2026-01-28(수), 10:00-19:00
(공식발표시간: 17:30-19:00)
ZONE1 (4층, 로비)

[WP] 포스터세션

E. Compound Semiconductors 분과

WP-075	**Segmented-PiN 구조를 통한 고효율 4H-SiC UV 포토다이오드 설계** 김상엽[1], 최수빈[2], 박가영[2], 백두산[1], 정승완[1], 석오균[2] [1]부산대학교 전기전자공학과, [2]부산대학교 전기전자공학부
WP-076	**빠른 스위칭 동작에서의 SBD 내장형 SiC MOSFET의 스위칭 특성 분석** 강규혁[1], 정승완[1], 백두산[1], 박진우[2], 류종현[3], 석오균[2] [1]부산대학교 전기전자공학과, [2]부산대학교 전기전자공학부, [3]부산대학교 기계공학부
WP-077	**이중 식각을 통한 전계 완화형 6.5 kV SiC PiN 다이오드 종단 구조 설계** 박수민[1], 김상엽[1], 정준기[1], 양승리[2], 백두산[1], 정승완[1], 석오균[2] [1]부산대학교 전기전자공학과, [2]부산대학교 전기전자공학부
WP-078	**채널링 이온주입을 적용한 1.2kV 급 SiC MOSFET 단락 보호 특성 향상에 관한 연구** 정준기[1], 박수민[1], 백두산[1], 정승완[1], 양승리[2], 석오균[2] [1]부산대학교 전기전자공학과, [2]부산대학교 전기전자공학부
WP-079	**High-Performance AlGaN/GaN-on-Si HEMTs with Controlled Trapping Effects by Periodically Carbon-Doped GaN Buffer and in-Situ SiN Passivation** Donghan Kim[1], Honghwi Park[1,2], Seung-Hyun Kang[1], Youngjin Park[1], Hongsik Park[1], and Jung-Hee Lee[1,3] [1]School of Electronic and Electrical Engineering, Kyungpook National University, [2]School of Electronic Engineering, Kumoh National Institute of Technology, [3]L&D Co., Ltd.

WP-080	**Analysis of Temperature Characteristics and Zero Temperature Coefficients for AlGaN/GaN MIS-HEMT Irradiated by Proton** Soo Bean Song[1], Jin Park[1], Won Suk Koh[1], Gang San Yun[1], Kyeong Min Lim[1], Young Jun Yoon[2], and In Man Kang[1] [1]School of Electronic and Electrical Engineering, Kyungpook National University, [2]Department of Electronics and Mechanical Engineering, Gyeongkuk National University
WP-081	**Analysis of Schottky-Like Ohmic Behavior in Al-Rich AlGaN HEMTs** Sakhone Pharkphoumy and Hyun-Seop Kim Department of Electrical Engineering, Kunsan National University
WP-082	**Effect of Proton Irradiation on the Electrical Performance of SnO_2 Field-Effect Transistor with ITO Electrodes** Huiseung Kim[1], Jeongtae Kim[2], Seonchang Kim[2], Suhyeon Park[1], Dawon Lee[1], Jiseop Byeon[1], Jeongin Seo[1], Dong-Seok Kim[2], and Roy Byung Kyu Chung[1] [1]Department of Advanced Materials Science and Engineering, Kyungpook National University, [2]Korea Multi-purpose Accelerator Complex, KAERI
WP-083	**Impact of AlGaN Channel Thickness on the Mobility and Reliability of Al-Rich AlGaN Channel HEMTs** Shyam Mohan, Joocheol Jeong, Jaejin Heo, Hyogeun Cho, Mingoo Jo, Minyeong Kim, and Okhyun Nam Convergence Center for Advanced Nano Semiconductor, Department of Semiconductor Engineering, Tech University of Korea
WP-084	**광 입사 방식에 따른 알파 산화 갈륨 UV-C 광 검출기 성능 비교** 조영관[1], 김용기[1], 신명훈[1], 박지현[2], 전대우[2] [1]한국항공대학교 반도체학과 우주시스템융합전공, [2]세라믹기술원 디스플레이소재센터
WP-085	**InP Double-Heterojunction Bipolar Transistors with Compact Modeling for High-Frequency and THz Application** Hyeon-Bhin Jo and Ki-Jin Kim ICT Device and Packaging Center, KETI
WP-086	**La_2O_3 중간층을 통한 In_2O_3 박막 트랜지스터의 전기적 성능 및 신뢰성 향상** 박동욱[1], 박영근[1], 김승훈[1], 신건희[2], 정원묵[1], 유찬미[2], 이동규[2], 조병진[1,2] [1]한국과학기술원 전기 및 전자공학부, [2]한국과학기술원 반도체공학대학원

WP-087	**Al-Rich AlGaN Channel HEMT Structures with Compositionally Graded AlGaN Contact Layer** Hyogeun Cho, Joocheol Jeong, Shyam Mohan, Jaejin Heo, Minyeong Kim, Mingoo Jo, and Okhyun Nam Convergence Center for Advanced Nano Semiconductor, Department of Semiconductor Engineering, Tech University of Korea
WP-088	**In-Situ SiN_x Interlayer for Ohmic Contacts in Al-Rich AlGaN Channel HEMTs** Joocheol Jeong, Shyam Mohan, Jaejin Heo, Hyogeun Cho, Mingoo Jo, Minyeong Kim, and Okhyun Nam Convergence Center for Advanced Nano Semiconductor, Department of Nano-Semiconductor, Tech University of Korea
WP-089	**Ellipsometric Study on the Temperature-Dependent Optical Properties of β-InSe** DooHyeon Lee[1], Yihyun Moon[1], DongMin Kim[1], Tae Jung Kim[1], Long V. Le[2], Xuan Au Nguyen[1], and Junho Choi[1] [1]Department of Physics, Kyung Hee University, [2]Institute of Materials Science, Vietnam Academy of Science and Technology
WP-090	**LPCVD SiO_2 기반 High-k-Free MIS-HEMT의 DC/AC 특성 평가** 김대강, 손보성, 김희진, 이성민, 이왕엽, 박시현 영남대학교 전자공학과
WP-091	**Monolithic GaN CMOS Integration with N/P-Channel FETs** Seung-Su Kim and Ho-Young Cha School of Electronic and Electrical Engineering, Hongik University
WP-092	**Study on Al/Ni/W Multilayer for Simultaneous Ohmic Contact to n- and p-type 4H-SiC** Jun Hyun Byun[1] and Dae Hwan Kang[2] [1]Department of Materials Science & Engineering, POSTECH, [2]Department of Semiconductor Engineering, POSTECH
WP-093	**Scaling Behavior of On-State Characteristics in Power GaN HEMTs** Ji-Seung Seo, Jin-Sup Kim, and Hyeon-Bhin Jo KETI

WP-094	**Characterization of Surface Stability in Cap-Recessed InP HEMTs Grown by MOCVD** Geunuk Han, Yunji Jeong, Inseon Song, Kyutae Kim, Keunman Song, Jaephil Shim, and Hyunchul Jang KANC
WP-095	**Design Optimization and Electrical Characterization of a Two-Step Ion Implanted Non-Box JFET Doping Profile in 1.2-kV SiC MOSFETs** Hee-Jin Kim and Ho-Jun Lee Department of Electrical and Electronics Engineering, Pusan National University
WP-096	**Integration of an Active Miller-Clamp and Inverter-Assisted Driver for Reduced Switching Loss in GaN HEMTs** Dong-Ho Seo and Ho-Young Cha School of Electronic and Electrical Engineering, Hongik University
WP-097	**A Study on the Dependence of Device Dimension on Quasi-Vertical GaN Schottky Barrier Diodes** Seongmin Kang, Jinseop Kim, and Hyeon-Bhin Jo KETI
WP-098	**Impact of Side-Recess Length on the DC and RF Characteristics of GaAs Metamorphic High Electron Mobility Transistors (mHEMTs)** Inseon Song[1], Ilhyeong Lee[1], Kyutae Kim[1], Geunuk Han[1], Yunji Jeong[1], Seung Heon Shin[2], Eun-Kyung Chu[1], Deok-Soo Park[1], Yumin Koh[1], Hyunchul Jang[1], and Jae-Phil Shim[1] [1]KANC, [2]Soonchunhyang University
WP-099	**Modulation of 2DEG for Highly Sensitive Magnetic Field Detection** Cheng Han[1], Mingi Seo[1], Younghoon Kim[1], John Son[3], and Junseok Heo[1,2] [1]Department of Intelligence Semiconductor Engineering, Ajou University, [2]Department of Electrical and Computer Engineering, Ajou University, [3]Genicom Co., Ltd
WP-100	**CMOS Compatible SiGe Channel Photo BJT with High Responsivity and Efficiency** Tae Young Yoon, Tae Woo Kim, Dong-Woo Jee, and Jang Hyun Kim Department of Intelligence Semiconductor Engineering, Ajou University

WP-101	**Electrical Characteristics Dependence on Gate-Drain Spacing for 1200 V-Class Applications of E-Mode GaN on Si Power Devices** Arim Choi, Hoseok Yoo, Hyeok-Jun Lee, Minjoo Kim, Chuyoung Cho, and Dong-Hyun Kim KANC
WP-102	**AlGaN/GaN HEMT 소자의 절연막 형성 및 열처리에 따른 전기적 특성 변화** 김민주, 최아림, 유호석, 이혁준, 조주영, 김동현 한국나노기술원
WP-103	**6인치 Si 기판 기반 pGaN/$Al_{0.2}Ga_{0.8}N$/GaN HEMT의 게이트 금속에 따른 전기적 특성 비교** 이혁준, 최아림, 유호석, 김민주, 조주영, 김동현 한국나노기술원
WP-104	**Optimization of Passivation Structures for High-Reliability GaN HEMT Operation** Hoil Son[1], Donghan Kim[1], Junghee Lee[3], Haechan Lee[1], Hyeongwoo Lee[1], Jeongil Kim[2], and Hongsik Park[1] [1]School of Electronic and Electrical Engineering, Kyungpook National University, [2]Department of Semiconductor Engineering, Dong-A University, [3]L&D Inc.
WP-105	**E-Mode Power GaN HEMT 구동을 위한 GaN 기반 모노리식 게이트 드라이브 회로 설계 및 제작** 임진홍[1,2], 김동훈[2], 임준혁[2], 김종선[2], 차호영[1,2] [1]주식회사 칩스케이, [2]홍익대학교
WP-106	**Single Event Effects (SEE) Analysis and Radiation Resistance Evaluation of AlGaN/GaN HEMTs Devices by Alpha Particles** Soomin Kim[1], Dongwook Kim[1], Dongchan Kim[2], and Jongwook Jeon[2] [1]Department of Display Engineering, Sungkyunkwan University, [2]Department of Electronic and Electric Engineering, Sungkyunkwan University
WP-107	**Low-Temperature Passivation of $In_{0.53}Ga_{0.47}As$/InP Mesa-Type Photodiodes** Taekyun Kim[1] and Junseok Heo[1,2] [1]Department of Intelligent Semiconductor Engineering, Ajou University, [2]Department of Electrical and Computer Engineering, Ajou University

WP-108	**Effect of Diode Electrode Structure on the Efficiency of Betavoltaic Cells** Jaewon Park[1,2], Hyeon-Tak Kwak[1], Dong-Seok Kim[3], Hoe-Min Kwak[1], Huiyun Jung[1], Donghan Kim[2], Dong-Young Kim[1], Jeong-Gil kim[4], Hongsik Park[2], Sung-Bum Bae[1], and Hyung-Seok Lee[1] [1]ETRI, [2]School of Electronic and Electrical Engineering, Kyungpook National University, [3]Korea Multi-Purpose Accelerator Complex, KAERI, [4]Department of Semiconductor, Dong-A University
WP-109	**Multi-Threshold Voltage GaN Device Development for GaN-Based Power ICs on a 200mm GaN-on-Si** Junhyeok Lee, Min Su Cho, Nakwon Yu, Jihoun Jung, Minjae Yeom, Heesub Lee, Jonghyun Lee, Sanggi Lee, and Woochul Jeon DB HiTek
WP-110	**AlGaN/GaN의 금속 접합 열처리 시간에 따른 계면 반응 및 구조 분석** 최여진[1], 장승환[1], 박찬영[1], 안대규[1], 최다은[1], 임기식[2], 안성진[1] [1]국립금오공과대학교 신소재공학과, [2]한국폴리텍대학
WP-111	**AlGaN/GaN 기반 비대칭 MSM 광검출기** 홍성호[1], 허준석[2] [1]아주대학교 전자공학과, [2]아주대학교 지능형반도체공학과
WP-112	**β-Ga_2O_3 기반 수직형 SBD를 활용한 저선량 X선 검출기** 김선재[1,3], 뷰흐엉[1,2], 김형윤[3], 박지현[3], 전대우[3], 황완식[1,2] [1]한국항공대학교 신소재공학과, [2]한국항공대학교 스마트항공모빌리티학과, [3]한국세라믹기술원
WP-113	**Monolithic Integration of a GaAs VCSELs on a Si Photodiodes for Coaxial Time-of-Flight Sensing** Wonjun Cho[1] and Junseok Heo[1,2] [1]Department of Intelligence Semiconductor Engineering, Ajou University, [2]Department of Electrical and Computer Engineering, Ajou University
WP-114	**Evaluation of Contact Properties of AlGaN/GaN High-Electron-Mobility Transistor Using the Bridge-Contact Resistance Method** Bogeun Son, Hyunjung Lee, and Hongsik Park School of Electronic and Electrical Engineering, Kyungpook National University

WP-115	**Fabrication of 4-Inch AlGaN/GaN HEMT on SiC for RF Application** Raksan Ko, Dong-Hyun Kim, Deoksoo Park, and Jaemoo Kim Device Technology Division, KANC
WP-116	**High Breakdown Voltage for Vertical GaN PN Diode with Multi Step Mesa Junction Termination Extensions** Dae-Hyun Son[1], Donghan Kim[1], Jaewon Park[1,2], Huiyun Jung[2], Hyeon-Tak Kwak[2], Hoe-Min Kwak[2], Hongsik Park[1], Sung-Bum Bae[2], and Hyung-Seok Lee[2] [1]School of Electronic and Electrical Engineering, Kyungpook National University, [2]ETRI
WP-117	**Experimental Study on i-GaN Thickness Effects in GaN PiN Betavoltaic Cell Performance** Huiyun Jung[1], Jae-Won Park[1,2], Hyeon-Tak Kwak[1], Donghan Kim[2], Hoe-Min Kwak[1], Dong-Young Kim[1], Dong-Seok Kim[3], Jeong-Gil Kim[4], Hongsik Park[2], Sung-Bum Bae[1], and Hyung-Seok Lee[1] [1]Photonic/Wireless Devices Research Division, Thin GaN Materials & Device Creative Research Section, ETRI, [2]School of Electronic and Electrical Engineering, Kyungpook National University, [3]KAERI, [4]Dong-A University
WP-118	**Electrical Characteristics Analysis of GaN HEMTs with p-GaN Gate Depending on RTA Temperature** Yeonsil Yang, Jinseop Kim, and Hyeon-Bhin Jo ICT Device and Packaging Center, KETI
WP-119	**Ga_2O_3의 UVC 검출 특성을 활용한 불꽃감지센서 응용 가능성** 류희중[1,2], 김선재[2], 엄준성[3], 구희성[3], 박지현[4], 전대우[4], 황완식[1,2] [1]한국항공대학교 스마트항공모빌리티학과, [2]한국항공대학교 신소재공학과, [3](주)멤스, [4]한국세라믹기술원
WP-120	**Reliability Enhancement of GaN MIS-HEMTs via High-Pressure Annealing** Songyi Han and Dae-Myeong Geum Department of Electrical and Computer Engineering, Inha University

WP-121	**Influence of CuO_x Radius on Breakdown Voltage of p-Type CuO_x / n-Type β-Ga_2O_3 Heterojunction Diodes** Hyeon Cheol Kim[1], Sameer Pokhrel[1], V. Janardhanam[2], Chel-Jong Choi[1], and Kyu Hwan Shim[1,3] [1]School of Semiconductor and Chemical Engineering, Semiconductor Physics Research Center (SPRC), Jeonbuk National University, [2]Department of Physics, School of Engineering, Dayananda Sagar University, [3]R&D Division, Sigetronics, Inc.
WP-122	**p-GaN Gate Recessed GaN HEMT with MIS Structure** Jong-Hyeok Sim, Jinhyeong Park, and Ho-Young Cha School of Electronic and Electrical Engineering, Hongik University
WP-123	**Photodiode based on Ga_2O_3 Nanowire Catalyst Synthesis** Jung-Bok Lee, Min-Seok Jang, Hee-Jin Kim, Ju-Eun An, and Ho-Jun Lee Pusan National University
WP-124	**p-GaN AlGaN/GaN HEMT의 정확한 열화시험을 위한 소자특성 실시간 측정 최적화** 이서윤, 김형탁 홍익대학교 전자전기공학부
WP-125	**Femtosecond Mid-Infrared Cr:ZnS Laser Utilizing Graphene-ZnSe Saturable Absorber** Seong Hyeon Kim[1], Seung Tae Song[1], Sang Yeop Jeong[1], Dong Ho Shin[2], Young Tea Chun[1], Fabian Rotermund[3], and Won Bae Cho[1] [1]Department of Nano-Semiconductor Engineering, Korea Maritime & Ocean University, [2]Digital Biomedical Research Division, ETRI, [3]Department of Physics, KAIST
WP-126	**E-Mode AlGaN HEMTs Enabled by Polarization Engineering with p-AlGaN Cap Layers** Ju-Eun Yun, Ryeong-Eun Kim, Do-Hyung Yeo, and Ho-Young Cha School of Electronic and Electrical Engineering, Hongik University

WP-127	**Contact-Area Engineering Using Patterned Anode Structures in Vertical GaN PIN Diode** Min-Guk Han and Ho-Young Cha School of Electronic and Electrical Engineering, Hongik University
WP-384	**High-Efficiency X-Band AlGaN/GaN/AlN HEMTs Achieving 64.2 % PAE and 6.27 W/mm CW Output Power Density** Donghan Kim[1], Jung-Hee Lee[3], A-Hyun Lee[2], Jeong-Gil Kim[2], and Hongsik Park[1] [1]School of Electronic and Electrical Engineering, Kyungpook National University, [2]Department of Semiconductor, Dong-A University, [3]L&D Inc.

