongik University</p>
TP1-413	<p>A 1.8 GHz Charge-pump PLL for DDR3 Interface of MRAM Controller</p> <p>Hyeon-Ho Kim, Seong-Yun Kim, Dong-Seob Shin, and Young-Chan Jang</p> <p>Electronic Engineering, Kumoh National Institute of Technology</p>
TP1-414	<p>낮은 온저항을 가지는 1.2 kV 급 SiC Double Trench MOSFET의 CSL 농도 최적화 설계</p> <p>김진훈, 윤효원, 김상엽, 박수민, 백두산, 이승연, 석오균</p> <p>금오공과대학교</p>
TP1-415	<p>Electrodeposition of Single Crystal Cu for Sub-μm Scale Vias of BEOL</p> <p>Jae-Wook Lee¹ and Jae Yong Song²</p> <p>¹Department of Electronic Materials Engineering, Kwangwoon University, ²Department of Semiconductor Engineering, POSTECH</p>
TP1-416	<p>Design of PAM4 Transmitter in 28-nm CMOS Technology</p> <p>Yu Jin Byeon and Min Seong Choo</p> <p>Department of Electronic Engineering, Hanyang University</p>
TP1-417	<p>Modeling of DSP-Based Receiver and Analysis Data Phase With Stochastic Method</p> <p>Jee Hyun Kwon, Tae Hyun Kim, and Min Seong Choo</p> <p>Department of Electronic Engineering, Hanyang University</p>
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TP1-419	<p>Technology of Channel Equalization at the Receiver in 28nm CMOS</p> <p>Dong-Eun Lee, Tae-Hyeon Kim, and Min-Seong Choo Department of Electronic Engineering, Hanyang University</p>
TP1-420	<p>Development of A Web-Based Simulation for Understanding MOSFETs</p> <p>Hyeri Hong, Jiyeon Oh, Seungwoo Han, Taejun Kim, Guna Park, and Kiwon Lee Department of Electronic Engineering, Wonkwang University</p>
TP1-421	<p>Logic-in-Memory Technology Mapping Framework for Memristor Crossbar with Maximized Parallelism</p> <p>Ik-Kyum Kim and Heechun Park Kookmin University</p>
TP1-422	<p>Effect of Gate Dielectric Interfacial Layer on the Performance of Organic CMOS Logic Gates</p> <p>Gyu-Young Kim, Gun-Ryeol Cho, Gab-Jin Sung, Jin-Hong Ahn, Moohyun Kim, Kyoungun Lee, Yeyun Bae, and Jeongkyun Roh Department of Electrical Engineering, Pusan National University</p>
TP1-423	<p>Floating Gate Flash와 Charge Trap Flash의 최적 Tunneling Oxide 두께 비교</p> <p>서상혁, 조성주, 채한수, 전예림, 김상완 서강대학교 전자공학과</p>
TP1-424	<p>Channel Shape and Gate Thickness Design of GAAFET for 3D-DRAM</p> <p>Myeongjae Choi, Hyeongseop Lim, and Changhwan Shin Department of Semiconductor Engineering, Korea University</p>
TP1-425	<p>A Redox-Mediator-Integrated Stretchable and Flexible Energy Storage System with Improved Energy Storage Ability</p> <p>SunWoo Lee¹, Jung Hyeon Kang¹, Suok Lee², Young-Woo Lee², and A-Rang Jang¹ ¹Division of Electrical, Electronic and Control Engineering, Kongju National University, ²Department of Energy Engineering, Soonchunhyang University</p>
TP1-426	<p>Copper Oxide Decorated Laser-induced Graphene Based Highly Sensitive and Flexible Non-enzymatic Glucose Sensor</p> <p>Gye Hyeon Lee¹, Minsoo Lee¹, Young-Woo Lee², and A-Rang Jang¹ ¹Division of Electrical, Electronic and Control Engineering, Kongju National University, ²Department of Energy Engineering, Soonchunhyang University</p>
TP1-427	<p>Study of the Soluble Organic Light Emitting Diode According to Different TFB Molecular Weight as a Hole Transport Layer</p> <p>Seok Hwan Jang and Jun Young Kim Department of Semiconductor Engineering, Gyeongsang National University</p>
TP1-428	<p>Study of the Inverted Polymer Solar Cell Using IGZO Electron Extraction Layer</p> <p>Gun Woong Kim and Jun Young Kim Department of Semiconductor Engineering, Gyeongsang National University</p>
