Session Title:	[WA1] RF Circuit Techniques for Wideband and Multi-Band Systems
Session Date:	December 3 (Wed.), 2025
Session Time:	13:20-15:00
Session Room:	Room A (Halla A)

[WA1-1] [Invited] 13:20-13:40

Broadband LNA Design Utilizing an Interleaved-Dual-Zero/Pole-Pair Technique

Yuyang Chen, Hanqi Gao, Xiaoming Liu, Chao Yang, Jianjun Zhou and Jing Jin (Shanghai Jiao Tong University, China)

[WA1-2] 13:40-14:00

A 57-110 GHz LNA with Novel Bandwidth Enhancement Technique in 130-nm SiGe BiCMOS

Zhan Chen (Nanjing University of Science and Technology, China); Chunxia Zhou (Nanjin University of Science and Technology, China); Guoxiao Cheng, Wei Kang and Wen Wu (Nanjing University of Science and Technology, China)

[WA1-3] 14:00-14:20

An 18/28 GHz Reconfigurable GaN LNA with Dual-Input Stage for Multi-Band Communications

Dingyuan Zeng, Haoshen Zhu, Xin He, Zeqi Liu, Song Chen and Xuelong Chen (South China University of Technology, China); Zongqi Cai (CEPREI, China); Quan Xue (South China University of Technology, China)

[WA1-4] 14:20-14:40

A 26-GHz CMOS Push-Push Oscillator

Hiyori Kishimoto, Kiyotaka Komoku, Jun Furuta, Yasunori Suzuki and Nobuyuki Itoh (Okayama Prefectural University, Japan)

[WA1-5] 14:40-15:00

A 3.5-GHz Duo-Binary-Encoding-Assisted Envelope Delta-Sigma Digitized Transmitter for Bandwidth-Efficient Three-Level-Envelope Power Amplification

Seunghyun Jang (ETRI, Korea (South))

Session Title:	[WB1] [SS] Innovative Front-End Components in mmWave IC Design
Session Date:	December 3 (Wed.), 2025
Session Time:	13:20-15:00
Session Room:	Room B (Halla B)

[WB1-1] 13:20-13:40

A D-Band CMOS Low-Noise Amplifier Using Complementary Feedback Techniques

Ha-Neul Lee and Jong-Ryul Yang (Konkuk University, Korea (South))

[WB1-2] 13:40-14:00

A Portable K-Band 4-D MIMO FMCW Radar System with Sparse Array for Short-Range Dual-Hand Gesture Sensing

Jiayu Zhang, Yuchen Li, Zhiwei Zhang, Yiyan Cao, Changzhan Gu and Junfa Mao (Shanghai Jiao Tong University, China)

[WB1-3] 14:00-14:20

A 127-GHz High-Efficiency Push-Push Oscillator Using Decoupled Harmonic Bypass Stub in 100-nm InP HEMT Technology

Seungwoo Shim, Hyunjoon Kim and Sanggeun Jeon (Korea University, Korea (South))

[WB1-4] 14:20-14:40

A Ku-Band CMOS Variable Gain Phase Shifter for Upper Mid-Band 6G Communication

Eunchae Jo, Jinseok Park, Mingyu Lee, Haram Park, Hyeonwon Song, Eunsu Mo and Seungchan Lee (Chonnam National University, Korea (South)); Bonghyuk Park (ETRI, Korea (South)); Seunghun Wang and Hui Dong Lee (Electonics and Telecommunications Research Insti

[WB1-5] 14:40-15:00

A Ka-Band Three-Way Doherty Power Amplifier in 150-nm GaN Technology

Moise Safari Mugisho and Christian Friesicke (Fraunhofer IAF, Germany); Friedbert van Raay (IAF, Germany); Dirk Schwantuschke (Fraunhofer Institute for Applied Solid State Physics, Germany); Rüdiger Quay (Fraunhofer IAF, Germany)

Session Title:	[WD1] Millimeter-Wave and Compact Antenna Technologies
Session Date:	December 3 (Wed.), 2025
Session Time:	13:20-15:00
Session Room:	Room D (Samda B)

[WD1-1] 13:20-13:40

A Basic Study on Beamforming Characteristics of a Partially Driven Array Antenna at 39 GHz for Reducing Total Power Consumption

Ho-Yu Lin and Yoshichika Ohta (Softbank Corp., Japan)

[WD1-2] 13:40-14:00

Miniaturized Millimeter-Wave Co-Linearly Polarized Patch Antenna with Dual Fence-Strip Resonators for in-Band Full-Duplex Applications

Li Qian, Jing Liu, Zhiqiang Yu and Jianyi Zhou (Southeast University, China)

[WD1-3] 14:00-14:20

Low-Cost Millimeter-Wave Circularly Polarized Antenna Array Using SICL Feeding Network

Xinyu Tong, Jun Xu and Hui Zhang (Southeast University, China); Xutao Yu (Southest Uni. National Mobile Communication Research Laboratory, China); Liang Gao (Southeast University, China); Yifan Yin (Nanjing University of Posts and Telecommunications, Canada)

[WD1-4] 14:20-14:40

A Compact 30 GHz Millimeter-Wave Sensor for Precise Detection and Differentiation of Unifocal and Multifocal Breast Cancers

Kyrillos Youssef (Egypt-Japan University for Science and Technology, Egypt); Ahmed Hassan Abd El-Malek (Egypt-Japan University for Science and Technology (E-JUST), Egypt); Haruichi Kanaya (Kyushu University, Japan); Mohammed Abo-Zahhad (Ejust, Egypt)

[WD1-5] 14:40-15:00

Millimeter-Wave Wideband Dual-Polarized Antenna with High Port Isolation and Simple Structure

Sai Ma and Jun Xu (Southeast University, China); Kai Chen (Southeast University, China & 东南大学, China); Wei Hong (Southeast University, China)

Session Title:	[WE1] EMC Security and Modeling
Session Date:	December 3 (Wed.), 2025
Session Time:	13:20-15:00
Session Room:	Room E (301)

[WE1-1] [Invited] 13:20-13:40

A Taxonomy of Electromagnetic Information Leakage Threats Focusing on Emission Process

Yuichi Hayashi and Taiki Kitazawa (Nara Institute of Science and Technology, Japan); Hikaru Nishiyama (National Institute of Advanced Industrial Science and Technology (AIST), Japan & Nara Institute of Science and Technology (NAIST), Japan)

[WE1-2] 13:40-14:00

A Material Design Guideline for Millimeter-Wave Absorbers Derived from 3D Visualization of Target Permittivity and Conductivity

Dan Suzuki (Tohoku University, Japan); Kishio Hidaka (Tohoku University & Graduate School of Engineering, Japan); Saijian Ajia and Yasushi Endo (Tohoku University, Japan); Motoshi Tanaka and Shotaro Takahashi (Akita University, Japan); Tomonaga Ueno (Nagoya University, Japan); Tomoki Osato (SoraMaterials Incorporated, Japan); Sho Muroga (Tohoku University, Japan)

[WE1-3] 14:00-14:20

Modeling and Measurement of Electromagnetic Susceptibility Transfer for LDO Chips

Jingxuan Chen, Guangzhi Chen, Hongzhan Song, Zhenhua Wen, Youlong Weng and Donglin Su (Beihang University, China)

[WE1-4] 14:20-14:40

A Novel Reflection Wave Decomposition Method Using Voltage-Controlled Voltage Source (VCVS) for Signal Integrity Analysis

Seonghi Lee, Dongryul Park and Sanguk Lee (Korea Advanced Institute of Science and Technology, Korea (South)); Seunghun Ryu (Korea Advanced Institute Science and Technology (KAIST), Korea (South)); Hyunwoo Kim (Korea Advanced Institute of Science and Technology University, Korea (South)); Hyunsik Kim and Duksoo Kim (SK Hynix, Korea (South)); Seungyoung Ahn (Korea Advanced Institute of Science and Technology, Korea (South))

[WE1-5] 14:40-15:00

Antenna Solutions Employing Coupling-Fed Techniques for Improved Platform Noise Immunity

Chung-Hao Huang and Chao-Chin Xu (Chung Yuan Christian University, Taiwan); Kuan-Hsueh Tseng (Micro-Star INTL CO., LTD, Taiwan); Chen-Kun Yang (Micro-Star INTL CO. LTD, Taiwan)

Session Title:	[WF1] mmWave Phased Array Antenna system
Session Date:	December 3 (Wed.), 2025
Session Time:	13:20-15:00
Session Room:	Room F (302)

[WF1-1] 13:20-13:40

A Beam-Reconfigurable E-Band 2-Beam 8-Element Phased Array Front-End Achieving 5.7 dB NF and 10.0/13.1 dBm OP1dB/Psat

Ruiyang Jiang, Xiangrong Huang and Haikun Jia (Tsinghua University, China); Jiayao Fan, Haoshen Zhu and Wenjie Feng (South China University of Technology, China); Wei Deng, Xiaochuan Duo, Xiao Zhu and Huabing Liao (Tsinghua University, China); Guolong Huang (Huawei Technologies, China); Guangjian Wang (Huawei Technologies Co., Ltd., China); Zhihua Wang and Baoyong Chi (Tsinghua University, China)

[WF1-2] 13:40-14:00

256-Element Active Integrated Array Antenna with 2-Dimensional 160 Degree Scanning

Seung soo Han (Chung-Ang University, Korea (South)); Ji-Hoon Lee (Korea Advanced Institute of Science and Technology, Korea (South)); Hyojae Shin and Han Lim Lee (Chung-Ang University, Korea (South))

[WF1-3] 14:00-14:20

A 94 GHz Phased Array Antenna-in-Package Micro-System Based on HDI Technology

Xiaoyi Liu (Southeast University, China); Shijie Xiang (Southeast University, China & 东南大学, China); Hongfu Meng (Southeast University, China)

[WF1-4] 14:20-14:40

A Compact Dual-Polarized End-Fire Filter Antenna for 5G MMW Terminal Applications

Zehua Shen (Southeast University, China); Feng Zhao (Nanjing Mobile Communication & Computing Innovation Institute, China); Fan Wu (Southeast University, China); Jingxue Wang (Hohai University, China); Chong Guo (Meatronee Technology Company Ltd., China)

[WF1-5] 14:40-15:00

Tiled 28 GHz mmWave Beamforming Module with a Scalable Array Structure

Seunggoo Nam (Korea Electronics Technology Institute, Korea (South)); Hong Seokyeon (KETI, Korea (South)); Boyoung Lee and Sehwan Choi (Korea Electronics Technology Institute, Korea (South))

Session Title:	[WG1] Radar Hardware and Systems
Session Date:	December 3 (Wed.), 2025
Session Time:	13:20-15:00
Session Room:	Room G (303)

[WG1-1] 13:20-13:40

Bi-Directional Gain-Enhanced D-Band FMCW Radar with Transmitarray and Packaging-Conscious AoP Integration

Dongyeon Seo (Seoul National University, Korea (South)); Kwangseok Choi and Seongeun Yoon (Korea Electronics Technology Institute, Korea (South)); Jungsuek Oh (Seoul National University, Korea (South))

[WG1-2] 13:40-14:00

Six-Port Interferometric CW Radar for Vibration Detection

Kamil Staszek (AGH University of Krakow, Poland)

[WG1-3] 14:00-14:20

Ultra-Compact Short Range FMCW Radar Using a Shared TX-RX Antenna

Minha Kim, Han Yan and Han Lim Lee (Chung-Ang University, Korea (South))

[WG1-4] 14:20-14:40

A High-Linearity CMOS Baseband Receiver with 33 dB Spillover Cancellation for 60 GHz FMCW Radar

Kyunghwan Kim (Samsung Electronics, Korea (South)); Hongkie Lim (Electronics and Telecommunications Research Institute (ETRI), Korea (South)); Doyoon Kim, Geonho Park, Goeun Baek and Jun-Seong Kim (Samsung Electronics, Korea (South)); Byeong-Taek Moon (KAIST, Korea (South)); Hyun-Chul Park and Chan-Hong Park (Samsung Electronics, Korea (South))

[WG1-5] 14:40-15:00

Improvement of Dynamic Range Applying the Brewster Angle for Corrosion Evaluation on Rebar Using Doppler Sensors at 10 GHz

Taisei Watanabe and Ryosuke Suga (Aoyama Gakuin University, Japan)

Session Title:	[WB2] Advances in Millimeter Wave and THz Phased Array ICs
Session Date:	December 3 (Wed.), 2025
Session Time:	15:40-17:20
Session Room:	Room B (Halla B)

[WB2-1] [Invited] 15:40-16:00

2D Beam-Steerable 300-GHz CMOS Phased-Array Transmitter and Receiver

Takeshi Yoshida (Hiroshima University, Japan)

[WB2-2] 16:00-16:20

A Frequency-Reconfigurable Multi-Band 4-Channel Beamforming IC for Millimeter-Wave 5G Communication

Gyuha Lee (Korea Advanced Institute of Science and Technology, Korea (South)); Hyoungkyu Jin and Jaehun Lee (Samsung Electronics, Korea (South)); Eun-Taek Sung (ETRI, Korea (South)); Songcheol Hong (Korea Advanced Institute of Science & Technology, USA)

[WB2-3] 16:20-16:40

Generating Enhanced THz Power via an 8 × 1 UTC-PD Array Integrated with a T-Junction Combiner

Hussein Ssali, Yoshiki Kamiura, Ming Che and Kazutoshi Kato (Kyushu University, Japan)

[WB2-4] 16:40-17:00

IF-Beamforming H-Band Receiver Using Cartesian Vector Modulation

Seunghoon Lee (POSTECH, Korea (South)); Junhyeong Kim (Samsung Electronics, Korea (South)); Sangcheol Jeon, Seongwoo Jang, Youngseo Du and Ho-Jin Song (POSTECH, Korea (South))

[WB2-5] 17:00-17:20

Sideband/Image-Rejection Up-/down-Converter Transceiver RFIC for Scalable 5G mm-Wave Phased-Array Antenna Systems

Aniello Franzese and Batuhan Sütbaş (IHP – Leibniz Institute for High Performance Microelectronics, Germany); Nebojsa Maletic (IHP – Leibniz-Institut für innovative Mikroelektronik, Germany); Andrea Malignaggi (IHP, Germany); Renato Negra (RWTH Aachen University, Germany); Corrado Carta (IHP – Leibniz Institut für Innovative Mikroelektronik, Germany & Technische Universität Berlin, Germany)

Session Title:	[WD2] Antenna Measurement, Imaging, and Performance Engineering
Session Date:	December 3 (Wed.), 2025
Session Time:	15:40-17:20
Session Room:	Room D (Samda B)

[WD2-1] 15:40-16:00

Microwave Imaging with Scanned near-Field Focused Beams Based on a Liquid Crystal Reflect-Array

Hongyuan Feng, Xin Yu Wu and Zhi Hao Jiang (Southeast University, China); Haocheng Jia (BOE Technology Group, Company, Ltd, China); Wei Hong, Ji Heng and Fengshuo Wan (Southeast University, China)

[WD2-2] 16:00-16:20

U-Net Based Near-to-Far-Field Transformation Under Limited Near-Field Measurement Area

Eugene Lee, Seung Hee Jang, Wonhyo Kim, Yeonjae Kim and Youngwook Kim (Sogang University, Korea (South))

[WD2-3] 16:20-16:40

Printed Log-Periodic Dipole Antenna with Multiple Narrow Notched Bands Using Co-Dipoles

Zhe Zhang, Jiacheng Sun, Zihao Yang, Zhixia Xu and Shunli Li (Southeast University, China)

[WD2-4] 16:40-17:00

Research on RCS Reduction Technology of Antenna Based on Absorptive/Transmissive Frequency Selective Surface

Zhichao Miao and Jinrong Li (Harbin Institute of Technology, China)

[WD2-5] 17:00-17:20

Circularly Polarized Bi-Directional Antenna Using Cross-Slotted Waveguide

Takuto Oyama and Nobuhiro Kuga (Yokohama National University, Japan)

Session Title:	[WE2] [SS] EMC Test and Noise Reduction
Session Date:	December 3 (Wed.), 2025
Session Time:	15:40-17:20
Session Room:	Room E (301)

[WE2-1] 15:40-16:00

Phase Retrieval Method Using Dual Synchronous Receivers for EMI Scanning Applications

Hailing Zhao (Southwest University of Science and Technology, China & Mianyang, China)

[WE2-2] 16:00-16:20

Electromagnetic Immunity Analysis for Wireless Communication Devices Using near-Field Noise Injection Testing

Naeun Kim (Kwangwoon University, Korea (South) & Electronics and Communications Engineering, Korea (South)); Eakhwan Song (Kwangwoon University, Korea (South))

[WE2-3] 16:20-16:40

Analysis of Inductance Reduction by Reactive Shield Coil and Methodology for Eliminating RX-Side Series Capacitor in LCC-LCC WPT Systems

Yujun Shin (Keimyung University, Korea (South)); Seongho Woo (Korea Advanced Institute of Science and Technology, Korea (South))

[WE2-4] 16:40-17:00

Sheet Impedance Dependence on Conductive Noise Suppression Performance of Composite Sheet with Carbonized Rice Husk

Eito Kamano (Tohoku University, Japan); Seiji Kumagai and Yusuke Abe (Akita University, Japan); Takamichi Miyazaki and Saijian Ajia (Tohoku University, Japan); Motoshi Tanaka (Akita University, Japan); Yasushi Endo and Sho Muroga (Tohoku University, Japan)

[WE2-5] 17:00-17:20

A Study on the Noise Source Analysis of Capacitance Differences Between Single IGBT and Module for Automotive Power Systems

Jaewon Rhee, Sanguk Lee, Seungmin Ha and Hongseok Kim (Korea Advanced Institute of Science and Technology, Korea (South)); Jiseong Kim (KAIST, Korea (South)); Dongil Shin, Semin Woo and Seokhyeon Son (Hyundai Motor Company, Korea (South)); Seungyoung Ahn (Korea Advanced Institute of Science and Technology, Korea (South))

Session Title:	[WF2] Sub-THz Communication for 6G
Session Date:	December 3 (Wed.), 2025
Session Time:	15:40-17:20
Session Room:	Room F (302)

[WF2-1] [Invited] 15:40-16:00

Modulation Linearity of Si Mach-Zehnder Modulators

Woo-Young Choi, Min-Hyeok Seong and Yongjin Ji (Yonsei University, Korea (South))

[WF2-2] [Invited] 16:00-16:20

Multishape Radio: Advanced Electromagnetic Wave Manipulation for Enabling 6G Wireless Communications

Doohwan Lee (NTT, Japan); Hirofumi Sasaki and Yasunori Yagi (NTT Corporation, Japan); Kosuke Suzuoki (Nippon Telegraph and Telephone Corporation, Japan); Riichi Kudo (NTT Corporation, Japan)

[WF2-3] 16:20-16:40

A 300-GHz Quartz Transmitarray Using FP Polarizers for Point-to-Point Communications

Jia-Hui Zhao, Feng Xie, Chen-Yu Ding and Zhang-Cheng Hao (Southeast University, China)

[WF2-4] 16:40-17:00

Long-Range Prediction of E-Band OAM Beam Profiles Using Measurement-Based Infinitesimal Dipole Modeling

SeokJu Moon (Ulsan National Institute of Science and Technology (UNIST), Korea (South)); EunMi Choi (UNIST, Korea (South)); Jaehoon Jeong (ETRI, Korea (South), Korea (South)); Young Dam Kim (Chungnam National University, Korea (South))

