

RFIT 2022 Technical Program Details

Session Code	Session Title	Time	Day	Date	Session Room	Pres Type	Remarks	Paper No.	Paper Title	Authors/ Speakers with affiliation and country
M1W.1	Workshop 1: mm-wave/THz Integrated Beamforming	09:30-10:10	Monday	29-Aug	Forum 1	Lecture	Workshop	-	Bi-Directional Doherty Phased-Array Transceiver for 5G and Beyond	Kenichi Okada (Tokyo Institute of Technology, Japan)
M1W.2	Workshop 1: mm-wave/THz Integrated Beamforming	10:10-10:50	Monday	29-Aug	Forum 1	Lecture	Workshop	-	Fast simultaneous calibration of integrated phased-array systems for 5G mm-Wave base station	Aoki Yuuichi (Samsung Electronics, Korea (South))
M1W.3	Workshop 1: mm-wave/THz Integrated Beamforming	11:10-11:50	Monday	29-Aug	Forum 1	Lecture	Workshop	-	mmWave Metasurface-in-Package (MiP) for Spatially Tailored 5G/6G Connectivity	Jungsuek Oh (Seoul National University, Korea (South))
M1W.4	Workshop 1: mm-wave/THz Integrated Beamforming	11:50-12:30	Monday	29-Aug	Forum 1	Lecture	Workshop	-	Phased Array for mm-wave 5G and 6G LEO Satellite Communications	Jinseok Park (ETRI, Korea (South))
M2W.1	Workshop 2: RF Technologies for Emerging Biomedical	13:30-14:10	Monday	29-Aug	Forum 1	Lecture	Workshop	-	Magnetoelectrically Powered and Controlled Millimetric Bioelectronic Implants	Kaiyuan Yang (Rice University, USA)
M2W.2	Workshop 2: RF Technologies for Emerging Biomedical	14:10-14:50	Monday	29-Aug	Forum 1	Lecture	Workshop	-	Body-Coupled Data and Power Transmission for Wireless Neural Implants	Joonsung Bae (Kangwon National University, Korea (South))
M2W.3	Workshop 2: RF Technologies for Emerging Biomedical	15:10-15:50	Monday	29-Aug	Forum 1	Lecture	Workshop	-	Smaller in Volume, Larger in Throughput: Wireless Solutions in Biomedical Application	Minyoung Song (imec, Netherlands)
M2W.4	Workshop 2: RF Technologies for Emerging Biomedical	15:50-16:30	Monday	29-Aug	Forum 1	Lecture	Workshop	-	Wireless and Free Floating Micromotes for Chronic Neural Recording	Taekwang Jang (ETH Zürich, Switzerland)
T1A.1	Microwave/mm-Wave Frequency Synthesis	09:00-09:20	Tuesday	30-Aug	Forum 1	Oral	Invited	1570805260	Reference Oversampling Phase-Locked Loops for Achieving Low Jitter, Spur and Power Consumption	Taekwang Jang (ETH Zürich, Switzerland)
T1A.2	Microwave/mm-Wave Frequency Synthesis	09:20-09:40	Tuesday	30-Aug	Forum 1	Oral	Invited	1570806602	An Ultra-Low Integrated-Phase-Noise 28-GHz LO Generator for 5G Transceivers Supporting Multiple Frequency Bands	Heein Yoon (UNIST, Korea (South)); Suneui Park, Juyeop Kim and Jaehyouk Choi (KAIST, Korea (South))
T1A.3	Microwave/mm-Wave Frequency Synthesis	09:40-10:00	Tuesday	30-Aug	Forum 1	Oral	Invited	1570805201	An 84-GHz CMOS Injection-Locked Frequency Multiplier With Phase Tuning Control	Chien-Nan Kuo and Wei-Chien Wang (National Yang Ming Chiao Tung University, Taiwan)
T1A.4	Microwave/mm-Wave Frequency Synthesis	10:00-10:20	Tuesday	30-Aug	Forum 1	Oral	Invited	1570803469	Microwave and Millimeter-Wave Signal Generation Using Injection Locked Technique	Hong-Yeh Chang (National Central University, Taiwan)

Session Code	Session Title	Time	Day	Date	Session Room	Pres Type	Remarks	Paper No.	Paper Title	Authors/ Speakers with affiliation and country