TP1-429	<p>A 32 Gb/s 0.84 pJ/b Referenceless Baud-Rate CDR with Integrated Pattern Decoding</p> <p>Yoojin Jung, Youngwook Kim, and Kwanso Park Yonsei University</p>
TP1-430	<p>Analysis of Temperature Dependent Characteristics of Photodetector based on Feedback Field Effect Transistor</p> <p>Jeongmin Koo¹, Yonghwan Kim², Dahee Jin³, and Il Hwan Cho¹ Department of Electronic Engineering, Myongji University</p>

TP1-431	<p>Low-Cost Maskless Photolithography System based on Digital Micromirror Device</p> <p>Gyu Rin Shin, Yun Seong Choi, Jae Seong Pyo, Moohyun Kim, Kyoungun Lee, Hoyoung Cho, and Jeongkyun Roh</p> <p>Department of Electrical Engineering, Pusan National University</p>
TP1-432	<p>Fast-Response Low-Dropout Regulator with Slew-Rate Enhanced Error-Amp</p> <p>Yun-su Kim, Min-Woo Kim, Yu-Guan Kim, Won-Jo Lee, and Byung-do Yang</p> <p>Department of Electronics Engineering, Chungbuk National University</p>
TP1-433	<p>A Wearable Hydrogen Sensor Using Porous PDMS Sponge Coated with Pd Nanoparticles Decorated CNTs</p> <p>Min-Hyuk Lim, SunWoo Lee, Han Gyeol Choi, and A-Rang Jang</p> <p>Division of Electrical, Electronic and Control Engineering, Kongju National University</p>
TP1-434	<p>Multilayer MoS₂ Based Vertical Memristor with Low Power Operation Using Copper Active Electrode</p> <p>Juyeong Jung, Changwoo Pyo, Seungchan Lee, SeongJin Park, YoungJoon Lee, Dahyeon Kim, and Myungsoo Kim</p> <p>UNIST</p>
TP1-435	<p>Light-induced Modulation of the Structural and Optical Properties of Perovskite Nano-structures</p> <p>Min Jin Kim, Ga Eun Kim, and Sang Hyun Lee</p> <p>School of Chemical Engineering, Chonnam University</p>
TP1-436	<p>Revealing Impact of Parasitic Capacitance and Introducing Concealed Architecture to Boost Electrical Performance in 2-D Channel Devices</p> <p>Hak Jun Ban, Seung Won Lee, and Seul Ki Hong</p> <p>Department of Semiconductor Engineering, Seoul National University of Science and Technology</p>
TP1-437	<p>Investigation of the Characteristics of 3D NAND Flash Combining Wave Shaped and Tapered Channel Effects</p> <p>Jueun Kim, Hyunseo Oh, Hyeongjun So, and Il Hwan Cho</p> <p>Department of Electronic Engineering, Myongji University</p>
TP1-438	<p>A Study on the Equivalent Oxide Thickness of Hf_{1-x}Zr_xO₂ Thin Films for Next-generation DRAM Applications</p> <p>Hyeonhong Min, Jongmug Kang, Seongbin Park, Hye Ryeon Park, Juntak Jeong, Yeseo Choi, Seungbin Lee, and Si Joon Kim</p> <p>Kangwon National University</p>
TP1-439	<p>ZrO₂ 절연막을 이용한 IGZO FET의 특성 향상 연구</p> <p>Junyeoung Hong¹, Hyeonseo Do¹, Jaemin Jo¹, Seungmo Kim², Hyunjun Hwang², and Byeong-Hun Lee²</p> <p>¹Department of Semiconductor Engineering, POSTECH, ²Department of Electrical Engineering, POSTECH</p>
TP1-440	<p>Optimization of ALD BeO Gate Dielectrics for 3D CMOS Devices</p> <p>Semi An¹, Jong Hyun Bae², Sangoh Han², Yoonseo Jang², W. Bielawski³, and Jungwoo Oh²</p> <p>¹Integrated Science and Engineering Division, Yonsei University, ²School of Intergrated Technology, Yonsei University. ³CMCM IBS, Department of Chemistry, UNIST</p>
TP1-441	<p>Design of Wearable Transparent Rectenna System Using Roll-to-Roll Lithography for Energy Harvesting and Microwave Power Transfer</p> <p>Se Hyun Jeong¹, Hyun Woo Jeong¹, Jeong-Wook Kim², Sang-Chan Park¹, Young-Dam Kim¹, and Jae-Hyuk Ahn¹</p> <p>¹Department of Electronics Engineering, Chungnam National University, ²Electronics and Telecommunications Research Institute</p>