[WF2-5] 17:00-17:20

A 7.0 pA/√Hz Ultra Low Noise Transimpedance Amplifier with 26.5 GHz Bandwidth for 50G PON

Kunming Yang (Southeast University, China & Institute of Radio Frequency and Optoelectronic Integration, China)

Session Title:	[WG2] Radar Signal Processing, Measurement Techniques and Systems
Session Date:	December 3 (Wed.), 2025
Session Time:	15:40-17:20
Session Room:	Room G (303)

[WG2-1] 15:40-16:00

A Deep Learning-Based Wavenumber Domain Imaging Method for ISAC

Lue Wen (National University of Singapore Singapore, Singapore); Siyuan Zhao (National University of Singapore & NUS ECE, Singapore); Tiantian Yin (National University of Singapore, Singapore); Yongxin Guo (City University of Hong Kong, Hong Kong); Xudong Chen (National University of Singapore, Singapore)

[WG2-2] 16:00-16:20

Wideband LFM Measurement with Synchronized Direct-Conversion Receivers

Ye-Won Jeong, Won-Jun Park and Byungkwan Kim (Chungnam National University, Korea (South))

[WG2-3] 16:20-16:40

Indoor Localization Using CNNs with Integrated Wi-Fi Fingerprints and Directional Information

Taiga Arata, Satoru Aikawa and Shinichiro Yamamoto (University of Hyogo, Japan)

[WG2-4] 16:40-17:00

A Mutual Coupling Based Self-Calibration Method Using RFSoC for L-Band Synthetic Aperture Radar

Koen Mouthaan (NUS, Singapore); Peizhuo Yang and Yuanchen Zeng (National University of Singapore, Singapore)

[WG2-5] 17:00-17:20

A Sub-400 mm^2 24-GHz FMCW Radar with 2×2 Antenna Array Configuration

Goo-Han Ko, Ryu Si Keuk and Minki Kang (Chung-Ang University, Korea (South)); Donghyun Baek (Chung-ang University, Korea (South))

Session Title:	[TA1] Millimeter-Wave and 5G RFIC Innovations
Session Date:	December 4 (Thu.), 2025
Session Time:	08:30-10:10
Session Room:	Room A (Halla A)

[TA1-1] [Invited] 08:30-08:50

Ultra-Wideband RF and Analog Circuit Design for 5G NR FR1/FR3

Yun Wang and Hongtao Xu (Fudan University, China)

[TA1-2] [Invited] 08:50-09:10

Sub-THz and THz CMOS Electronics for Sensing and Communication Applications

Chun-Hsing Li, Tse-Ying Chen, Yen-You Li and Wei-Tang Tseng (National Taiwan University, Taiwan); Te-Yen Chiu and Chun Wang (National Tsing Hua University, Taiwan)

[TA1-3] 09:10-09:30

A 120 GHz AiP Transmitter and Receiver with 21.5 dBm EIRP and 10 dB Noise Figure in 40-nm CMOS

Dong-Yeol Yang (Sungkyukkwan University, Korea (South)); Jae-Hyun Park (Samsung Electronics, Korea (South)); Seung-Yeon Kim and Seuk-Won Kang (Sungkyunkwan University, Korea (South)); Sungho Lee (Korea Electronics Technology Institute, Korea (South)); Byung-Sung Kim (Sungkyunkwan University, Korea (South))

[TA1-4] 09:30-09:50

An 84-95 GHz CMOS Downconverter with a 22-to-35 GHz IF for Multi-Band Radiometers

Chien-Hao Hsiao, Rou-Yin Huang, Yi-Fu Chen, Shih-Hao Lai and Hong-Yeh Chang (National Central University, Taiwan)

[TA1-5] 09:50-10:10

A 21.5-35.5 GHz CMOS LNA with Integrated 180° Phase Shifting Using Partially Coupled Transformer for 5G NR Applications

Min-Seok Baek, Han Woong Choi, Joon-Hyung Kim, Jae-Hyeok Song, Jae-Eun Lee, Jeong-Taek Son, Byeong-Chan Lee, Jong-Seong Park, Ilhun Kim, Eun-Gyu Lee and Choul-Young Kim (Chungnam National University, Korea (South))

Session Title:	[TB1] High Performance Power Amplifiers
Session Date:	December 4 (Thu.), 2025
Session Time:	08:30-10:10
Session Room:	Room B (Halla B)

[TB1-1] 08:30-08:50

An SLMBA with Enhanced Back-off Range Using a Novel Design Method for an Optimal Load-Modulation Profile

Tatsuya Itoh and Shinichi Tanaka (Shibaura Institute of Technology, Japan)

[TB1-2] 08:50-09:10

Sigmoid-Function-Based Variable Gain Amplifier for Dual-Input Power Amplifier

Wataru Yamamoto (Mitsubishi Electric Corporation, Japan); Takuma Torii (Mitsubishi Electric, Japan); Akihito Hirai (Mitsubishi Electric Corporation, Japan)

[TB1-3] 09:10-09:30

27dBm Output Power 2-Stage 5.9-7.12GHz PA for Wi-Fi Application in 130nm RF BiCMOS

Raphaël Paulin, Simon Bouvot, Jean-Christophe Mas, Cedric Durand and Daniel Gloria (STMicroelectronics, France)

[TB1-4] 09:30-09:50

Wideband High-Power Class EF2 Power Amplifier Based on Multiple Series Resonance

Sangyeop Kim (Sungkyunkwan University, Korea (South)); Sunwoo Nam (Samsung Electronics Company Ltd, Korea (South)); Yoonjung Lee, Seogyun Lim and Youngoo Yang (Sungkyunkwan University, Korea (South))

[TB1-5] 09:50-10:10

A Compact 40 dBm GaN/SiC MMIC Doherty Power Amplifier at FR3 Band for 6G Applications

Hossein Zaheri and Gregor Lasser (Chalmers University of Technology, Sweden)

Session Title:	[TD1] Space-Time Coding and Reconfigurable Antennas for Future Wireless Systems
Session Date:	December 4 (Thu.), 2025
Session Time:	08:30-10:10
Session Room:	Room D (Samda B)

[TD1-1] 08:30-08:50

Frequency-Modulated Continuous Waves Generation Based on Space-Time-Coding Leaky-Wave Antenna

Zi Han Ma, Han Qing Yang, Rui Bi and Shao Nan Chen (Southeast University, China); Hui Dong Li (Southeast University,China); Jun Yan Dai and Qiang Cheng (Southeast University, China)

[TD1-2] 08:50-09:10

A RCS Manipulation Cloak Based on the 2-Bit Space-Time Coding Metasurfaces

Zhe Zhang (Southeast University, China); H. L. Wang (Southeast University, Afghanistan)

[TD1-3] 09:10-09:30

Adaptive Frequency-Reconfigurable Antenna for Emerging 5G and IoT Applications

Domin Choi, Jaemin Lee and Wahaj Abbas Awan (Chungbuk National University, Korea (South)); Sangmin Lee (Korea National University of Transportation, Korea (South)); Nam Kim (Chungbuk National University, Korea (South))

[TD1-4] 09:30-09:50

On-Chip Slotted Patch Antenna at 226 - 244 GHz in SiGe Cu-Backend Technology

Raqibul Hasan (IHP Microelectronics, Germany); Darko Cvetkovski (IHP - Leibniz-Institut Für Innovative Mikroelektronik, Germany); Franz Alwin Dürrwald (Technische Universität Dresden, Germany); Seyyid Dilek (IHP - Leibniz Institute for High Performance Microelectronics, Germany); Uwe Maaß (Fraunhofer IZM, Germany); Akanksha Bhutani (Karlsruhe Institute of Technology, Germany); Mohamed Hussein Eissa (IHP, Germany); Batuhan Sütbaş (IHP - Leibniz Institute for High Performance Microelectronics, Germany); Dietmar Kissinger (Ulm University, Germany); Corrado Carta (IHP - Leibniz Institut für Innovative Mikroelektronik, Germany & Technische Universität Berlin, Germany)

[TD1-5] 09:50-10:10

Dual-Band Counter-CP Antenna with Wide AR Based on Metamaterials

Pei-Min Huang, Qing-Xin Chu, Zheng-hua Rong and Pei-Lin Yu (South China University of Technology, China)

Session Title:	[TE1] Next-Generation Antenna Architectures: Lenses, Arrays, and Machine Learning
Session Date:	December 4 (Thu.), 2025
Session Time:	08:30-10:10
Session Room:	Room E (301)

[TE1-1] [Invited] 08:30-08:50

Low-Cost Lightweight 3D-Printed Luneburg Lenses Enabling Both Wide Angular and Long Distance Coverage for Radio Applications

Jun Xu, Wei Hong, Kai Chen and Yuechao Wang (Southeast University, China)

[TE1-2] 08:50-09:10

Ka-Band Omnidirectional Circularly Polarized Waveguide Slot Antenna for Low-Altitude UAV Applications

Jinlun Li and Yuqing Zhu (Southeast University, China); Chengcheng Yu (Sunway Communication, China); Hongxin Zhao (State Key Laboratory of Millimeter Waves, Southeast University, China)

[TE1-3] 09:10-09:30

An L-Band Dual-Polarized 8×8 Array with RFSoC-Based SCORE Digital Beamforming

Shiwen Tang and Peizhuo Yang (National University of Singapore, Singapore); Koen Mouthaan (NUS, Singapore)

[TE1-4] 09:30-09:50

Dual-Polarized, Lightweight, and Conformal L-Band Antenna Array with RFSoC for UAV Platforms

Xunlei Wang, Mohammad Ameen, Peizhuo Yang and Gong Chen (National University of Singapore, Singapore); Koen Mouthaan (NUS, Singapore)

[TE1-5] 09:50-10:10

Machine-Learning-Driven Auto-Tuning of PIFA for Recurrent Problems in Dynamic Environments via Offline Surrogate Modeling

Wei-Cheng Chen (National Taiwan University, Taiwan)

Session Title:	[TF1] Reconfigurable Intelligent Surface for 5G adv/6G
Session Date:	December 4 (Thu.), 2025
Session Time:	08:30-10:10
Session Room:	Room F (302)

[TF1-1] 08:30-08:50

RIS-Enabled Four-Stream Beamforming System for Multi-User Millimeter-Wave Communications

Jun Wei Zhang and Qiang Cheng (Southeast University, China)

[TF1-2] 08:50-09:10

A Millimeter Wave Omni-Directional Scattering Surface Using Randomly Placed Metal Patches

Fu-Ching Wang, Jhao-Fu Luo and Hsin-Chia Lu (National Taiwan University, Taiwan)

[TF1-3] 09:10-09:30

A Scalable LC Phase Shifter Based on Periodic Differential Microstrip Loading for 5G RIS

Yuh-Chyi Chang (National Sun Yat-Sen University, Taiwan); Tien-Lun Ting (National Sun Yat-sen University, Taiwan); Tsung-Hsien Lin (National Sun Yat-Sen University, Taiwan)

[TF1-4] 09:30-09:50

300 GHz Stretchable RISs with Dynamic Reflection Beam Control

Sonoa Oe and Yuki Tankawa (The University of Osaka, Japan); Yuto Kato (National Institute of Advanced Industrial Science and Technology, Japan); Yosuke Nakata (Osaka University, Japan); Atsushi Sanada (The University of Osaka, Japan)

[TF1-5] 09:50-10:10

Sub-THz Graphene-Based Reconfigurable Intelligent Surface Assisted 2D Beam Steering for 6G Applications

Abhishek Chauhan (Indian Institute of Technology Patna, India); Amit Kumar Singh (IIT Patna, India); Rahul Mondal (Indian Institute of Technology Patna, India); Akhilesh Kumar (Indian Institute of Technology, Patna, India); Mohd Farman Ali (Indian Institute of Technology Delhi, India)

Session Title:	[TG1] Algorithms and Computational EM for Intelligent EW/Sensing
Session Date:	December 4 (Thu.), 2025
Session Time:	08:30-10:10
Session Room:	Room G (303)

[TG1-1] [Invited] 08:30-08:50

FDA Beampattern Optimization with Nonlinear Frequency Offsets and Non-Uniform Element Spacing

Abdul Hadee, Ahmad Bilal, Sohom Bhattacharjee, Yash Hemant Shah and Choon Sik Cho (Korea Aerospace University, Korea (South)); Pathipati Srihari (National Institute of Technology Karnataka, India)

[TG1-2] 08:50-09:10

Design of an Optimal Jammer Trajectory for Maintaining a Consistent Jamming-to-Signal Ratio

Bosung Park, Changhyeon Im and Hosung Choo (Hongik University, Korea (South))

[TG1-3] 09:10-09:30

Accelerating Discontinuous Galerkin Domain Decomposition Method with MLACE and MLFMA for Multiscale Problems Based on GPUs

Xing Mu (Metax-tech Inc., China)

[TG1-4] 09:30-09:50

Multi-Task Frequency Attentive Network for Lightweight Small Aerial Target Classification

Yan Gong, Hanjun Zhao and Hui Chu (Nanjing University of Science and Technology, China)

[TG1-5] 09:50-10:10

Deep-Learning-Based X-Band Waveguide Permittivity Measurement Method for Dielectric Materials with Air Gaps

Seonguk Kwon, Jungbin Seo, Handong Seo, Hyemin Yang, Chaejin Lee and Youngcheol Park (Hankuk University of Foreign Studies, Korea (South))

Session Title:	[TA2] RF Front-End Circuits for Reconfigurable and mmWave Applications
Session Date:	December 4 (Thu.), 2025
Session Time:	10:30-12:10
Session Room:	Room A (Halla A)

[TA2-1] [Invited] 10:30-10:50

A Design of Sub-GHz Wi-SUN/ TVWS/Dual Mode Transceiver with Automatic Impedance Calibration

Sung Jae Lee (SungKyunKwan University & SKAICHIPS Company, Korea (South)); Young Gun Pu (University of Sungkyunkwan, Korea (South)); Jun-Eun Park and Kang-Yoon Lee (Sungkyunkwan University, Korea (South))

[TA2-2] 10:50-11:10

Low-Loss, Compact Band-Pass/Low-Pass Switch-Type 4-Bit Phase Shifter for 5G FR2 Applications

Geonho Park, Kyunghwan Kim, Goeun Baek and Doyoon Kim (Samsung Electronics, Korea (South)); Han-Woong Choi (Chunnam National Univiersity, Korea (South)); Byeong-Taek Moon (KAIST, Korea (South)); Hyun-Chul Park and Chan-Hong Park (Samsung Electronics, Korea (South))

[TA2-3] 11:10-11:30

24-GHz CMOS Active Quasi-Circulator with Wideband 30-dB Isolation

Chih-Hao Yang (National Taiwan University, Taiwan); Zi-Hao Fu (National Taiwn University, Taiwan); Kun-You Lin (National Taiwan University, Taiwan)

[TA2-4] 11:30-11:50

A E Band Vector Sum Phase Shifter with Switched Delay Line

Jun-kyo Park (Sungkyunkwan University, Korea (South))

[TA2-5] 11:50-12:10

A Compact Active Bi-Directional Phase Shifter Employing a Highly Isolated Single Gilbert-Cell

Uichan Park, Taeyeong Yoon and Jungsuek Oh (Seoul National University, Korea (South))

Session Title:	[TB2] Millimeter-Wave Power Amplifiers
Session Date:	December 4 (Thu.), 2025
Session Time:	10:30-12:10
Session Room:	Room B (Halla B)

[TB2-1] [Invited] 10:30-10:50

Millimeter-Wave CMOS Power Amplifier Designs: Practical Considerations

Hyun-Chul Park (Samsung Electronics, Korea (South))

[TB2-2] 10:50-11:10

GaN Power Amplifier MMICs for Upper D-Band Communications

Philipp Neininger, Thomas Zieciak, Peter Brückner, Michael Mikulla and Rüdiger Quay (Fraunhofer IAF, Germany)

[TB2-3] 11:10-11:30

A Coupler-Based Single-Stage Broadband Ka-Band Power Amplifier with Dual-Driven Gain-Boosting Technique Achieving 21.9 dB/36.4% Gain/PAEmax

Lei Zhang, Weitao Yang, Xiaoxian Liu and Zhangming Zhu (Xidian University, China)

[TB2-4] 11:30-11:50

A Linearity-Improved Millimeter-Wave GaN Power Amplifier Based on AM/PM Compensation

Gaojing Zhang, Luqi Yu, Yucheng Yu, Peng Chen and Chao Yu (Southeast University, China)

[TB2-5] 11:50-12:10

A Ka-Band Reconfigurable PA-LNA Using Load Modulated Balanced Amplifier

Shaoping Zhang and Chenxi Zhao (University of Electronic Science and Technology of China, China)

Session Title:	[TD2] SIW, Multibeam, and Biomedical Antenna Solutions
Session Date:	December 4 (Thu.), 2025
Session Time:	10:30-12:10
Session Room:	Room D (Samda B)

[TD2-1] 10:30-10:50

2-D Multibeam End-Fire Antenna Based on Broadband Hybrid SIW and SICL Butler Matrices

Wei Li, Jun Xu, Pinpin Yan, Zhengbo Jiang and Wei Hong (Southeast University, China)

[TD2-2] 10:50-11:10

Experimental Analysis of a Quad-Band Antenna to Establish Wireless Intracranial Implant-to-Implant Communications

Uzman Ali, Abdul Basir and Toni Björninen (Tampere University, Finland)

[TD2-3] 11:10-11:30

A SIW-Based Shared Aperture Beam-Steerable Antenna for Multiband Wireless Communications

Md Abu Sufian (DGIST, Korea (South)); Niamat Hussain (University of Glasgow, United Kingdom (Great Britain)); Minyoung Song (DGIST, Korea (South))

[TD2-4] 11:30-11:50

G-Band CRLH Substrate-Integrated Waveguide Slot Antenna in Glass-Based IPD Technology

Shuping Li (Rutgers University, USA); Yusiang Wu and Yu-Hsiang Cheng (National Taiwan University, Taiwan); Chung-Tse Michael Wu (Rutgers University, USA)

[TD2-5] 11:50-12:10

A Hybrid-Integrated Dual-Circularly Polarized Horn Antenna with Microstrip-to-Waveguide Transition for Ku-Band Receiver Applications

Jian-Yu Li and Hao-Chun Chen (Yuan Ze University, Taiwan); Tzung-Wern Chiou (BWant Co., Ltd, Taiwan)

Session Title:	[TE2] [SS] AI and Emerging Techniques in Antenna Design for IoT and Microwave Systems
Session Date:	December 4 (Thu.), 2025
Session Time:	10:30-12:10
Session Room:	Room E (301)

[TE2-1] 10:30-10:50

A High SNR 2.4 GHz PCB Antenna Design for Compact IoT Devices

Anh Duc Le (Hanoi University of Science and Technology, Vietnam); Tam Nguyen Thanh (Le Quy Don Technical University, Vietnam); Quoc Cuong Nguyen (Hanoi University of Science and Technology, Vietnam); Thuy Minh Le (School of Electrical & Electronic Engineering, Vietnam & Hanoi University of Science and Technology, Vietnam)

[TE2-2] 10:50-11:10

A Circularly Polarized Filtenna for IoT Monitoring Applications

Quang Minh Pham, Quoc Cuong Nguyen and Nguyen Xuan Quyen (Hanoi University of Science and Technology, Vietnam); Thuy Minh Le (School of Electrical & Electronic Engineering, Vietnam & Hanoi University of Science and Technology, Vietnam)