T1B.1	Power Amplifiers for 5G Applications	09:00-09:20	Tuesday	30-Aug	Vernazza	Oral	Invited	1570805161	23-28 GHz Doherty Power Amplifier Using 28 nm CMOS for 5G Applications	Young Chan Choi (Sungkyunkwan University, Korea (South)); Sungjae Oh (Samsung Electronics Ltd., Korea (South)); Youngoo Yang (Sungkyunkwan University, Korea (South))
T1B.2	Power Amplifiers for 5G Applications	09:20-09:40	Tuesday	30-Aug	Vernazza	Oral	Invited	1570803007	A Compact Broadband Power Amplifier Covering 23-39 GHz for 5G Mobile Communication	Chenguang Li, Ruitao Wang, Jian Zhang, Wei Zhu and Yan Wang (Tsinghua University, China)
T1B.3	Power Amplifiers for 5G Applications	09:40-10:00	Tuesday	30-Aug	Vernazza	Oral	Invited	1570805084	Two-Stage CMOS/GaAs HBT Doherty Power Amplifier Module for 5G Handsets	Hyeongjin Jeon and Jongyun Na (Sungkyunkwan University, Korea (South)); Hansik Oh (Samsung Electronics, Korea (South)); Youngoo Yang (Sungkyunkwan University, Korea (South))
T1B.4	Power Amplifiers for 5G Applications	10:00-10:20	Tuesday	30-Aug	Vernazza	Oral	Invited	1570803218	Power Combining Configurations of HPUE PA for 5G Mobile Phone Applications	Satoshi Tanaka and Hiroshi Okabe (Murata Manufacturing Co., Ltd., Japan)
T2P.1	Plenary Session: Prof. Mark Rodwell	10:50-11:30	Tuesday	30-Aug	Forum 1	Talk	Plenary	-	100-300GHz MIMO Communications: Transistors, ICs, Arrays, and Systems	Mark Rodwell (University of California, Santa Barbara, USA)
T2P.2	Plenary Session: Prof. Songcheol Hong	11:30-12:10	Tuesday	30-Aug	Forum 1	Talk	Plenary	-	Subarray hybrid beamforming front-end ICs for millimeter-wave communications and high resolution sensings	Songcheol Hong (KAIST, Korea (South))
T3A.1	mm-Wave/THz Building Blocks	13:30-13:50	Tuesday	30-Aug	Forum 1	Oral	Invited	1570808550	Multiplexing Schemes for Sub-THz/THz Interconnects	Xuan Ding and Jane Gu (University of California Davis, USA)
T3A.2	mm-Wave/THz Building Blocks	13:50-14:10	Tuesday	30-Aug	Forum 1	Oral	Invited	1570805203	Design of Frequency-Reconfigurable Filtering Phase Shifter Based on Controllable Mixed Electric-Magnetic Coupling	Tao Yang (University of Electronic Science and Technology of China, China)
T3A.3	mm-Wave/THz Building Blocks	14:10-14:30	Tuesday	30-Aug	Forum 1	Oral		1570800178	An Ultra-Compact Bidirectional Ka-Band Front-End Module With 4.0-dB NF and 13.5-dBm OP1dB	Jian Zhang, Wei Zhu, Ruitao Wang, Chenguang Li, Sen Yin and Yan Wang (Tsinghua University, China)
T3A.4	mm-Wave/THz Building Blocks	14:30-14:50	Tuesday	30-Aug	Forum 1	Oral		1570801155	25-31-GHz Low Noise Amplifiers in 0.15- μ m GaN/SiC HEMT Process	Shih-Yun Chen (National Taiwan University, Taiwan)
T3A.5	mm-Wave/THz Building Blocks	14:50-15:10	Tuesday	30-Aug	Forum 1	Oral		1570801039	An E-Band Built-In Self-Tester Detectable Active Reflection Coefficient for Millimeter-Wave Beamforming Transmitters	Seung-Uk Choi (Pohang University of Science and Technology, Korea (South)); Kyunghwan Kim (Pohang University of Science and Technology (POSTECH), Korea (South)); Kangseop Lee, Seunghoon Lee and Ho-Jin Song (POSTECH, Korea (South))

Session Code	Session Title	Time	Day	Date	Session Room	Pres Type	Remarks	Paper No.	Paper Title	Authors/ Speakers with affiliation and country
T3B.1	Advanced Circuit and System Designs	13:30-13:50	Tuesday	30-Aug	Vernazza	Oral	Invited	1570807046	An Energy-Efficient Supply- and Temperature-Independent $\Delta\Sigma$ Capacitance-To-Digital Converter	Junghyup Lee (DGIST, Korea (South))