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[WP] 포스터세션

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

WP-128	**A Study on the Reversed Thickness Dependence of the Memory Window in HZO-Based MIFIS FeFETs** Kilhwa Pi[1,2], Min Kyu Yeom[1,2], Seungheon Choi[1,2], Sanghyup Lee[1,2], and Cheol Seong Hwang[1,2] [1]Department of Materials Science and Engineering, Seoul National University, [2]Inter-university Semiconductor Research Center, Seoul National University
WP-129	**Development of Process Technology for 180 nm CMOS Multi-Project Wafer (MPW) Service** Byeong-Hyeok Choi[1], Sung-Min Park[1], Jin Hyun Kim[1], Eunpa Won[1], Joong-Heon Kim[1], Daeyoung Kim[1], Juyoung An[1], Sangsoo Kim[1], Onyu Kim[1], Hyosang Kim[1], Changweon Lee[1], Joongsool Park[1], Youngsu Kim[2], and Sang Hyun Jung[1] [1]KANC, [2]NNFC
WP-130	**Fully CMOS-Compatible Analog Content-Addressable Memory Using Single-Poly Embedded Flash Memory** Jeseung Jeong[1,2], Jonghyun Ko[1,2], Wooseong Roh[1,2], Jong-Ho Lee[1,2], and Gyuweon Jung[1,2,3] [1]Department of Electrical and Computer Engineering, Seoul National University, [2]Inter-university Semiconductor Research Center, Seoul National University, [3]School of Transdisciplinary Innovations, Seoul National University
WP-131	**Separating Ferroelectric Negative Capacitance from High-k Contributions in Metal-Ferroelectric-Insulator-Semiconductor Structured Capacitor** Subin Jung[1,2], Seungheon Choi[1,2], and Cheol Seong Hwang[1,2] [1]Department of Materials Science and Engineering, Seoul National University, [2]Inter-university Semiconductor Research Center, Seoul National University

WP-132	**Random Telegraph Noise-Driven Probabilistic Bit in Polycrystalline Silicon Thin-Film Transistor** Jun-Young Park, Seong-Hun Kim, and Joon-Kyu Han Department of Material Science and Engineering, Seoul National University
WP-133	**Modeling and Process Design Guideline of Oxide Chemical Mechanical Planarization in CMOS Back-End-of-Line Process** Min Seok Cha[1,2] and Woo Young Choi[1,2] [1]Department of Electrical and ComputerEngineering, Seoul National University, [2]Inter-university Semiconductor Research Center, Seoul National University
WP-134	**Integration and Validation of a Multi-Chip Floorplan with Process Monitoring on a 180nm CMOS MPW Platform** Eunpa Won[1], Sung-Min Park[1], Jin Hyun Kim[1], Byeong-Hyeok Choi[1], Joong-Heon Kim[1], Daeyoung Kim[1], Juyoung An[1], Sangsoo Kim[1], Onyu Kim[1], Hyosang Kim[1], Changweon Lee[1], Joongsool Park[1], Youngsu Kim[2], and Sang Hyun Jung[1] [1]KANC, [2]NNFC
WP-135	**Annealing 온도에 따른 피드백 전계효과 트랜지스터 기반 확률 비트의 특성 변화 연구** 허효주, 조경아, 김상식 고려대학교 전기전자공학과
WP-136	**트리플 게이트 피드백 전계효과 트랜지스터로 구성된 로직-인-메모리 셀의 JK Latch 동작 연구** 설민혁, 조경아, 김상식 고려대학교 전기전자공학과
WP-137	**Probabilistic Bit와 Markov Random Fields Model을 이용한 Image Denoising 구현 연구** 강민구, 조경아, 김상식 고려대학교 전기전자공학과
WP-138	**삼중 게이트 피드백 전계효과 트랜지스터로 구성된 로직-인-메모리 셀의 3진법 NAND Gate 동작 연구** 김태완[1], 허효주[1], 전주희[1], 김동기[2], 이동형[2], 조경아[1], 김상식[1,2] [1]고려대학교 전기전자공학과, [2]고려대학교 반도체시스템공학과

WP-139	**삼중 게이트 피드백 전계효과 트랜지스터 기반 NANY/NCONS 게이트의 로직-인-메모리 동작 연구** 전윤수[1], 임재욱[1], 전주희[2], 조경아[2], 김상식[1,2] [1]고려대학교 반도체시스템공학과, [2]고려대학교 전기전자공학과
WP-140	**Scaling Characteristics of Oxide-Based Vertical Channel Transistors for Gain-Cell Memory** Hyeonho Gu[1], Haksoon Jung[1], Minho Park[1], Hyeonjin Lee[2], Yanfeng Zhao[2], Yongwoo Lee[1], Byungjo Kim[2], and Jimin Kwon[1,2] [1]Department of Electrical Engineering, UNIST, [2]Graduate School of Semiconductor Materials and Devices Engineering, UNIST
WP-141	**p-Si:H/n-Ga_2O_3 이중 채널 기반 생체모방 시냅스 광 트랜지스터** 김용기[1], 윤영빈[3], 신명훈[1,2] [1]한국항공대학교 항공전자정보공학부, [2]한국항공대학교 우주시스템공학부, [3]한국전자통신연구원 차세대반도체소자연구실
WP-142	**Resistivity-Correlated Design of Zero-TCR Poly-Si Resistors From 130 nm to 28 nm HKMG CMOS Process** Seungjun Boo, Jinhyuk Lee, Jonghyun Son, Dongmin Shin, Juri Kim, Changmin Jeon, and Ohkyum Kwon Samsung Foundry, Samsung Electronics Co., Ltd.
WP-143	**Layered Trench Gate Exhibiting Source/Drain Over-Etch Immunity without Punch-Through Stopper** Seungjoon Jeong and Changhwan Shin School of Electrical Engineering, College of Engineering, Korea University
WP-144	**Optimized FlipFET Standard Cell Design for Reduced Gate Delay and Improved Routability** Dongjin Wi[1], Minho Park[1], and Jimin Kwon[2] [1]Department of Electrical Engineering, UNIST, [2]Department of Electrical Engineering, Graduate School of Semiconductor Materials and Devices Engineering, UNIST
WP-145	**Analysis of Gate-All-Around FET with Oxide Bottom-Up Structure to Reduce Parasitic Capacitance in Shallow Trench Isolation Region** Sungho Yang and Changhwan Shin School of Electrical Engineering, College of Engineering, Korea University

WP-146	**Effect of Annealing Atmosphere for Bottom Electrode Anneal on the Endurance of W/HZO/W Ferroelectric Capacitors** Hyeonjung Park[1], Changwoo Han[2], and Changhwan Shin[2] [1]Department of Electrical and Computer Engineering, Sungkyunkwan University, [2]School of Electrical Engineering, College of Engineering, Korea University
WP-147	**Characteristics of GIDL Erase-Induced Hot Carrier Injection in Vertical NAND Flash Memory** Jae Hyun Nam[1,2], Jin Ho Chang[1,2], Kyung Moon Kim[1,2], Da Eun Yang[1,2], Ji Sun Baek[1,2], Suk-Kang Sung[3], and Woo Young Choi[1,2] [1]Department of Electrical and Computer Engineering, Seoul National University, [2]Inter-university Semiconductor Research Center, Seoul National University, [3]Advanced Flash Technology Team, Samsung Electronics Co., Ltd.
WP-148	**Latch-Up Voltage Modulation by Applying Adaptive Pulse on Charge-Trap Based Floating-Body Transistor** Taeho Lee[1,2], Jonghyun Ko[1,2], Jiseong Im[1,2], and Jong-Ho Lee[1,2] [1]Department of Electrical and Computer Engineering, Seoul National University, [2]Inter-university Semiconductor Research Center, Seoul National University
WP-149	**Inner Spacer Effects on Stress and Parasitic Capacitance in Gate-All-Around Nanosheet FETs: A TCAD Framework Using Kinetic Monte Carlo Epitaxy** NaYun Kim[1,2] and Jiwon Chang[1,2] [1]Department of System Semiconductor Engineering, Yonsei University, [2]BK21 Graduate Program in Intelligent Semiconductor Technology
WP-150	**Additional Oxidation Treatment를 통한 5V NMOS TDDB 개선** 황수진, 강형근, 이도현, 김선구, 남명희, 박정수 Department of Technology Development, SK hynix systemic (wuxi) solutions, Co., Ltd.
WP-151	**3-Tier CFET 6T-SRAM With 2D-TMDCs Channels With Double-Sided Interconnect and Backside PDN for Angstrom Technology Node** Jonghun Lee[1], Seungmin Jun[2], and Jongwook Jeon[2] [1]Department of Display Engineering, Sungkyunkwan University, [2]Department of Electrical and Computer Engineering, Sungkyunkwan University

WP-152	**Enhanced Electrical Performance of GOI nMOSFETs via Laser-Annealing-Induced Source/Drain Activation and Tensile Strain** Minseo Song[1], Hojin Jeong[2], Hyeongrak Lim[2], and Sanghyeon Kim[2] [1]Graduate School of Semiconductor Technology, KAIST, [2]School of Electrical Engineering, KAIST
WP-153	**From Vulnerability to Robustness: Radiation-Hard Isolation for BPR-Enabled Stacked Nanosheet CFETs** Dongwook Kim[1], Sumin Kim[1], and Jongwook Jeon[2] [1]Department of Display Engineering, Sungkyunkwan University, [2]Department of Electrical and Computer Engineering, Sungkyunkwan University
WP-154	**Enhanced Responsivity of $CuInSe_2$ Quantum Dot-Coated Silicon Photodetectors** Juwon Yun[1], Neunghee Han[2], Seonyoung Park[1], Jihun Lee[1], Woonhyuk Baek[3], and Kihyun Kim[1,4] [1]Department of Electronics and Information Engineering, Jeonbuk National University, [2]Department of Semiconductor Science and Technology, Jeonbuk National University, [3]School of Semiconductor and Chemical Engineering, Jeonbuk National University, [4]Division of Electronic Engineering, Jeonbuk National University
WP-155	**Frequency-Tunable THz Detector Design with Embedded Varactor Stacking for Detecting Sensitivity** Gi Yong Lee[1], Yoo Bin Song[1,3], Tae Hwan Hyeon[2], Min Woo Ryu[1,3], and Kyung Rok Kim[1,3] [1]Department of Electrical Engineering, UNIST, [2]Graduate School of Semiconductor Materials and Devices Engineering, UNIST, [3]Ternell Corp.
WP-156	**A 28-nm Ternary-SRAM Macro with Highly Bit-Dense Bitline Reduction Architecture and Energy-Efficient Single-Ended 8T Access Operation** Myoung Kim[1,2], Yesong Jeong[1,2], Woo-Seok Kim[1], Junyoung Park[1], Sang Hun Yeo[1], In Jun Jang[1], Kwan Yong Lee[2], Min Woo Ryu[1,2], and Kyung Rok Kim[1,2] [1]Department of Electrical Engineering, UNIST, [2]Ternell Corp.

WP-157	**Development of a Next-Generation CFET PDK Considering Backside Power Delivery Network (BSPDN)** JuneYeop Lee[1], Jihye Yoo[1], Gaon Lee[2], and Jongwook Jeon[1] [1]Department of Electrical and Computer Engineering, Sungkyunkwan University, [2]Department of Display Engineering, Sungkyunkwan University
WP-158	**Enhancing Sensitivity of FET-Based Trantenna through Aperture Design** Tae Hwan Hyeon[1], Yoo Bin Song[2,3], Gi Yong Lee[2], Min Woo Ryu[2,3], and Kyung Rok Kim[2,3] [1]Graduate School of Semiconductor Materials and Devices Engineering, UNIST, [2]Department of Electrical Engineering, UNIST, [3]Ternell Corp.
WP-159	**Transparent Optical Power Monitoring Using Thin InGaAs Membrane MSM Photodetector** Jaehyeon An[1,2], Jinil Lee[1], Kyunghwan Kim[1], Hojoong Jung[1], Jae-Hoon Han[1], SangWook Han[1], Myung-Jae Lee[2], and DaeHwan Ahn[1] [1]Center for Quantum Technology, KIST, [2]Department of Electrical and Electronic Engineering, Yonsei University
WP-160	**An Area-Efficient TCAM Cell Based Ternary Latch with Hybrid Operation** Jun Young Park[1], Woo-Seok Kim[1], Myoung Kim[1,2], Yesong Jeong[1], Sang Hun Yeo[1], Kwan Yong Lee[1], In Jun Jang[1], Min Woo Ryu[1,2], and Kyung Rok Kim[1,2] [1]Department of Electrical Engineering, UNIST, [2]Ternell Corp.
WP-161	**Study of Tensile Strain Formation in Rapid-Melting-Growth Germanium under Different SiO_2 Capping Conditions** Dong Woo Lee, Jongmin Son, Hyeseo Park, Youngmin Kim, and Donghwan Ahn School of Materials Science & Engineering, Kookmin University
WP-162	**Tunneling-Based 3D Ternary CMOS Technology for Highly Reliable, Low-Power, and High-Density SRAM Toward Sustainable SoC Design** Woo-Seok Kim[1], Sang Hun Yeo[1], Kwan Yong Lee[2], Myoung Kim[1,2], In Jun Jang[1], Junyoung Park[1], Yesong Jeong[1,2], Min Woo Ryu[1,2], and Kyung Rok Kim[1,2] [1]Department of Electrical Engineering, UNIST, [2]Ternell Corp.