[TE2-3] 11:10-11:30

Multilayer CPWG-to-Waveguide Transition for Circularly Polarized Ku-Band Antenna Systems

Hoyong Kim, Gyoungdeuk Kim and Sangkil Kim (Pusan National University, Korea (South))

[TE2-4] 11:30-11:50

A High Aperture Efficiency Leaky Wave Antenna with a Nonlinear Elliptical Slot Distribution for High Power Microwave Applications

Wonkyo Kim and Mee-Su Lee (Chungnam National University, Korea (South)); Dong-Hoon Lee (Chungnam National University, Republic of Korea, Korea (South)); Junyeon Kim and Donggeun Seo (Agency for Defense Development, Korea (South)); Ick-Jae Yoon (Chungnam National University, Korea (South))

[TE2-5] 11:50-12:10

Diffusion Model Driven Inverse Design of Microstrip Patch Antenna Enabling Extendable FOM Modeling

Minje Kim, Jungsuek Oh, Taeyeong Yoon, Euiho Shin and Hooyoung Kim (Seoul National University, Korea (South))

Session Title:	[TF2] Advanced Front-End System for 5G adv/6G
Session Date:	December 4 (Thu.), 2025
Session Time:	10:30-12:10
Session Room:	Room F (302)

[TF2-1] 10:30-10:50

A Closed-Loop Impedance Tuner with Integrated Reflectometer and High-Voltage Tuning Switches

Ting-Li Hsu and Amelie Hagelauer (Technical University of Munich, Germany); Valentyn Solomko (Infineon Technologies, Germany)

[TF2-2] 10:50-11:10

A 15.5-44 GHz Vector Modulator Phase Shifter with an Improved QAF in 22nm FD-SOI CMOS

Zixuan Wang, Jiewen Wang, Kun Gao, Wenhua Chen, Haigang Feng and Zhenghe Feng (Tsinghua University, China)

[TF2-3] 11:10-11:30

Design of a 22nm CMOS 2.4GHz and 5GHz WiFi-6 Transmitter with Calibration for LO Leakage and Image Using an Envelope Detector

Eunchang Kim (Korea Aerospace University, Korea (South))

[TF2-4] 11:30-11:50

A Low-Cost Digital Predistortion Method Based on 2D Look-Up Tables for 5G Mobile Applications

Yu-Chen Chang, Chun-Ying Chen and Jau-Horng Chen (National Taiwan University, Taiwan)

[TF2-5] 11:50-12:10

A Calibration Method Compensating Impedance Difference of Signal Paths in Wideband Reflectometer for Semiconductor Process Chamber

Ji-Young Kim and Sungjun Cho (Korea Advanced Institute of Science and Technology, Korea (South)); Seong-Jin Kim and Hyo-Won Lee (KAIST, Korea (South)); Yeong-Ju Seo (Korea Advanced Institute of Science and Technology, Korea (South)); Jong-Won Yu (Korea (South))

Session Title:	[TG2] [SS] Emerging Electromagnetic Technologies for Medical Diagnosis and Therapy
Session Date:	December 4 (Thu.), 2025
Session Time:	10:30-12:10
Session Room:	Room G (303)

[TG2-1] 10:30-10:50

A Knowledge-Fusion Deep Learning Approach for Premature Beat Classification Using mmWave Radar in Clinical Settings

Yuchen Li, Jie Cao and Gaomin Xue (Shanghai Jiao Tong University, China); Xiaolei Xu (Xinhua Hospital Affiliated to Shanghai Jiaotong University School of Medicine, USA); Qishan Chen and Li Zhang (Xinhua Hospital Affiliated to Shanghai Jiaotong University School of Medicine, China); Changzhan Gu (Shanghai Jiao Tong University, China)

[TG2-2] 10:50-11:10

Transcutaneous Auricular Vagus Nerve Stimulation for Cognitive Enhancement

Sang Beom Jun (Ewha Womans University, Korea (South))

[TG2-3] 11:10-11:30

Preliminary Design of a Modified Birdcage Receiver RF Coil for 23Na Breast MRI at 7T

Sheikh Faisal Ahmad (Kyungpook National University & Institute of Advance Convergence Technology, Korea (South)); Sukhoon Oh (Korea Basic Science Institute, Korea (South)); Hyun Deok Kim (Kyungpook National University, Korea (South))

[TG2-4] 11:30-11:50

Wrist-Worn Frequency-Modulated Continuous Wave (FMCW) Radar for Respiration Monitoring

Iou Heng Chen (National Sun Yat-sen University, Taiwan); Ji-Xun Zhong (National Sun Yat-Sen University, Taiwan); Ju-Yin Shih and Fu-Kang Wang (National Sun Yat-sen University, Taiwan)

[TG2-5] 11:50-12:10

Terahertz Radiation for Novel Cancer Therapy

Joo-Hiuk Son (Korea (South))

Session Title:	[TA3] RF Power Amplifier
Session Date:	December 4 (Thu.), 2025
Session Time:	13:20-15:00
Session Room:	Room A (Halla A)

[TA3-1] [Invited] 13:20-13:40

An Improved Noise Figure Measurement Technique for Differential Amplifiers

Bharatha Kumar Thangarasu, Shuai Li, Hongshi Yu, Wansi Ge, Xiaozheng Guo, Yuqing Liu, Sini Wu, Nagarajan Mahalingam, Fanyi Meng and Kaixue Ma (Tianjin University, China); Luz Hh (Suda, China); Kiat Seng Yeo (Singapore University of Technology and Design, Singapore & Tianjin University, China)

[TA3-2] 13:40-14:00

A Reconfigurable Dual-Band Asymmetrical Doherty Power Amplifier Using PIN Diodes

Gongxu He and Cuiping Yu (Beijing University of Posts and Telecommunications, China); Yuanan Liu (Beijing University of Posts and Telecom, China)

[TA3-3] 14:00-14:20

A Ka-Band Harmonic-Tuned GaN Doherty Power Amplifier

Moise Safari Mugisho and Christian Friesicke (Fraunhofer IAF, Germany); Dirk Schwantuschke (Fraunhofer Institute for Applied Solid State Physics, Germany); Peter Brückner and Rüdiger Quay (Fraunhofer IAF, Germany)

[TA3-4] 14:20-14:40

Novel Inductively-Gated FET Diodes for Microwave Rectifiers

Taisei Shimada and Shinichi Tanaka (Shibaura Institute of Technology, Japan)

[TA3-5] 14:40-15:00

Asymmetric Doherty Power Amplifier Design Based on Load-Pull Driven Current Ratio Optimization for Accurate Load Modulation

Jisu Park and Minjae Ahn (Konkuk University, Korea (South)); Dongsu Kim and Yunsik Park (Korea Electronics Technology Institute, Korea (South)); Hyunchul Ku (Konkuk University, Korea (South))

Session Title:	[TB3] Millimeter Wave and Sub-Teraherz Signal Sources
Session Date:	December 4 (Thu.), 2025
Session Time:	13:20-15:00
Session Room:	Room B (Halla B)

[TB3-1] [Invited] 13:20-13:40

Resonant Tunneling Diodes for Terahertz Practical Applications

Safumi Suzuki (Institute of Science Tokyo, Japan)

[TB3-2] 13:40-14:00

A 280-GHz Signal Source for FMCW Radar Systems Based on 28-nm CMOS Technology

Myeongjae Kim, Jaewon Jang, Wooyong Keum, Giyeong Nam and Jae-Sung Rieh (Korea University, Korea (South))

[TB3-3] 14:00-14:20

High-Output-Power Sub-Harmonic Injection-Locked Colpitts Oscillator

Nicola Pelagalli (IHP - Leibniz Institute for High Performance Microelectronics, Germany); Andrea Malignaggi (IHP, Germany); Corrado Carta (IHP - Leibniz Institut für Innovative Mikroelektronik, Germany & Technische Universität Berlin, Germany)

[TB3-4] 14:20-14:40

A 66-GHz/121-GHz Dual-Mode Distributed VCO in 250-nm InP HBT

Satoshi Kawahara, Teruo Jyo and Tsutomu Takeya (NTT Corporation, Japan); Hitoshi Wakita (NTT, Japan); Munehiko Nagatani, Miwa Mutoh and Yuta Shiratori (NTT Corporation, Japan); Hiroyuki Takahashi (NTT Device Technology Laboratories, Japan)

[TB3-5] 14:40-15:00

A Low Power Colpitts VCO with High-Q Transistor-Controlled Capacitor for mm-Wave Applications

Yu-Teng Chang (National Taiwan Normal University, Taiwan); Hsing-Hung Lin and Chung-Ping Chen (National Taiwan University, Taiwan)

Session Title:	[TD3] Filtering and ME Dipole Antenna Technologies
Session Date:	December 4 (Thu.), 2025
Session Time:	13:20-15:00
Session Room:	Room D (Samda B)

[TD3-1] 13:20-13:40

Patch Array with Filtering Characteristics Based on Reversed Element Arrangement

Wanjing Huang, Zhenqiang Chen, Yiqiu Liang, Zhiqiang Yu and Jianyi Zhou (Southeast University, China)

[TD3-2] 13:40-14:00

Low Profile Absorption Filtering Reconfigurable Intelligent Surfaces for Intelligent Wireless Communication

JianJia Hu (University of Electronic Science and Technology of China, China)

[TD3-3] 14:00-14:20

Novel Design of Ultrawideband Antenna with Broad Absorptive Notch Band of Quasi-Rectangular Filtering Response

Haoyan Ma, Zihao Yang, Shunli Li and Hongxin Zhao (State Key Laboratory of Millimeter Waves, Southeast University, China)

[TD3-4] 14:20-14:40

A Novel Quasi-Yagi Filtering Antenna with Multi-Mode Bandpass Filter

Yihao Xia, Yunxi Tao, Bokai Wen, Yiheng Chen and Xueyang Fang (Northwestern Polytechnical University, China); Xilong Lu (Yangtze River Delta Research Institute, Northwestern Polytechnical University, China)

[TD3-5] 14:40-15:00

A Low-Profile Millimeter-Wave Magneto-Electric Dipole Bowtie Antenna with Rectangular Slot

Seung Uk Oh (Hanyang University, Korea (South)); Tae Hwan Jang (Hanyang University @ Ansan Campus, Korea (South))

Session Title:	[TE3] Recent Advances in Microwave Components and Their Applications
Session Date:	December 4 (Thu.), 2025
Session Time:	13:20-15:00
Session Room:	Room E (301)

[TE3-1] 13:20-13:40

3D-Printed Frequency-Diverse Metasurface for Camera-Based Terahertz Spectrometry

Sakib Quader (The University of Adelaide, Australia); Mariam Abdullah (University of Adelaide, Australia); Estrid He (RMIT, Australia); Christophe Fumeaux (University of Queensland, Australia); Withawat Withayachumnankul (The University of Adelaide, Austr

[TE3-2] 13:40-14:00

Compact Self-Matching Microwave Plasma Source with a Wide Impedance Bandwidth

Jeong-Hun Park, Seung-Jun Park and Moon-Que Lee (University of Seoul, Korea (South))

[TE3-2] 14:00-14:20

A Compact Ultrawideband Common-Mode Filter Based on Comb-Shaped Defected Ground Structure

Zhiyuan Niu and Cheng Zhou (Southeast University, China); Peng Zhou (Nanjing University of Science and Technology, China); Xiaoxing Yin (State Key Laboratory of Millimeter Waves, China)

[TE3-4] 14:20-14:40

Switch-Based Complex Termination Impedance Reconfigurable Filters for RF Receiver Front-Ends

Chengfei Yi (University of Electronic Science and Technology of China, China)

[TE3-5] 14:40-15:00

A Reconfigurable Miniaturized Bandpass Filter with a Fixed Center Frequency of 4 GHz

Hao J Liu (University of Electronic Science and Technology of China, China)

Session Title:	[TF3] RF and Antenna Technologies for Satellite Communications
Session Date:	December 4 (Thu.), 2025
Session Time:	13:20-15:00
Session Room:	Room F (302)

[TF3-1] [Invited] 13:20-13:40

Design Guidelines Using Groove Gap-Waveguide Technology for Realizing a Millimeter-Wave 4×4 Butler Beamforming Matrix for Space Multiplexing

Mohammad Alibakhshikenari (University of Rome Tor Vergata, Italy); Bal Virdee (London Metropolitan University, United Kingdom (Great Britain)); Hassan Zakeri (Amirkabir University of Technology, Iran); Takfarinas Saber (National University of Ireland Galway, Ireland); Ernesto Limiti (University of Rome Tor Vergata, Italy)

[TF3-2] [Invited] 13:40-14:00

Q/V-Band DBF Array Antenna and Direct Digital RF Transceivers for Future LEO Constellation Satellites

Noriharu Suematsu, Tomoyuki Furuichi and Satoshi Tsukamoto (Tohoku University, Japan); Yoshiaki Morino and Akihito Hirai (Mitsubishi Electric Corporation, Japan)

[TF3-3] 14:00-14:20

A Deep Notch Filtering LNA with Compact Layout and 2.3 dB NF for Ka-Band Satellite Communication

Ruiyang Jiang, Haikun Jia, Xiaochuan Duo, Wei Deng and Baoyong Chi (Tsinghua University, China)

[TF3-4] 14:20-14:40

Design and of Deployable Mesh Reflector Antennas for Satellite Applications

Changhyeon Im (Hongik University, Korea (South)); Wongu Seo (Hanwhasystems Company, Korea (South)); Seul-Gi Park (Hanwha Systems, Korea (South)); Hosung Choo (Hongik University, Korea (South))

[TF3-5] 14:40-15:00

Design and Integration of a Ka-Band Satellite Receiver in LTCC Technology

Nieves García (University of Cantabria, Spain); Aintzane Lujambio (Alter Technology, Spain); Beatriz Aja (Universidad de Cantabria, Spain); Luisa Fuente (University of Cantabria, Spain)

Session Title:	[TG3] RF and Microwave for Medical Applications
Session Date:	December 4 (Thu.), 2025
Session Time:	13:20-15:00
Session Room:	Room G (303)

[TG3-1] [Invited] 13:20-13:40

Integration of RF MEMS and CMOS RFIC for Infrared Sensing

Huei Wang and Pei-Hsiang Wang (National Taiwan University, Taiwan); Zhixing Lin (University of California, Davis, USA); Yuen-Sum Ng (National Taiwan University, Taiwan); Melisa Gulseren and Matthew Benson (University of California, Davis, USA); Yunshan Wang, Jun-Han Lin, Chun-Wei Hsu, Sheng-Fu Zhuang, Xin-Hao Huang, Sheng-Chun Chen and Sheng-Wei Shih (National Taiwan University, Taiwan); Qun Jane Gu (Georgia Institute of Technology, USA); Juan Sebastián Gomez-Diaz (University of California, Davis, USA)

[TG3-2] [Invited] 13:40-14:00

Evolution of Human Exposure Research in Response to Changes in Radiofrequency Service

Jung Ick Moon (Electronics and Telecommunications Research Institute, Korea (South))

[TG3-3] 14:00-14:20

In Vivo Signal Attenuation of Ingestible Electronics: Propagation Across Frequency Bands and pH Levels

Ziyao Zhou and Hen-Wei Huang (Nanyang Technological University, Singapore)

[TG3-4] 14:20-14:40

Application of mmWave FMCW Radar to Measure Thickness of Materials and 3D Imaging

Edrick Baijukya (Ulsan National Institute of Science and Technology, Korea (South)); EunMi Choi (UNIST, Korea (South))

[TG3-5] 14:40-15:00

A Low-Profile Circumgyrated Shaped GCPW Patch Antenna for Wireless Medical Telemetry Services

Nayab Gogosh (COMSATS University Islamabad, Pakistan); Sohail Khalid (Riphah International University, Pakistan); Musa Hussain (Griffith University, Queensland, Australia); Adnan Iftikhar (COMSATS Institute of Information Technology, Islamabad, Pakistan); Muhammad Farhan Shafique (COMSATS Institute of Information Technolgy, Pakistan); Syed Muzahir Abbas (Macquarie University, Australia)

Session Title:	[TA4] Millimeter Wave Front-End Amplifiers
Session Date:	December 4 (Thu.), 2025
Session Time:	15:40-17:20
Session Room:	Room A (Halla A)

[TA4-1] [Invited] 15:40-16:00

Power Panel: a Layer-Integrated Power and Control Infrastructure for Compact RF CMOS Circuits

Minoru Fujishima (Hiroshima University, Japan)

[TA4-2] 16:00-16:20

A Compact 140 GHz PALNA for Wireless Transceivers in 40-nm Bulk CMOS

Jaegwan Kim, Jeongho Jang and Munkyo Seo (Sungkyunkwan University, Korea (South))

[TA4-3] 16:20-16:40

A D-Band Low Noise Amplifier in 250nm Electronic Photonic Integrated SiGe

Deniz Tas (Fraunhofer EMFT, Germany); Kai Scheller (Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany); Amelie Hagelauer (Fraunhofer, Germany); Marco Dietz (Fraunhofer EMFT, Germany); Robert Weigel (Friedrich-Alexander Universität Erlangen-Nürnberg, Germany)

[TA4-4] 16:40-17:00

A 56-72 GHz Broadband Load-Modulated Balanced Amplifier in 0.1 μm GaAs pHEMT Technology

Zichun Zheng (Southeast University, China & Purple Mountain Laboratories, China); Peng Chen, Zhe Chen, Qi Wu, Zetao Zhan, Jixin Chen and Wei Hong (Southeast University, China)

[TA4-5] 17:00-17:20

A 15.7-21.4 GHz Power Amplifier with 28.2-dBm Psat and 33.1% PAEpeak in 0.18-μm GaAs pHEMT Process for 6G FR3 Applications

Chun-Wei Hsu, Yi-Qi Lin and Yunshan Wang (National Taiwan University, Taiwan); Chan-Shin Wu and Tzu-Hung Chen (Ultraband Technologies Inc., Taiwan); Huei Wang (National Taiwan University, Taiwan)

Session Title:	[TB4] Signal Generation & Frequency Conversion
Session Date:	December 4 (Thu.), 2025
Session Time:	15:40-17:20
Session Room:	Room B (Halla B)

[TB4-1] [Invited] 15:40-16:00

An Area-Efficient and Ultra-Low-Jitter Cascaded Wideband LO Generator

Jaehyouk Choi (Seoul National University, Korea (South))

[TB4-2] 16:00-16:20

A 5.1% Efficiency, 2.1 dB Conversion Gain Buffer-Less E-Band Frequency Quadrupler with T-Coil Voltage Swing Optimization

Goeun Baek, Geonho Park, Kyunghwan Kim, Doyoon Kim, Jae-Hyun Park, Byeong-Taek Moon, Hyun-Chul Park and Chan-Hong Park (Samsung Electronics, Korea (South))

[TB4-3] 16:20-16:40

A Cascadable 20-GHz Phase Shifter with Sub-0.15° Resolution in 130-nm BiCMOS

Georg Zachl (Johannes Kepler University Linz, Austria); Harald Pretl (Johannes Kepler Universität, Austria)

[TB4-4] 16:40-17:00

A 930-GHz Triple-Push Oscillator Based on 250-nm InP HBT Technology

Heekang Son and Giyeong Nam (Korea University, Korea (South)); Doyoon Kim (Samsung Electronics, Korea (South)); Junghwan Yoo and Jae-Sung Rieh (Korea University, Korea (South))