TP1-442	<p>고성능 광센서를 위한 CsPbBr₃/MoS₂ 이종접합 특성 연구</p> <p>Young Jun Rho, Min Jin Kim, Jun Woo Kim, Dong Yeong Kim, and Sang Hyun Lee School of Chemical Engineering, Chonnam National University</p>
TP1-443	<p>Atomic Layer Deposited Mg-doped ZnO for Quantum Dot Light-Emitting Diodes</p> <p>Min Seok Kim¹, Hyo Geun Lee², Hyeonseung Ban², Jisu Han³, Jaehoon Lim^{3,4}, and Seong-Yong Cho² ¹Department of Materials Science and Engineering, Myongji University, ²Department of Photonics and Nanoelectronics, Hanyang University, ³Department of Energy Science, Center for Artificial Atoms, Sungkyunkwan University, ⁴SKKU Institute of Energy Science and Technology (SIEST), DFEE, Sungkyunkwan University</p>
TP1-444	<p>Flexible Device with Resistive Random-access Memory Using Organic Polymer for Transient Electronics and Neuromorphic Application</p> <p>Ho Jung Jeon¹ and You Seung Rim^{1,2} ¹Department of Intelligent Mechatronics Engineering and Convergence Engineering for Intelligent Drone, ²Department of Semiconductor System Engineering, Sejong University</p>
TP1-445	<p>A Study of Embedded Microprocessors in the Automotive Field</p> <p>Ji Hye Yang Kyungpook National University</p>
TP1-446	<p>커패시터 충전 효율 개선을 위한 정류 및 Charge Pump 시스템의 최적화 연구</p> <p>김야현, 김지민, 박준영, 윤유빈, 이상목, 허준영, 윤광석 Department of Electronic Engineering, Sogang University</p>
TP1-447	<p>Palladium-deposited Molybdenum Disulfide-Based Hydrogen Sensor Using Machine Learning Technology for Environmental Adaptation</p> <p>Taeha Kim, U Jin Cho, Dongjun Jang, Youhyeong Jeon, and Min-Woo Kwon Department of Electric Engineering, Gangneung-Wonju National University</p>
TP1-448	<p>Optimization of Process Conditions of ZrO₂ Thin Films Deposited by Atomic Layer Deposition Using a New Precursor</p> <p>Ji-Hwan Kim, Seung Won Lee, Yoonchul Shin, Yeon-Ji Jeon, and Ji-Hoon Ahn Department of Materials Science and Chemical Engineering, Hanyang University</p>
TP1-449	<p>재구성 가능한 실리콘 트랜지스터의 채널 길이에 따른 전기적 특성 연구</p> <p>김나현, 임두혁 경기대학교</p>
TP1-450	<p>테라헤르츠 시간영역 분광법을 이용한 실리콘 기판의 광 전도도 분석</p> <p>박수정, 이재영, 김튼튼 울산대학교 물리학과</p>
TP1-451	<p>A Study of Monolayer Multicomponent Thin Films of Dysprosium-Doped HfO₂ Grown by Atomic Layer Deposition</p> <p>Hui-Jin Kim¹, Geun-Ha Oh², Young Min Song², Soon-Kyeong Park¹, and Il-Kwon Oh^{1,2} ¹Department of Electrical and Computer Engineering, Ajou University, ²Department of Intelligence Semiconductor Engineering, Ajou University</p>
TP1-452	<p>재구성 가능한 실리콘 트랜지스터 기반 NAND 게이트의 Logic-In-Memory 특성 연구</p> <p>고예연, 임두혁 경기대학교</p>
TP1-453	<p>원자층 증착법을 활용한 HfAlO 및 TiN 기반의 MFM Capacitor 특성 연구</p> <p>심유하, 박종문, 임두혁 경기대학교</p>

TP1-454	<p>실리콘 PIM 소자 기반 Inverter의 전기적 특성 연구</p> <p>김다운, 임두혁 경기대학교 전자공학부</p>
TP1-455	<p>재구성 가능한 실리콘 트랜지스터 기반 NOR 게이트의 로직-메모리 특성 연구</p> <p>김선혁, 임두혁 경기대학교</p>
TP1-456	<p>Atomic Layer Deposition of Titanium Dioxides Thin Films Using New-Ti Precursor on Different Substrates</p> <p>Juan Hong¹, Taehyun Kim², and Woongkyu Lee^{1,2} ¹Department of Materials Science and Engineering, Soongsil University, ²Department of Green Chemistry and Materials Engineering, Soongsil University</p>