WP-163	**TCAD-Based Variability Analysis and Optimization in 28-nm Gate-Underlap Ternary CMOS Technology** Kwan Yong Lee[1], Woo-Seok Kim[2], Sang Hun Yeo[2], In Jun Jang[2], Myoung Kim[1,2], Yesong Jeong[1,2], Junyoung Park[2], Min Woo Ryu[1,2], and Kyung Rok Kim[1,2] [1]Ternell Corp., [2]Department of Electrical Engineering, UNIST
WP-164	**Ultra-Thin La_2O_3 Interfacial Layer for TDDB Lifetime Extension in HZO Ferroelectric Devices** HyeonCheol Jeong[1], KyungSoo Park [2], Yoonseok Lee[1], Yeonwoo Choi[1], SangMyun Lim[1], JiHoon Choi[1], Taesuk Kim[2], and Changhwan Choi[1,2] [1]Department of Semiconductor Engineering, Hanyang University, [2]Division of Materials Science and Engineering, Hanyang University
WP-165	**Short-Channel Effect Immune and Ultra-Low Power Steep-Slope Ternary CFET/GAA Architecture for Edge-AI Applications** Sang Hun Yeo[1], Woo-Seok Kim[1], Kwan Yong Lee[2], In Jun Jang[1], Myoung Kim[1,2], Jun Young Park[1], Yesong Jeong[1,2], Min Woo Ryu[1,2], and Kyung Rok Kim[1,2] [1]Department of Electrical Engineering, UNIST, [2]Ternell Corp.
WP-166	**Bias-Temperature Instability Characteristics of High-k Metal Gate Ternary CMOS Technology** In Jun Jang[1], Woo-Seok Kim[1], Sang Hun Yeo[1], Kwan Yong Lee[2], Myoung Kim[1,2], Junyoung Park[1], Yesong Jeong[1,2], Min Woo Ryu[1,2], and Kyung Rok Kim[1,2] [1]Department of Electrical Engineering, UNIST, [2]Ternell Corp.
WP-167	**Protocol-Compatible Ternary Bus for Energy-Efficient On-Chip Interconnects** Yesong Jeong[1,2], Myoung Kim[1,2], Woo-Seok Kim[1], Jun Young Park[1], Sang Hun Yeo[1], Kwan Yong Lee[2], In Jun Jang[1], Min Woo Ryu[1,2], and Kyung Rok Kim[1,2] [1]Department of Electrical Engineering, UNIST, [2]Ternell Corp.
WP-168	**High-Speed Terahertz Detector for Large-Area Low-Noise Imaging System** Yoo Bin Song[1,3], Tae Hwan Hyeun[2], Gi Yong Lee[1], Min Woo Ryu[1,3], and Kyung Rok Kim[1,3] [1]Department of Electrical Engineering, UNIST, [2]Graduate School of Semiconductor Materials and Devices Engineering, UNIST, [3]Ternell Corp.

WP-169	**Compact Modeling of CFET Devices Including N/PMOS and Intermediate RC Network** Gaon Lee[1], Hojin Kim[3], Woonwoo Kim[2], Jihye Yoo[4], Juneyeop Lee[4], and Jongwook Jeon[2] [1]Department of Display Engineering, Sungkyunkwan University, [2]Department of Electrical and Computer Engineering, Sungkyunkwan University, [3]Department of Semiconductor Convergence Engineering, Sungkyunkwan University, [4]Device Research Laboratory (SKKU-DRL), Sungkyunkwan University
WP-170	**Impact of Doping Concentration in the Lightly-Doped Drain on Gate-Induced Drain Leakage of Ultra-Thin-Body MOSFET** Erica Soomin Kim[1,2] and Seongjae Cho[1,2] [1]Division of Electronic and Semiconductor Engineering, Ewha Womans University, [2]Institute for Multiscale Matter and Systems (IMMS), Ewha Womans University

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M. RF and Wireless Design 분과

WP-191	**3D-Printed AiP Lid Substrates with Coaxial Through-Via Feeds for Improved High-Frequency Signal Integrity** Kyungsun Kim[1], Nahyeon Kim[1], Haksoon Jung[2], Yongwoo Lee[2], and Jimin Kwon[1,2] [1]Graduate School of Semiconductor Materials and Devices Engineering, UNIST, [2]Department of Electrical Engineering, UNIST
WP-192	**A Bandgap-Referenced Wide-Swing Current-Mode VCSEL Driver in 0.18-μm CMOS for Low-Cost Short-Range LiDAR Sensors** Yiyao Li, Yu Hu, Sieun Choi, Suwon Cho, Somi Park, Sunkyung Lee, Bobin Seo, and Sung Min Park Division of Electronic & Semiconductor Engineering, Ewha Womans University
WP-193	**A Low-Noise CMOS Active-Feedback Transimpedance Amplifier with a Low-Dropout Regulator based on Flipped Voltage Follower** Suwon Cho, Sieun Choi, Yiyao Li, Bobin Seo, Somi Park, Sunkyung Lee, Yu Hu, and Sung Min Park Division of Electronic & Semiconductor Engineering, Ewha Womans University
WP-194	**RF Power Transfer Efficiency Measurement System for Stable Plasma Processing in Semiconductor Manufacturing** Narim Lee[1], Dongjun Min[1], Hyunjun Kim[1], Hyunjoo Hwang[2], Wonwoo Kho[2], Namjun Kang[3], and Seung-Eon Ahn[1,2] [1]Department of Nano & Semiconductor Engineering, Tech University of Korea, [2]Department of IT · Semiconductor Convergence Engineering, Tech University of Korea, [3]ion RESEARCH

WP-195	**Design of a 28-nm FD-SOI Differential Low-Noise Amplifier for 6G Front-End Applications** Geunwoo Park[1], Chaeyun Kim[2], Bohyeon Kim[2], and Changkun Park[1,2] [1]School of Electronic Engineering, Soongsil University, [2]Department of Intelligent Semiconductor, Soongsil University
WP-196	**K-Band CMOS Voltage-Controlled Oscillator for Millimeter-Wave Signal Generation** Ji-Ho Yoo[1], Hyeon-Jin Son[2], and Jong-Ryul Yang[1,2] [1]Department of Electronics and Electrical Engineering, Konkuk University, [2]Millisight Technologies Co., Ltd.
WP-197	**First Heterogeneous and Monolithic 3D (HM3D) Integration of InGaAs HEMTs and InP/InGaAs DHBTs on Si CMOS for Next-Generation Wireless Communication** Nahyun Rheem[1], Jaeyong Jeong[1], Yoon-Je Suh[1], Chan Jik Lee[1], Bong Ho Kim[1,2], Joon Pyo Kim[1,2], Seong Kwang Kim[1,2], Hyeongrak Lim[1], Jongmin Kim[3], Dae-Hwan Ahn[4], Jae-Hoon Han[4], Jongwon Lee[5], and Sanghyeon Kim[1] [1]School of Electrical Engineering, KAIST, [2]Samsung Electronics Co., Ltd., [3]KANC, [4]Center for Opto-Electronics Materials and Devices, KIST, [5]Department of Semiconductor Convergence, Chungnam National University
WP-198	**에너지 효율적인 딜레이 라인 기반 LO와 커패시턴스 펄스 셰이핑을 이용한 사이드로브 저감 IR-UWB 송신기** 김민성, 권익진 아주대학교 전자공학과
WP-199	**Modeling Large-Signal RF Behavior Considering Self-Heating and Trap Effects** Wonwoo Kim[1], Changho Ra[1], Dongchan Kim[1], Jaejoon Woo[2], and Jonguk Jeon[1] [1]Department of Electrical and Computer Engineering, Sungkyunkwan University, [2]Department of Semiconductor Convergence Engineering, Sungkyunkwan University

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T. AI 분과

WP-339	**Efficient Analog Computing-in-Memory Macro for Block Floating Point Number Format** Wonkyung Han[1], Dohyun Kim[1], Jihoon Park[1], Juheun Lee[2], Wonjun Han[2], and Jae-Joon Kim[1,2] [1]Department of Electrical and Computer Engineering, Seoul National University, [2]Interdisciplinary Program in Artificial Intelligence, Seoul National University
WP-340	**Analysis of Group-Wise Quantized Element Distributions Across Different Workloads** Do Hyun Kim and Jae Joon Kim Department of Electrical and Computer Engineering, Seoul National University
WP-341	**M_XFP_4 Dot-Product Engine with Configurable Depth Tree Reduction** Wonjun Han and Jae-Joon Kim Interdisciplinary Program in Artificial Intelligence, Seoul National University
WP-342	**A Schmitt-Trigger Comparator-Based Noise-Robust Reconfigurable Leaky Integrate-and-Fire Neuron Circuit for Spiking Neural Networks** Chae-Hwan Park[1,2], Seung Yoon Shin[1,2], Seong Eun Kim[1,2], Min Kang[1,2], and Soo-Yeon Lee[1,2] [1]Deptartment of Electrical and Computer Engineering, Seoul National University, [2]Inter-university Semiconductor Research Center, Seoul National University
WP-343	**An Efficient LUT-Based FP_{16} Exponential Function Approximation for LLM Accelerators** 최성우, 이제훈, 이주찬, 김재준 서울대학교 전기·정보공학부

WP-344	**Random Point Sampling for Faster LiDAR Semantic Segmentation Inference** Gyeongseok Hyeon and Injae Yoo School of Electrical and Electronics Engineering, Pusan National University
WP-345	**Artificial Neuronal Arithmetic based on Ovonic Threshold Switches for Biologically-Inspired Analog Computation** Jingyeong Hwang[1,2], Unhyeon Kang[1,2], Seungmin Oh[1,3], Jiin Bang[1,4], Kyungmin Lee[1,5], Younghyun Lee[1], Hakseung Rhee[6], Jooyoung Bae[1], and Suyoun Lee[1,4] [1]Center for Semiconductor Technology, KIST, [2]Department of Materials Science and Engineering, Seoul National University, [3]Department of Physics and Astronomy, Seoul National University, [4]Nanoscience and Technology, Korea National University of Science and Technology, [5]Department of Electrical Engineering, Korea University, [6]Department of Materials Science and Engineering, KAIST
WP-346	**Demonstration of the Hopfield Associative Network Using Cu-Ge_2Te_1 CBRAM Array** Jiin Bang[1,2], Jingyeong Hwang[2,3], Unhyeon Kang[2,3], Seungmin Oh[2,4], Kyungmin Lee[2,5], Hakseung Ree[6], Younghyun Lee[2], Jooyoung Bae[2], and Suyoun Lee[1,2] [1]Nanoscience and Technology, University of Science and Technology, [2]Center for Semiconductor Technology, KIST, [3]Department of Materials Science and Engineering, Seoul National University, [4]Department of Physics and Astronomy, Seoul National University, [5]Department of Electrical Engineering, Korea University, [6]Department of Materials Science and Engineering, KAIST
WP-347	**ROM 시냅스 기반 면적 최소화형 확률적 SNN** 이승준[1,4], 금건우[1,4], 김윤[2,4,5], 구민석[3,4,5] [1]서울시립대학교 지능형반도체학과, [2]서울시립대학교 전자전기컴퓨터공학부, [3]서울시립대학교 첨단융합학부, [4]서울시립대학교 반도체 연구센터, [5]주식회사 IM전자
WP-348	**듀얼게이트 가우시안 트랜지스터를 이용한 MLP 구현** 유영우[1,2], 조준형[3], 유호천[4], 김영준[1,2] [1]가천대학교 반도체공학과, [2]가천대학교 전자공학과, [3]한양대학교 인공지능반도체공학과, [4]한양대학교 융합전자공학과

WP-349	**Vision Transformer 모델의 최적 토큰 프루닝 레이어 선택을 위한 조건부 계층적 탐색 프레임워크** 이승주, 김병수 한국전자기술연구원 SoC플랫폼연구센터
WP-350	**Performance-Latency Analysis of RAG Systems in On-Device Environments** Wonjun Hwang, Seungil Lee, and Hyun Kim Department of Electrical and Information Engineering, Research Center for Electrical and Information Technology, Seoul National University of Science & Technology
WP-351	**Reinforcement Learning Architecture based on Train-Inference Chains for Resource Optimization** Junghwan Choi, Dohyun Kim, and Shiho Kim School of Integrated Technology, BK21 Graduate Program in Intelligent Semiconductor, Yonsei University
WP-352	**Evaluating Throughput of KV-Cache Offloading Across Memory Tiers** Juchan Lee, Hyunjin Kim, Jiwon Song, and Jae-Joon Kim Department of Electrical and Computer Engineering, Seoul National University
WP-353	**Ternary MAC Architecture with Scaling for Energy-Efficient NPU Design** 김도윤, 송다예, 정서현 국민대학교 전자공학부
WP-354	**A Comparative Analysis of DRAM Architectures for Efficient Test-Time Adaptation in Convolutional Layers** Jeongho Kim, Jin Shin, and Hyun Kim Department of Electrical and Information Engineering, Research Center for Electrical and Information Technology, Seoul National University of Science & Technology
WP-355	**Vertical Si/SiGe/Si Biristor-Based P-Bits for Probabilistic Computing** Jaeseoung Park, Jong Pil Im, Hanchan Song, Wangjoo Lee, Jeong Woo Park, and Dongwoo Suh ETRI

WP-356	**Advancing Semiconductor Reliability through AI and FFT-Enhanced Photo-Induced Current Transient Spectroscopy (PICTS)** Saegyoung Song[1], Hui Gu Lee[2], Byeongchan Sim[1], Minju Kim[1], Dong Il Kim[1], Hyunwee Cho[1], and Jinpyo Hong[1,2] [1]Department of Physics, Hanyang University, [2]Division of Nano-scale Semiconductor Engineering and Physics, Hanyang University
WP-357	**Improving Hardware Efficiency of the Fault Detector for Sliding-Window CNN Accelerator** Doan Khue Do, Chunmyung Park, Xuan Truong Nguyen, and Hyuk-Jae Lee Department of Electrical and Computer Engineering, Seoul National University
WP-358	**Lightweight FRC-Aware Mixed Quantization for Robust Edge Speech Recognition** Hanul Ryu, Minsu Kim, Sungho Lee, and Mingeon Shin KETI
WP-359	**Hardware Architecture Optimization for Winograd Convolution-Based Edge AI Accelerator** Minsu Kim, Hanul Ryu, Mingeon Shin, and Sungho Lee Convergence Signal SoC Research Center, KETI
WP-360	**A Neuromorphic Compute-in-Memory Processor for Efficient Acceleration of SlipReLU-Based ANN-to-SNN Converted Spiking ResNet-18** Seolhyeon Kim, Suk-Min Yoon, and Min-Seong Choo Department of Electronic Engineering, Hanyang University
WP-361	**Interface Tuning of HfO_x/TaO_x Multilayered Memristor for Implementation of Noise-Aware Neural Network** Seung Kyu Kang[1], Sungmin Yu[1,2], Sang Min Lee[1,3], Suyoun Lee[1], Jong-Keuk Park[1], and Inho Kim[1] [1]Center for Semiconductor Technology, KIST, [2]Display and Nanosystem Laboratory, School of Electrical Engineering, Korea University, [3]Department of Micro/Nano Systems, Korea University

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U. Bio-Medical 분과

WP-362	**Nernst-Planck Model-Based Simulation for Design and Performance Prediction of Iontophoretic Devices** Jongho Cho[1], Dongjun Han[2], Hyemi Lee[3], Hyungjun Choi[1], Kyeungbin Kim[1], and Dong-Wook Park[2] [1]Department of Electrical and Computer Engineering, University of Seoul, [2]School of Electrical and Computer Engineering, University of Seoul, [3]Department of BioHealth and Eco-Up convergence, University of Seoul
WP-363	**반도체 공정을 활용한 SERS 바이오 센서 제작** 김수근[1,2], 강영호[1,3] [1]전남대학교 물리교육과, [2]전남대학교 광전자융합기술연구소, [3]전남대학교 양자기술연구소
WP-364	**sEMG 신호의 On-Chip 특징 추출을 위한 VCO-Based Analog Front End 설계** 유희재[1,3], 구민석[2,3,4], 김윤[1,3,4] [1]서울시립대학교 전자전기컴퓨터공학과, [2]서울시립대학교 첨단융합학부, [3]서울시립대학교 반도체연구센터(UOS-FAB), [4]주식회사 IM전자
WP-365	**Microwave-Processed PZTO Membrane with Plasma-Enhanced Surface Adhension: From Thin Film to Nanofiber Structure for High-Sensitivity pH** Seung Jin Lee, Seung-Hwa Choi, and Won-Ju Cho Department of Electronic Materials Engineering, Kwangwoon University
WP-366	**A Bias-Free and Ultra-Low Interrogation Power RF Biosensor based on Cu-MOF for Dopamine Detection** Yoongi Cho[1], Sung moon Park[2], Seungchan Lee[2], and Myungsoo Kim[1,2] [1]Graduate School of Semiconductor Materials and Devices Engineering, UNIST, [2]Department of Electrical and Computer Engineering, UNIST