[TB4-5] 17:00-17:20

A 200-GHz Frequency Multiplier Chain in 28-nm CMOS Technology

Chien-Nan Kuo, I-Ming Ku, Fu-Qiun Huang and Yu-Shun Chen (National Yang Ming Chiao Tung University, Taiwan); Ping-Chun Hsieh (National Tsing Hua University, Taiwan)

Session Title:	[TD4] Wide-Scanning and Reconfigurable Antenna Systems
Session Date:	December 4 (Thu.), 2025
Session Time:	15:40-17:20
Session Room:	Room D (Samda B)

[TD4-1] [Invited] 15:40-16:00

Wideband Beam Scanning Leaky Wave Antenna Using CRLH T-Shaped Unit Cells

Arokiaswami Alphones and Mahalingam Durga Lakshmi (Nanyang Technological University, Singapore); N Nasimuddin (Institute for Infocomm Research, Singapore)

[TD4-2] 16:00-16:20

An Ultrawide-Angle Scanning Planar Phased Array for Radar Application

Wen-Ye Liu and Zhang-Cheng Hao (Southeast University, China)

[TD4-3] 16:20-16:40

Millimeter-Wave Miniaturized Antenna and Its Wide-Angle Scanning Array for 5G Mobile Communication

Kai Chen (Southeast University, China); Jun Xu, Jixin Chen, Zhengbo Jiang and Wei Hong (Southeast University, China)

[TD4-4] 16:40-17:00

Pattern-Reconfigurable Antenna with Multi-Permittivity Dielectric Lens Using Dual Layer 3-D Printing Method

Ji-Hoon Lee and Young-Jun Lim (Korea Advanced Institute of Science and Technology, Korea (South)); Dong-Min Seo (KAIST, Korea (South)); Yeong-Ju Seo (Korea Advanced Institute of Science and Technology, Korea (South)); Hyeon-Jeong Cho (KAIST, Korea (South)); Jong-Won Yu (Korea (South))

[TD4-5] 17:00-17:20

Impedance and Radiation Phase Tunable Miniaturized PIFA with a Single Varactor for 6G FR3 Beamforming-IC-Less Array Antenna

Woojun Lee (Virginia Tech, USA); Jaehoon Kim, Jinhyun Kim and Jungsuek Oh (Seoul National University, Korea (South))

Session Title:	[TE4] Design and Characterization of RF Systems and Components
Session Date:	December 4 (Thu.), 2025
Session Time:	15:40-17:20
Session Room:	Room E (301)

[TE4-1] [Invited] 15:40-16:00

Recent Developments in Millimeter-Wave Receiver Technology for Radio Astronomy in South Korea

Jung-Won Lee (Korea Astronomy and Space Science Institute & University of Science & Technology, Korea (South)); Do-Heung Je, Jihoon Choi and Bangwon Lee (Korea Astronomy and Space Science Institute, Korea (South)); Junhan Kim (Korea Advanced Institute of Science and Technology, Korea (South)); Seungrae Kim (Korea Astronomy and Space Science Institute, Korea (South)); Jiman Kang (Korea Astronomy and Space Science Institute & University of Science & Technology, Korea (South)); Minsu Ko and Wooseok Kang (Korea Advanced Institute of Science and Technology, Korea (South))

[TE4-2] 16:00-16:20

Sparse Antenna Impedance Reconstruction for Blind Frequency Impedance Matching in Mobile Devices

Min-Gi Kim, Hyungcheol Kim, Sangmi Noh and Dooseok Choi (Samsung Electronics, Korea (South))

[TE4-3] 16:20-16:40

Analysis of Probe Coupling for Channel Property Optimization in an HVAC Duct

Dong-Min Seo (KAIST, Korea (South)); Ji-Hoon Lee (Korea Advanced Institute of Science and Technology, Korea (South)); Hyo-Won Lee (KAIST, Korea (South)); Ji-Young Kim (Korea Advanced Institute of Science and Technology, Korea (South)); Jong-Won Yu (Korea (South))

[TE4-4] 16:40-17:00

A Fully Passive Approach for Real-Time Strain Sensing of LiFePO4 Cells in EV Battery Packs

Badar Muneer (University of Perugia, Italy & Mehran University of Engineering and Technology, Pakistan); Matteo Lame (Università degli studi di Perugia, Italy); Valentina Palazzi, Federico Alimenti and Luca Roselli (University of Perugia, Italy)

[TE4-5] 17:00-17:20

AI-Assisted EM Simulator for the Randomized Pixelated RF Components

Jungmin Lee (Virginia Polytechnic Institute and State University, USA); Woojun Lee (Virginia Tech, USA); Ji Wu Hong (Virginia Polytechnic Institute and State University, USA); Jeffrey Walling (University of Utah, USA)

Session Title:	[TF4] Radar Applications in Human and Environmental Sensing
Session Date:	December 4 (Thu.), 2025
Session Time:	15:40-17:20
Session Room:	Room F (302)

[TF4-1] [Invited] 15:40-16:00

Beyond Contact: the Rise of Wireless Human Sensing Technologies

Takuya Sakamoto (Kyoto University, Japan)

[TF4-2] 16:00-16:20

Machine Learning Selection of Range Bins for Coherent Integration in Distributed Radar Observing Frontal and Lateral Motion

Eun Sung Jang and Jae-Woo Park (Ajou University, Korea (South)); Hyunseok Kim (Electronics and Telecommunications Research Institute, Korea (South)); Jayol Lee (Electronics and Telecommnications Research Institute, Korea (South)); Kyoung Hwan Park (Electronics and Telecommunications Research Institute, Korea (South)); Jeong-Wook Kim (Ajou University, Korea (South))

[TF4-3] 16:20-16:40

A Study on Boiling Process Detection of Water Using 24 GHz FMCW Radar

Tatsuya Yamazaki and Ryosuke Suga (Aoyama Gakuin University, Japan)

[TF4-4] 16:40-17:00

A Robust and Accurate Sleep Apnea Detection Framework Based on a K-Band FMCW MIMO Radar

Keke Zheng, Zhiwei Zhang and Jiayu Zhang (Shanghai Jiao Tong University, China); Yijing Guo (Shanghai Sixth People's Hospital, China); Liling Wang (Renji Hospital, Shanghai Jiao Tong University School of Medicine, China); Changzhan Gu (Shanghai Jiao Tong University, China)

[TF4-5] 17:00-17:20

Integrated Framework for Human Activity Classification and Frame Reconstruction Using in-Pocket FMCW Radar

Juho Cha and Insoo Choi (Sogang University, Korea (South)); Kyungwoo Yoo (Samsung Electronics, Korea (South)); Youngwook Kim (Sogang University, Korea (South))

Session Title:	[TG4] Innovations in Antenna Design and Electromagnetic Tracking
Session Date:	December 4 (Thu.), 2025
Session Time:	15:40-17:20
Session Room:	Room G (303)

[TG4-1] 15:40-16:00

A Hybrid Wireless Tracking Method Based on Electromagnetic Tracking and IMU

Yuming Fu, Xiaoyang Wu and Yong-xin Guo (National University of Singapore, Singapore)

[TG4-2] 16:00-16:20

Quad-Polarized Wideband Magnetoelectric Dipole Antenna with Integrated Heatsink and Transmit/Receive Module Using PlutoSDR

Gong Chen, Jingxiang Wang and Yuyang Chen (National University of Singapore, Singapore); Koen Mouthaan (NUS, Singapore)

[TG4-3] 16:20-16:40

A Dual-CP Active Phased-Array Antenna with Simultaneous Direction and Handedness of Arrival Estimation

Weimin Zeng and Zhi Hao Jiang (Southeast University, China); Min Fang (ZTE Corporation, China); Wei Hong (Southeast University, China)

[TG4-4] 16:40-17:00

Experimental Verification of Null Steering Using Wi-Fi Sniffing for Coexistence of Microwave Power Transfer and Wi-Fi

Ryugo Sato, Lumi Hyou, Zhengdong Lin, Hiroyuki Morikawa and Yoshiaki Narusue (The University of Tokyo, Japan)

[TG4-5] 17:00-17:20

Design of Broadband Electromagnetic Camouflage on Scattering Surface

Yongjune Kim (The University of Suwon, Korea (South))

Session Title:	[FA1] Advances in Millimeter Wave Transceivers
Session Date:	December 5 (Fri.), 2025
Session Time:	08:30-10:10
Session Room:	Room A (Halla A)

[FA1-1] [Invited] 08:30-08:50

300-GHz Band Fully Differential InP-HEMT Wireless Front End Achieving 160-Gb/s 43-m Data Transmission

Hiroshi Hamada, Ibrahim Abdo and Taro Sasaki (NTT Device Technology Laboratories, Japan); Takuya Tsutsumi (Osaka Metropolitan University, Japan); Hiroyuki Takahashi (NTT Device Technology Laboratories, Japan)

[FA1-2] 08:50-09:10

A 1.1-pJ/b 10-Gb/s V-Band OOK Transmitter for Ultra-Compact Wireless Sensor Networks

Helmuth Morath and Xin An (TU Dresden, Germany); Maximilian G Becker (Technische Universtität Dresden, Germany); Jens Wagner (Technische Universität Dresden & Chair for Circuit Design and Network Theory, Germany); Frank Ellinger (Technische Universität Dresden, Germany)

[FA1-3] 09:10-09:30

A 240-GHz SiGe BiCMOS Dicke Radiometer with Monolithically Integrated on-Chip MEMS Switches

Jungsoo Kim (ETRI, Korea (South)); Doyoon Kim (Samsung Electronics, Korea (South)); Junghwan Yoo (Korea University, Korea (South)); Mehmet Kaynak (Texas Instruments); Selin Tolunay Wipf and Alexander Göritz (IHP, Germany); Jae-Sung Rieh (Korea University, Korea (South))

[FA1-4] 09:30-09:50

A Wideband Single-Sideband Up-Conversion Mixer in 90 nm BiCMOS for D-Band JCAS Applications

Dingan Wang (Friedrich Alexander Universität Erlangen Nürnberg, Germany); Sascha Breun, Marco Kawan and Kai Scheller (Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany); Robert Weigel (Friedrich-Alexander Universität Erlangen-Nürnberg, Germany); Norman Franchi (Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany)

[FA1-5] 09:50-10:10

A 26-GHz down-Conversion Receiver for 5G Scalable Multi-Mode Application

Min Lu (Sanechips Technology Co., Ltd, China & State Key Lavoratory of Mobile Network and Mobile Multimedia Technology, China); Zhilin Chen, Zhoutao Lu, Yong Wang, Songsong Cao, Liyang Li, Wenbo Tian, Sheng Huang and Siyu Lin (Sanechips Technology Co. Ltd, China); Xiaoning Zhang (Sanechips Technology Co., Ltd, China & State Key Lavoratory of Mobile Network and Mobile Multimedia Technology, China); Runyu Liu and Zekun Li (Sanechips Technology Co. Ltd, China); Jie Hu (Sanechips Technology Co., Ltd, China & State Key Lavoratory of Mobile Network and Mobile Multimedia Technology, China); Keqing Ouyang and Zhijun Long (Sanechips Technology Co. Ltd, China)

Session Title:	[FB1] Simulation and Measurement Techniques
Session Date:	December 5 (Fri.), 2025
Session Time:	08:30-10:10
Session Room:	Room B (Halla B)

[FB1-1] 08:30-08:50

Modeling of Braided Structures in Flexible Metallic Waveguides and Numerical Analysis of Propagation Loss

Yuki Sonoda, Tetsuya Ueda and Shogo Shimada (Kyoto Institute of Technology, Japan)

[FB1-2] 08:50-09:10

Investigation of the Impact of Bendings on the Polarization of Electromagnetic Surface Waves on Circular Polymer Microwave Fibers

Stefan Wögerbauer, Helmut Paulitsch and Michael Gadringer (Graz University of Technology, Austria)

[FB1-3] 09:10-09:30

Interlaboratory Comparison of Commercial High-Resistivity Silicon Calibration Substrate at D-Band

Hyunji Koo (Korea Research Institute of Standards and Science, Korea (South)); Gia Ngoc Phung and Uwe Arz (Physikalisch-Technische Bundesanstalt, Germany); Chihyun Cho (Korea Research Institute of Standard and Science, Korea (South)); Jae-Yong Kwon (Korea Research Institute of Standards and Science, Korea (South))

[FB1-4] 09:30-09:50

Single Port Dielectric Constant Extraction Using Digital-Twinning

Archibald W Rohde and Tinus Stander (University of Pretoria, South Africa)

[FB1-5] 09:50-10:10

Microwave Microfluidic Sensor for Detecting Ionic Contaminants in Water

Umesha Sandarenu, Amir Ebrahimi, Wayne Rowe and Kamran Ghorbani (RMIT University, Australia)

Session Title:	[FD1] Reconfigurable Antennas, Metasurfaces, and Intelligent Array Systems
Session Date:	December 5 (Fri.), 2025
Session Time:	10:30-12:10
Session Room:	Room D (Samda B)

[FD1-1] 10:30-10:50

Design of a 2-Bit Dual-Polarized Beam-Scanning Reconfigurable Intelligent Surface

Qiankun Xu, Shenglin Rao, Jiahao Chen, Jingkai Xue, Chunyue Zhao and Xing Chen (Sichuan University, China)

[FD1-2] 10:50-11:10

Compact Low-Profile Multi-Mode Hemispherical Null-Steering Antenna

Tran-Hien Bui (University of Queensland, Australia); Sasan Ahdi Rezaeieh (The University of Queensland, Australia); Christophe Fumeaux (University of Queensland, Australia)

[FD1-3] 11:10-11:30

A 3D Hemispherical Reconfigurable Antenna with Switchable Patterns Using a Butler Matrix

Mohamed Himdi (Université de Rennes, France & IETR, France); Hamsakutty Vettikalladi (King Saud University, Saudi Arabia); Amani Cherif and Sylvain Dubois (Université de Rennes, France); Ali M. Albishi (King Saud University, Saudi Arabia)

[FD1-4] 11:30-11:50

A RIS-Integrated Phased Antenna Array for 6G Wide-Range Communication Applications

Wanchen Yang (Nanjing University of Aeronautics and Astronautics, China); Li Wei (Hohai University, China); Xiangchuan Wang (Nanjing University of Aeronautics & Astronautics, China); Lihan Wang (Nanjing University of Aeronautics and Astronautics, China); Wenquan Che (South China University of Technology, China); Shilong Pan (Nanjing University of Aeronautics & Astronautics, China)

[FD1-5] 11:50-12:10

A Reconfigurable Dual-Beam Dual-CP Patch Array Antenna with Switchable Parasitic Lines

Ren Sonoda, Maodudul Hasan and Masaya Tamura (Toyohashi University of Technology, Japan)

Session Title:	[FE1] Antenna Designs: Reconfigurability, Feed Networks, and RCS Reduction
Session Date:	December 5 (Fri.), 2025
Session Time:	08:30-10:10
Session Room:	Room E (301)

[FE1-1] 08:30-08:50

Linear Polarization Reconfigurable Array Antenna with Pattern Diversity Using Rat-Race Coupler and Switchable Feed Network

Maodudul Hasan (Toyohashi University of Technology, Japan); Eisuke Nishiyama and Ichihiko Toyoda (Saga University, Japan)

[FE1-2] 08:50-09:10

A Waveguide Rat-Race Coupler with Phase Inverter Circuits Comprised of Twists

Hidenori Yukawa (Mitsubishi Electric, Japan); Takeshi Oshima and Akimichi Hirota (Mitsubishi Electric Corporation, Japan)

[FE1-3] 09:10-09:30

Broadband and Wide-Angle RCS Reduction for Microstrip Slot Array Antenna Using Metamaterial Absorber

Gege Gao, Huidong Li, Jun Yan Dai and Qiang Cheng (Southeast University, China)

[FE1-4] 09:30-09:50

An X-Shaped Compact Single-Layer Patch Antenna for Dual-Band GNSS L1/L5

Yooree Shin and Moon-Que Lee (University of Seoul, Korea (South))

[FE1-5] 09:50-10:10

A Flexible Millimeter-Wave Array Antenna with Ultralow-Loss $BaTiO_3$/MXene/PET Composite Substrate

Luyang Sun (Southeast University, China & Center for Flexible RF Technology, China); Hao Chen, Tong-Shuai Sun, Ze-Hui Chen, Jianing Li, Wenzhe Song and Wei Bing Lu (Southeast University, China)

Session Title:	[FF1] Advances in Wireless Sensors and Applications
Session Date:	December 5 (Fri.), 2025
Session Time:	08:30-10:10
Session Room:	Room F (302)

[FF1-1] [Invited] 08:30-08:50

Cognitive 4D MIMO Radar Technology for Human-Centric ISAC in B5G/6G Networks

Tzyy-Sheng Jason Horng (National Sun Yat-sen University, Taiwan); Yi-Chen Lai (National Sun Yat-Sen University, Taiwan)

[FF1-2] 08:50-09:10

Biomedical Radar Sensor for Non-Contact Simplified Pulmonary Function Testing

Li Wen (Shanghai Jiao Tong University, China); Yijing Guo (Shanghai Sixth People's Hospital, China); Changzhan Gu (Shanghai Jiao Tong University, China)

[FF1-3] 09:10-09:30

Contactless Vital Sign Monitor Using IEEE 802.15.4z HRP UWB Communication

Hyojun Park (Kookmin University, Korea (South))

[FF1-4] 09:30-09:50

Basic Experiment of Sub-cm Sized 2-GHz Domino-Resonator Wireless Sensor Network for High-Density EEG

Kota Nishi, Tomoyuki Furuichi and Noriharu Suematsu (Tohoku University, Japan)

[FF1-5] 09:50-10:10

Classification of Mangosteen Fruit Quality Based on Microwave Signal Measurement and Machine Learning

Suthami Ariessaputra (University of Indonesia); Catur Apriono and Fitri Yuli Zulkifli (Universitas Indonesia, Indonesia)

Session Title:	[FG1] [SS] Recent Advances in Radar Research for Various Applications I
Session Date:	December 5 (Fri.), 2025
Session Time:	08:30-10:10
Session Room:	Room G (303)

[FG1-1] 08:30-08:50

Data Augmentation Techniques for Radar-Based Vital Sign Detection

Kyuhwan Hwang and Dohyeon Lee (Ajou University, Korea (South)); Kyoung Hwan Park (Electronics and Telecommunications Research Institute, Korea (South)); Yong Bae Park (Ajou University, Korea (South))

[FG1-2] 08:50-09:10

Low-Power Comparator-Counter-Based SIL Radar for Wrist Pulse Detection

Haotian Shi, Zhi Zheng and Bo Wang (National University of Singapore, Singapore); Yongxin Guo (City University of Hong Kong, Hong Kong)

[FG1-3] 09:10-09:30

Advanced Waveform Design for Integrated Sensing and Communication Applications

Seonmin Cho, Chanul Park and Seongwook Lee (Chung-Ang University, Korea (South))

[FG1-4] 09:30-09:50

Robust Heart-Rate Monitoring Under Sleep Postural Variability Using a 24-GHz MIMO FMCW Radar

Zhiwei Zhang, Keke Zheng and Jiayu Zhang (Shanghai Jiao Tong University, China); Yijing Guo (Shanghai Sixth People's Hospital, China); Changzhan Gu (Shanghai Jiao Tong University, China)