TP1-457	<p>Surface Planarization Issues in Multi-layered RDL Interposer Fabrication</p> <p>Jinho Jang¹, Minji Kang¹, Injoo Kim², and Sungdong Kim¹ ¹Department of Mechanical System Design Engineering, Seoul National University of Science and Technology, ²Department of Mechanical Design and Robot Engineering, Seoul National University of Science and Technology</p>
TP1-458	<p>Optimizing Cu-Cu Bonds in Hybrid Bonding through O₂ Plasma and Wet Processes</p> <p>Wookyung Lee¹, Siye Lee¹, Injoo Kim², and Sungdong Kim¹ ¹Department of Mechanical System Design Engineering, Seoul National University of Science and Technology, ²Department of Mechanical Design and Robot Engineering, Seoul National University of Science and Technology</p>
TP1-459	<p>Temperature Effects on Cu-Cu Bonding for Hybrid Bonding</p> <p>Siye Lee¹, Wookyung Lee¹, Injoo Kim², and Sungdong Kim¹ ¹Department of Mechanical System Design Engineering, Seoul National University of Science and Technology, ²Department of Mechanical Design and Robot Engineering, Seoul National University of Science and Technology</p>
TP1-460	<p>A 4.5-GHz Duty Cycle Corrector with a 15%-85% Input Duty Range for DRAM Applications</p> <p>류희철, 이원영 서울과학기술대학교 스마트ICT융합공학과</p>
TP1-461	<p>Advancing Solvent Orthogonality via Refined Solution Phase Ligand Exchange Techniques for Colloidal Quantum Dot Photodetectors</p> <p>Hong Gu Kang¹, Ju Young Woo², and Seong-Yong Cho³ ¹Department of Materials Science and Engineering, Myongji University, ²Department of Digital Transformation R&D, KITECH, ³Department of Photonics and Nanoelectronics, Hanyang University</p>
TP1-462	<p>Impact of Dielectric Wall Variations of Forksheet FET</p> <p>Jin ho Park and Hyunwoo Kim Department of Electrical and Electronics Engineering, Konkuk University</p>
TP1-463	<p>A Novel TFT-Based Active Pixel Sensor Enabling High Gain and Readout Speed</p> <p>Minju Kim, Junghun Kim, Myeonghyun Jeon, and Jiwon Lee Department of Photonics and Nanoelectronics, Hanyang University</p>
TP1-464	<p>Adaptive CMOS RF-DC Converter for RF Energy Harvesting</p> <p>Ye-Won Kim and Ickjin Kwon Department of Electrical and Computer Engineering, Ajou University</p>
TP1-465	<p>Ti silicide를 이용한 Cross Bridge Kelvin Resistor의 측정 오차 최적화</p> <p>Chang Min Chae, Hyung Ju Noh, and Sangwan Kim Department of Electrical Engineering, Sogang University</p>

TP1-466	<p>DAC 선동작을 통해 채널 동작시간을 증가시킨 OLED 소스 드라이버 IC</p> <p>Won-Jo Lee, Yu-Guan Kim, Min-Woo Kim, Yun-Su Kim, and Byung-do Yang Department of Electronics Engineering, Chungbuk National University</p>
TP1-467	<p>실리콘 기판 위 구현된 NIR 대역 양자점 포토다이오드</p> <p>Doheon Lee, Junghun Kim, Hyeonsoo Ahn, and Jiwon Lee Department of Photonics and Nanoelectronics, Hanyang University</p>
TP1-468	<p>Automatic Display Defect Detection System Using Image Processing</p> <p>Min-Rak Son, Ji-Soo Sin, Min-Jin Kim, and Won Il Lee Kumoh National Institute of Technology</p>
TP1-469	<p>Analysis of Single-Event Transient in Nanosheet Gate-All-Around Structured Tunneling-Based Ternary CMOS</p> <p>Hyeong Chan Son and Hyunwoo Kim Department of Electrical and Electronics Engineering, Konkuk University</p>
TP1-470	<p>고성능 듀얼 게이트 HfO₂/MoS₂/SiO₂ FET의 특성 연구</p> <p>Jun Woo Kim, Young Jun Rho, Dong Yeong Kim, and Sang Hyun Lee School of Chemical Engineering, Chonnam National University</p>
TP1-471	<p>Lateral Growth of Single Crystalline Cu for Low Resistance Trench of BEOL</p> <p>Giho Jeong¹ and Jae Yong Song² ¹Department of Materials Science and Engineering, Hanyang University, ²Department of Semiconductor Engineering, POSTECH</p>