WP-367	**MEMS-Fabricated Silicon Nanocolumn CMUT Arrays for Flexible and Disposable Ultrasound Patches** Seonghun Cho[1,2], Dong-Hyun Kang[1,3], Hae Youn Kim[1], Shinyong Shim[1], Dong Hun Kim[1], Baren Jeong[4], Yoon Seong Lee[4], Eun-Ah Park[4], Whal Lee[4], Hyungmin Kim[1], Butrus T. Khuri-Yakub[5], Maesoon Im[6,7,8], Jae-Woong Jeong[2], and Byung Chul Lee[1,7,8] [1]Bionics Research Center, KIST, [2]School of Electrical Engineering, KAIST, [3]Department of Mechanical Engineering, Gangneung-Wonju National University, [4]Department of Radiology, Seoul National University Hospital, [5]Department of Electrical Engineering, Stanford University, [6]Brain Science Institute, KIST, [7]Division of Bio-Medical Science and Technology, KIST School, University of Science and Technology, [8]KHU-KIST Department of Converging Science and Technology, Kyung Hee University
WP-368	**췌장암 치료를 위한 3차원 자가적응, 삽입형 마이크로 LED 소자Self-Adaptive, Three-Dimensional Implantable MicroLEDs for Pancreatic Cancer Therapy** Minseo Kim, Jae Hee Lee, and Keon Jae Lee Department of Materials Science and Engineering, KAIST
WP-369	**G-ISFET 의 Dirac Point 산포를 줄이기 위한 인터페이스 회로 IP** Sohyeon Ahn, Kwang Soup Song, and Ji-Yong Um Department of Medical IT Convergence Engineering, Kumoh National Institute of Technology

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[WP] 포스터세션

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

WP-220	**초고속 상관 화학기계연마 계측을 위한 위상 이동 간섭계와 능동 탐침 주사 탐침 현미경 통합 기술** 유준호, 장재영 넥센서
WP-221	**반도체 생산라인의 Optical Inspection 장비에서 Beam Alignment 동작 분석 기반의 생산성 향상 및 산포 저감 전략** 신효섭[1,2,3], 신동군[4] [1]성균관대학교 반도체디스플레이공학과, [2]삼성전자 메모리사업부, [3]Samsung Advanced Institute of Technology, [4]성균관대학교 소프트웨어 컴퓨터 공학과
WP-222	**Rapid Analysis of SiGe Composition by Wide-Field Raman Spectroscpopy** Chanwoo Kim and Hyuksang Kwon KRISS
WP-223	**차세대 3D 반도체 공정을 위한 오토인코더 기반 오버레이 계측 정밀도 향상 기법** 이현철[1,3], 장현진[1], 우호성[2], 이원규[3] [1]오로스테크놀로지, [2]한국방송통신대학교, [3]고려대학교
WP-224	**Development of a Z-Pinch Plasma Source-Based Testing Platform for Optical Characterization of Materials Used in Extreme Ultraviolet Lithography** Eun-Seok Choe[1,2], Wooram Kim[1], Do-Yeon Hwang[1,4], Hee-Jung Yeom[1], Jinhoo Seong[1,4], Gwang-Seok Chae[1,4], Young-Gi Kim[3], Hyo-Chang Lee[4], Hyun-Dam Jeong[5], Won Chegal[1,6], Dong-Wook Kim[2], and Jung-Hyung Kim[1] [1]Semiconductor and Display Metrology Group, KRISS, [2]Department of Radio and Information Communications Engineering, Chungnam National University, [3]Korea Institute of Fusion Energy, [4]Department of Semiconductor Science, Engineering and Technology, Korea Aerospace University, [5]Department of Chemistry, Chonnam National University, [6]Graduate School of Analytical Science and Technology, Chungnam National University

WP-225	**Development of an Extreme Ultraviolet Light Source via Dual-Pulse Laser-Produced Plasma for EUV Lithography Material Evaluation Systems** Do-Yeon Hwang[1,2], Wooram Kim[1], Eun-Seok Choe[1], Chegal Won[1], Young-Gi Kim[3], Hyo-Chang Lee[2,4], and Jung-Hyung Kim[1] [1]KRISS, [2]Department of Semiconductor Science, Engineering and Technology, Korea Aerospace University, [3]Korea Institute of Fusion Energy, [4]School of Electronics and Information Engineering, Korea Aerospace University
WP-226	**절연체 기반 유전영동을 이용한 반도체 공정용 화학물질 내 나노입자 정제 기술** 이승윤[1], 장진혁[2], 오준영[2], 김영훈[2], 최삼종[2], 김윤호[2], 김지현[1] [1]서울대학교 화학생물공학부, [2]삼성전자 소재기술팀
WP-227	**Quantitative Hydrogen Analysis by Time of Flight-Elastic Recoil Detection Analysis (TOF-ERDA) Using Medium Energy Ion** Kyungsu Park, Jwa Soon Kim, Jiho Song, Haejoon Hahm, Soobang Kim, Jong Hun Kim, and Won Ja Min HB Solution Co., Ltd.
WP-228	**광섬유 전단력 현미경 기반 초고분해능 열영상 이미징 기술** 정문경, 김동욱, 정찬배, 김동목, 장기수 한국기초과학지원연구원 연구장비개발부
WP-229	**Electrical Property Enhancement in MOCVD-Grown MoS2 FETs: Comparative Insights into Contact Strategies** Junghyun Lee[1,2], Sanghwa Lee[1,2], Hyunwoo Kim[1,2], Bongjoong Kim[2], and Jun Oh Kim[2] [1]KRISS, [2]Hongik University
WP-230	**Design and Optimization of Quasi-3D Hole Array Nanostructures for High-Efficiency Plasmonic Filters** Tae-kyung Im[1,2], Jehwan Hwang[3], Hyunwoo Kim[1,2], Sanghwa Lee[1,2], Bongjoong Kim[2], and Jun Oh Kim[1] [1]KRISS, [2]Mechanical Engineering, Hongik University, [3]Optical Lens Materials Research Center, KOPTI

WP-231	**Comparative Study of Channel Geometry and Electrical Performance in MoS_2 FETs** Hyunwoo Kim[1,2], Do Kyung Kim[3], Junghyun Lee[1,2], Sangwha Lee[1,2], Bongjoong Kim[2], and Jun Oh Kim[1] [1]KRISS, [2]Hongik University, [3]Kangwon National University
WP-232	**E-Beam Generated Fast-Traps in MoS_2 Transistors through Transient I-V Characterization** Joonyup Bae[1], Sunghan Cho[1,2], Nagyeong Lee[1], and Jihyun Kim[1] [1]Department of Chemical and Biological Engineering, Seoul National University, [2]Global Manufacturing and Infra Technology, Samsung Electronics Co., Ltd.
WP-233	**Thermal Property Imaging for 3D Packaging Using Frequency-Domain Thermoreflectance** Dongyun Seo, Jihyun Kim, Kyusung Han, and Jungwan Cho School of Mechanical Engineering, Sungkyunkwan University
WP-234	**Diffraction Diversity 향상을 통한 EUV Ptychography 이미지 복원 성능 개선 연구** 홍준호[1,3], 문승찬[2,3], 이태호[3], 안진호[1,2,3] [1]한양대학교 신소재공학과, [2]한양대학교 나노반도체공학과, [3]극한스케일·극한물성-이종집적 한계극복 반도체 기술 연구센터
WP-235	**4D-STEM과 EELS을 이용한 $Hf_{0.5}Zr_{0.5}O_2$ 강유전상에서의 산소공공 분포와 상안정화 상관성 분석** 성민찬[1], 정지훈[1], 이기용[1], 박범수[2], 이성호[1], 정지원[1], 오상호[1] [1]한국에너지공과대학교 에너지공학부, [2]삼성전자 반도체연구소
WP-236	**Micron-Scale Thermal Property Characterization Using Thermo-Optic Phase Spectroscopy (TOPS)** Kyusung Han, Jihyun Kim, Taeyeon Kim, Dongyun Seo, and Jungwan Cho School of Mechanical Engineering, Sungkyunkwan University
WP-237	**Non-Destructive Material Characterization Using a Compact Multispectral LWIR Imaging Module** Jejung Lee[1], Yonghun Cho[1], Danwon Lee[1], Gimin Bae[2], and Young Hwa Lee[1] [1]Next-Generation C5 System Department, Institute of Innovation for Future Army, [2]DDOK, Co. Ltd.

WP-238	**Quantitative Evaluation of Probe Current Stability in Scanning Electron Microscopes for Semiconductor Metrology** Ha Rim Lee[1], Youngkwon Haam[1,3], Junhyeok Hwang[1], Jeong-Woong Lee[1], Haewon Jung[1], Hoon Kang[1], Junhyeong Park[1], Hyunmo Gu[1], Insu Seo[1], and In-Yong Park[1,2,3] [1]Strategic Technology Research Institute, KRISS, [2]Major in Nanoconvergence Measurement, University of Science and Technology, [3]Graduate School of Analytical Science and Technology, Chungnam National University
WP-239	**Voltage Contrast Inspection of an Electrical Defect on a Semiconductor Wafer with X-Ray Photoelectron Spectroscopy and an Electron Beam** Gyungtae Kim[1], Tae Gun Kim[1], Chil-sung Jung[1], Yunju Oh[1], and Bongjin Simon Mun[2] [1]NNFC, [2]GIST
WP-240	**Artificial Neural Network-Based Detection of In-Cell Region Pattern Non-Uniformity** ChangHwan Lee, SeuRi Jeong, and DkNyon Lee SK hynix Inc.
WP-241	**Metrology and Inspection을 위한 SEM 이미지 복원 및 응용** 황준혁, 이정웅, 박인용, 오가와 타카시 한국표준과학연구원 미래선도연구장비그룹
WP-242	**Johnsen-Rahbek형 정전척의 표면 형상에 따른 Chucking Mechanism 고찰** 김범수, 조지훈, 김창훈 (주)보부하이테크
WP-243	**3D 구조 하부 결함 분석을 위한 In-Line 파괴 검사 기법 개발** Do Young Choi, Jae Cheol Jo, and Kyu Young Kim SK Hynix Inc.
WP-244	**Effect of Sulfur Passivation on the Electrical Characteristics of InGaAs-InP Heterojunction TFET** Jong Hwan Park, Min Su Kim, Dong Hwi Choi, Jae Hyeop Lee, and Jae Cheol Shin

	Department of Electronics and Electrical Engineering, Dongguk University

WP-245	**Enhancing Yield and Variability Control of 8-Inch CMOS-Compatible RRAM for Mass Production Applications** Heesoo Yang, Woo-Seok Kim, Bonseong Gu, Youna Kwon, Sanghwa Lee, Won-chul Lee, Dong-wook Lee, Seung Jong Yoo, Gap Sup Sim, Young Joo Kim, Woo-Suk Sul, and Kanghyeok Jeon NNFC
WP-246	**Fabrication of a Laser-Integrated TEM Holder and Drift Benchmarking toward In-Situ Micro Solder Bump** Yun Jae Jung, Hui Won Park, Ye Rim Kang, Hyun Jin Choi, Jin Young Kim, and Young Heon Kim Department of Analytical Science and Technology, Graduate School of Analytical Science and Technology, Chungnam National University
WP-247	**Analysis of EUV Light Source based on the Cold Cathode Electron Beam Irradiation with Multilayer Mirror Measurement for Actinic Inspection Technique** Iksu Kim, Umesh Balaso Apugade, Dana Chung, and Kyu Chang Park Department of Information Display, Kyung Hee University
WP-248	**Development and Assessment of an Air-Free Transfer Holder for Reliable TEM Characterization of Air-Sensitive Semiconductors** Hui Won Park, Yun Jae Jung, and Young Heon Kim Graduate School of Analytical Science and Technology, Chungnam National University
WP-249	**Microstructural Property and Formation Mechanism of Cracks in AlInN/GaN Heterostructure** Chan Hee Hwang[1], Da Mi Kwon[1], Hyeon Jin Choi[1], Jong Hoon Kim[1], Eun Ah Cheon[2], Young Kyun Noh[2], and Young Heon Kim[1] [1]Graduate School of Analytical Science and Technology, Chungnam National University, [2]IVWorks Co., Ltd.
WP-250	**Pellicle Inspection Technique based on the EUV Light Source with Cold Cathode Electron Beam** Umesh Balaso Apugade, Iksu Kim, and Kyu Chang Park Department of Information Display, Kyung Hee University
WP-251	**Fabrication and Reliable Evaluation of MEMS Heating Chips for In-Situ TEM**

	Ji Min Lee[1], Jin Young Kim[1], Dae Yeon Kim[1], Yun Jae Jung[1], Hui Won Park[1], Hoil Cha[2], Jong Cheol Park[2], Yun Chang Park[2], and Young Heon Kim[1] [1]Department of Analytical Science and Technology, Graduate School of Analytical Science and Technology, Chungnam National University, [2]NNFC
WP-252	**Optical and Electronic Responses of 2D van der Waals Heterostructures Probed by Temperature-Dependent Infrared Ellipsometry** Sukhyun Choi, Yongjai Cho, Junghoon Yang, Jongkyoon Park, and Won Chegal Semiconductor and Display Metrology Group, KRISS
WP-253	**플라즈마 식각 환경에서 이트륨계 소재의 오염입자 발생 실시간 분석 연구** 이래원[1,3], 민병현[1,2], 강상우[1,2], 김태성[3], 문지훈[1] [1]한국표준과학연구원 전략기술연구소, [2]과학기술연합대학교대학원 정밀측정, [3]성균관대학교 성균나노과학기술원

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[WP] 포스터세션

S. Chip Design Contest 분과

WP-254	**A Half-VDD Biased Capacitively Driven On-Chip Link With Switched-Capacitor Signaling** Wonbin Lee[1], Soonwon Kwon[2], In-Woo Jang[1], Jae-Seung Jeong[1,3], Sara Kim[1], and Kyeongha Kwon[1] [1]KAIST, [2]MediaTek, [3]Samsung Electronics Co., Ltd
WP-255	**An 850μW, 2-to-5GHz Jitter-Filtering and Instant-Toggling Injection-Locked Quadrature-Clock Generator for Low-Power Clock Distribution in HBM Interfaces** Jeongbeom Seo[1], Yuhwan Shin[2], and Jaehyouk Choi[1] [1]Department of Electrical and Computer Engineering, Seoul National University, [2]Electrical Engineering, KAIST
WP-256	**A 0.4-VDDQ 11.5-Gb/s/pin Transmitter with Switched-Coupling Charge-Pump Crosstalk Cancellation Achieving Eye-Margin Recovery for Ultra-Dense Die-to-Die Interfaces** Yoochang Kim[1] and Young-Ha Hwang[1,2] [1]Department of Intelligent Semiconductors, Soongsil University, [2]School of Electronic Engineering, Soongsil University
WP-257	**A Low-Power 8-b 500MS/s Three-Comparator SAR ADC with Background Comparator-Swapping Offset Calibration** Seunghyun Kim and Minjae Lee School of Electrical Engineering and Computer Science, GIST
WP-258	**A Temperature-Compensated LDO with Embedded Voltage Reference for Compact SoCs in 65nm CMOS** Beomsoo Kim[1], Yuli han[2], and Kunhee Cho[1] [1]Department of Semiconductor Convergence Engineering, Sungkyunkwan University, [2]DB Global Chip

WP-259	**Small-Area, High-Speed, and High Uniformity Source Driver IC for OLED-on-Silicon (OLEDoS) Displays** Jung Hwan Oh, Wi Man Yoo, Dong Kun Lee, and Jong Seok Kim Department of Electronics and Electrical Engineering, Hanyang University ERICA
WP-260	**A High-Efficiency Low-Ripple Pulse-Frequency Modulation Buck Converter for Light-Load Applications** Gang-Bae Park, So-Hyun Lee, Hye-Seon Choi , and Jong-Seok Kim Department of Electrical and Electronic Engineering, Hanyang University ERICA
WP-261	**In-Memory-Computing Architecture for Closed-Loop Peripheral Nerve Modulation Implants** Donghyeon Yi[1], Seoyoung Lee[2], and Minkyu Je[1] [1]School of and Electrical Engineering, KAIST, [2]IMEC
WP-262	**An Energy-Efficient Multi-Cell Battery Charger with Simultaneous Charging and Balancing** Seongil Yeo and Kunhee Cho Department of Semiconductor Convergence Engineering, Sungkyunkwan University
WP-263	**Second-Order Feedforward $\Delta\Sigma$ Converter for High-Sampling-Rate Current-Type Bio Signal Measurement** Minseok Park and Chul Kim Department of Bio and Brain Engineering, KAIST
WP-264	**A 100-Mb/s TIA-first Galvanic-Coupling Communication Receiver for Neural Implant Systems** 이현엽, 이동윤, 정윤철, 제민규 한국과학기술원 전기 및 전자공학부
WP-265	**A Design Technique for Highly Parallel PRTS Generators** Jusung Park and Jintae Kim Konkuk University
WP-266	**Single-Photon Avalanche Diode Based X-Ray Detector** Hyun-Seung Choi and Youngcheol Chae Yonsei University