[FG1-5] 09:50-10:10

Data Fusion Method to Improve the Detection Accuracy of an anti-Artillery Radar

Hyung-Gi Na (LIGNEX1, Korea (South))

Session Title:	[FA2] [SS] Advanced Components for 5G/6G
Session Date:	December 5 (Fri.), 2025
Session Time:	10:30-12:10
Session Room:	Room A (Halla A)

[FA2-1] 10:30-10:50

Glass-Based Reconfigurable Intelligent Surface for 6G Upper-Mid Band Applications

Hong Seokyeon (KETI, Korea (South)); Seunggoo Nam and Sehwan Choi (Korea Electronics Technology Institute, Korea (South))

[FA2-2] 10:50-11:10

A Millimeter-Wave Multi-Functional Single-Channel Beamforming IC

Soo-Chang Chae, Young-Hwan Choo and Ki-Jin Kim (Korea Electronics Technology Institute, Korea (South))

[FA2-3] 11:10-11:30

Compact n77/n79 Diplexer Using Dual BAW Filters and Glass IPD Based Matching Networks

Daehee Park (Korea Electronics Technology Institute (KETI), Korea (South)); Minsoo Park (Korea Electronics Technology Institute & Yonsei University, Korea (South)); Jongsu Ha (Wisol, Korea (South)); Dongsu Kim (Korea Electronics Technology Institute, Korea (South))

[FA2-4] 11:30-11:50

Super-Compact Reconfigurable Cavity-Backed Antenna Diplexer for 5G and 6G Applications

Rusan Kumar Barik (SR University, Warangal, Telangana, India); Chandu DS (VIT-AP University, India); Kritika Bansal (Vellore Institute of Technology AP University, Amaravati, India)

[FA2-5] 11:50-12:10

Design of Miniaturized Bandpass Filters with Adjustable Bandwidth Based on HR-Si IPD Technology

Yane Zheng and Yuandan Dong (University of Electronic Science and Technology of China, China)

Session Title:	[FB2] Recent Advances in Instrumentation and Device Measurements
Session Date:	December 5 (Fri.), 2025
Session Time:	10:30-12:10
Session Room:	Room B (Halla B)

[FB2-1] 10:30-10:50

Challenges for High-Datarate Chip-to-Chip Interconnects Using Organic Interposer Materials for Heterogeneous Chiplet Systems Up to 110 GHz

Jens Loeffler (Friedrich-Alexander-Universität Erlangen Nürnberg, Germany); Manuel Koch and Sascha Breun (Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany); Robert Weigel (Friedrich-Alexander Universität Erlangen-Nürnberg, Germany); Norman Franchi (Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany)

[FB2-2] 10:50-11:10

Open-Loop Active Load-Pull Setup Using the ZCU216 Radio Frequency System-on-Chip

Iaroslav Shilinkov (Chalmers University of Technology, Sweden); Rob Maaskant (CHALMERS, Sweden); Gregor Lasser (Chalmers University of Technology, Sweden)

[FB2-3] 11:10-11:30

Transformation Response Analysis of Wideband Impedance Transforming Test Fixtures in Load-Pull Measurement Setups

Lida Kouhalvandi (Dogus University, Turkey); Osman Ceylan (Maury Microwave, USA)

[FB2-4] 11:30-11:50

Four-Port Probe Stations and SOLR Calibration Standard Design Up to 125 GHz on 28 nm CMOS

Dipankar Shakya (New York University, USA); Theodore Rappaport (New York University & NYU WIRELESS, USA); Ethan Shieh and Michael E. Knox (NYU WIRELESS, USA); Hamed Rahmani (New York University, USA); Davood Shahrjerdi (NYU WIRELESS, USA); Mingjun Ying (New York University & NYU WIRELESS, USA); Kimberly Fan and Matt Lu (MPI Corporation, USA); Andrej Rumiantsev (MPI Corporation, Germany); Vince Malette (MPI Corporation, USA); Gavin Fisher, Giancarlo De Chirico, Pratik Ghate and Shean McMahon (Formfactor Inc., USA)

[FB2-5] 11:50-12:10

Deep Learning Based Phase Calibration for Enhanced Beam Control Accuracy

Nam Jik Kim (Chung-Ang University, Korea (South)); Gilsu Jeong (University of Electronics Engineering & Chung-Ang University, Korea (South)); Han Lim Lee (Chung-Ang University, Korea (South))

Session Title:	[FD2] Machine Learning and Numerical Modeling for Microwave Components
Session Date:	December 5 (Fri.), 2025
Session Time:	08:30-10:10
Session Room:	Room D (Samda B)

[FD2-1] 08:30-08:50

Deep Learning Based Modulation Parameters Extraction of Non-Reciprocal Bandpass Filter

Girdhari Chaudhary, Suyeon Kim, Palaystint Thorng, Alvaro Fuentes and Yongchae Jeong (Jeonbuk National University, Korea (South))

[FD2-2] 08:50-09:10

Deep Learning Enabled Inverse Design of Pixel-Based Bandpass Filters

Chandan Roy (Huawei Technologies Canada, Canada); Ming Jian (Huawei Technologies Co. LTD, Canada); Peyman Neshaastegaran (Huawei Technologies Canada, Canada); Wenyao Zhai (Huawei Technologies Canada Research Center, Canada)

[FD2-3] 09:10-09:30

Kernel-Based Machine Learning Surrogates for RF Circulator Design

Marco Atlante (Politecnico di Torino, Italy & University of Brest, Lab-STICC, Italy); Riccardo Trinchero and Igor S Stievano (Politecnico di Torino, Italy); Mihai Telescu (Université de Bretagne Occidentale, France); Norbert Parker (Lab-STICC, France & IMT-Atlantique, France); Vincent Laur (Lab-STICC / University of Brest, France); Noel Tanguy (Université de Bretagne Occidentale & Lab-STICC, France)

[FD2-4] 09:30-09:50

Machine Learning Based Energy Selective Surface Design Excluding Contradictory Structure

Ic-Pyo Hong (Kongju National University, Korea (South)); Seung-Heon Oh (Information and Communication Engineering, Korea (South))

[FD2-5] 09:50-10:10

Impedance Estimation of Internal Nodes of RF Devices Based on Measurement Cable de-Embedding Enabled by Transmission Line Model Fitting

Abdul Basir, Uzman Ali and Toni Björninen (Tampere University, Finland)

Session Title:	[FE2] Cutting-Edge Array Design: Performance Optimization and Measurement
Session Date:	December 5 (Fri.), 2025
Session Time:	10:30-12:10
Session Room:	Room E (301)

[FE2-1] 10:30-10:50

Ultra-Low-Profile Circularly Polarized Folded Metasurface Array with High Aperture Efficiency

yifan Wang Yifan, Wang (Southeast University, China); Ruina Xing (AVIC LEIHUA Electronic Technology Research Institute , China, China); Teng Li (Southeast University, China)

[FE2-2] 10:50-11:10

Discussion on the Architecture of High Aperture Efficiency Large-Spacing Horn-Lens Array

Chen-Yu Ding and Zhang-Cheng Hao (Southeast University, China)

[FE2-3] 11:10-11:30

Multifidelity Active Reflection Coefficient Surrogate Models for Large Regular Phased Arrays

Brandt Klopper (North-West University, South Africa)

[FE2-4] 11:30-11:50

A Method for High Power Microwave Array Antenna Pointing Calibration and Power Combining Based on Drone

Xinhong Cui (The Northwest Institute of Nuclear Technology, China)

[FE2-5] 11:50-12:10

A Coverage-Reconfigurable Patch Antenna Using Switchable Parasitic Elements

Maodudul Hasan (Toyohashi University of Technology, Japan); Eisuke Nishiyama (Saga University, Japan); Masaya Tamura (Toyohashi University of Technology, Japan); Ichihiko Toyoda (Saga University, Japan)

Session Title:	[FF2] [SS] AI-Driven Design and Signal Processing in RF, mmWave, and THz Systems
Session Date:	December 5 (Fri.), 2025
Session Time:	10:30-12:10
Session Room:	Room F (302)

[FF2-1] 10:30-10:50

Inverse Design of on-Chip Millimeter-Wave Wideband Filter via Equivalent Circuit-Based Learning Scheme

Jingwei Zhang (Zhejiang University, China)

[FF2-2] 10:50-11:10

Evaluating the Generalization of Supervised and Unsupervised Spectrum Anomaly Detection on Unseen Frequency Bands

Byungkwan Kim (Chungnam National University, Korea (South))

[FF2-3] 11:10-11:30

Y-Slot Patch Antenna Using MLP Neural Networks Trained on ADS Circuit Datasets

Muhammad Kamran Shereen, Xiaoguang Liu and Xiaohu Wu (Southern University of Science and Technology, China); Ayesha Naseem (FAMU-FSU College of Engineering Tallahassee, Florida, USA); Muhammad Uzair (Florida A&M University, USA)

[FF2-4] 11:30-11:50

Self-Supervised Deep Learning for THz-TDS Image Denoising

Seung-Hwan Jung and Woon-Ha Yeo (Sahmyook University, Korea (South)); Seung Jae Oh (Yonsei University, Korea (South)); Han-Cheol Ryu (Sahmyook University, Korea (South))

[FF2-5] 11:50-12:10

Analyzing the Effects of Raised-Cosine Tapering on WVD-CNN Detection of Pulsed Chirp Signals

Yunbae Kim (Electronics and Telecommunications Research Institute, Korea (South)); Jonghun Yoon (Electronics and Telecommunications Research Institute (ETRI), Korea (South)); Bongsu Kim (ETRI, Korea (South))

Session Title:	[FG2] [SS] Recent Advances in Radar Research for Various Applications II
Session Date:	December 5 (Fri.), 2025
Session Time:	10:30-12:10
Session Room:	Room G (303)

[FG2-1] 10:30-10:50

A Comprehensive Harmonic Radar Modeling Approach Through Analysis of Nonlinear Radar Equation and RCS

Sooyoung Oh and Sun K. Hong (Soongsil University, Korea (South))

[FG2-2] 10:50-11:10

Design of L-Band Radar Module Assembly

Gunyoung Kim (Hanwha Systems, Korea (South))

[FG2-3] 11:10-11:30

High-Precision Micro-Deformation Estimation Algorithm for mmWave GB-Arc-InSAR Based on One-Dimensional Range Projection

Yue Li (Chongqing University of Posts and Telecommunications, China)

[FG2-4] 11:30-11:50

A Novel MIMO Radar Imaging Algorithm for Mobile Platforms

Siyuan Zhao (National University of Singapore & NUS ECE, Singapore); Zhi Zheng, Lue Wen, Tiantian Yin and Xudong Chen (National University of Singapore, Singapore); Yongxin Guo (City University of Hong Kong, Hong Kong)

[FG2-5] 11:50-12:10

3D Mount-Angle Calibration Using Inverse Sensor Model-Based Occupancy Grid Map

Ho-Won Kim, Young-Seo Ji, Jun-Beom Cho and Byungkwan Kim (Chungnam National University, Korea (South))

Session Title:	[FA3] [SS] Microwave Circuits and Systems
Session Date:	December 5 (Fri.), 2025
Session Time:	13:20-15:00
Session Room:	Room A (Halla A)

[FA3-1] 13:20-13:40

A K-Band CMOS Power Amplifier with Transformer-Based Matching for High Gain and Low Distortion

Min-Seok Kwon and Jong-Ryul Yang (Konkuk University, Korea (South))

[FA3-2] 13:40-14:00

A 157 GHz Direct Downconversion IQ Mixer in 130 nm BiCMOS Technology

Nils Arneth, Kai Scheller, Timur Isbilen and Sascha Breun (Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany); Robert Weigel (Friedrich-Alexander Universität Erlangen-Nürnberg, Germany); Norman Franchi (Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany)

[FA3-3] 14:00-14:20

A Compact Tunable Meta-Filter for X/Ku Band Power Applications

Karim Kouny (Ecole Polytechnique Férérale de Lausanne (EPFL), Switzerland); Romain Fleury (EPFL, Switzerland)

[FA3-4] 14:20-14:40

Array Rectenna for Wide-Angle Coverage with FOCV MPPT Algorithm

Minjae Ahn and Hyunchul Ku (Konkuk University, Korea (South))

[FA3-5] 14:40-15:00

Self Packaged Broadband RRC with Swapped Ports for Upper Mid-Band Applications

Seungkyun Roh and Byung-Wook Min (Yonsei University, Korea (South))

Session Title:	[FB3] Numerical Modelling and Analysis for RF Components and Antennas
Session Date:	December 5 (Fri.), 2025
Session Time:	13:20-15:00
Session Room:	Room B (Halla B)

[FB3-1] 13:20-13:40

Efficient Integral Equation Modeling of Arbitrary Rectangular Waveguide Bends and T-Junctions with Conducting Inclusions

Fernando D Quesada Pereira and Antonio Huéscar (Technical University of Cartagena, Spain); Antonio Oliva Aparicio (Universidad Politécnica de Cartagena, Spain); Alejandro Alvarez-Melcon (Technical University of Cartagena, Spain); Vicente Boria (Universidad Politécnica de Valencia, Spain)

[FB3-2] 13:40-14:00

Comparative PEEC Modeling of Magnetic Materials Under Different Equivalent Sources

Qiwen Yan (Southwest University of Science and Technology, China); Xiaoping Li (Swust University, China); Xu Wang and Yin Sun (DeTooLIC Technology Co., China); Jun Fan (Missouri University of Science and Technology, USA); Jingkun Mao (Tianjin University of Technology, China)

[FB3-3] 14:00-14:20

A Truncated Convolution Quadrature Approach for EM Transient Scattering from Composite Structures

Rongchuan Bai (Zhejiang University, China)

[FB3-4] 14:20-14:40

Modeling of Conformal Reflectarrays Through Domain Decomposition Using a Generalized Admittance Approach

Dijun Lin (Ericsson AB, Sweden & Chalmers University of Technology, Sweden); Lars Manholm (Ericsson Research, Sweden); Parisa Aghdam (Ericsson AB, Sweden); Rob Maaskant (CHALMERS, Sweden)

[FB3-5] 14:40-15:00

A Novel Multi-Objective Maxwell's Equations Derived Optimization Algorithm and Application in Sparse Antenna Array Synthesis

Haoyang Zhang, Xin Zhang, Tong Wang, Lilin Li and Donglin Su (Beihang University, China)

Session Title:	[FD3] SIW and Waveguide-Based Circuits
Session Date:	December 5 (Fri.), 2025
Session Time:	13:20-15:00
Session Room:	Room D (Samda B)

[FD3-1] 13:20-13:40

Design of a Wideband SIW Bandpass Filter Using Resonator Spacing for Improved Coupling

Geun-Young Bae (Korea Electronics Technology Institute, Korea (South)); Kwang-Sik Park (Thislink, Korea (South)); Jong-Gwan Yook (Yonsei University, Korea (South)); Chan-Sei Yoo (Korea Electronics Technology Institute, Korea (South))

[FD3-2] 13:40-14:00

Design of SIW Filters Based on Circuit Model Extraction

Chunxia Zhou (Nanjin University of Science and Technology, China)

[FD3-3] 14:00-14:20

Band-Pass Filters Through Unmetallized 3D Printed Dielectric Waveguide Inserts

Tinus Stander (University of Pretoria, South Africa); Carlos Sempere Chaves (Fraunhofer FHR, Germany); Dirk Nüßler (Fraunhofer Institute for High Frequency Physics and Radar Techniques FHR, Germany)

[FD3-4] 14:20-14:40

Low-Pass Corrugated Filters Based on Half-Mode Groove Gap Waveguide Technology

Stephan Marini and Antonio Seller-Rueda (Universidad de Alicante, Spain); Pablo Soto (Universidad Politécnica de Valencia, Spain); Encarnación Gimeno Nieves (Universidad de Alicante, Spain); Vicente Boria (Universidad Politécnica de Valencia, Spain)

[FD3-5] 14:40-15:00

Design of a 3-dB Broadband Coupled-Line Coupler Based on Periodically Corrugated Rectangular Coaxial Waveguide

Kelin Zhang, Qiuyi Zhang and Shunli Li (Southeast University, China); Hongxin Zhao (State Key Laboratory of Millimeter Waves, Southeast University, China)

Session Title:	[FE3] Compact, Wideband, and Multifunctional Passive Microwave Components
Session Date:	December 5 (Fri.), 2025
Session Time:	13:20-15:00
Session Room:	Room E (301)

[FE3-1] 13:20-13:40

A Ku/K/Ka-Band Ultra-Compact Wilkinson Power Divider/Combiner Realized in a Single Shared Inductor Using Magnetic Coupling Cancellation

Yoongoo Kang and Inchan Ju (Ajou University, Korea (South))

[FE3-2] 13:40-14:00

A Compact High-Isolation Wilkinson Power DividerCombiner for W- and D-Band with Series and Coupled Inductors

Jong-Seong Park, Joon-Hyung Kim, Jae-Hyeok Song, Jae-Eun Lee, Jeong-Taek Son, Min-Seok Baek, Byeong-Chan Lee, Ilhun Kim, Eun-Gyu Lee and Choul-Young Kim (Chungnam National University, Korea (South))

[FE3-3] 14:00-14:20

Design of a Modified Gysel Power Divider with Enhanced Isolation and Integrated Harmonic Rejection

Hong-Yu Chen and Ching-Wen Tang (National Chung Cheng University, Taiwan)

[FE3-4] 14:20-14:40

Design and Measurements of a 10-12 GHz Four-Way Transformer-Based Power Divider in 22nm FDSOI

Evgenii Fedorov (TU BS, Germany & Fedorov, Germany); Vadim Issakov (Technische Universität Braunschweig, Germany)

[FE3-5] 14:40-15:00

A Wideband, Low-Loss, and Highly Reliable Supportless Air-Filled Coax-to-Waveguide Transition with Monolithic 3-D Printing Integration

Ziyang Lin, Jin Li, Zhentao Xie, Zhihong Xu and Tao Yuan (Shenzhen University, China)

Session Title:	[FF3] Wireless Power Transfer, RF Devices & Circuit Modeling
Session Date:	December 5 (Fri.), 2025
Session Time:	13:20-15:00
Session Room:	Room F (302)

[FF3-1] [Invited] 13:20-13:40

Design and Calibration of a CW Time Reversal Wireless Power Transfer Transmitter with Pilot Signal Detection

Young-Seok Lee, Taeyeong Yoon, Jungsuek Oh and Sangwook Nam (Seoul National University, Korea (South))

[FF3-2] 13:40-14:00

PTX-Symmetric Wireless Power Transfer for IoT in Low-Q Conditions

Myeongjun Shin (Konkuk University, Korea (South)); Chanho An (Konkuk University & Konkuk, Korea (South)); Hyunchul Ku (Konkuk University, Korea (South))

[FF3-3] 14:00-14:20

K-Band WPT Link with a DC Output Power of 2.9 Watts and a High Transfer Efficiency of 20.7% from the Transmitter's RF Output Power

Ryosuke Sato, Naoki Sakai and Kenji Itoh (Kanazawa Institute of Technology, Japan)

[FF3-4] 14:20-14:40

Rectifier Model Using Two Types of Neural Networks for Multiple Average Input Power Levels

Hiroto Sakaki (Mitsubishi Electric Corporation, Japan); Kenjiro Nishikawa (Kagoshima University, Japan)

[FF3-5] 14:40-15:00

Design of Furniture Embedded 3-D Transmitting Coil for Multi-Receiver Wireless Power Transfer