T3B.2	Advanced Circuit and System Designs	13:50-14:10	Tuesday	30-Aug	Vernazza	Oral	Invited	1570803514	Number of Oscillation Cycles (NOC): A New Paradigm for VCO-Based Comparison	Qiang Li (University of Electronic Science and Technology of China, China)
T3B.3	Advanced Circuit and System Designs	14:10-14:30	Tuesday	30-Aug	Vernazza	Oral	Invited	1570806039	Tabbed Routing Modeling and Design Optimization for High-Speed Signaling Channel	Kyunghwan Song (Korea Advanced Institute of Science and Technology, Korea (South)); Seonghi Lee (KAIST, Korea (South)); Seungyoung Ahn (Korea Advanced Institute of Science and Technology, Korea (South))
T3B.4	Advanced Circuit and System Designs	14:30-14:50	Tuesday	30-Aug	Vernazza	Oral		1570799737	A Refined Skew Matrix Model of the CIM3 in the Up-Mixer Extending the Duality of I/Q Imbalance	Ealwan Lee (GCT Semiconductor, Inc., Korea (South))
T3B.5	Advanced Circuit and System Designs	14:50-15:10	Tuesday	30-Aug	Vernazza	Oral	Invited	1570806965	Body-Coupled Powering for Wearables	Jiamin Li (National University of Singapore, Singapore); Jerald Yoo (National University of Singapore & The N1 Institute for Health, Singapore)
T4F.1	Interactive Forum	15:10-16:20	Tuesday	30-Aug	Forum 2	Poster		1570806757	A 350-GHz Fundamental-Mode Common-Base Cross-Coupled Oscillator in 130-nm InP HBT Technology	Heekang Son, Junghwan Yoo and Jae-Sung Rieh (Korea University, Korea (South))
T4F.2	Interactive Forum	15:10-16:20	Tuesday	30-Aug	Forum 2	Poster		1570807118	A High PAE Stacked K-Band Power Amplifier Using π -Phase Compensation Technique	Omar Alngar, Adel Barakat and Ramesh K. Pokharel (Kyushu University, Japan)
T4F.3	Interactive Forum	15:10-16:20	Tuesday	30-Aug	Forum 2	Poster		1570800997	Differential HPUE PA for n77 Band With a Cross-Coupled Feed-Forward Gain Control Circuits	Hideyuki Sato, Satoshi Tanaka, Yuuri Honda, Masafumi Kazuno, Kenji Mukai, Yusuke Tanaka, and Hiroshi Okabe (Murata Manufacturing Co., Ltd., Japan)
T4F.4	Interactive Forum	15:10-16:20	Tuesday	30-Aug	Forum 2	Poster		1570805160	26 GHz 2-Stacked Power Amplifier Using 28 nm Bulk CMOS	Soohyun Bin, Young Chan Choi and Youngoo Yang (Sungkyunkwan University, Korea (South))
T4F.5	Interactive Forum	15:10-16:20	Tuesday	30-Aug	Forum 2	Poster		1570805158	900 MHz Differential Power Amplifier IC Using 55 nm CMOS Technology	Jiwon Hwang, Sooncheol Bae, Young Chan Choi, Woojin Choi, Jaekyung Shin and Youngoo Yang (Sungkyunkwan University, Korea (South))
T4F.6	Interactive Forum	15:10-16:20	Tuesday	30-Aug	Forum 2	Poster		1570805112	A 4-9 GHz Reconfigurable Differential Power Combiner/Splitter in 65nm CMOS	Haipeng Duan, Qin Chen and Xu Wu (Southeast University, China); Dongming Wang (Southeast University & National Mobile Communications Research Lab., China); Lianming Li (National Mobile Communications Research Lab., China)

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T4F.7	Interactive Forum	15:10-16:20	Tuesday	30-Aug	Forum 2	Poster		1570812071	A High Gain Vector-Sum Phase Shifter in 28nm CMOS for 5G Communication	Jinhyun Kim (Seoul National University, Korea (South)); Seongwoog Oh (Seoul National University & Institute New Media and Communications (INMC), Korea (South)); Jungsuek Oh (Seoul National University, Korea (South))