WP-267	**A Design Technique for Linearity Enhanced Dynamic Amplifier** Gwangmin Jung and Jintae Kim Konkuk University
WP-268	**An Energy-Efficient Keyword Spotting Processor with Zero-Aware Feature Skipping and Relaxed Convolution** Sangyeon Kim[1], Seongmin Ki[1], and Sungju Ryu[2] [1]Department of Electronic Engineering, Sogang University, [2]Department of System Semiconductor Engineering, Sogang University

WP-269	**A Single-Ended PAM-3 Transmitter with Multiplexing Driver for Memory Interfaces** Chan-Hee Jeon and Yong-Un Jeong School of Semiconductor Systems Engineering, Sejong University
WP-270	**A 9.4-fs-FoM Fast Transient Switched-Capacitor LDO in 28-nm CMOS** Sangwoong Sim, Donghwan Kim, and Jaehoon Jun Departmentl of Electrical and Computer Engineering, Inha University
WP-271	**Mutual Locking of Buffered Oscillators via Inter-Core Line** 김준성, 김문일 고려대학교 초고주파 연구실
WP-272	**A V-Band Vector Sum Phase Shifter over a Wide Band Width in 28nm CMOS Technology** Hyeong Jin An and Chul Woo Byeon [1]Department of Electronic and Electrical Engineering, Dankook University
WP-273	**A V-band Power Divider/Combiner with a Tunable Isolation Band Using a Capacitor Bank in 28nm CMOS Technology** Yeon Soo Lim and Chul Woo Byeon Department of Electronic and Electrical Engineering, Dankook University
WP-274	**A V-Band 2-Stage Low-Phase-Error Variable Gain Amplifier with 0.5dB Resolution of 24dB Gain Range in 65nm CMOS Technology** In Cheol Yoo and Chul Woo Byeon Department of Electronic and Electrical Engineering, Dankook University

WP-275	**Time-Interleaved Nyquist and Delta-Sigma Current-Steering DACs for Wireless Transmitter** Hyunyoung Yoo[1], Yeonsu Kim[1], Su-Hyeon Kim[1], Eunji Yoo[1], Gu-Hyeon Lee[1], Jae-Yun Park[2], and Jae-Won Nam[1] [1]Department of Electronic Engineering, Seoul National University of Science & Technology, [2]Agency for Defense Development
WP-276	**Design of Analog Front-End for the Wideband Wireline Receiver** Hyunyoung Yoo[1], Su-Hyeon Kim[1], Yeonsu Kim[1], Eunji Yoo[1], Gu-Hyeon Lee[1], Jae-Yun Park[2], and Jae-Won Nam[1] [1]Department of Electronic Engineering, Seoul National University of Science & Technology, [2]Agency for Defense Development
WP-277	**Gate- and Body-Driven OLEDoS Pixel Circuit for a Wide Data Range** Chanjin Park and Soo-Yeon Lee Department of Electrical and Computer Engineering, Seoul National University
WP-278	**Energy-Efficient Compression Architecture for Molecular Dynamics** Seongmin Ki, Sangyeon Kim, and Sungju Ryu Sogang University
WP-279	**A Low-Dropout Regulator Using Gain-Boosting OTA and Dynamic Feedback Compensation for Low Power DRAM Cores** Min Cheol Kim, Ju Hong Min, and Jang Hyun Kim Department of Intelligence Semiconductor Engineering, Ajou University
WP-280	**Scalable Neuromorphic Architecture with STDP based on Chip Learning for Edge Devices** SuHwan Na, SungHyun Cha, and DongSun Kim Department of Semiconductor Systems Engineering, Sejong University
WP-281	**A 5V-Input 0.6-to-2.2V Output 3 Level Step-Down Converter Using Open Loop Based Flying Capacitor Voltage Balancing for DDR5 VRoD PMICs** 최정진[1], 이정섭[2], 윤제훈[1], 유승완[1], 최우석[1], 이강윤[1] [1]성균관대학교 전자전기컴퓨터공학과, [2]성균관대학교 반도체디스플레이공학과
WP-282	**A 90GHz Passive Mixer-First Receiver in 28-nm CMOS** 최규빈, 노승모, 최우열 서울대학교 전기정보공학부

WP-283	**12-Bit High Resolution-Area Efficient Current DAC** Dong Hun Cha[1], Ji Seong Kim[2], Se Woong Jeong[1], Yu Jin Lee[1], and Jeong Hoan Park[1,2] [1]Department of Semiconductor Engineering, Kyung Hee University, [2]Department of Electronic Engineering, Kyung Hee University
WP-284	**Reconfigurable Regulating Rectifier with Minimized Conduction and Switching Loss in 130nm BCDMOS** 신도현, 홍진우, 허준영, 김지민, 김종민, 범진욱 Department of Electronic Engineering, Sogang University
WP-285	**High-Speed and Highly Reliable 3-T Embedded NOR Flash Memory for Standard CMOS Process** Min Se Kim[1,2], Jae Seung Woo[1,2], and Woo Young Choi[1,2] [1]Department of Electrical and Computer Engineering, Seoul National University, [2]Inter-university Semiconductor Research Center, Seoul National University
WP-286	**Biopotential Amplifier with SNR-Optimizing Technique under Harsh Contact Impedance Conditions** Younghun Jeong and Nhamil Koo School of Foundry Engineering, Dankook University
WP-287	**Compact Integration of RDAC and High-Pass Filter for Battery Electrochemical Impedance Spectroscopy** ByeongHo Hwang[1], UiKyoung Lee[1], JiHan Shin[2], and KyeongHa Kwon[1,2] [1]School of Electrical Engineering, KAIST, [2]Graduate School of AI Semiconductor, KAIST
WP-288	**Energy-Efficient Ternary Content-Addressable Memory based on One Capacitor and One Nanoelectromechanical Memory Switch Memory Cell** Myeong Su Shin[1,2], Geun Tae Park[1,2], Jin Wook Lee[1,2], and Woo Young Choi[1,2] [1]Department of Electrical and Computer Engineering, Seoul National University, [2]Inter-university Semiconductor Research Center, Seoul National University

WP-289	**Nanoelectromechanical Physically Unclonable Function for Resource-Constrained IoT Environments** Seung Hun Baek[1,2], Jin Wook Lee[1,2], Geun Tae Park[1,2], and Woo Young Choi[1,2] [1]Department of Electrical and Computer Engineering, Seoul National University, [2]Inter-university Semiconductor Research Center, Seoul National University
WP-290	**Low-Power Analog CMOS Neuron Circuits for Solving Fan-in Issues in Spiking Neural Network Systems** Seongjin Kim[1,2,3], Jonghyuk Park[1,2], Yeonwoo Kim[1,2], and Woo Young Choi[1,2] [1]Department of Electrical and Computer Engineering, Seoul National University, [2]Inter-university Semiconductor Research Center, Seoul National University, [3]Flash Design Team, Samsung Electronics Co., Ltd.
WP-291	**A 20 GHz Integer-N PLL with Injection-Locked Frequency Divider-by-4 in 28 nm CMOS** Young Jun Byun, Min Gi Seo, and Gyungsu Byun Department of Electrical and Computer Engineering, Inha University
WP-292	**A Low-Power CMOS Non-Linear DDS for Non-Faradaic EIS Biosensors** Jun-Seok Beom, Kang-Woo Choi, and Nam-Seog Kim School of Information and Communication Engineering, Chungbuk National University
WP-293	**Design of Polysilicon Grating Couplers Using Metal Reflector in FD-SOI Platform** Jiwi Park, Chaewon Jeon, and Kyoungsik Yu KAIST
WP-294	**A High-Voltage Double Step-Down Converter with Perturb & Observe MPPT Technique in Solar PV System** Tae-Ryeong Kim and Jong-Wook Lee Department of Electronic Engineering, Kyung Hee University
WP-295	**Micro-Bolometer Thermal Imager with Ambient Temperature Compensated Sensor Sensitivity** Jongho Jung, Taehyung Kim, Kiwon Seo, and Gunhee Han School of Integrated Technology, Yonsei University

WP-296	**Design of W-band Power Amplifier and Low-Noise Amplifier for High-Speed Dielectric Waveguide Link** 이영한, 이성준, 최우열 서울대학교 전기정보공학부
WP-297	**A Dual Supply-Ground Voltage Regulation Scheme Using Low-Dropout Regulators for CMOS SoCs** Hee-Cheol Joo[1] and Young-Ha Hwang[1,2] [1]Department of Intelligent Semiconductors, Soongsil University, [2]School of Electronic Engineering, Soongsil University
WP-298	**Differential Sense Amplifier Integrating Precharge and Offset Compensation Process** Chaebin Kim[1] and Keewon Kwon[2] [1]Department of Electronic and Electrical Engineering, Sungkyunkwan University, [2]Department of Semiconductor System Engineering, Sungkyunkwan University
WP-299	**HVLS-Based Cell-Selective EIS Structure for Series-Connected Multi-Cells** Ayeon Gwon, Yeseul Song, and Junwon Jeong Sookmyung Women's University
WP-300	**DC-DC Converter with Pulse-Skip Mode for Low-Power Operation** Minseok Kim, Haechan Park, Jiho Jung, Minkwang Ji, Jooyun Oh, Sungwan Hong, Jihun Oh, Heejun Byeon, Huiseung Chae, Jaehyeok Lee, Kyungseok Lee, and Joongho Choi University of Seoul
WP-301	**A Second-Order Noise-Shaping SAR ADC with 3-Level-Switching CDACs Employing a Novel DWA** 김준형, 나우성, 조장현, 최보성, 고경보, 권준석, 박상규 한양대학교 융합전자공학과
WP-302	**A K-Band Doherty Power Amplifier with Transformer-Based Matching Network for 6G and Beyond Wireless Communication** 이성준, 김준엽, 최우열 서울대학교 전기정보공학부

WP-303	**An Error Correcting Code Encoder Utilizing Orthogonal Latin Square Code for HBM Application** Yue Ri Jeong, Sangho Lee, Seongmo An, Jinyeol Kim, and Seung Eun Lee Department of Electronic Engineering, Seoul National University of Science & Technology
WP-304	**Gray Code Counter-Based Loopback Verification Framework for RCD Control Word Functionality in 28nm CMOS** Saransh Rajjarwal, Min-Gi Seo, Young-Jun Byun, and Gyung Su Byun Department of Electrical and Computer Engineering, Inha University
WP-305	**Input Bus Termination Calibration with Digital Controller Design for High-Speed Memory Interface** Saransh Rajjarwal, Min-Gi Seo , Young-Jun Byun, and Gyung Su Byun Department of Electrical and Computer Engineering, Inha University
WP-306	**8-Way FDM-Based 500 MHz BW DDFS for a Baseband Qubit Controller** Hyunyoung Yoo[1], Su-Hyeon Kim[1], Muhammad Fakhri Mauludin[2], Yeonsu Kim[1], Eunji Yoo[1], Gu-Hyeon Lee[1], Jae-Yun Park[3], Jusung Kim[4], and Jae-Won Nam[1] [1]Department of Electronic Engineering, Seoul National University of Science & Technology, [2]Department of Electronics Engineering, Hanbat National University, [3]Agency for Defense Development, [4]Division of Electronic and Semiconductor Engineering, Ewha Womans University
WP-307	**가변 부하 배터리 밸런싱을 위한 High-VDS, Low-ron Stacked CMOS Switch IC** 이규환, 최동국, 최수로, 김상혁, 이경태 Department of Electrical Engineering and Computer Science, DGIST
WP-308	**A Sub-1-V Bandgap Reference Circuit with High PSRR** Minoo Lee, Gahyeon Sung, and Junghyup Lee DGIST
WP-309	**Low-Power Wideband 4.8-7.2 GHz Balun-LNA with Local Feedback gm-Boosting and Current-Bleeding for Wi-Fi 7 Applications** Youngchae Lee, Chaerin Park, and Kuduck Kwon Department of Electronic Engineering, Kangwon National University

WP-310	**A Blocker-Tolerant Balun-LNTA with Integrated Dual-Band LC Notch Filter for Sub-6 GHz 5G NR Receivers** Sejin Lee, Seungyeon Kim, and Kuduck Kwon Department of Electronic Engineering, Kangwon National University
WP-311	**A Dual-Band N-Path Balun-LNA for 5G New Radio Cellular Applications** Byounghyun You, Heesu Lee, and Kuduck Kwon Department of Electronic Engineering, Kangwon National University
WP-312	**A Pipelined ADC With a Gain-Boosted Dynamic Amplifier** Bo Gao, Raymond Mabilangan, and Seung-Tak Ryu School of Electrical Engineering, KAIST
WP-313	**Design and Analysis of a Cascaded Floating Inverter Amplifier Based 2nd-Order Noise-Shaping SAR ADC** Jang Su Hyeon and Hyeon June Kim Seoul National University of Science & Technology
WP-314	**A Hybrid Recording System with 10kHz-BW 630mVpp 84.6dB-SNDR 173.3dB-FOMSNDR and 5kHz-BW 114dB-DR for Simultaneous ExG and Biocurrent Acquisition** Seokhan Jeong[1], Taeryoung Seol[2], and Junghyup Lee[1] [1]DGIST, [2]Georgia Institute of Technology
WP-315	**A 7T1C 5644 PPI OLED on Silicon Pixel Circuit with 1.2V and 5.5V Transistors in 28nm CMOS Process** Hyeon-Ji Lee, Chang-Hun Lee, and Byong-Deok Choi Department of Electronic Engineering, Hanyang University
WP-316	**A Wide-Lock-In-Range and Low-Jitter 12-14.5 GHz SSPLL Using a Low-Power Frequency-Disturbance-Detecting and Correcting Loop** Young Jun Kim, Si Heon Lee, Tae Hyub Kim, and Younghyun Lim School of Semiconductor Engineering, Kyung Hee University
WP-317	**A Calibration-Free VCO-$\Delta\Sigma$ ADC with PVT-Insensitive Frequency-Locked Differential Regulation Scheme for Multi-Channel ExG Acquisition** Sehwan Lee[1,2], Kyuhyeon Park[1], and Junghyup Lee[1] [1]DGIST, [2]Samsung Electronics Co., Ltd.