Yeong-Ju Seo, Seong-Jin Kim, Hyeon-Jeong Cho and Dong-Min Seo (KAIST, Korea (South)); Ji-Hoon Lee (Korea Advanced Institute of Science and Technology, Korea (South)); Jong-Won Yu (Korea (South))

Session Title:	[FG3] [SS] Wireless Power Transmission Regulation, Technology and Industry Trends
Session Date:	December 5 (Fri.), 2025
Session Time:	13:20-14:40
Session Room:	Room G (303)

[FG3-1] 13:20-13:40

Wireless Power Transmission Technology, Regulatory, Standardization, and Industry Trends

WH Jang (RAPA, Korea (South)); GeeJeong Goo (CAT, Korea (South))

[FG3-2] 13:40-14:00

RF Wireless Power Transfer Technology and EMI/EMC Mitigation Strategies

Kyung-hak Lee (WARP Solution Inc., Korea (South))

[FG3-3] 14:00-14:20

Measurement and Analysis of Magnetic Field Strength in Dynamic Wireless Power Transfer for Electric Buses

Yongsup Shim (National Radio Research Agency, Korea (South)); Geejeong Goo (CLP Solution, Korea (South)); WonHo Jang (Korea Radio Promotion Association, Korea (South)); Her Youngtae and Seokhee Bae (National Radio Research Agency, Korea (South))

[FG3-4] 14:20-14:40

Trends in Beam WPT Technology and Its Applications of the 920 MHz WPT System

Jun Tsumochi (Aeterlink Corp., Japan); Naoto Kodate (Aeterlink, Corp., Japan); Yuji Tanabe (Aeterlink Corp, Japan)

Session Title:	[FA4] [SS] Wireless Power Transmission Systems
Session Date:	December 5 (Fri.), 2025
Session Time:	13:20-15:00
Session Room:	Room A (Halla A)

[FA4-1] 13:20-13:40

Automated Coil Optimization for Efficient Wireless Power Transfer in Implantable Medical Devices

Cheolhyeon Lee (Korea Electronics Technology Institute, Korea (South) & KETI, Korea (South)); Young-Han Kim (Korea Electronics Technology Institute (KETI), Korea (South)); Hyunsu Kim (Korea Electronics Technology Institute, Korea (South)); Hanbyeol Park and Junha Lee (The Catholic University of Korea, Korea (South)); Sohmyung Ha (New York University Abu Dhabi, United Arab Emirates); Soon-Jae Kweon (The Catholic University of Korea, Korea (South))

[FA4-2] 13:40-14:00

Design of N-Sector Coils with Differential Mode for Uniform H-Field Exposure in Cell Culture

Hae-Been Han and Moon-Que Lee (University of Seoul, Korea (South))

[FA4-3] 14:00-14:20

Cavity Resonance-Enabled WPT Using Dual-Axis Orthogonal Power Receivers

Ayumu Omae, Ryui Kawai and Masaya Tamura (Toyohashi University of Technology, Japan)

[FA4-4] 14:20-14:40

A Phased Array Antenna for 24 GHz Wireless Power Transfer Applications

Shailendra Kaushal (Fujikura Ltd., Japan); Kenji Itoh (Kanazawa Institute of Technology, Japan); Ning Guan (Fujikura, Ltd., Japan)

[FA4-5] 14:40-15:00

System Level Simulation of Long Range Wireless Power Transfer for Multi Device in Indoor Environment

Yoo Jung Moon (KETI, Korea (South)); Changseok Yoon (Korea Electronics Technology Institute, Korea (South)); Hyun-Seok Ahn and Young-Han Kim (Korea Electronics Technology Institute (KETI), Korea (South))

Session Title:	[FD4] Electromagnetic Scattering
Session Date:	December 5 (Fri.), 2025
Session Time:	15:20-17:00
Session Room:	Room D (Samda B)

[FD4-1] 15:20-15:40

Electro-Magnetic Wave Scattering by a Dielectric Wedge

Jung-Woong Ra (KAIST, Korea (South))

[FD4-2] 15:40-16:00

Near-Field Setup to Investigate Direction-Dependent Scattering of a Sub-Resonant Dielectric Sphere

Fatemeh Habibi (University of Stuttgart, Germany); Jan Hesselbarth (University of Stuttgart & IHF -- Institute of Radio Frequency Technology, Germany)

[FD4-3] 16:00-16:20

Highly Cost-Effective Reconfigurable Metasurface Using SMD Slide Switches for Zero-Power Consumption

Kyounghwan Kim and Sungjoon Lim (Chung-Ang University, Korea (South))

[FD4-4] 16:20-16:40

Compact Ultra-Wideband Antenna for SFCW GPR-Based Concrete Scanning

Gyeongyong Jeong Jeong and Seung-Jun Park (University of Seoul, Korea (South)); Changbin Joh and Joo-Hyung Lee (Korea Institute of Civil Engineering and Building Technology, Korea (South)); Moon-Que Lee (University of Seoul, Korea (South))

[FD4-5] 16:40-17:00

Dual-Level GPU Acceleration for Time-Domain Physical Optics (TDPO): Facet-Observer Hybrid Parallelism in Electromagnetic Scattering Analysis

Jiaxuan Wang and Qiang Ren (Beihang University, China)

Session Title:	[FE4] Milimeter-Wave Components and Packaging Technologies
Session Date:	December 5 (Fri.), 2025
Session Time:	15:20-17:00
Session Room:	Room E (301)

[FE4-1] [Invited] 15:20-15:40

A Dual-Channel D-Band IQ Receiver with on-Package Antenna and Baseband Polyphase Filter Using Cost-Effective Heterogenous Integration

Ting-Yu Chang, Tian-Wei Huang, Ti-Yu Chao, Shao-Chen Huang, I. Wang and Yu-Hsiang Cheng (National Taiwan University, Taiwan); Jeng-Han Tsai (National Taiwan Normal University, Taiwan)

[FE4-2] 15:40-16:00

Improved Matching of a Chip-to-Waveguide Transition via Cavity Wall Adjustment

Sooyeon Kim (Electronics and Telecommunications Research Institute, Korea (South)); Seung-Hwan Kim (ETRI, Korea (South))

[FE4-3] 16:00-16:20

An Integrated Shield Flip-Chip Mounting MIC Bandpass Filter in Q-Band

Yu Kanamori (JAPAN FINE CERAMICS Company Limited, Japan); Tamotsu Nishino and Noriharu Suematsu (Tohoku University, Japan)

[FE4-4] 16:20-16:40

A GaAs Filter Bank with Wide-Stopband Utilizing Asymmetric Frequency-Division SP7T Switch

Shangsong Ye (University of Electronic Science and Technology of China, China)

[FE4-5] 16:40-17:00

Design and Fabrication of a Decade-Bandwidth 3-30 GHz Quadrature Hybrid Coupler with Discontinuity and Packaging Ingenuity

Taiyo Ushiyama, Mai Sasaki, Tsuyoshi Hazemoto, Sayu Tomioka and Satoshi Ono (The University of Electro-Communications, Japan); Sho Masui and Takafumi Kojima (National Astronomical Observatory of Japan, Japan); Takeshi Sakai (The University of Electro-Communications, Japan)

Session Title:	[FF4] Emerging Devices and Materials for RF Systems
Session Date:	December 5 (Fri.), 2025
Session Time:	15:20-17:00
Session Room:	Room F (302)

[FF4-1] [Invited] 15:20-15:40

Ultra-Low Power Wideband Cryogenic CMOS Noise-Canceling LNAs for Quantum Computing

Mahesh Kumar Chaubey (National Tsing Hua University, Taiwan); Yin-Cheng Chang (Taiwan Semiconductor Research Institute, National Institutes of Applied Research, Taiwan); Po-Chang Wu and Hann-Huei Tsai (Taiwan Semiconductor Research Institute, NIAR, Taiwan); Shawn S. H. Hsu (National Tsing Hua University, Taiwan)

[FF4-2] 15:40-16:00

K-Band Cryogenic VCO in 90-nm CMOS Process

Afiya Maritza (National Taiwan University of Science and Technology, Taiwan)

[FF4-3] 16:00-16:20

A First-of-Its-Kind RF Demonstration: Impact of Alignment Layers on Liquid Crystal-Based Devices

Byeongju Moon and Hogyeom Kim (Seoul National University, Korea (South)); Changjae Lee (Korea Advanced Institute of Science and Technology (KAIST), Korea (South)); Jungsuek Oh (Seoul National University, Korea (South))

[FF4-4] 16:20-16:40

Screen-Printed via Integrated with 4D-Printed Multimaterial for Microwave Circuit Applications

Seyeon Park, Junghyeon Kim, Hyeonji Song, Taehwan Jang and Sungjoon Lim (Chung-Ang University, Korea (South))

[FF4-5] 16:40-17:00

Study of Thermal Insulated Transmission Line for Superconducting Quantum Computers

Maria Fuwa (Advanced Industrial Science and Technology (AIST), Japan); Tomonori Arakawa (National Institute of Advanced Industrial Science and Technology, Japan); Noriyoshi Hashimoto, Shota Norimoto and Junta Igarashi (National Institute of Advanced Industrial Science and Technology (AIST), Japan); Makoto Minohara (Advanced Industrial Science and Technology, Japan)

Session Title:	[FG4] [SS] Application for Radio Communication
Session Date:	December 5 (Fri.), 2025
Session Time:	15:20-16:20
Session Room:	Room G (303)

[FG4-1] 15:20-15:40

IPD(Incident Power Density) Measurement Using the μ-EO Probe at the 6G Frequency

YoungJun Ju (Eretec Inc., Korea (South)); Byeonggyu Yu, Donggeun Choi and Kihwea Kim (National Radio Research Agency, Korea (South))

[FG4-2] 15:40-16:00

Millimeter Wave Communication and Sensing for ITS

Hyun Seo Oh (Daegu Catholic University, Korea (South))

[FG4-3] 16:00-16:20

A Study on the Promotion Strategy for Space Radiocommunication in the New Space Era

Heejun Park (National Radio Research Agency, Korea (South))

Session Title:	[P1] Interactive Forum I (Poster)
Session Date:	December 3 (Wed.), 2025
Session Time:	15:00-16:40
Session Room:	3F Lobby

[P1-001]

Extrapolation of the Avalanche Frequency in Noise-Source Diodes from Conventional 130 nm SiGe HBT Test Structures

Luca Menicucci Salamanca (IHP – Leibniz Institute for High Performance Microelectronics, Germany); Giacomo Schiavolini (Department of Engineering, University of Perugia, Italy); Seyyid Dilek (IHP – Leibniz Institute for High Performance Microelectronics, Germany); Giulia Orecchini (Department of Engineering, University of Perugia, Italy); Gunter Fischer (IHP – Leibniz Institute for High Performance Microelectronics, Germany); Federico Alimenti (Department of Engineering, University of Perugia, Italy); Corrado Carta (IHP – Leibniz Institute for High Performance Microelectronics & Technische Universität Berlin, Germany)

[P1-002]

High Fmax × Lg of AlGaN/GaN HEMTs with a Micro Field-Plate T-Shape Gate of Lg = 0.6 *M*m

Xuejing Yang (Korea Advanced Institute of Science and Technology (KAIST), Korea (South)); Kyounghoon Yang (KAIST, Korea (South)); Kiwon Lee (Won Kwang University, Korea (South)); Yongsik Jeong (KAIST, Korea (South)); SuMin Choi (Kyungpook National University, Korea (South)); Dae-Hyun Kim (Kyungpook National University, Germany); Wan-Soo Park (Kyungpook National University, Korea (South))

[P1-003]

Fmax of 411 GHz in $Al_{0.4}Ga_{0.6}N$/GaN HEMTs with $Al_{0.08}Ga_{0.92}N$ Back-Barrier for Future RF Applications

Wan-Soo Park and Hyeok-Jun Lee (Kyungpook National University, Korea (South)); Tae-Woo Kim (Texas Tech University, USA); Jae-Hak Lee (Kyungpook National University, Korea (South)); Kyounghoon Yang (KAIST, Korea (South)); Dae-Hyun Kim (Kyungpook National University, Korea (South))

[P1-004]

A Bidirectional Programmable Metasurface Unit with Switchable Transmission and Reflection Modes

Sen Zheng and Hui Feng Ma (Southeast University, China)

[P1-005]

A Highly Linear GaN LNA with 0.89 dB Noise Figure for 5G Networks

Siddharth Thakur (Indian Institute of Technology Kanpur, India); Md Hasnain Ansari (Indian Institute of Technology, India); Nagaditya Poluri (Indian Institute of Technology Kanpur, India & The University of Sheffield, United Kingdom (Great Britain)); Yogesh Chauhan (Indian Institute Of Technology, India)

[P1-006]

Fast-Switching Infinite Phase Shifter Using Dual Complementary Folding Circuits

Anji Miura, Yotaro Mune, Asaka Kobayashi and Hideyuki Nosaka (Ritsumeikan University, Japan)

[P1-007]

A 180º Phase-Shifting CMOS Reflection Amplifier for 6G Active Reconfigurable Intelligent Surface

Euiseong Kim (Jeonbuk National University, Korea (South)); Donggu Im (Chonbuk National University, Korea (South)); Seokgyu Lee, Yaehoon Roh, Jung-Mu Kim and Hae-Won Son (Jeonbuk National University, Korea (South)); Ilku Nam (Pusan National University, Korea (South))

[P1-008]

An Ultra-Wideband Rectifier Based on a Novel Broadband Impedance Self-Resonant Network

Haoxuan Long (Guangdong University of Technology, China); Jinlin Yang (Guangdong Polytechnic Normal University, China); Jian Liu (Guangdong University of Technology, China)

[P1-009]

60 Gb/s Transimpedance Amplifiers with Emitter-Follower and Folded-Cascode Interstage Configurations in 22-nm FDSOI

Volkan Erturk (IHP-Leibniz-Institut für innovative Mikroelektronik, Germany); Corrado Carta (IHP - Leibniz Institut für Innovative Mikroelektronik, Germany & Technische Universität Berlin, Germany); Batuhan Sütbaş (IHP - Leibniz Institute for High Performance Microelectronics, Germany); Aniello Franzese (IHP - Leibniz -İnstitut Für Innavtive MikroElektronik, Germany); Arzu Ergintav (IHP GmbH, Germany); Mesut Inac (IHP - Leibniz-Institute Für Innovative MikroElektronik, Germany)

[P1-010]

A 2-6 GHz 10 W High-Power GaN Power Amplifier Using Extended Matching Technique

Yu-Chun Lin (National Taiwn University, Taiwan); Chun-Wei Lin and Kun-You Lin (National Taiwan University, Taiwan)

[P1-011]

A Low-Power TSPC-PRBS Generator in 12 nm FinFET Bulk CMOS

Kai Scheller, Konstantin Vilyuk, Philip Hetterle, Jonas Weninger and Andre Engelmann (Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany); Robert Weigel (Friedrich-Alexander Universität Erlangen-Nürnberg, Germany); Albert-Marcel Schrotz and Norman Franchi (Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany)

[P1-012]

An X-Band LNA with High-Linearity and Improved Gain Flatness in 0.15 μm GaAs pHEMT Process

Leyi Ka (Southeast University, China); Yao Li (South China University of Technology, China)

[P1-013]

An X-Band GaAs Low Noise Amplifier

Dong-Ho Lee (Hanbat National University, Korea (South))

[P1-014]

A Tunable Multi-Inductor Coupling 2.0-6.6 GHz Compact CMOS Ultra-Wideband Fourth-Order Bandpass Filter Based on Q-Enhanced Technique

Lei Zhang, Qian Zhang, Xiaoxian Liu and Zhangming Zhu (Xidian University, China)

[P1-015]

Direct Wideband Matching Technique for Nonlinear Multistage Power Amplifiers

Alexander Deublein (Institute for Smart Electronics and Systems, Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany); Michael Loose (Institute for Electronics Engineering, Germany); David Riess (Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany); Christian Musolff (University of Erlangen-Nuremberg, Germany); Robert Weigel (Friedrich-Alexander Universität Erlangen-Nürnberg, Germany); Georg Fischer (Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany); Christof Pfannenmüller (Friedrich-Alexander-Universität Erlangen-Nürnberg & Institute for Electronics Engineering, Germany); Norman Franchi (Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany)

[P1-016]

Fractional-N Sampling Phase-Locked Loop with Time Domain Sign Generation Using Aux-DTC and Fast Locking AFC

Juwon Choi, Ibrar ali Wahla, Seunghyun Kang and Jonghoon Park (Kangwon University, Korea (South)); Shinwoong Kim (Handong Global University, Korea (South)); In-Chul Hwang (Kangwon National University, Korea (South))

[P1-017]

1.75-43.75 GHz N-Path Harmonic Mixer with Folded Noise Cancellation

Yuki Tsukui, Yoshiaki Morino and Kazutomi Mori (Mitsubishi Electric Corporation, Japan); Takuma Torii (Mitsubishi Electric, Japan); Akihito Hirai and Koji Yamanaka (Mitsubishi Electric Corporation, Japan); Tomoyuki Furuichi and Noriharu Suematsu (Tohoku University, Japan)

[P1-018]

D-Band ×8 Beamforming Frequency Multiplier Chain with GM-Boosting Doubler and PCPP

Kangseop Lee (POSTECH, Korea (South) & Institute of Artificial Intelligence, Korea (South))

[P1-019]

A 57μW Logarithmic RF Voltage Detector Integrated with High-Voltage RF Switch

Ting-Li Hsu (Technical University of Munich, Germany); Valentyn Solomko (Infineon Technologies, Germany); Amelie Hagelauer (Technical University of Munich, Germany)

[P1-020]

A Digitally Calibrated Two-Point Modulator with on-Chip Gain Calibration for BLE Applications

HoWon Kim, Yeon Jae Jeong, Seok Kee Kim and Kang-Yoon Lee (Sungkyunkwan University, Korea (South))

[P1-021]

A 50mW Low Power 2-Channel 15-17GHz Receiver with 6.0 dB NF for Ku Band FMCW Radar

Junyeon Won, Yoseong Nam, Chanho Jung and Su-bin Choi (Chung-Ang University, Korea (South)); Donghyun Baek (Chung-ang University, Korea (South))

[P1-022]

A Highly Integrated CMOS Dicke Radiometer IC for Remote Thermometer Applications

JIN MO Kim (Kwangwoon University, Korea (South))

[P1-023]

Enhanced RF Performance of Dual-Gate GaN HEMTs

Sanghoon Park (Kumamoto University, Japan); Debaleen Biswas (University of Chicago, USA); Yuji Ando and Hidemasa Takahashi (Nagoya University, Japan); Akio Wakejima (Kumamoto University, Japan)

[P1-024]

6-18 GHz GaN High Power Amplifier MMIC for Multi-Function Radar Application

Moongyu Kim, Kyungdong Bae, Yoonjung Lee and Youngoo Yang (Sungkyunkwan University, Korea (South))

[P1-025]

Optimization of Ohmic Contact for AlGaN/GaN HEMTs Using Dielectric Passivation

Iju Kim, Ki-Jin Kim and Hyeon-Bhin Jo (Korea Electronics Technology Institute, Korea (South))

[P1-026]

A 2.4 GHz-Band Amplifier with β-Ga_2O_3 MESFET Fabricated by Mist CVD Method

Hikaru Ikeda, Shizuo Fujita, Katsuhisa Tanaka and Takeru Wakamatsu (Kyoto University, Japan); Yuji Ando, Hidemasa Takahashi, Ryutaro Makisako and Jun Suda (Nagoya University, Japan); Tetsuzo Ueda and Hidetaka Sugaya (Panasonic, Japan)