T4F.8	Interactive Forum	15:10-16:20	Tuesday	30-Aug	Forum 2	Poster		1570805173	A 28-GHz Low Insertion Loss Variation 4-Bit Phase Shifter	Juwon Kim and Byung-Wook Min (Yonsei University, Korea (South))
T4F.9	Interactive Forum	15:10-16:20	Tuesday	30-Aug	Forum 2	Poster		1570806609	29-To-65-GHz CMOS Amplifier With Tunable Frequency Response	Shunsuke Yabuki, Shinichiro Fujimoto, Shuhei Amakawa, Takeshi Yoshida and Minoru Fujishima (Hiroshima University, Japan)
T4F.10	Interactive Forum	15:10-16:20	Tuesday	30-Aug	Forum 2	Poster		1570801244	An E-Band Direct Conversion Transmitter With I/Q Calibration	Seunghoon Lee (POSTECH, Korea (South)); Kyunghwan Kim (Pohang University of Science and Technology (POSTECH), Korea (South)); Kangseop Lee and Ho-Jin Song (POSTECH, Korea (South))
T4F.11	Interactive Forum	15:10-16:20	Tuesday	30-Aug	Forum 2	Poster		1570804367	150-GHz Vector Modulator Phase Shifter in 65-nm CMOS	Ju-Hyeon Park, Ui-Gyu Choi and Jong-Ryul Yang (Yeungnam University, Korea (South))
T4F.12	Interactive Forum	15:10-16:20	Tuesday	30-Aug	Forum 2	Poster		1570805247	A Switchless Bidirectional Distributed Amplifier With 2-dB Gain Variation in One Decade Frequency Range in 90-nm CMOS Process	Wei Hsuan Tsai, Yunshan Wang and Huei Wang (National Taiwan University, Taiwan)
T4F.13	Interactive Forum	15:10-16:20	Tuesday	30-Aug	Forum 2	Poster		1570806970	A 19 GHz 5-Bit Low RMS Phase Error Passive Phase Shifter Using 0.18 μ m CMOS Process	Jeng-Han Tsai, Ying-Chen Chang and Pin-Jung Chen (National Taiwan Normal University, Taiwan)
T4F.14	Interactive Forum	15:10-16:20	Tuesday	30-Aug	Forum 2	Poster		1570801256	A Study of K-Band Gain-Boosted Amplifier Using Inductor Coupling	Yuki Hayashi, Nobuyuki Itoh and Kiyotaka Komoku (Okayama Prefectural University, Japan)
T4F.15	Interactive Forum	15:10-16:20	Tuesday	30-Aug	Forum 2	Poster		1570802197	Design of Diplexer-Matching Dual-Band Active Load Mixer With Master-Slave IF Active Filter	Wen Cheng Lai (National Taiwan University of Science and Technology, Taiwan)
T4F.16	Interactive Forum	15:10-16:20	Tuesday	30-Aug	Forum 2	Poster		1570807272	Design of a Coplanar Waveguide for X-Band Radar Antenna Elements	Jeongmin Cho (University of Hongik, Korea (South)); Doyoung Jang (Hongik University, Korea (South), Korea (South)); Chang-Hyun Lee and Hyun Kim (LIG Nex1 Company Ltd., Korea (South)); Hosung Choo (Hongik University, Korea (South))
T4F.17	Interactive Forum	15:10-16:20	Tuesday	30-Aug	Forum 2	Poster		1570807301	Design of a High-Gain Antipodal Vivaldi Antenna Using Periodic Diagonal Slots and an Elliptical Director for Microwave Power Transmission Systems	Sungsik Ohm and Eunjung Kang (Hongik University, Korea (South)); Chulhun Seo (Soongsil University, Korea (South)); Hosung Choo (Hongik University, Korea (South))

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T4F.18	Interactive Forum	15:10-16:20	Tuesday	30-Aug	Forum 2	Poster		1570801298	Modeling of Hot-Via Technology for System-In-Package at Millimeter-Wave Frequencies	Yi-Fan Tsao and Yuan Wang (National Yang Ming Chiao Tung University, Taiwan); Serguei Chevtchenko (Ferdinand-Braun-Institut, Leibniz-Institut für Höchstfrequenztechnik, Germany); Mihaela Wolf (Ferdinand-Braun-Institut Leibniz-Institut für Höchstfrequenztechnik, Germany); Joachim. Wuerfl (Ferdinand-Braun-Institut, Germany); Heng-Tung Hsu (National Chiao Tung University & International College of Semiconductor Technology, Taiwan)