TP1-472	<p>Design of UART Module and Digital Controlled Current Mirror in TSMC 28 nm Process</p> <p>Yong Woo Kim¹, Jung Nam Kim¹, Minsuk Koo², and Yoon Kim¹ ¹Department of Electrical and Computer Engineering, University of Seoul, ²Department of Computer Science and Engineering, Incheon National University</p>
TP1-473	<p>A Study on the Characteristics of the TFT by Optimizing the Sputtered InWZnO Thin Film</p> <p>Tae Gun Kim, Yu Jin Yang, Seung Hyeok Lee, and Se Rim Lee Technology University of Korea</p>
TP1-474	<p>Optimization of Channel Layer Thickness for Improved Performance in Hetero-Structure AOS FETs</p> <p>Jung Wan Noh^{1,2}, Tae Hyun Noh^{1,2}, and Younghyun Kim^{1,2} ¹Department of Photonics and Nanoelectronics, Hanyang University, ²BK21 FOUR ERICA-ACE Center, Hanyang University</p>
TP1-475	<p>Enhancing Charge Trap Memory with Oxygen-Deficient HfO_x Charge Trap Layer for Non-Volatile Memory</p> <p>Hyunji Jeong^{1,2}, Seoungmin Park^{1,2}, and Younghyun Kim^{1,2} ¹Department of Photonics and Nanoelectronics, Hanyang University, ²BK21 FOUR ERICA-ACE Center, Hanyang University</p>
TP1-476	<p>JEP183 Measurement TCAD Simulation in Planar 1.2kV 4H-SiC Power MOSFETs</p> <p>Oh Seong Eun, Kim Beom Jin, Yoo Dahui, and Ho-Jun Lee Department of Electrical Engineering, Pusan National University</p>
TP1-477	<p>Comparing Results of JEP183 Measurement in Planar and Trench 1.2kV 4H-SiC Power MOSFETs</p> <p>Kim Beom Jin, Kang Min Jae, Jeong Dong Hun, YOO DAHUI, and Ho-Jun Lee Department of Electrical Engineering, Pusan National University</p>
TP1-479	<p>경량 블록암호 SIMECK과 EC-DH를 이용한 하드웨어 가속기 구조의 IoT 보안 시스템 구현</p> <p>이주형, 이승희, 신경욱 금오공과대학교 전자공학부 반도체시스템전공</p>

TP1-480	<p>Cu Grain Size에 따른 SAC305/Cu 접합부 금속간화합물 성장 거동 분석</p> <p>한다경, 노은채, 윤정원 충북대학교 신소재공학과</p>
TP1-481	<p>TLP Bonding Using Sn/Ni/Sn-foil Laminated Solder Preform</p> <p>Dong-Bok Lee, Yeong-Jin Seo, and Jeong-Won Yoon Department of Advanced Materials Engineering, Chungbuk National University</p>
TP1-482	<p>고선형성 가중치 프로그래밍이 가능한 IGZO 2T Synaptic Device</p> <p>고찬영¹, 성수원¹, 박성민¹, 하태준¹, 조현영¹, 정윤영^{1,2,3} ¹Department of Electrical Engineering, POSTECH, ²Department of Semiconductor Engineering, POSTECH, ³CSTC, POSTECH</p>
TP1-483	<p>Sn-2.3Ag Flip-chip Solder Bump의 고온 장기 신뢰성 평가</p> <p>A Study of Long-term Temperature Reliability of Sn-2.3Ag Flip-Chip Solder Bump</p> <p>장은수, 윤정원 충북대학교 신소재공학과</p>
TP1-484	<p>등온 시효 처리에 따른 리플로우 및 레이저 솔더링 접합부 특성 비교 연구</p> <p>Hyo-Won Lee, Eun-Chae Noh, Da-Gyeong Han, and Jeong-Won Yoon Department of Advanced Materials Engineering, Chungbuk National University</p>
TP1-485	<p>Keyword Spotting 성능 향상을 위한 CPU-NPU 하이브리드 프로세서 설계</p> <p>Yoono Kim, Jiwoong Chio, Gisan Ji, and Sungju Ryu Department of Electronic Engineering, Sogang University</p>
TP1-486	<p>Designing a Hybrid RISC-V CPU and NPU System for Image Classification Optimization</p> <p>Minse Kim, Junhee Lee, Gisan Ji, and Sungju Ryu Department of Electronic Engineering, Sogang University</p>
TP1-487	<p>A Random Number Generator based on Stochastic Ferroelectric Tunnel Junction</p> <p>Dong-Jun Kim¹, Seo-Eun Jang¹, Sungjun Kim², and Min-Hwi Kim¹ ¹Chung-Ang University, ²Dongguk University</p>
TP1-488	<p>A Simulation of Electrical Properties in the Induced Systems</p> <p>Se Hun Kim¹, Jik Hyeon Ham¹, and Seock-Kyun Son^{1,2} ¹Department of Physics, Kyung Hee University, ²Department of Information Display, Kyung Hee University</p>