WP-318	**ADC-Free Neuron based on Page Buffer for Bit-Sliced Neuromorphic Systems** Jinhyeok Kim[1,4], Yoon Kim[1,3,4], and Minsuk Koo[2,3,4] [1]School of Electrical and Computer Engineering, University of Seoul, [2]School of Advanced Fusion Studies, University of Seoul, [3]IM Electronics co., [4]Center for Semiconductor Research, University of Seoul
WP-319	**Hybrid LDO Having Small-Output Ripple and Fast Settling at 0.5V Supply Using Dynamic Gate-Voltage Generation and Fast-PD Decision** Seungwan Kim and Younghyun Lim School of Semiconductor Engineering, Kyung Hee University
WP-320	**Design of Programmable-Gain Amplifier for Precise Measurement of Dielectric Absorption Voltage Recovery in On-Chip Capacitors** Joo-Sun Lee, Yong-Jin Kim, and Byong-Deok Choi Department of Electronic Engineering, Hanyang University
WP-321	**60GHz Dual-Core Class-F Push-Push VCO with Dual Path Voltage Control** Joon-Hyuk Moon, Ye-Won Jeon, Jun-Kyo Park, Tae-Jeong Kim, and Byung-Sung Kim RF Microelectronic Design Lab., Sungkyunkwan University
WP-322	**LPDDR 인터페이스용 NRZ/PAM-4 듀얼 모드 송신기 설계** 김승균[1], 조항민[2], 이원영[1] [1]서울과학기술대학교 스마트ICT융합공학과, [2]한국전자통신연구원
WP-323	**A SiC MOSFET Gate Driver Employing an Adaptive Soft Turn-Off Current and a Current Slope-to-Digital Converting Technique** Geonwoo Park[1], Jinman Myung[1], Yoseph Kim[1], Seungjik Lee[2], and Ilku Nam[1] [1]Department of Electrical Engineering, Pusan National University, [2]Analog Devices Korea
WP-324	**A Compact Fractional Output Divider with Time-Multiplexed INL Detection Achieving −75 dBc Worst-Case Spur over 0.64–0.90 V** Jiwon Shin, Yoona Lee, and Woo-Seok Choi Department of Electrical and Computer Engineering, Seoul National University

WP-325	**A D-Band Compact, Power Efficiency X8 Frequency Multiplier With 112-172 GHz Output 3-dB Bandwidth in 28-nm Bulk CMOS** Dong-Yeol Yang, Ye-won Jeon, and Byung-Sung Kim RF Microelectronic Design Lab., Sungkyunkwan University
WP-326	**Design of a Hybrid Step-Down Converter with Inductor Current Reduction** Seungjin Baek[1], Seunghoon Lee[1], Jusung Kim[2], and Kunhee Cho[1] [1]Department of Semiconductor Convergence Engineering, Sungkyunkwan University, [2]Division of Electronic and Semiconductor Engineering, Ewha Womans University
WP-327	**CTCAM-Based HW Friendly Image Classification Model** 김동휘, 김수민, 임현기, 박주환, 최연우, 서영석, 홍상훈 경희대학교 전자공학과
WP-328	**A Galvanically Isolated High Speed Switching Gate Driver for Low-to-Medium Voltage Wide-Bandgap Semiconductor** Sangin Choi and Kunhee Cho Department of Semiconductor Convergence Engineering, Sungkyunkwan University
WP-329	**A 12-b Fully-Differential Ring-Amp-Based 100-MS/s Pipelined SAR ADC** Jisu Kim[1], Taeho Lee[2], and Jun-Eun Park[1] [1]Department of Electrical and Computer Engineering Sungkyunkwan University, [2]Department of Semiconductor Convergence Engineering Sungkyunkwan University
WP-330	**Wideband High-Performance CMOS Cascode Frequency Down Converters** Hosung Kang, Seungyun Han, and Jihoon Kim Kyonggi University
WP-331	**Skew-Detecting Method for Time-Interleaved SAR ADC** Joonhyun Park and Hyungil Chae Konkuk University

WP-332	**A 56-Gb/s PAM4 Receiver Using Injection-Based Baud-Rate CDR With Jointly Adaptive AFE** 박민수, 전정훈 Department of Electrical and Computer Engineering, Sungkyunkwan University
WP-333	**전압 결합 방식 및 전류 결합 방식 동시에 사용된 밀리미터파 CMOS 도허티 전력증폭기 설계** 빈수현, 최영찬, 양영구 성균관대학교 전자전기컴퓨터공학과
WP-334	**An eMRAM-Based True Random Number Generator Using a Digitally Controlled Delay Line** Seunghwa Hyun and Jongsun Park Department of Electrical Engineering, Korea University
WP-335	**Wireless Network of Distributed Neural Interface** Joonyoung Lim, Jong-hyun Park, Gwang-ho Choi, Seok-won Joo, and Yoon-Kyu Song Graduate School of Convergence Science and Technology, Seoul National University
WP-336	**Adaptive Spike Detecting Circuit for Wireless Brain Implant Neural Interface IC** Joonyoung Lim, Jong-hyun Park, Gwang-ho Choi, Seok-won Joo, and Yoon-kyu Song Graduate School of Convergence Science and Technology, Seoul National University
WP-337	**Feasibility Validation of a Domain-Specific Accelerator Integrated into an Open-Source RISC-V SoC** Dowon Kim, Dongbeom Son, Dongeon Won, and Jungwook Choi Hanyang University
WP-338	**D-Band Frequency Multiplier for Wireless Communications in 28-nm CMOS FDSOI Process** 김재관[1], 서문교[2] [1]성균관대학교 반도체융합공학과, [2]성균관대학교 전자전기공학부

WP-385	A 97.5%-Efficiency Hybrid Dual-Path Buck Converter with Self-Balancing Hyeon Gyu Park and Young-Kyun Cho Department of Radio and Information and Communication Engineering, Chungnam National University

2026-01-28(수), 10:00-19:00
(공식발표시간: 17:30-19:00)
ZONE2-2 (5층, 로비)

[WP] 포스터세션

C. Material Growth & Characterization 분과

WP-036	**Doping-Dependent Ferroelectric Properties of Al Doped HfO2 Thin Films for FeFET Applications** Hyun Gon Pyo[1,2] and Cheol Seong Hwang[1,2] [1]Department of Materials Science and Engineering, Seoul National University, [2]Inter-university Semiconductor Research Center, Seoul National University
WP-037	**Overcoming Intrinsic Thermal Instability in MoS2 Monolayer via High-Pressure CVD Growth** Seok joon Yun and Takmo Jeong University of Ulsan
WP-038	**공정 변수의 복합적 제어를 통한 고결정성·저결함 MoS_2 박막의 합성** 황준연, 원종서, 이재원, 허정윤, 홍웅기 단국대학교 파운드리공학과
WP-039	**Atomic Layer Deposition of Molybdenum Carbide and Substrate-Dependent Reduction to Metallic Molybdenum.** 안광용[1], 구본욱[1], Kieran G Lawford[2], Seán T. Barry[2], and Han-Bo-Ram Lee[1] [1]Department of Material Science and Engineering, Incheon National University, [2]Department of Chemistry, Carleton University
WP-040	**Stoichiometry-Engineered Binary Chalcogen Thin Films Enabled by Integrated Synthetic Approach** Gayeon Lee[1], Namwook Hur[2], Changhwan Kim[2], Seonguk Yang[1], and Joonki Suh[1] [1]Department of Chemical and Biomolecular Engineering, KAIST, [2]Department of Materials Science and Engineering, UNIST

WP-041	**Study on the Efficiency of Deuterium Annealing for Various Process Durations** Min-Woo Kim, Hyo-Jun Park, Eui-Cheol Yun, Sang-Min Kang, Da-Eun Bang, Dol Sohn, and Jun-Young Park School of Semiconductor Engineering, Chungbuk National University
WP-042	**Highly Crystalline ZrO_2 Films under 2 nm by Atomic Layer Modulation** Wonjoong Kim[1], Ngoc Le Trinh[1], Bonwook Gu[1], Dohyun Kim[1], Byung-ha Kwak[2], Hyun-Mi Kim[3], Hyeongkeun Kim[3], Youngho Kang[1], Il-Kwon Oh[2], and Han-Bo-Ram Lee[1] [1]Department of Materials Science and Engineering, Incheon National University, [2]Department of Electrical and Computer Engineering, Ajou University, [3]Electronic Convergence Materials and Devices Research Center, KETI
WP-043	**Multi-Zone Thermally Decoupled MOCVD for Low-Temperature MoS_2 Synthesis** Jongseo Won, Jaewon Lee, Jungyoon Hur, Junyeon Hwang, and Woonggi Hong Department of Foundry Engineering, Dankook University
WP-044	**Van der Waals High-k Crystalline Lanthanum Oxychloride Integration for Superior Switching 2D Transistor** Changjun Park[1], Habin Baek[2], Hanbin Cho[1], Jing Huang[3], Kyungmin Ko[4], Chanho Lee[2], Sangwoo Park[2], Soobeom Shin[2], Hu Young Jeong[2], Jun Kang[3], and Joonki Suh[1] [1]Department of Chemical & Biomolecular Engineering, KAIST, [2]Graduate School of Semiconductor Materials and Devices Engineering, UNIST, [3]Beijing Computational Science Research Center, [4]Department of Materials Science and Engineering, Seoul National University
WP-045	**Electro-Optical Switching Behavior of VO2(M) Thin Films for Integrated Photonic Modulators** Namhoon Kim[1,2], Jaehyeon Gyeong[1], Heonjin Choi[2], and Donghee Park[1] [1]Center for Quantum technology, Post-Silicon Semiconductor Institute, KIST, [2]Department of Materials Science and Engineering, Yonsei University

WP-046	**Understanding Rapid Growth Mechanism of MOCVD-Grown Wafer-Scale MoS_2 under BEOL Compatible Temperature** Taehyeon Kim[1,2,3], Jaemin Myoung[1,2,3], Taesung Kim[4], and Jihun Mun[1] [1]Strategic Technology Research Institute, KRISS, [2]SKKU Advanced Institute of Nanotechnology (SAINT), Sungkyunkwan University, [3]Department of Nano Science and Technology, Sungkyunkwan University, [4]School of Mechanical Engineering, Sungkyunkwan University
WP-047	**Epitaxial Synthesis of Highly Crystalline RuO_2 Thin Films via RF-Magnetron Sputtering** Min-Seok Kim[1,2], Jun-Hyeong Park[1,2], Dong Hyun Lim[1,3], Jun Min Suh[2,4], Ho Won Jang[2], Seung-Hyub Baek[1,5], and Tae Heon Kim[1,5] [1]Electronic and Hybrid Materials Research Center, KIST, [2]Department of Materials Science and Engineering, Research Institute of Advanced Materials, Seoul National University, [3]Department of Semiconductor Engineering, Seoul National University of Science & Technology, [4]School of Transdisciplinary Innovations, Seoul National University, [5]Division of Nanoscience and Technology, KIST School, University of Science and Technology
WP-048	**Temperature-Dependent Phase Transition in WS_2 for Reinforcing Band-to-Band Tunneling and Photoreactive Random Access Memory Application** Hyun Woo Shim[1], Gun Hoo Woo[2], Jin Il Cho[2], and Tae Sung Kim[1] [1]School of Semiconductor Convergence Engineering, Sungkyunkwan University, [2]Memory Division, Samsung Electronics Co., Ltd.
WP-049	**The Preparation of Trans-2-Fluoro-3-(Trifluoromethyl)oxirane for Plasma-Based Dry Etching** 김성미[1,2], 홍유진[1], 오명석[1], 채희엽[2], 장봉준[1] [1]한국화학연구원 계면재료 화학공정 연구센터, [2]성균관대학교 화학공학과
WP-050	**Anion-Controlled Transition Metal-Based Catalysts for Sustainable Chemical Processes** So Hyeon Kwon, Jaeyong Lee, Hwiyong Kwon, Daeun Kim, Yubin Choi, and Haeri Lee Department of Chemistry, Hannam University

WP-051	**Role of Intermediates in Salt-Assisted CVD Growth of Molybdenum Disulfide** Chanmin Park[1], YongJu Kim[1], Jaewoo Ku[1], Hyeonryul Lee[2], Sooncheol Kwon[3], and Minsu Kim[1] [1]Department of Advanced Materials Engineering, Kyonggi University, [2]Department of Advanced Battery Convergence Engineering, Dongguk University, [3]Department of Energy and Materials Engineering, Dongguk University
WP-052	**Thickness-Driven Evolution of Crystallographic Symmetry and the Resulting Domain Twinning in Epitaxial Perovskite Oxide (001) Thin Films** Dong-Hun Han[1,2], Jaebaek Ju[1,3], Donghyeon Lim[1,4], Ho Won Jang[2,5], Tae Heon Kim[1,6], and Seung-Hyub Baek[1,6] [1]Electronic and Hybrid Materials Research Center, KIST, [2]Department of Materials Science and Engineering, Research Institute of Advanced Materials, Seoul National University, [3]Department of Materials Science and Engineering, Korea University, [4]Department of Semiconductor Engineering, Seoul National University of Science & Technology, [5]Advanced Institute of Convergence Technology, Seoul National University, [6]Division of Nanoscience and Technology, KIST School, University of Science and Technology
WP-053	**Thermal Conductivity Measurements of Nickel-Based Alloy Thin Films with Different Alloy Compositions** Minkyu Je, Ajin Jo, Taeyeon Kim, Chan Kim, Jihyun Kim, Dongwoo Lee, and Jungwan Cho School of Mechanical Engineering, Sungkyunkwan University
WP-054	**Thermal Characterization of Sputtered HfO_2 Thin Films on Si Using Frequency-Domain Thermoreflectance** Hyeokje Kim, Euimin Cheong, Taeyeon Kim, Jihyun Kim, Dongwoo Lee, and Jungwan Cho School of Mechanical Engineering, Sungkyunkwan University

WP-055	**Bandgap and Work Function in Semiconducting HfSe2 Films** Mincheol Kim[1,2,3], Tae Gyu Rhee[1,3], Young Rok Khim[1], Yeong Gwang Khim[1,2], Young Hoon Khim[1], Dang Nguyen Hoang[4], Nguyen Huu Lam[4], Ganbat Duvjir[4], Jungdae Kim[4], Rovi Angelo Beloya Villaos[5], Feng-Chuan Chuang[5], and Young Jun Chang[1] [1]Department of Physics, University of Seoul, [2]Department of Smart Cities, University of Seoul, [3]KIST, [4]Department of Physics and Energy Harvest-Storage Research Center, University of Ulsan, [5]Center for Theoretical and Computational Physics, National Sun Yat-sen University
WP-056	**오비탈 전류의 분극제어를 통한 무자기장 수직자화 스위칭** 정건우[1], 윤성종[1], 전홍원[1], 우다은[1], 조흥래[1], 김우진[1], 양희창[2], 김혜진[3], 이원익[2], 박민서[2], 전세윤[3], 최현경[2], 김종윤[2], 김동현[3], 엄기태[1], 이수길[1] [1]가천대학교 반도체공학과, [2]가천대학교 반도체전자공학부 차세대반도체공학전공, [3]가천대학교 반도체전자공학부 전자공학전공
WP-057	**Growth and Characterization of Two-Dimensional Molybdenum Disulfide by Using Metal Organic Chemical Vapor Deposition** Jeongseo Moon[1,2], Won Young Jang[3], Kyung Rim Kang[4], Min-jae Lee[3], Hong Seok Ko[4], Seong Bin You[5], Kang Bok Ko[2], Bo-In Park[1,2,3], Chel-jong Choi[1,2,3], and Keun Heo[1,2,3] [1]School of Semiconductor and Chemical Engineering, Jeonbuk National University, [2]Semicondutor Physics Research Center, Jeonbuk National University, [3]Department of Semiconductor Science and Technology, Jeonbuk National University, [4]Department of Electronic Engineering, Jeonbuk National University, [5]Division of Advanced Materials Engineering, Jeonbuk National University
WP-058	**Titanium Carbide MXene Based Composite for Multi-Directional Heat Spreader** Seoyeon Choi[1], Young Ho Jin[1], Yeongcheol Park[2], Jae Hun Seol[2], and Soon-Yong Kwon[2] [1]Department of Materials Science and Engineering and Graduate School of Semiconductor Materials and Devices Engineering, UNIST, [2]Departmentl of Mechanical Engineering, GIST

WP-059	**Precursor-Driven Morphological Control of MXenes for High-Performance EMI Shielding and Energy Storage** Jaeeun Park[1], Ju-Hyoung Han[1], Yujin Chae[1], Mincheal Kim[2], Juwon Han[1], Younggeun Jang[1,3], Young Ho Jin[1], Jaewon Wang[1], Zonghoon Lee[1,3], EunMi Choi[2], and Soon-Yong Kwon[1,4] [1]Department of Materials Science and Engineering, UNIST, [2]Department of Electrical Engineering, UNIST, [3]Center for Multidimensional Carbon Materials, IBS, [4]Graduate School of Semiconductor Materials and Devices Engineering, UNIST
WP-060	**WS_2-$MoSe_2$ Heterostructures Grown by Two-Step Metal-Organic Chemical Vapor Deposition** Chaehui Lim[1,2], Wonchan Lee[1,2], Yunjung Cho[1,2], Seohee Park[2,3], and Seunguk Song[1,2] [1]Department of Energy Science, Sungkyunkwan University, [2]Center for 2D Quantum Heterostructures, IBS, Sungkyunkwan University, [3]Department of Chemistry, Sungkyunkwan University
WP-061	**Defect-Engineered Epitaxial Growth of WS_2 Monolayer for 2D Optoelectronics** Yunjung Cho[1,2], Wonchan Lee[1,2], Seohee Park[2,3], and Seunguk Song[1,2] [1]Department of Energy Science, Sungkyunkwan University, [2]Center for 2D Quantum Heterostructures, IBS, Sungkyunkwan University, [3]Department of Chemistry, Sungkyunkwan University
WP-062	**Understanding the First-Firing Mechanism in Ge-Te Based Binary Ovonic Threshold Switches through Atomic-Scale Analysis and First-Principles Calculations** Young-Min Kim[1,2], Siwon Park[1,2], Sangyeop Kim[1,2], and Jong-Souk Yeo[1] [1]School of Integrated Technology, College of Computing, Yonsei University, [2]BK21 Graduate Program in Intelligent Semiconductor Technology
WP-063	**집속 이온빔 패터닝을 통한 InGaN/GaN 양자점의 선택적 영역 성장** 김바울, 조용훈 한국과학기술원 물리학과