T4F.19	Interactive Forum	15:10-16:20	Tuesday	30-Aug	Forum 2	Poster		1570807603	Grating Lobe Suppression in Wide-Angle Scanning Phased Array With Large Inter Element Spacing by Subarray Rotation	Hyunyoung Cho and Jeong-Wook Kim (KAIST, Korea (South)); Sol Kim (Korea Advanced Institute Science and Technology(KAIST), Korea (South)); Ji-Hoon Lee, Ju-Ik Oh and Jong-Won Yu (KAIST, Korea (South))
T4F.20	Interactive Forum	15:10-16:20	Tuesday	30-Aug	Forum 2	Poster		1570806462	An Accurate and Instantaneous Permittivity Measurement Using Modified Multi-Line Method	Junhyuk Ahn, Myeonggin Hwang and Youngno Youn (Pohang University of Science and Technology, Korea (South)); Wonbin Hong (Pohang University of Science and Technology (POSTECH), Korea (South))
T4F.21	Interactive Forum	15:10-16:20	Tuesday	30-Aug	Forum 2	Poster		1570807125	Circularly Polarized High-Gain Patch Antenna Using Higher-Order Mode for GPS Applications	Eunjung Kang and Hosung Choo (Hongik University, Korea (South))
T4F.22	Interactive Forum	15:10-16:20	Tuesday	30-Aug	Forum 2	Poster		1570805246	Frequency Tunable Microstrip Patch Antenna Based on Liquid Crystal at Millimeter-Wave Band	Jinki Park, Ye-Eun Chi and Seong-Ook Park (Korea Advanced Institute of Science and Technology, Korea (South))
T4F.23	Interactive Forum	15:10-16:20	Tuesday	30-Aug	Forum 2	Poster		1570801409	Sub-Terahertz Electromagnetic-Wave Absorber for Future Wireless Communication	Sangyeop Lee (Tokyo Institute of Technology, Japan); Masao Fujita and Masayuki Toyoda (Maxell, Ltd., Japan); Kyoya Takano (Tokyo University of Science, Japan); Shinsuke Hara (National Institute of Information and Communications Technology, Japan); Issei Watanabe (National Institute of Information and Communications Technology, Japan); Akifumi Kasamatsu (National Institute of Information and Communications Technology, Japan); Hiroyuki Ito (Tokyo Institute of Technology, Japan)
T4F.24	Interactive Forum	15:10-16:20	Tuesday	30-Aug	Forum 2	Poster		1570801486	Design of Power Detector for mm-Wave Beamforming Systems	Soo-Chang Chae, Chung-geun Jang, Soo-Jeong Kim, Ki-Jin Kim and Kwang-Ho Ahn (Korea Electronics Technology Institute, Korea (South))
T4F.25	Interactive Forum	15:10-16:20	Tuesday	30-Aug	Forum 2	Poster		1570805202	Evaluation of Partial Denture Management RFID System Using a Simple Phantom Model	Yuji Takatera, Eisai Nagahari and Bowen Dang (Tohoku University, Japan); Mizuki Motoyoshi (Shizuoka Institute of Science and Technology, Japan); Junyi Xu, Hiroyasu Sato, Qiang Chen and Noriharu Suematsu (Tohoku University, Japan)
T4F.26	Interactive Forum	15:10-16:20	Tuesday	30-Aug	Forum 2	Poster		1570807113	Study of an Atmospheric Refractivity Estimation Using AREPS and Genetic Algorithm	Doyoung Jang (Hongik University, Korea (South), Korea (South)); Jongmann Kim (Yonsei University & ADD, Korea (South)); Yong Bae Park (Ajou University, Korea (South)); Hosung Choo (Hongik University, Korea (South))