TP1-489	<p>VVV 특화 RISC-V 프로세서 기반 CPU-NPU 하이브리드 프로세서 설계</p> <p>Jaeseok Lee, Jeonghwan Ahn, Gisan Ji, and Sungju Ryu Department of Electronic Engineering, Sogang University</p>
TP1-490	<p>Improving the Current Density of IGZO TFT by Corrugated Substrate</p> <p>Ye Won Jeong¹, Jeong Ha Yoon¹, Taewon Seo¹, and Yoonyoung Chung^{1,2,3} ¹Department of Electrical Engineering, POSTECH, ²Department of Semiconductor Engineering, POSTECH, ³Center for Semiconductor Technology Convergence, POSTECH</p>
TP1-491	<p>Highly-stable a-IGZO TFT under PBS Condition by Passivation with Hydrogen Plasma Treatment</p> <p>Jeongha Yoon¹, Yewon Jeong¹, Taewon Seo¹, and Yoonyoung Chung^{1,2,3} ¹Department of Electrical Engineering, POSTECH, ²Department of Semiconductor Engineering, POSTECH, ³Center for Semiconductor Technology Convergence, POSTECH</p>
TP1-492	<p>BaZrO₃/MgO Templated Epitaxy Enables Three Orders of Magnitude Conductivity Increase in Ba_{0.95}La_{0.05}SnO₃ Films on Al₂O₃ Substrates, Promoting Very High Transparency and X-band Electromagnetic Shielding</p> <p>Youngkyoung Ha¹, Jingyeong Jeon¹, Subhin Hwang¹, Judith L. MacManus-Driscoll², and Shinbuhm Lee¹ ¹DGIST, ²University of Cambridge</p>

TP1-493	<p>Random Resistance of Graphene according to Self-Assembled Monolayers and Application of Physically Unclonable Functions</p> <p>Eun Bee Ko², Su Bin Lee¹, Si Heon Lim², Min Seo Kim¹, Byung Cheol Jang³, Ho Cheon Yoo¹, and Hyun Ho Kim²</p> <p>¹Department of Electronic Engineering, Gachon University, ²Department of Energy Engineering Convergence, Kumoh National Institute of Technology, ³School of Electronics and Electrical Engineering, Kyungpook University</p>
TP1-494	<p>하프늄 기반 산화물을 활용한 실리콘 나노선 메모리 소자에 대한 특성 연구</p> <p>박종문, 임두혁</p> <p>경기대학교</p>
TP1-495	<p>Stacked Structure Infrared Photodetector Utilizing Colloidal Quantum Dots</p> <p>Ji Hyeon Woo and Seong-Yong Cho</p> <p>Department of Photonics and Nanoelectronics, Hanyang University ERICA</p>
TP1-496	<p>메모리 효율성 향상을 위한 DNN 경량화 기술연구</p> <p>Hoyong Jeong, Jaeseok Moon, Jinsung Lee, Jaeseong Byun, Sehyun Hwang, Dongseok Oh, Jincheol Yang, and Sukju Kang</p> <p>Department of Electrical Engineering, Sogang University</p>
TP1-497	<p>Understanding Process Instability Triggered by Built-in Dipole Moments in Janus MoSSe</p> <p>Seon Yeon Choi¹, Sun Woo Kim^{1,2}, Si Heon Lim^{1,2}, Eun Bee Ko¹, Seunghyun Kim³, Yun Chang Park⁴, Sunghun Lee⁵, and Hyun Ho Kim^{1,2}</p> <p>¹School of Materials Science and Engineering, Kumoh National Institute of Technology, ²Department of Energy Engineering Convergence, Kumoh National Institute of Technology, ³Department of Chemical Engineering, POSTECH, ⁴Department of Measurement and Analysis, NNFC, ⁵Division of Nanotechnology, Convergence Research Institute, DGIST</p>
TP1-498	<p>Analysis of Hot Carrier Injection (HCI) and Fowler-Norheim (FN) Tunneling Mechanisms in Charge Trap Flash (CTF) Memory Device</p> <p>Youn Seok Kye, Jae Yeon Park, and Sangwan Kim</p> <p>Department of Electronic Engineering, Sogang University</p>
TP1-499	<p>DRAM Write Recovery Speed 연구</p> <p>Ji Won Son, Jeon Woong Kang, Seo Yoon Lee, and Sung-Woong Chung</p> <p>POSTECH</p>