WP-064	**Investigation of Multiferroic ε-$Ga_{2-x}Fe_xO_3$ Thin Films Grown by Mist CVD** Young Soo Hwang, Ha Young Kang, Jae Heon Jung, and Roy Byung Kyu Chung School of Materials Science and Engineering, Kyungpook National University
WP-065	**Carbon Coated-Nitride MAXene/MoS_2 Heterogeneous Catalyst for Hydrogen Evolution Reaction** Yujin Chae[1], Yeoseon Sim[1], Shi-Hyun Seok[1], Jaeeun Park[1], Ju-Hyoung Han[1], Young Ho Jin[1], and Soon-Yong Kwon[1,2] [1]Department of Materials Science and Engineering, UNIST, [2]Graduate School of Semiconductor Materials and Devices Engineering, UNIST
WP-066	**Spatially Confined Vapor-Phase Growth of $MoTe_2$-WS_2 Lateral Heterostructure** Inbae Song[1,2], Yunjung Cho[1,2], Kyungwu Kwon[1,2], Wonchan Lee[1,2], and Seunguk Song[1,2] [1]Department of Energy Science, Sungkyunkwan University, [2]Center for 2D Quantum Heterostructures, IBS, Sungkyunkwan University
WP-067	**In Situ Observation of a Confined Nucleation and Growth of Bi Particles in δ-Bi_2O_3 Nanosheets** Hyeon Jin Choi, Yun Jae Jeong, Jin Young Kim, Chan Hee Hwang, and Young Heon Kim Graduate School of Analytical Science and Technology, Chungnam National University
WP-068	**Ce-Induced Lattice Expansion of $BaZrO_3$ for Advanced Substrate** Biprojit Sana, Dong Whee Kim, Hei Woong Lee, and Yoon Seok Oh Department of Physics, UNIST
WP-069	**Quantitative Analysis of Hydrogen in H_xVO_2** Byungho Lee[1,2], Jinwook Lee[1,2], and Woo Jin Kim[1,2] [1]Department of Materials Science and Engineering, Pusan National University, [2]Institute of Materials Technology, Pusan National University
WP-070	**One-Step SiO_2 Coating for Reliable Insulation in High-Density Probe** Minsoo Jang and Doowon Lee Division of Electrical, Electronic and Control Engineering, Kongju National University

WP-071	**Epitaxial Growth of Twin-Free Orthorhombic $SrCuO_2$ Thin Films** Jiwon Lee[1,2], Jaewoo Lee[1,2], Hyungmok Lee[1,2], and Woo Jin Kim[1,2] [1]Department of Materials Science and Engineering, Pusan National University, [2]Institute of Materials Technology, Pusan National University
WP-072	**Fluorine-Doped N-Type α-Ga_2O_3 and Its Phase Stability** Choi Yoonho and Roy Byung Kyu Chung Department of Materials Science & Engineering, Kyungpook National University
WP-073	**Electrical Properties of AlN** Do Hyun Kim[1], Ji Soo Jang[2], Nimphy Sarkar[1], Da Hyung Kim[1], Seon Namgung[1], Taenam Kwon[1], Kunook Chung[1], Se Young Park[3], Seung Hyub Baek[2], Tae Heon Kim[2], and Yoon Seok Oh[1] [1]UNIST, [2]KIST, [3]Department of Physics, Soongsil University
WP-074	**TCAD Simulation Based Modeling of Short-Wave Infrared PbS CQD Photodiode** Eunsoo Lim[1], Junghun Kim[2], and Jiwon Lee[1,2] [1]Department of Semiconductor Engineering, POSTECH, [2]Graduate School of Semiconductor Technology, POSTECH

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L. Analog Design 분과

WP-171	**A PVT-Compensated LDO with a Process-Calibration BGR and a Temperature-Coefficient Cancelled BMR** 황중환, 류지환, 김민우, 김윤수, 염인선, 최명현, 양병도 충북대학교 전자정보대학 반도체공학부
WP-172	**Wide-Range, Fast-Locking Referenceless CDR based on BFSM** Jinwoo Hong, Jongmin Park, and Jinwook Burm Department of Electronic Engineering, Sogang University
WP-173	**A 12-bit Column-Parallel Two-Step TDC-Assisted SAR ADC for CIS** Jongmin Kim, Wooseok Jung, and Jinwook Burm Department of Electronic Engineering, Sogang University
WP-174	**All-Digital CDR with Fast Locking and Improved PI Linearity Using an Injection-Locked Ring Oscillator** Jimin Kim, Taeuk Kim, and Jinwook Burm Department of Electronic Engineering, Sogang University
WP-175	**A High PSR, Fast Transient Response Dual-Pass Transistor Capacitor-Less LDO for X-Ray Detector Applications** Hyeonjae Yoo[1], Seungpyo Oh[2], Dooho Kim[1], Kang Heo[1], Kyunghun Yoon[1], and Jooyeol Rhee[2] [1]Advanced Technology R&D Center, Vieworks Co., [2]College of Semiconductor, Gachon University
WP-176	**임베디드 플래시 구동을 위한 복구시간 감지 기반 레귤레이터 내장형 차지 펌프** 김준서[1,4], 김정남[2,4], 김윤[2,4,5], 구민석[3,4,5] [1]서울시립대학교 지능형반도체학과, [2]서울시립대학교 전자전기컴퓨터공학부, [3]서울시립대학교 첨단융합학부, [4]서울시립대학교 반도체 연구센터(UOS-FAB), [5]주식회사 IM전자

WP-177	**A Low-Power RF-DC Converter Using an Adaptive Architecture to Achieve a 43-dB Wide-Input-Range for RF Energy Harvesting** Yeji Han and Ickjin Kwon School of Electrical and Computer Engineering, Ajou University
WP-178	**Comparator Offset Calibration for Single-Channel Speculative Loop-Unrolled SAR ADC in 28-nm CMOS** Dong-Un Jin and Min-Seong Choo Department of Electronic Engineering, Hanyang University
WP-179	**Power and Area Efficient Time-Domain ADC** Youngwoo Kwon and Hyungil Chae Konkuk University
WP-180	**A C-CI SAR ADC with Pulse-Gating Charge-Injection Cell** Junmin Park and Hyungil Chae Konkuk University
WP-181	**A High-Resolution Supply-Noise-Insensitive Linear Digital-to-Time Converter for Low-Noise Fractional Dividers** Yuna Hwang[1,2] and Woo-Seok Choi[1,2] [1]Department of Electrical and Computer Engineering, Seoul National University, [2]Inter-university Semiconductor Research Center, Seoul National University
WP-182	**A Study on Extremely Low-Power Design and Operation for High-Performance Digital Pixel Sensor** Jaehun Jeong, Sanggwon Lee, Yong-Suk Choi, Yeongseok Shim, Gihwan Cho, Youna Lee, Bumjun Kim, Su-Hyun Han, Heesung Shim, Min-Woong Seo, Jae-kyu Lee, and Jonghyun Go Semiconductor R&D Center, Samsung Electronics Co., Ltd.
WP-183	**아날로그 부궤환을 이용하여 주변광 간섭을 상쇄하는 PPG 아날로그 수신단 증폭기** Minji Kim and Ji-Yong Um Department of Medical IT Convergence Engineering, Kumoh National Institute of Technology

WP-184	**A High-Power-Supply-Rejection Capless Low-Dropout Regulator with Extended Bandwidth** Min-Seo Kim, You-Chan Kim, Hui-Won Jeong, Joon-Ho Im, and Byong-Deok Cho Department of Electronic Engineering, Hanyang University
WP-185	**Ultra-Low Quiescent Current OCL-LDO With Fast-Transient Response** Dong-Wook Jeong and Ickjin Kwon Department of Electrical and Computer Engineering, Ajou University
WP-186	**보조 패스 트렌지스터의 방전 전류 및 다이오드 커넥티드 MOS 이용한 빠른 과도응답을 가지는 Ultra-Low-Power OCL-LDO 레귤레이터 설계** 김주훈, 권익진 아주대학교 전자공학과
WP-187	**12-Bit, 640MSps TI-SAR ADC With Clock Distribution Layout Technique for WiFi-6 Application** 안상준, 김선우, 황인성, 여중기, 정보근, 백동헌, 김영진 한국항공대학교 Nanowave-Integrated Circuit and System Lab
WP-189	**전력반도체 게이트 구동 드라이버의 Isolation을 위한 구동 환경 변화에 둔감한 신호 변조 회로** 김남현[1,2], 심민섭[2], 김기현[1], 송기남[1] [1]한국전기연구원 파워SoC연구센터, [2]경상국립대학교
WP-190	**Radiation-Hardened Logic Gate Design Methodology Considering NMOS Dimension Variation under TID Effects** Serin Lee, Kihyun Kim, and Kyoungho Lee KERI

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N. VLSI CAD 분과

WP-200	**High-Frequency Clock Generator Design based on Logic Synthesis for Cross-Process Portability** Sooah Choi, Jihoon Park, and Jae-Joon Kim Department of Electrical and Computer Engineering, Seoul National University
WP-201	**A16K: 1.6nm NSFET, FSFET, and CFET Technology Libraries for Chip-Level VLSI Prediction** Hwiryong Kim[1], Hanmok Park[1], Mingyun Sun[2], Yongjin Kwon[2], Jiyoon Jung[2], Gahyeon Kim[2], Gyengjin Kim[2], Sunmean Kim[1], and Taigon Song[2] [1]School of Electronics and Electrical Engineering, Kyungpook National University, [2]School of Electronics Engineering, Kyungpook National University
WP-202	**In-Cell Routability Prediction for Complementary FET Standard Cell Transistor Placement** Seo Yeong Mun[1] and Suwan Kim[2] [1]Department of Convergent Biotechnology And Advanced Materials Science, Kyung Hee University, [2]Department of Electronic Engineering, Kyung Hee University
WP-203	**A Perceptron Hybrid Branch Predictor for Ternary Pipelined Architectures** Seonghoon Kim, Hanmok Park, Sunmean Kim, and Taigon Song School of Electronic and Electrical Engineering, Kyungpook National University
WP-204	**A Hardware-Level Framework for Training and Inference of Capacitive Computing-in-Memory Architecture** Changhyeon Park[1,2] and Woo Young Choi[1,2] [1]Department Electrical and Computer Engineering, Seoul National University, [2]Inter-university Semiconductor Research Center, Seoul National University

WP-205	**Area and Energy-Efficient Architecture for p-Bit Digital Ising Machine** Jin Su Kim, Jun Hee Lee, Ji Hoon Park, and Jae Joon Kim Seoul National University
WP-206	**An RTL-Based General Synthesis Methodology for Device-Independent Ternary Logic Circuits** Hanmok Park, Seonghoon Kim, and Taigon Song School of Electronics and Electrical Engineering, Kyungpook National University
WP-207	**온도를 고려한 정적 타이밍 분석과 임계 경로 변화 분석** 조혜양, 박영훈, 정준서, 김강훈, 김현수, 박성범, 김주호 서강대학교 컴퓨터공학과
WP-208	**SRAM 기반 인메모리 컴퓨팅에서 전력 효율적인 Adder Tree를 위한 아키텍처 및 트랜지스터 수준 설계의 학습 기반 공동 최적화** 고다훈[1], 송민근[1], 이준서[1], 우재현[1], 조형원[1], Aiganym Zhalinova[1], 강성원[2], 강지수[2], 김태민[2], 김태우[2], 정한울[1] [1]연세대학교 전기전자공학과, [2]Department of Electronic Engineering, Kwangwoon University
WP-209	**머신러닝 기반 설계 최적화를 이용한 에너지 효율적 SRAM 기반 메모리 내 연산 회로** 박세준[1], 유두현[1], 고동현[1], 정우석[1], 김태성[1], 한창용[1], 박관우[2], 백재승[2], 장이준[2], 손승원[2], 정한울[1] [1]연세대학교 전기전자공학과, [2]Department of Electronic Engineering, Kwangwoon University
WP-210	**Post-Scaler: Architecture Support for True FP-INT GEMM** Jihyun Moon[1,3] and Joon-Sung Yang[1,2,3] [1]Department of Systems Semiconductor Engineering, Yonsei University, [2]Department of Electrical and Electronic Engineering, Yonsei University, [3]BK21 Graduate Program in Intelligent Semiconductor Technology, Yonsei University

WP-211	**Ancilla-Aware Tiled Architecture for Efficient Surface Code Communication in Fault-Tolerant Quantum Computing** Youngjung Kang[1] and Joon-Sung Yang[1,2,3] [1]Department of System Semiconductor Engineering, Yonsei University, [2]Department of Electrical and Electronic Engineering, Yonsei University, [3]BK21 Graduate Program in Intelligent Semiconductor Technology, Yonsei University
WP-212	**DNN Accelerator Exploiting Slice-Level Sparsity with Bit-Slice Architecture** Insu Choi[1] and Joon-Sung Yang[1,2,3] [1]Department of Electrical and Electronic Engineering, Yonsei University, [2]Department of System Semiconductor Engineering, Yonsei University, [3]BK21 Graduate Program in Intelligent Semiconductor Technology, Yonsei University
WP-213	**자기 지도 학습 기반 테스트 포인트 삽입** 박태민[1], 양준성[1,2,3] [1]연세대학교 전기전자공학과, [2]연세대학교 시스템반도체공학과, [3]연세대학교 지능형반도체IT융합전공
WP-214	**Automated Layout Optimization for Planar MOSFETs Considering Local Layout Effects (LLE)** Ji-hye Yoo[1], Gaon Lee[2], June-yeop Lee[1], and Jong-wook Jeon[1] [1]Department of Electrical and Computer Engineering, Sungkyunkwan University, [2]Department of Display Engineering, Sungkyunkwan University
WP-215	**Logic Optimization via Reinforcement Learning-Guided Gate Transformation** Donghyuk Lee, Hyunmin Jo, and Heechun Park UNIST
WP-216	**Robust Fusion-Based Acceleration of Attention Training on Edge Hardware** Dowon Kwon, Joonseok Kim, Jonghyeon Nam, and Seokhyeong Kang Graduate School of Semiconductor Technology, POSTECH
WP-217	**LLM-Based Code Augmentation for Generating PPA-Diverse RTL Designs** Yeonwoo Shim[1], Sunsang Gwon[2], and Seokhyeong Kang[2] [1]Department of Semiconductor Engineering, POSTECH, [2]Department of Electrical Engineering, POSTECH

WP-218	**FPGA 구현을 위한 경량 인공지능 기반 ADC 실시간 보정 구조 설계** 강륜[1], 김건[1], 김동영[1], 김수연[1], 김신욱[1], 박제원[1], 김소원[1], 임채혁[1], 서현아[1], 윤정현[1], 이주원[1], 이혜린[1], 최우진[2], 김어진[2], 정민우[2], 이명진[1] [1]전남대학교 지능전자컴퓨터공학과, [2]전남대학교 전자컴퓨터공학부
WP-219	**고신뢰도 IR Drop 예측을 위한 물리 기반 후처리 전류 인식 보정 및 이방성 필터링** 고운 서강대학교 컴퓨터공학과

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B. Patterning (Lithography & Etch Technology) 분과

WP-001	**저 지구온난화지수 HFE-347 이성질체를 이용한 SiO_2 Contact Hole 식각** 김민욱[1,2], 김창구[1,2] [1]Department of Chemical Engineering, Ajou University, [2]Department of Energy Systems Research, Ajou University
WP-002	**지구온난화지수가 낮은 Fluorinated Alcohol 플라즈마를 이용한 SiO_2 식각** 김준영[1,2], 김창구[1,2] [1]Department of Chemical Engineering, Ajou University, [2]Department of Energy Systems Research, Ajou University
WP-003	**Forward Metal-Assisted Chemical Etching for Self-Aligned Recess-Gate β-Ga_2O_3 MESFETs** 김지호[1,2], 최웅[1], 김지현[1] [1]서울대학교 화학생물공학부, [2]삼성전자 DS 메모리사업부
WP-004	**Temperature-Dependent HF Physisorption Etching Mechanisms of SiO_2 and SiN in NF3/H2 Plasma** Jungjae Yoo, Taemin Kim, Youngmin Sunwoo, Paul Seo, Hongsik Jeong, and Byungjo Kim Graduate School of Semiconductor Materials and Devices Engineering, UNIST
WP-005	**광-보조 습식 세정을 통한 High-NA EUV 마스크 상의 Sn 오염 입자 제거 효율 향상** 최웅[1], 박제환[1], 김문경[2], 김지현[1] [1]서울대학교 화학생물공학부, [2]삼성전자 파운드리사업부