[P1-027]

Novel Dual-Modulation Out-Phasing Power Amplifier with Arbitrary Loop Network

Yixi Tang (South China University of Technology, China); Wenjie Feng (Nanjing University of Science and Technology, China); Weiwei Wang (Hangzhou Dianzi University, China); Wenquan Che (South China University of Technology, China)

[P1-028]

Reflective Analog Predistorter with Independent Tunable Gain and Improved Insertion Loss

Pengyu YU (The Chinese University of Hong Kong, Hong Kong); Kwok-keung (Michael) Cheng (Chinese University of Hong Kong, Hong Kong); Pengde Wu (Hangzhou Dianzi University, China); Jieen Xie (The Chinese University of Hong Kong, Hong Kong)

[P1-029]

A 10W QFN Packaged CCF GaN MMIC Power Amplifier for UAV Applications

Avinash Singh (IIT Roorkee, India); Machavaram V. Kartikeyan (Indian Institute of Technology, Roorkee, India); Karun Rawat (Indian Institute of Technology Roorkee, India)

[P1-030]

2-Stage GaN MMIC Amplifier in General Purpose Power Transistor Package for 4.25GHz 20W Microwave Power Source

Sei Mizojiri and Kazuya Yaginuma (Pale Blue Inc., Japan); Kohei Fujiwara and Takashi Kondo (Tokyo Metropolitan Industrial Technology Research Institute, Japan); Shinji Hara and Noriyuki Tanba (Nagoya University, Japan)

[P1-031]

Enhanced Performance of AlN/GaN HEMTs via Novel LPCVD-Based Sub-Gate Oxidation

Zhiyong Liu, Jiejie Zhu, Lingjie Qin, Bowen Zhang, Mengdi Li, Boxuan Gao and Xiaohua Ma (Xidian University, China)

[P1-032]

Design and Bias Network Optimization of a Ka-Band CMOS Power Amplifier with 32.5% Modulation PAE Supporting 64-QAM

En-Lin Hong, Ji-Hao Huang, Kai-Jie Chuang, Yi-Wen Wang, Ting-Yu Chang and Tian-Wei Huang (National Taiwan University, Taiwan)

[P1-033]

W-Band Mixer-First Receiver Using Floating Body Switches in 28-nm CMOS

Kyubin Choi, Younghan Lee, Seungmo Noh, Sungjun Lee, Junyeop Kim and Wooyeol Choi (Seoul National University, Korea (South))

[P1-034]

Nonlinear Modeling and Frequency Multiplication Characteristic of Quasi-Vertical Diamond SBD in L-Band

Kosuke Saito, Ryunosuke Saito and Tomoyuki Furuichi (Tohoku University, Japan); Hitoshi Umezawa and Yuji Kato (Ookuma Diamond Device Co., Ltd., Japan); Noriharu Suematsu (Tohoku University, Japan)

[P1-035]

A Coupled Oscillator Arrays for D-Band Scalable Phased Arrays

Xiangao Meng (University of Electronic Science and Technology of China, China); Yinian Feng (UESTC, China & ESE, China); Jun Yuan, Bingli Dai, Bo Zhang and Cheng Wang (University of Electronic Science and Technology of China, China)

[P1-036]

A 56~81 GHz Frequency Quadrupler with 19.4 dB Conversion Gain and 8.07 dBm Output Power Using Harmonic Trap in 28nm CMOS

Yuchi Liu, Jiacheng Guo and Yuan Du (Nanjing University, China)

[P1-037]

A Power-Efficient mm-Wave Divide-by-16 Frequency Divider in SiGe BiCMOS Technology

Matthias Moeck (Karlsruhe Institute of Technology (KIT), Germany); Benedict Baschang and Ahmet Cagri Ulusoy (Karlsruhe Institute of Technology, Germany)

[P1-038]

A Q-Band -4 dBm Output Power Passive Frequency Tripler Using Stacked APDNP

Ryunosuke Saito, Ryosei Miyagawa, Yuki Fujiya, Tomoyuki Furuichi and Noriharu Suematsu (Tohoku University, Japan)

[P1-039]

A V-Band Four-Channel Phased-Array Beamforming Transmitter with Integrated Antenna Array

Hyun-Sik Hwang (Korea Advanced Institute of Science and Technology, Korea (South)); Cheol So (University of California, Santa Barbara, USA); Songcheol Hong (Korea Advanced Institute of Science & Technology, USA)

[P1-040]

Design of a 135-GHz Single-Ended Amplifier Using Coupled-Line and Capacitive Neutralization for Improved Stability and Gain

Taewon Kim, Jeongho Jang and Munkyo Seo (Sungkyunkwan University, Korea (South))

[P1-041]

An Investigation of the Low-Power Capability of SiGe HBTs in V-Band LNA Design

Xin Xu (TU Dresden, Germany); Jens Wagner (Technische Universität Dresden & Chair for Circuit Design and Network Theory, Germany); Frank Ellinger (Technische Universität Dresden, Germany)

[P1-042]

A 300-GHz Voltage-Controlled Oscillator Using a Coupled-Line Resonator with 177.6-dBc/Hz FoM and 5.6-dBm Peak Output Power

Hyunjoon Kim (Korea University, Korea (South)); Dongkyo Kim (Dong-A University, Korea (South)); Sanggeun Jeon (Korea University, Korea (South))

[P1-043]

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Daniele Ursini and Batuhan Sütbaş (IHP – Leibniz Institute for High Performance Microelectronics, Germany); Habeeb Bello (Ahmadu Bello University, Nigeria); Leonardo Pantoli (University of Laquila, Italy); Giorgio Leuzzi (University of L'Aquila, Italy); Corrado Carta (IHP – Leibniz Institut für Innovative Mikroelektronik, Germany & Technische Universität Berlin, Germany)

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A 36 Gbit/s 15.6 fJ/Bit FoM TSPC 2:1 Multiplexer for High-Speed Serial Links in 22 nm FDSOI

Jonas Weninger, Florian Probst, Alexander Spielberger, Andre Engelmann and Albert-Marcel Schrotz (Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany); Robert Weigel (Friedrich-Alexander Universität Erlangen-Nürnberg, Germany); Norman Franchi (Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany)

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Jaewon Jang, Jaeman Lee, Minseok Choi, Youngkyu Lee and Jae-Sung Rieh (Korea University, Korea (South))

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Zi-Jian Li, Qiu Yuan, Qing Luo and Xiaowei Zhu (Southeast University, China)

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A 22.6-28.3-GHz LNA with 22.1-dB Gain and 1.94-dB Noise Figure Using 90-nm CMOS Technology

Yi-Chi Li, Yunshan Wang and Yu-Hsiang Cheng (National Taiwan University, Taiwan)

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A Compact D-Band Power Amplifier with Reverse- Phase Coupling Transformer in 28nm CMOS

Jizhao Li, Jiacheng Guo and Yuan Du (Nanjing University, China)

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Gianluca Simone, Martin Grund, Manuel Koch and Sascha Breun (Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany); Robert Weigel (Friedrich-Alexander Universität Erlangen-Nürnberg, Germany); Norman Franchi (Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany)

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A Wideband 0.103mm2 Edge Combining Based Frequency Quintupler Covering 10-60GHz

Han Huang, Haoyu Bai, Jiazheng Zhou, Dong Wang, Jiaqi He, Sihao Zhang, Junhua Liu and Huailin Liao (Peking University, China)

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Yen-Lin Chen (National Tsing Hua University, Engineering and System Science, Taiwan); Tzihong Chiueh (National Taiwan University Physics, Taiwan); Yu-Shao Jerry Shiao (Taiwan Semiconductor Research Institute, Taiwan)

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A 323.2 GHz Detector Using Harmonic Injection Locking with Polarization Diversity in 40nm CMOS

Jiacheng Xie, Yiyang Shu and Xun Luo (University of Electronic Science and Technology of China, China)

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Shijie Xiang (Southeast University, China); Xiaoyi Liu, Yihui Wang and Hongfu Meng (Southeast University, China)

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Jiawen You, Zhan Wang and Yuandan Dong (University of Electronic Science and Technology of China, China)

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Yongzheng Li (South China University of Technology, China); Wanchen Yang (Nanjing University of Aeronautics and Astronautics, China); Quan Xue and Wenquan Che (South China University of Technology, China)

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A $\Delta\Sigma$ Frequency-to-Digital Converter Based Sub-Sampling DPLL Without Extra Modules in Auxiliary Loop

Jonghoon Park, Juwon Choi, Seunghyun Kang, Young ryul Yun and Ibrar ali Wahla (Kangwon University, Korea (South)); In-Chul Hwang (Kangwon National University, Korea (South))

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A High-Tolerance and Thickness-Adjustable PCB-Based Microstrip-to-Waveguide Transition Design

Jianhan Zhang, Xiaohe Cheng and Yuan Yao (Beijing University of Posts and Telecommunications, China)

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Digital-Assisted Canceler for MIMO in-Band Full-Duplex Radio

Yiqiu Liang, Honfji Fan, Zhiqiang Yu and Jianyi Zhou (Southeast University, China)

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Unified Compact Load Network for Broadband Doherty Power Amplifier with Enhanced Back-off

Yoonjung Lee (Sungkyunkwan University, Korea (South)); Woojin Choi, Yifei Chen and Jaekyung Shin (Samsung Electronics Company Ltd., Korea (South)); Youngoo Yang (Sungkyunkwan University, Korea (South))

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SuMin Choi, Hyeok-Jun Lee, Wan-Soo Park and In-Geun Lee (Kyungpook National University, Korea (South)); Hyeok-Min Kwon (Hankyong National University, Korea (South)); Tae-Woo Kim (Texas Tech University, USA); Jae-Hak Lee (Kyungpook National University, Korea (South)); Kyounghoon Yang (KAIST, Korea (South)); Dae-Hyun Kim (Kyungpook National University, Germany)

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Robust Hybrid Beamforming with Mutual Coupling Compensation for mmWave MIMO

Mengyu Zhang (Friedrich-Alexander-University Erlangen-Nürnberg, Germany); Robert Weigel (Friedrich-Alexander Universität Erlangen-Nürnberg, Germany); Norman Franchi and Torsten Reissland (Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany)

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Takashi Shiba and Tori Inoue (Tohoku University, Japan); Gustavo Pedroso Cainelli (Institut Fur Automation Und Kommunikation, Germany); Sven Müller (Demag Cranes and Components GmbH, Germany); Tomoyuki Furuichi (Tohoku University, Japan); Nils Kranefeld (Demag Cranes and Components GmbH, Germany); Fumiko Ohori and Taketoshi Nakajima (National Institute of Information and Communications Technology, Japan); Giuliano Persico (Demag Cranes & Components GmbH, Germany); Lisa Underberg (Ifak, Germany); Satoko Itaya (National Institute of Information and Communications Technology, Japan); Noriharu Suematsu (Tohoku University, Japan)

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A 60 GHz Four-Channel OAM Multiplexing Antenna Array for Short-Range Communication

Yuhan Wang, Xiaohe Cheng and Yuan Yao (Beijing University of Posts and Telecommunications, China)

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Affordable Non-Contact Respiration Monitoring Using Wi-Fi CSI and Doppler Radar: a Performance-Cost Trade-off for Resource-Limited Settings

Abrar Zarif, Hasin Rayhan, Sourav Kumar Pramanik and Shekh Md Mahmudul Islam (University of Dhaka, Bangladesh)

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Lang Zhang, Ze Li, Zengshan Tian and Yu Zhang (Chongqing University of Posts and Telecommunications, China)

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Yanjun Zhang, Jun Tao and Jiang Liu (Southeast University, China); Jie Li (Nanjing University of Aeronautics and Astronautics, China); Zhanye Chen (Southeast University, China); Yan Huang (Southeast University, Nanjing, China)

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Optimal Estimation of Adjacent Waves Based on Observed Wave Data Using a Kalman Filter

SeungJun Kim (National Korea Maritime & Ocean University, Korea (South)); Jang Ju Su (MOASOFT, Korea (South)); You Seok Yeoh (Korea Maritime & Ocean University, Korea (South)); Min Cheol Paek and Seong Been Jang (National Korea Maritime & Ocean University, Korea (South)); Kyeong-sik Min (Korea Maritime and Ocean University, Korea (South))

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Soyun Lee, Byungkwan Kim, Sun-Ji Oh and Seo-Hyun Park (Chungnam National University, Korea (South))

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Impact of 5G Adjacent Band Emissions on FSS Downlink Performance

Hyo-Won Lee and Ga-Yeong Park (KAIST, Korea (South)); Ji-Young Kim and Sungjun Cho (Korea Advanced Institute of Science and Technology, Korea (South)); Jong-Won Yu (KAIST, Korea (South))

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Yoshiaki Morino, Akihito Hirai, Yuki Tsukui and Kazutomi Mori (Mitsubishi Electric Corporation, Japan); Tomoyuki Furuichi, Satoshi Tsukamoto and Noriharu Suematsu (Tohoku University, Japan); Koji Yamanaka (Mitsubishi Electric Corporation, Japan)

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Spaceborne SAR Interference Suppression Based on a Digital Subband Filter Model

Xuezhi Chen (Southeast University, China); Xutao Yu (Southest Uni. National Mobile Communication Research Laboratory, China); Yuan Mao, Xinyu Guan and Jiale Chen (Southeast University, China); Yan Huang (Southeast University, Nanjing, China)

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Shao-Chun Huang, Yi-Lun Huang, Yuan-Hung Huang and Chao-Hsin Wu (National Taiwan University, Taiwan)

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System-Level Throughput of Multi-UAV Wireless Networks Considering Altitude and Density

Kosuke Asai, Shota Muroki and Fumiaki Maehara (Waseda University, Japan)

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Thermal Diffusion Effect by Increasing Gate-Pitch for 4.25GHz 50W Microwave Power Source

Noriyuki Tanba and Shinji Hara (Nagoya University, Japan); Sei Mizojiri and Kazuya Yaginuma (Pale Blue Inc., Japan); Kohei Fujiwara and Takashi Kondo (Tokyo Metropolitan Industrial Technology Research Institute, Japan)

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Analysis on GNSS Microwave Scattering Signals from Surface in Snow-Covered

Jie Li, Feng Wang and Dongkai Yang (Beihang University, China)

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A High-Tolerance Planar Coupler Based on BGA Process for Low-Cost Phased Array

Chao Tang (Chongqing University Of Posts And Telecommunications, China); Zongrui He (University of Electronic Science and Technology of China, China); Wei Nie (Chongqing University of Posts and Telecommunications, China)

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Evaluation of Ku-Band Geostationary Satellite Link Latency Under Tropical Rainfall

Yasser Asrul Ahmad (IIUM, Malaysia)

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Predicting Amplifier Intermodulation Distortion from Single-Tone Measurement/Simulation

Ryoko Kishikawa (National Institute of Advanced Industrial Science and Technology & The Graduate University of Advanced Studies, Japan); Korkut K Tokgöz (Sabanci University, Turkey & Evrim Co. Ltd., Japan); Hiroyuki Ito (Tokyo Institute of Technology, Japan); Shuhei Amakawa (Hiroshima University, Japan)

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A Study of Wireless Signal Connection Between Microstrip Lines with Open Ends

Atsushi Oyama, Teruo Tobana and Kohei Akimoto (Akita Prefectural University, Japan)

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State Transfer Adaptive Matching Network Architecture (STA-MNA) Based on Deep Learning Used in RF Systems

Kun Wang, Jin Jiao and Cheng Zhou (Southeast University, China); Hongxin Zhao (State Key Laboratory of Millimeter Waves, Southeast University, China)

[P1-081]

Common- and Differential-Mode Loop Gains by Two Wave Probes for Closed-Loop Stability Analysis

Robert (Shu-I) Hu (National Chiao Tung University, Taiwan); Ying Chen (University of California at Davis, USA); Chih-Cheng Chang (National Yang Ming Chiao Tung University, Taiwan)

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Responses of Voltage and Current Excitations from the Eight-Port Wave Probe's Perspective for Closed-Loop Circuit Stability Analysis

Robert (Shu-I) Hu (National Chiao Tung University, Taiwan); Ying Chen (University of California at Davis, USA); Chin-Chi Lin and Chih-Cheng Chang (National Yang Ming Chiao Tung University, Taiwan)

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Medium-Power Amplifier for the 17-22 GHz Band Designed for High oIP3

Giovanni Di Pietrantonio (IHP – Leibniz Institute for High Performance Microelectronics, Germany); Andrea Malignaggi (IHP, Germany); Corrado Carta (IHP – Leibniz Institut für Innovative Mikroelektronik, Germany & Technische Universität Berlin, Germany)

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Research on the CARL-RTDETR Model for Lightweight Object Detection in Complex SAR Scenarios

Zhaoyu Liu, Wei Chen and Yang Lixia (Anhui University, China)

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Theoretical Analysis of High Efficiency Power Amplifier with Double Injected Envelope Components

Yasunori Suzuki, Kiyotaka Komoku, Jun Furuta and Nobuyuki Itoh (Okayama Prefectural University, Japan)

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Sheet Beam Focusing Simulation of Cold Cathode Field Emitter for Planar TWT Applications

Si Eun Han (Ulsan National Institute of Science and Technology (UNIST), Korea (South)); EunMi Choi and Mincheal Kim (UNIST, Korea (South))

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Dogyun An (KETI, Korea (South)); Hyeon-Bhin Jo (Korea Electronics Technology Institute, Korea (South))

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A Study on Quasi-Vertical GaN SBD for Dependence of Schottky Metal and Drift Layer Thickness

Seongmin Kang (Korea Electronics Technology Institute (KETI), Korea (South))

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Two-Level Beam Selection Algorithm for mmWave Wireless Power Transfer Systems

Seungsu Chung, Jaeyeon Ha and Jaehyun Park (Pukyong National University, Korea (South)); Jae Cheol Park (ETRI, Korea (South)); Jung Ick Moon (Electronics and Telecommunications Research Institute, Korea (South))

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A Low-Complexity Reconfigurable Rectifier Optimized for DC-DC Converter Integrated RF Energy Harvesting Systems

Prakash Gundabathina (National Yang Ming Chiao Tung University, Taiwan); Haruichi Kanaya (Kyushu University, Japan); Maryam Shojaei Baghini (IITB, India); Po-Hung Chen (National Yang Ming Chiao Tung University, Taiwan)

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Comparison of Omni PDP and Synthesized Directional PDP at 415 GHz

Jinhyung Oh (Electronics and Telecommunications Research Institute, Korea (South)); Jong Ho Kim (ETRI, Korea (South))

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Microwave-Assisted Carbothermal Synthesis of ZrC Nanosheets from ZrOx/rGO Precursor

Motohiro Shimizu and Dai Mochizuki (Tokyo Denki University, Japan)

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Focusing System with Multiple Dielectric Lenses for mmWave OAM Waves Generated by Loop Antenna Array

Ryo Ishikawa, Masaaki Kawase, Takumi Aramaki, Akira Saitou and Kazuhiko Honjo (The University of Electro-Communications, Japan)

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Amplitude-Disorder Inspired Synthesis of Wideband Wide-Scanning Hybrid Analog-Digital Array

Yuhan Fan (National University of Singapore, Singapore)