TP1-500	<p>Analysis on Electrical Performance of Nanosheet FET with Asymmetric Inner Spacer Thickness</p> <p>Won Gi Hong and Hyunwoo Kim</p> <p>Department of Electrical and Electronics Engineering, Konkuk University</p>
TP1-501	<p>Solution-Processed Metal-Oxide Thin-Film Transistors Fabricated at Low Temperatures by Metal Ion Doping</p> <p>Eun-Ha Kim, Chae-Eun Kim, Ho-Jun Cha, Yeon-Eui Lee, Su-Been Kim, Se-Ryong Park, and Tae-Jun Ha</p> <p>Department of Electronic Materials Engineering, Kwangwoon University</p>
TP1-502	<p>An Overall Study of Raman Spectroscopy for Two-dimensional Materials</p> <p>Mubin Park¹, Jyyoun Han¹, and Seok-Kyun Son^{1,2}</p> <p>¹Department of Physics, Kyung Hee University, ²Department of Information Display, Kyung Hee University</p>
TP1-503	<p>Voltage Dependence of Kink Effect in Floating Body PD-SOI MOSFETs</p> <p>Wongi Cho and Seonghearn Lee</p> <p>Department of Electronics Engineering, Hankuk University of Foreign Studies</p>

TP1-504	<p>Incandescent of Graphene and High Electrical Characteristics on Ge Wafer by CVD Method Gyu-Seock Ko¹, Do-Hoon Kim¹, Hyeon-Sik Jang², and Seok-Kyun Son^{1,3} ¹Department of Physics, Kyung Hee University, ²School of Semiconductor Science & Technology, Jeonbuk National University, ³Department of Information Display, Kyung Hee University</p>
TP1-505	<p>Transfer Methods of Monolayer Graphene Minjun Kang, Jiyong Park, and Yong-Sun Kim Ajou University</p>
TP1-506	<p>High-Performance Resistive Random Access Memory based on Solution-Processed High-k Dielectrics Chae-Eun Kim, Eun-Ha Kim, Da-Bin Seo, Se-Ryong Park, and Tae-Jun Ha Department of Electronic Materials Engineering, Kwangwoon University</p>
TP1-507	<p>Analyzing of Self-heating Effect of a-ITZO Thin Film Transistor by Using Thremoreflectance Microscopy for Better Heat Dissipation in Channel Thickness Yongjin Shin, Taewon Jin, Sanghoon Shin and Younghyun Kim Department of Photonics and Nanoelectronics, BK21 FOUR ERICA-ACE Center, Hanyang University</p>
TP1-508	<p>Wearable ECG and GSR Acquisition System with Motion Artifacts Robustness Seokhan Jeong, Jiho Kim, Minho Sung, Jeongmin Cha, Taeryoung Seol, and Junghyup Lee DGIST</p>
TP1-509	<p>Enhancing Nonlinearity of LTP/LTD in HfO₂-Based Synaptic Devices for Spiking Neural Networks Jong Min Baek¹, Jung Hyeon Gong¹, Chae Min Yeom¹, Hyeon Seung Lee¹, Hyuk Min Kwon², and Hi Deok Lee¹ ¹Chungnam National University, ²Semiconductor Convergence Campus, Korea Polytechnics College</p>
TP1-510	<p>Attention in Attention-Based One-Encoder-Two-Decoder Network for Image Deblurring Ji-Soo Sin and Ho Sub Lee Kumoh National Institute of Technology</p>
TP1-511	<p>Multi-Kernel Strip Pooling-Based Attention Network for Super Resolution Jong Youn Lee, Gwang Nam An, Do Hyeon Seo, Chan Mee Kim, and Ho Sub Lee Kumoh National Institute of Technology</p>
TP1-512	<p>Study on the Methods to Improve Switching Variability and Reliability in Self-rectifying Resistive Switching Memory Yura Oh, Sua Han, and Hae Jin Kim Department of Materials Science and Engineering, Myongji University</p>
TP1-513	<p>CNN-LSTM 모델 기반 반도체 제조 공정 이상 탐지 방안 Sejin Park¹ and Hye-Jung Yoon² ¹University of Seoul, ²Seoul National University</p>
TP1-514	<p>Optimizing MoS₂ Properties through Substrate-Heated Sputter Deposition: Exploring Crystallinity and Deposition Characteristics Ha Yeon Choi¹, Tae Gyu Ryu¹, Hye Seong Park¹, Hyuk Min Kwon², and Hi Deok Lee¹ ¹Chungnam National University, ²Semiconductor Convergence Campus of Korea Polytechnics College</p>