WP-006	**Nanoporous MoS_2 Bio-FET for Artificial Olfaction with Edge-Dominant VOC Sensing** Subin Lim[1] and Sunkook Kim[2] [1]Department of Display Engineering, Sungkyunkwan University, [2]School of Advanced Materials Science and Engineering, Sungkyunkwan University
WP-007	**고종횡비 구조 내 이온-표면 상호작용의 물리적 메커니즘 규명을 위한 분자동역학-AI 융합 시뮬레이션 프레임워크** 선우영민, 이도훈, 홍준표, 김병조 울산과학기술원 반도체 소재·부품 대학원
WP-008	**Explainable AI 기반 NF_3/H_2 플라즈마의 SiO_2 및 SiN 저온 식각 메커니즘 분석** 서바울, 선우영민, 김태민, 유정재, 정홍식, 김병조 울산과학기술원 반도체 소재 · 부품 대학원
WP-009	**Revisiting the Role of Carboxylates in Organotin Carboxylate EUV Resists** Hyeok Yun, Hayun Kim, Wonchul Kee, and Hyun-Dam Jeong Department of Chemistry, Chonnam National University
WP-010	**Synthesis and Evaluation of Function-Integrated Inorganic Molecular Resists for EUV Lithography** Gahyun Lee, Pronab Kumar Singha, Seung-yong Baek, Hyeok Yun, and Hyun-Dam Jeong Department of Chemistry, Chonnam National University
WP-011	**High-Sensitivity Negative-Tone Tin-Oxo Molecular Resist for EUV Lithography** Soyeong Heo, Wonchul Kee, and Hyun-Dam Jeong Department of Chemistry, Chonnam National University
WP-012	**Surface Characterization of Siloxane Molecular Resists: Understanding Chemical Contrast for Next-Generation Lithography** Jiyoung Bang, Hyeok Yun, Wonchul Kee, Donghwan Kim, and Hyun-Dam Jeong Department of Chemistry, Chonam National University

WP-013	**Molecular Tin-Orthosilicates: Synthesis, Characterization, and Electron-Beam Lithography Application for EUV Resists** Jiyoung Bang[1], Hyeok Yun[1], Soyoung Heo[1], Seung Hwan Kang[2], Yusun Won[2], Hyun Tae Jung[2], and Hyun-Dam Jeong[1] [1]Department of Chemistry, Chonnam National University, [2]JSI Silicone Inc.
WP-014	**Synthesis and Structural Characterization of a Monomeric Inorganic Resist for EUV Lithography** Wonchul Kee[1], Hayun Kim[1], Soyeong Heo[1], Jiyoung Bang[1], Hyun-Sung Yoon[1], Seungyong Baek[1], Gahyun Lee[1], Hyeok Yun[1], Eun-Seok Choe[2], Jung-Hyung Kim[2], and Hyun-Dam Jeong[1] [1]Department of Chemistry, Chonnam National University, [2]KRISS
WP-015	**Radical Generation and Fragmentation Mechanisms of Decomposition Products from C_3F_6O and C_4F_8O** Minji Kim and Sangheon Lee Chemical Engineering and Materials Science, Ewha Woman's University
WP-016	**Molecular Design and Synthesis of Extreme UV Photoresists Incorporating Unsaturated Carbon Units and Tin Atoms** Gayoung Kim[1], Junsik Kim[1], Sung-Wook Hwang[1], Dain Park[1], Yejin Ku[1], Jinseok Lee[1], Seokmin Kang[1], Jiho Kim[3], Geonwha Kim[3], Sangsul Lee[3], and Jin-Kyun Lee[1,2] [1]Program in Environment and Polymer Engineering, Inha University, [2]Department of Polymer Science and Engineering, Inha University, [3]Pohang Accelerator Laboratory, POSTECH
WP-017	**Atomic Layer Etching of SiO_2 and SiN_x Using Combined Remote and Direct Plasma Processes** Sung Hyun Lim, So Won Kim, and Hee Chul Lee Department of Advanced Materials Engineering, Tech University of Korea
WP-018	**저온전자온도 플라즈마를 이용한 EUV 포토레지스트 건식 현상 공정 기술** 김지원[1,4], 석지후[1,4], 윤광섭[1,3], 이태호[4], 정진욱[2,4], 안진호[1,4] [1]한양대학교 신소재공학과, [2]한양대학교 전기공학과, [3]삼성전자 반도체 연구소, [4]극한스케일·극한물성-이종집적 한계극복 반도체 기술 연구센터

WP-019	**Reaction-Condition Optimization for Impurity Suppression and Purification of Tin-Oxo Cluster CNU-TOC-01 (4C-C)** Seung-Yong Baek, Cheol-Ho Jo, Seung-Hoon Park, and Hyun-Dam Jeong Department of Chemistry, Chonnam National University
WP-020	**Formulation-Process Optimization Guided by Electron-Beam Evaluation for EUV Resists** Seung-Yong Baek, Wonchul Kee, and Hyun-Dam Jeong Department of Chemistry, Chonnam National University
WP-021	**Efficient Prediction of Wafer-Radius Ion Energy and Angular Distributions with Machine Learning for Plasma Etching** Wan-gyu Gwak[1], Kyeong-Bin Kim[2], Jongchan Park[3], Chan-Young Choi[4], and Eun-ho Lee[1,2,3] [1]Department of Smart Fab. Technology, Sungkyunkwan University, [2]Department of Mechanical Engineering, Sungkyunkwan University, [3]Department of Intelligent Robotics, Sungkyunkwan University, [4]SEMES Co., Ltd.
WP-022	**Organic-Inorganic Hybrid Positive-Tone Photoresist via MLD for EUV Lithography** Junseong Hur[1], Jaehyuk Lee[2], Hyeonseok Ji[2], Nguyen Quang Khanh[2], Chaerim Kim[2], Soojin Park[1], Tran Cuong Dai[2], Heeseo Kim[2], and Myung Mo Sung[2] [1]Department of Semiconductor Engineering, Hanyang University, [2]Department of Chemistry, Hanyang University
WP-023	**Vertical Molecular Wire Structured Hybrid Multilayer Photoresist for Extreme Ultraviolet Lithography Using Molecular Layer Deposition** Taeeon Kim[1], Heemin Kang[2], Hyeonseok Ji[1], Jaehyuk Lee[1], Chaerim Kim[1], and Myung Mo Sung[1] [1]Department of Chemistry, Hanyang University, [2]Department of Semiconductor Engineering, Hanyang University
WP-024	**DFT를 이용한 초기 CF_x 라디칼 흡착을 통한 비정질 Si_3N_4 표면에서의 플루오로카본 필름 연구** 조미현, 이상헌 이화여자대학교 화공신소재공학과

WP-025	**Development of Fluorinated Protective Layer and Its Integration with Water-Transfer Photolithography for Organic Semiconductor Patterning** 김서연[1], 김가영[1], 권유정[1], 엄준호[3], 최재학[3,4], 이진균[1,2] [1]Program in Environment and Polymer Engineering, Inha University, [2]Department of Polymer Science and Engineering, Inha University, [3]Department of Materials Science and Engineering, Chungnam National University, [4]Department of Polymer Science and Engineering, Chungnam National University
WP-026	**Multiscale Patterning of Single-Crystal C8-BTBT Enabled by a PDMS Solvent-Diffusion Process** Seeun Kwon, Sangtae Lee, Dongjun Lee, Bumseo Park, and Insung Bae Hannam University
WP-027	**Development of a Multi-Sensor-Based Defect Classification and Endpoint Prediction Model for Semiconductor Metal Etching Process Using Machine Learning** Minseo Kim[1], Suyeon Kim[2], Heejin Moon[3], and Dagyeong Hong[4] [1]Dong-Eui University, [2]Pusan National University, [3]Kyungpook National University, [4]Seoul National University of Science & Technology
WP-028	**Plasma-Enhanced Atomic Layer Etching for Fine Line Patterns of Next-Generation Interconnect Materials** Daehan Won[1,2], Harin Song[1,2], Hongju Yang[1,2], Hojin Chung[1,2], Chee Won Chung[1,2], and In-Hwan Baek[1,2] [1]Department of Chemical Engineering, Inha University, [2]Program in Semiconductor Convergence, Inha University
WP-029	**Reaction Mechanism of Zirconium Oxide Atomic Layer Etching: An In vacuo XPS Study** Mi-Soo Kim[1], Eunju Ham[1], Sejeong Jo[1,2], Hyun-jeong Yoo[1,2], Hye-Lee Kim[1,2], Youn Seoung Lee[3], Sun-Jae Kim[1,2], and Won-Jun Lee[1,2] [1]Department of Nanotechnology and Advanced Materials Engineering, Sejong University, [2]Metal-organic Compounds Materials Research Center, Sejong

	University, [3]Department of Information and Communication Engineering, Hanbat National University
WP-030	**Atomic Layer Etching of Cobalt Thin Films via Surface Fluorination and Low-Energy Ar+ Ion Activation** Yeh Been Im[1], Young Don Kim[2], Hyeon Jun Cho[3], Chin Wook Chung[2,3], and Changhwan Choi[1,2] [1]Division of Materials Science and Engineering, Hanyang University, [2]Department of Semiconductor Engineering, Hanyang University, [3]Department of Electrical Engineering, Hanyang University
WP-031	**H_2O and O_2 Additive Effects on Cryogenic Etching of SiO_2 and Si_3N_4 in CF_4/Ar Plasmas under Self-Bias Conditions** Kangwoo Lee[1], Haegeon Jung[2,3], Hakseung Lee[2,3], Daeun Hong[1], Minsung Jeon[4], and Heeyeop Chae[1,4] [1]School of Chemical Engineering, Sungkyunkwan University, [2]Department of Semiconductor and Display Engineering, Sungkyunkwan University, [3]Samsung Institute of Technology, Samsung Electronics Co., Ltd., [4]Department of Semiconductor Convergence Engineering, Sungkyunkwan University
WP-032	**Plasma Atomic Layer Etching of Molybdenum for Low-Damage and Precisely Controllable Etch Process** Donguk Kim[1], Hyunjin Yim[2], Yehbeen Im[2], Youngseo Na[1], Kangbaek Seo[1], Seungchae Lee[2], Kanghyeok Lee[1], Sangtae Park[2], and Changhwan Choi[1,2] [1]Department of Semiconductor Engineering, Hanyang University, [2]Division of Materials Science and Engineering, Hanyang
WP-033	**Atomic-Scale Smoothing of Cobalt Thin Films via a Plasma-Enhanced Quasi-ALD/ALE Supercycle** SangTae Park[1], HyunJin Lim[1], YehBeen Im[1], Young Seo Na[2], SeungChae Lee[1], KangBaek Seo[2], DongUk Kim[2], KangHyeok Lee[2], and Changhwan Choi[1,2] [1]Division of Materials Science and Engineering, Hanyang University, [2]Department of Semiconductor Engineering, Hanyang University
WP-034	**유기가스를 이용한 몰리브덴 박막의 플라즈마 강화 원자층 식각** 정호진[1,2], 양홍주[1,2], 원대한[1,2], 송하린[1,2], 정지원[1,2], 백인환[1,2] [1]Department of Chemical Engineering, Inha University, [2]Program in

	Semiconductor Convergence, Inha University
WP-035	**Silicon Oxide Etch Rate Model with Optical Emission Spectroscopy and VI-Probe** Eunchong Park[1], Minseong Kim[2], Sanghee Han[3], Jaehyeon Kim[3], and Heeyeop Chae[2,3] [1]Department of Nano Science and Technology, SKKU Advanced Institute of Nanotechnology, Sungkyunkwan University, [2]Department of Semiconductor Convergence Engineering, Sungkyunkwan University, [3]School of Chemical Engineering, Sungkyunkwan University

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[WP] 포스터세션

V. Quantum Technology 분과

WP-371	**Design and Simulation of a 2-Qubit Superconducting Quantum Processor** Jiwon Seok, Seung-Young Seo, and Jae-Yoon Sim Department of Electronic and Electrical Engineering, POSTECH
WP-372	**Anharmonic GHz Phonon Modes in Josephson Junction Tunnel Barriers: A First-Principles Study** Yosep Park[1] and Yeonghun Lee[1,2] [1]Department of Intelligent Semiconductor Engineering, Incheon National University, [2]Department of Electronics Engineering, Incheon National University
WP-373	**Site-Controlled Quantum Dot Embedding in GaAs Nanowires on Silicon** Illia Tikhonov[1,2], Sung-Yul L. Park[1], Ga Hyun Cho[1,3], and Jindong Song[1,2] [1]KIST, [2]University of Science and Technology, [3]Hanyang University
WP-374	**Design and Optimization of 493 nm Inversely Tapered Edge Couplers for Low-Loss Coupling in Ba^+ Ion-Trap Quantum Computing Platforms** Seung-Gun Kim[1], Jaewoo Kim[1], Chiyoon Kim[2], Changsoon Kim[3], Taehyun Kim[2], Donghwan Ahn[1], and Youngmin Kim[1] [1]School of Materials Science and Engineering, Kookmin University, [2]Department of Computer Science and Engineering, Seoul National University, [3]Department of Intelligence and Information, Seoul National University
WP-375	**Scalable Ground-State Cooling of 40Ca+ Ion Chains via Electromagnetically Induced Transparency and Observation of Mode Mixing** Kim Keumhyun, Lee Hyegoo, SHIN Yongha, HAN Sangsoo, CHO Junhee, KIM Myunghun, GWON Sehyeon, Moon Youngil, and LEE Moonjoo Electrical Engineering, POSTECH

WP-376	**Hybrid Quantum-Classical DMFT for Hubbard Model** Juyeon Kim and Yeonghun Lee Department of Electronics Engineering, Incheon National University
WP-377	**Quasiperiodic Dynamics of a Trapped-Ion Mechanical Oscillator** Myunghun Kim, Sehyeon Gwon, Sangsoo Han, Junhee Cho, Keumhyun Kim, Hyegoo Lee, Yongha Shin, Youngil Moon, Kiyanoush Goudarzi, and Moonjoo Lee Department of Electrical Engineering, POSTECH
WP-378	**양자점 단일광자 결합을 위한 MgO 도핑 TFLN 기반 광대역·편광 비의존 모드 사이즈 컨버터** 김보성, 김구환, 김홍석, 문기원, 주정진, 박재규 한국전자통신연구원 양자기술연구본부 양자젠서연구실
WP-379	**Experimental Implementation of Tunable Spin-Spin Couplings between 40Ca+ Ions** LEE Hyegoo, KIM Keumhyun, SHIN Yongha, HAN Sangsoo, CHO Junhee, MOON Young Il, KIM Myunghun, GWON Sehyeon, and LEE Moonjoo Electrical Engineering Department, POSTECH
WP-380	**Anti-Reflection Coating for Integrated-Photonic-Circuit-Based Ba+ Trapped-Ion Chips** Uihwan Jeong[1,2,3], Chiyoon Kim[1,2,3], Suhan Kim[1,2,3], Kwangyeul Choi[1,2,3], Seungwoo Yu[1,2,3], Changsoon Kim[4], and Taehyun Kim[1,2,3] [1]Department of Computer Science and Engineering, Seoul National University, [2]Automation and System Research Institute, Seoul National University, [3]Inter-university Semiconductor Research Center, Seoul National University, [4]Department of Intelligence and Information, Seoul National University

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[WP] 포스터세션

A. Interconnect & Package 분과

WP-381	**포트 모델링 기법을 사용한 S-파라미터 시뮬레이션-측정 상관성 개선** 표승수[1], 김문정[1], 진병규[2] [1]국립공주대학교 전기전자제어공학과, [2]보스반도체
WP-382	**소재 및 공정 기반 모델링을 사용한 S-파라미터 정합성 향상** 이현아[1], 박혜준[2], 김문정[1] [1]국립공주대학교 전기전자제어공학과, [2]아이윈
WP-383	**PCB 전송선로의 임피던스 불연속 구간에 대한 전기적 특성 분석** 정준호[1], 진병규[2], 김문정[1] [1]국립공주대학교 전기전자제어공학과, [2]보스반도체