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Self-Calibration Algorithm for Amplitude-Phase Errors in UHF Radar Arrays Based on Enhanced Channel Optimization Particle Swarm Optimization Algorithm

ZhiCheng Qian, Qing Zhou, LinXun Jiang, Xiaohua Zhu and Hong Hong (Nanjing University of Science and Technology, China)

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Single-Station Localization via AoA Estimation with Augmented Nested Arrays

Shengxian Xu, Chenglin Huang, Zengshan Tian and Kaikai Liu (Chongqing University of Posts and Telecommunications, China)

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A New Design for a High Efficient Bidirectional Dualband Multi-Beam Antenna Array

Engelbert Tyroller (Werner-Heisenberg-Weg 39, Germany); Stefan Lindenmeier (Universität der Bundeswehr, Germany)

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A Miniaturized Dual-Band Implantable Antenna for Biomedical Applications

Xinyi Wu (Harbin Institute of Technology, China); Beijia Liu (Harbin Institute of Technology & School of Electronics and Information Engineering, China); Siqi Wang, Lei Xing and Shengchang Lan (Harbin Institute of Technology, China)

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High-Gain Conical Beam Coverage Realized by Using Switchable Tilted Patch Array Elements for Satellite Broadcasting Reception

Yuta Ishihara, Takuto Oyama and Nobuhiro Kuga (Yokohama National University, Japan)

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Dual-Wideband Metasurface for Polarization Conversion Targetting Integrated 5G and 6G MIMO Communication

Muhammad Awais Khan Bangash (School of Electrical and Computer Engineering (ECE) Oklahoma State University, USA); Muhammad Ikram (American University of Kuwait, Kuwait); Syed Shahan Jehangir (Oklahoma State University, USA)

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A Three-Stage Evolutionary-Reinforced Framework for Antenna Optimization

Bingjie Zhang, Yue Su and Shunli Li (Southeast University, China); Xiaoxing Yin (State Key Laboratory of Millimeter Waves, China); Hongxin Zhao (State Key Laboratory of Millimeter Waves, Southeast University, China)

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SIW Based Self-Triplexing Antenna for mm-Wave Communications with Ultra-Low Frequency Ratio

Chandu DS (VIT-AP University, India); Kritika Bansal (Vellore Institute of Technology AP University, Amaravati, India); Rusan Kumar Barik (SR University, Warangal, Telangana, India)

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Optimizing Tension Tie Placement to Enhance Gain in Truss Reflector Antennas

Jongho Keun and Changhyeon Im (Hongik University, Korea (South)); Changseong Kim and Seul-Gi Park (Hanwha Systems, Korea (South)); Hosung Choo (Hongik University, Korea (South))

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A Dual-Polarized 2 Bit Reconfigurable Reflectarray Based on Magneto-Electric Dipole Elements

Wei Zheng and Junyi Lv (Southeast University, China); Feng Zhao (Nanjing Mobile Communication & Computing Innovation Institute, China); Wu-Guang Zhao (Southeast University, China); Jingxue Wang (Hohai University, China); Fan Wu (Southeast University, China)

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Design of a Dual-Polarized Crossing Perpendicular-Corporate-Feed Waveguide 8×8-Slot Array Antenna

Hinata Ishikawa, Jiro Hirokawa and Takashi Tomura (Institute of Science Tokyo, Japan)

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A Beamwidth Controllable and Switchable Transmitarray Antenna

Shizhe Xu and Rundong Zhang (Southeast University, China); Zhenghuan Wei (Southeast University, China & Purple Mountain Laboratories, China); Yizhu Shen (Southeast University, China)

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A 3D Printing-Based Ultra-Wideband Metallic Glass Antenna

Guobao Feng (China Academy of Space Technology, China & CAST Xi'an, China)

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Low-Profile, UWB, Dual-Polarized Magneto-Electric Antenna

Shenglin Rao, Qiankun Xu, Jingkai Xue, Jiahao Chen, Chunyue Zhao and Xing Chen (Sichuan University, China)

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Minsang Yoon and Changhyeon Im (Hongik University, Korea (South)); Changseong Kim and Seul-Gi Park (Hanwha Systems, Korea (South)); Hosung Choo (Hongik University, Korea (South))

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A Compact Circularly Polarized Filtering Antenna with 2-Bit Reconfigurable Phase

Ge Fan (Southeast University, China)

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Wideband Endfire Magnetoelectric Dipole Antenna Array Based on Micro-Metal Additive Manufacturing

Quanda Liu and Fan Wu (Southeast University, China); Jingxue Wang (Hohai University, China)

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Design and Analysis of UWB Microstrip Antenna for 5G Communications and Military Applications

Sarra Khacha (University of Ferhat Abbas, Algeria); Mehenni Nor-elhouda (University Ferhat ABBAS Setif 1, Algeria); Djamel Sayad (University of 20 Aout 1955 – Skikda, Algeria); Rami Zegadi (University of Ferhat Abbas, Sétif, Portugal); Issa Elfergani (Instituto de Telecomunicações, Portugal); Mohammad Alibakhshikenari (University of Rome Tor Vergata, Italy); Jonathan Rodriguez (Instituto de Telecomunicações, Portugal); Patrizia Livreri (University of Palermo, Italy); Chan Hwang See (Edinburgh Napier University, United Kingdom (Great Britain)); Takfarinas Saber (National University of Ireland Galway, Ireland); Chemseddine Zebiri (Ferhat Abbas University of Setif, Algeria)

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A Dual-Band Dual-Polarized Meta-Lens Antenna for Sub-6-GHz Wireless Communications

Yuehui Cui and Jiaying Du (South China University of Technology, China)

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Equivalence in Coupling of Radiating Slots with a Reflection-Canceling Post Between the Method of Moments and an EM Simulator for the Array Design

Hayato Sato, Jiro Hirokawa and Takashi Tomura (Institute of Science Tokyo, Japan)

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High-Gain, Wideband, Circularly Polarized Transmitarray Antenna Using a Variable Rotation Technique

Mohamed Elhefnawey (Gyeonsang National University, Korea (South) & October 6 University, Egypt); Kyoung Hun Kim (Gyeongsang National University, Korea (South)); Wang-Sang Lee (Gyeongsang National University (GNU), Korea (South))

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Integrated Antenna Design for 4G Microwave & 5G Millimeter Wave Mobile Communications

Muhammad Ikram (American University of Kuwait, Kuwait); Usama Malik (Hanyang University, Korea (South)); Syed Shahan Jehangir (Oklahoma State University, USA); Rifaqat Hussain (Queen Mary University of London, United Kingdom (Great Britain)); Kamel Sultan (University of Queensland, Australia)

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U6G IBFD Antenna with Digital-Assisted Cancellation

Honfji Fan, Yiqiu Liang, Zhiqiang Yu and Jianyi Zhou (Southeast University, China)

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Qian Song, Donglin Su and Zi Yang Wang (Beihang University, China)

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Extrapolation of Radiation Pattern with Neural Networks: a Paradigm with LSTM-Based and Generative Adversarial Networks

Lida Kouhalvandi (Dogus University, Turkey); Mohammad Alibakhshikenari (University of Rome Tor Vergata, Italy); Hassan Zakeri (Amirkabir University of Technology, Iran); Ladislau Matekovits (Politecnico di Torino, Italy); Serdar Ozoguz (Istanbul technical University, Turkey); Takfarinas Saber (National University of Ireland Galway, Ireland); Ernesto Limiti (University of Rome Tor Vergata, Italy)

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High-Isolation Nano-Antenna Design for Terahertz Full-Duplex Communication

Durga Prasad Purbey (Indian Institute of Technology Kharagpur, India); Sandip Ghosal (National Institute of Technology Rourkela, India); Arijit De (Indian Institute of Technology Kharagpur, India)

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Design of a Narrow-Wall Slotted Waveguide Array Antenna with Corporate Feed in the 150 GHz Band

Ryouske Sakurai, Jiro Hirokawa and Takashi Tomura (Institute of Science Tokyo, Japan); Minoru Inomata (NTT, Japan); Wataru Yamada (NTT Corporation, Japan)

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Liquid-Based Polarization-Reconfigurable Antenna Using Gravitational Method for WLAN Applications

Thanatcha Satitchantrakul (King Mongkut's University of Technology North Bangkok, Thailand); Niklas Takanen and Ping Jack Soh (University of Oulu, Finland)

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Near-Field Mutual Coupling Assessment in Co-Platform Antennas Using a Modified Friis Transmission Formula

Yunru Zhao (Beihang University, China); Peng Liu (AVIC Research Institute for Special Structures of Aeronautical Composites, China); Qi Wu (Beihang University, China)

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Reduction of Sidelobe Level in Reflectarray Antennas Using LCMV Algorithm

Hogun Lee and Jeong-Hae Lee (Hongik University, Korea (South))

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Superdirectivity Extends the Scanning Range of Antenna Arrays

Yinglu Wan (Guangxi University, China)

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Mechanical Rotary Metasurface for Wide-Beam Scanning and Polarization Conversion

Chhungheng Lor and Sungjoon Lim (Chung-Ang University, Korea (South))

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Characterization of Sub-THz Multipath Propagation in Urban Environments via High-Resolution Parameter Estimation

Jae-Joon Park, Myung-Don Kim, Juyul Lee and Byung Su Kang (ETRI, Korea (South))

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Maximized Electrical near-Field Intensity from a Compact Dielectric Probe

Fatemeh Habibi (University of Stuttgart, Germany); Jan Hesselbarth (University of Stuttgart & IHF -- Institute of Radio Frequency Technology, Germany)

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High-Efficiency Horizontal-Polarized Leaky-Wave Antenna Based on Mode-Modulation

Zhang Wen Cheng, Meng Wang and Hui Feng Ma (Southeast University, China)

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Two Types of Composite T-/π-Type Rhombic Unit Cell Structures for Topological Waveguides

Sho Toyomitsu, Tsutomu Nagayama, Seiji Fukushima and Toshio Watanabe (Kagoshima University, Japan)

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High-Performance X-Band Semi-Transparent Metamaterial Absorber Utilizing Flexible PDMS and Resistive Elements

Wahaj Abbas Awan, Domin Choi and Jaemin Lee (Chungbuk National University, Korea (South)); Niamat Hussain (University of Glasgow, United Kingdom (Great Britain)); Dongkyu Sim (Chungbuk National University, Korea (South)); Seonggyoon Park (Kongju National University, Korea (South)); Nam Kim (Chungbuk National University, Korea (South))

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Source Reconstruction of Array Antenna Based on Physics Informed Neural Networks

Wonhyo Kim, Yeonjae Kim and Youngwook Kim (Sogang University, Korea (South))

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Simulation and Experimental Analysis of AM-Modulated Signal Backscattered by on-Board HT

Da-Hyun Lee, Jae-Sung Choi, Jin-Seong Lee and Jae-Young Chung (Seoul National University of Science and Technology, Korea (South))

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Impact of RX Parasitic Resistance on Power Transfer Efficiency in Coil-to-Coil Wireless Systems

Chanho An (Konkuk University & Konkuk, Korea (South)); Myeongjun Shin and Hyunchul Ku (Konkuk University, Korea (South))

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Design of a Low-Loss Transmission Frequency Selective RIS with 1-Bit Reconfigurable Phase

Miao Li, Lijie Wu, Huidong Li, Jun Yan Dai and Qiang Cheng (Southeast University, China)

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RCS Measurement and Modeling of Manned Electric Bicycle in the 77-81 GHz Band

Mengdi Wu, Zhengbo Jiang, Junping Zhu, Shangbing Qiao and Tong Liu (Southeast University, China)

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A Novel Dual-Polarized Endfire Phased Array Antenna for mmWave Mobile Terminal Applications

Liangying Li (Hefei University of Technology, China)

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Deep Learning-Enhanced FEM for Perforated Enclosures: CNN-Based Impedance Boundary Modeling

Hui Wang and Qiang Ren (Beihang University, China)

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MINNs: MNA Informed Neural Networks for Efficient Uncertainty Quantification of Nonlinear Transmission Lines

Dyuti Basu, Aakanksha Verma, Avirup Dasgupta and Sourajeet Roy (IIT Roorkee, India)

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Non-Destructive Detection and Classification of Camel Milk Adulteration Using Microwave Reflection and Machine Learning

Dawiya Youssouf Hamadi (UOWD, United Arab Emirates); Abeer El Elkhouly and Mohd Fareq Abd Malek (University of Wollongong in Dubai, United Arab Emirates); Hasliza ARahim (Universiti Malaysia Perlis & Advanced Communication Engineering, Centre of Excellence (ACE), Malaysia)

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Millimeter-Wave Antenna Featuring Polygonal Parasitic Patches with a Gain of 8.21 dB

Xin Jiang (Sharp Corparation, Japan); Takashi Nakano, Tazuko Kitazawa and Yukio Tamai (Sharp Corporation, Japan)

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Mutual Coupling Reduction in Dual-Band MIMO Antenna Using DGS and SRR for Wi-Fi 7 Band Applications

Loveta Ramyhaidar Winaryo, Catur Apriono and Fitri Yuli Zulkifli (Universitas Indonesia, Indonesia)

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Prediction of Directionally Dependent Electric Field in Elongated Rectangular Enclosures

J.Y. Choi (Korea Aerospace University, Korea (South))

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Antenna Factor Calibration of Optical Electric Field Sensor Using GTEM Cell

Yuma Otomo (Tohoku Gakuin University & Graduate School, Japan); Shinobu Ishigami and Ken Kawamata (Tohoku Gakuin University, Japan)

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Enhancing Transparency and EMP Shielding Based on Low-E Glass Windows Using Thin Conductive Films for Civil and Military Applications

Manh Hai Tao, Tien Dat Nguyen and Chang Won Jung (Seoul National University of Science and Technology, Korea (South))

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A 7-9GHz Reconfigurable Microstrip Bandpass Filter Using Defected Ground Structure

Runlong Li (University of Electronic Science and Technology of China, China)

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A Method for Estimating Impedance of Floating Electrode Multi-Layered Ceramic Capacitors

Sanguk Lee and Jaewon Rhee (Korea Advanced Institute of Science and Technology, Korea (South)); Seunghun Ryu (Korea Advanced Institute Science and Technology (KAIST), Korea (South)); Seonghi Lee (Korea Advanced Institute of Science and Technology, Korea (South)); Hyunwoo Kim (Korea Advanced Institute of Science and Technology University, Korea (South)); Hongseok Kim and Seungyoung Ahn (Korea Advanced Institute of Science and Technology, Korea (South))

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Design of Compact SIW BPF Matching Network with Harmonic Suppression Capability

Palaystint Thorng (Jeonbuk National University, Korea (South)); Phanam Pech (Jeonbuk National University, Korea (South) & JIANT-IT Human Resource Development Center, Korea (South)); Suyeon Kim, Girdhari Chaudhary and Yongchae Jeong (Jeonbuk National University, Korea (South))

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Novel Design of a Broadband Radio Wave Absorber Using Periodic Dielectric Cuboid Arrays

Yasunari Hashimoto (Aoyama Gakuin University, Japan); Yoshitoshi Maeda and Temma Sasaki (WICERA Co., Ltd., Japan); Ryosuke Suga (Aoyama Gakuin University, Japan)

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Festim Iseini (IHP – Leibniz-Institut für innovative Mikroelektronik, Germany); Andrea Malignaggi (IHP, Germany); Nicola Pelagalli (IHP – Leibniz Institute for High Performance Microelectronics, Germany); Falk Korndoerfer (IHP microelectronics, Germany); Corrado Carta (IHP – Leibniz Institut für Innovative Mikroelektronik, Germany & Technische Universität Berlin, Germany); Gerhard Kahmen (IHP Leibniz Institut für Innovative Mikroelektronik, Germany)

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Capacitive Compensation for Low Amplitude and Phase Imbalances in mm-Wave Marchand Baluns

Volkan Erturk (IHP-Leibniz-Institut für innovative Mikroelektronik, Germany); Batuhan Sütbaş (IHP – Leibniz Institute for High Performance Microelectronics, Germany); Corrado Carta (IHP – Leibniz Institut für Innovative Mikroelektronik, Germany & Technische Universität Berlin, Germany)

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Design of All Pole Multifunctional Filtering Power Divider in Microstrip Technology

Manoj Kumar and Gowrish Basavarajappa (Indian Institute of Technology Roorkee, India)

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Compact 5.8-15.8-GHz Marchand Balun with Narrow Notched Band Based on Three-Line Coupled Scheme for 6G Communication

Zihuan Chen, Jie Zhou and Xun Luo (University of Electronic Science and Technology of China, China)

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Takumi Tomii (Tottori University, Japan); Tamotsu Nishino (Tohoku University, Japan); Takuto Akashi, Kiyoka Takemoto, Tadao Matsunaga and Sang-Seok Lee (Tottori University, Japan)

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Rushiraj Sunil Jawale and Gowrish Basavarajappa (Indian Institute of Technology Roorkee, India)

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Pascal Stadler (Ruhr-University Bochum, Germany); Nils Pohl (Ruhr-University Bochum & Fraunhofer FHR, Germany); Tobias T Braun (Ruhr University Bochum, Germany); Klaus Aufinger and Christian Geissler (Infineon Technologies AG, Germany)

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Ouadie Touijer (Universität Erlangen-Nürnberg, Germany); Alexander Schönecker (Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany); Jens Loeffler (Friedrich-Alexander-Universität Erlangen Nürnberg, Germany); Jan Philipp Wiedemann, Norman Franchi and Georg Fischer (Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany)

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Stefan Wögerbauer, Helmut Paulitsch and Michael Gadringer (Graz University of Technology, Austria)

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Chae Suin (Korea Electronics Technology Institute, Korea (South) & Hanyang University, Korea (South)); Jaemyung Lim (Hanyang University, Korea (South)); Jeln Yu (Korea Electronic Technology Institute, Korea (South))

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Hong-Yu Chen and Ching-Wen Tang (National Chung Cheng University, Taiwan)

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Jiyeon Lee, Dal Ahn, Kye-Si Kwon and Hyeonsu Kim (Soonchunhyang University, Korea (South)); Sang-Min Han (Soonchunhyang, Korea (South)); Jongsik Lim (Soonchunhyang University, Korea (South))

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Woojun Lee (Virginia Tech, USA); Jungmin Lee (Virginia Polytechnic Institute and State University, USA); Jeffrey Walling (University of Utah, USA)

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Shiqi Jiang, Yuwei Zhang and Jinping Xu (Southeast University, China)

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JaeGyeong Shin (UNIST, Korea (South))

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Yuehui Cui, Hao Fang and RongLin Li (South China University of Technology, China)

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Sheikh Faisal Ahmad (Kyungpook National University & Institute of Advance Convergence Technology, Korea (South)); Hyun Deok Kim (Kyungpook National University, Korea (South))

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Alexis Goblot (Universite de Rennes, France); Olivier Lafond (Universite de Rennes 1, France); Mohamed Himdi (Université de Rennes, France & IETR, France)

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Yingjuan Lu (Southeast University, China)

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Sang Yun Han and Byung-Wook Min (Yonsei University, Korea (South))

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Gabriel Felipe Martinez, Alessandro Niccolai, Eleonora L. Zich and Riccardo Enrico Zich (Politecnico di Milano, Italy)

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Jun Choi, Sangpil Kang, Wonwhi Jin, Inho Jeon, Jeok Park, Hyunggeun Lee, Taeil Kim and Jinkyu Hwang (Acetechnologies, Korea (South))