TP1-515	<p>2차 고조파 측정법을 이용한 강자성체 소자의 스핀 토크 측정 피진주, 김종도, 김하늘, 임은지, 김상훈 울산대학교 물리학과</p>
TP1-516	<p>Hash Table을 활용한 Adaptive Learning-Based FTL Myung hoon Hyun Sungkyunkwan University</p>

TP1-517	<p>동적 비전 센서의 Verilog 디지털회로설계 및 시뮬레이션</p> <p>김성주</p> <p>성균관대학교 반도체시스템공학과</p>
TP1-518	<p>Improving the Reliability Characteristics Using Doping Layer between WLs in 3D NAND Flash Memory</p> <p>Hyewon Kyung^{1,2}, Jungil Bae^{1,2}, Donghoon Lee^{1,2}, Kijun Lim^{1,2}, Yunejae Suh^{1,3}, Sanghyuk Lee^{1,3}, and Daewoong Kang¹</p> <p>¹Next Generation Semiconductor Convergence and Open Sharing System, ²Chung-Ang University, ³Soongsil University</p>
TP1-519	<p>Analysis of Cell Characteristics Depending on Vertical Channel Structure in 3D NAND Flash</p> <p>Donghoon Lee^{1,2}, Hyewon Kyung^{1,2}, Jungil Bae^{1,2}, Yunjae Seo^{1,3}, Sanghyuk Lee^{1,4}, Kijun Lim^{1,2}, and Daewoong Kang¹</p> <p>¹Next Generation Semiconductor Convergence and Open Sharing System, Seoul National University, ²School of Electrical and Electronics Engineering, Chung-ang University, ³Department of Electronic Engineering, Soongsil University, ⁴Department of Materials Science and Engineering, Soongsil University</p>
TP1-520	<p>A New Concept to Improve the Retention Characteristics in 3D NAND Flash</p> <p>Yunejae Suh^{1,2}, Sanghyuk Lee^{1,3}, Hyewon Kyung^{1,4}, Jungil Bae^{1,4}, Donghoon Lee^{1,4}, Kijun Lim^{1,4}, and Daewoong Kang¹</p> <p>¹Next Generation Semiconductor Convergence and Open Sharing System, ²Department of Electronic Engineering, Soongsil University, ³Department of Materials Science and Engineering, Soongsil University, ⁴School of Electrical and Electronics Engineering, Chung-ang University</p>
TP1-521	<p>New Process to Fabricate the CT(Charge Trap)-Cut in 3D NAND Flash to Improve Reliability</p> <p>Kijun Lim^{1,2}, Hyewon Kyung^{1,2}, Jungil Bae^{1,2}, Yunjae Suh^{1,3}, Donghoon Lee^{1,2}, Sanghyuk Lee^{1,3}, and Daewoong Kang¹</p> <p>¹Next Generation Semiconductor Convergence and Open Sharing System, ²School of Electrical and Electronics Engineering, Chung-ang University, ³Department of Electronic Engineering, Soongsil University, ⁴Department of Materials Science and Engineering, Soongsil University</p>
TP1-522	<p>Analysis of Trap Effect in Back Oxide to Control the Cell Current in 3D NAND Flash</p> <p>Sanghyuk Lee^{1,2}, Yunejae Suh^{1,3}, Hyewon Kyung^{1,4}, Jungil Bae^{1,4}, Donghoon Lee^{1,4}, Kijun Lim^{1,4}, and Daewoong Kang¹</p> <p>¹Next Generation Semiconductor Convergence and Open Sharing System, ²Department of Materials Science and Engineering, Soongsil University, ³Department of Electronic Engineering, Soongsil University, ⁴School of Electrical and Electronics Engineering, Chung-ang University</p>
TP1-523	<p>A New Approach to Improve Cell Characteristics of 3D NAND Flash Using Indium-gallium-zinc-oxide Channels.</p> <p>Jungil Bae^{1,2}, Hyewon Kyung^{1,2}, Donghun Lee^{1,2}, Kijun Lim^{1,2}, Yunejae Suh^{1,3}, Sanghyuk Lee^{1,4}, and Daewoong Kang¹</p> <p>¹Next Generation Semiconductor Convergence and Open Sharing System, ²Department of Electrical and Electronics Engineering, Chung-Ang University, ³Department of Electronic Engineering, Soongsil University, ⁴Department of Materials Science and Engineering, Soongsil University</p>