T4F.27	Interactive Forum	15:10-16:20	Tuesday	30-Aug	Forum 2	Poster		1570801215	Fast Anomaly Detection via the Orthogonality Sampling Method in Microwave Imaging	Sangwoo Kang (Korea Advanced Institute of Science and Technology, Korea (South)); Seongje Chae and Won-Kwang Park (Kookmin University, Korea (South))
T4F.28	Interactive Forum	15:10-16:20	Tuesday	30-Aug	Forum 2	Poster		1570803560	Vital Signal Detection for Continuous-Wave Radar Sensor Using Compensation Technique	Ah-Jung Jang, In-Seong Lee, Jae Young Sim and Jong-Ryul Yang (Yeungnam University, Korea (South))

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T4F.29	Interactive Forum	15:10-16:20	Tuesday	30-Aug	Forum 2	Poster		1570803246	Cooperative Microwave Power Transfer Using Beam Scanning Scheme	Minjae Ahn and Hyunchul Ku (Konkuk University, Korea (South))
T4F.30	Interactive Forum	15:10-16:20	Tuesday	30-Aug	Forum 2	Poster		1570807216	Correction of Multilayer Semiconductor Process Parameters for Electromagnetic Field Analysis in the 300-GHz Band	Rion Shinya (Tokyo University of Science, Japan); Shinsuke Hara and Akifumi Kasamatsu (National Institute of Information and Communications Technology, Japan); Yohtaro Umeda and Kyoya Takano (Tokyo University of Science, Japan)
T4F.31	Interactive Forum	15:10-16:20	Tuesday	30-Aug	Forum 2	Poster		1570801290	Optimization of Deep Learning-Based BSIM-CMG I-V Parameter Extraction in Seconds	Fredo P Chavez (Macquarie University, Australia); Ming-Yen Kao (University of California Berkeley, Berkeley, US, USA); Chenming Hu (University of California Berkeley USA, USA); Sourabh Khandelwal (Macquarie University, Australia)
In person Interactive Forum will be held at Forum 2, while the uploaded poster videos will be played at Forum 1.										
T5A.1	Technologies for mm-wave/THz Circuits and Systems	16:20-16:40	Tuesday	30-Aug	Forum 1	Oral	Invited	1570816813	SiGe BiCMOS Technology With Advanced Integration Solutions for mm-Wave and THz Applications	Mehmet Kaynak (IHP, Germany & IHP Microelectronics, Turkey)
T5A.2	Technologies for mm-wave/THz Circuits and Systems	16:40-17:00	Tuesday	30-Aug	Forum 1	Oral	Invited	1570807102	A Compact and Low-Cost THz SoP Heterogeneous Integration Platform	Chun-Hsing Li (National Taiwan University, Taiwan); Te-Yen Chiu (National Tsing Hua University, Taiwan)
T5A.3	Technologies for mm-wave/THz Circuits and Systems	17:00-17:20	Tuesday	30-Aug	Forum 1	Oral		1570805120	Investigation of BEoL Integrated Ferroelectric Thin-Film HfO2 for mmWave Varactor Applications	Sukhrob Abdulazhanov and Dang Khoa Huynh (Fraunhofer IPMS, Germany); Quang Huy Le (Fraunhofer IPMS & Brandenburg University of Technology, Germany); David Lehninger and Thomas Kämpfe (Fraunhofer IPMS, Germany); Gerald Gerlach (Technische Universität Dresden, Germany)
T5A.4	Technologies for mm-wave/THz Circuits and Systems	17:20-17:40	Tuesday	30-Aug	Forum 1	Oral		1570807070	Design of Wideband CMOS ESD Protection Circuit Using Mutually Coupled Inductor	Hyunyeon Kim (Sogang University, Korea (South)); Jaehoon Jeong (Sogang University, Korea, Korea (South)); Jinho Jeong (Sogang University, Korea (South))
T5A.5	Technologies for mm-wave/THz Circuits and Systems	17:40-18:00	Tuesday	30-Aug	Forum 1	Oral	Invited	1570801437	Chip-Level High-Frequency EMC Strategies and Measurement Techniques	Yin-Cheng Chang (Taiwan Semiconductor Research Institute, NARLabs, Taiwan); Ping-Yi Wang (National Tsing Hua University, Taiwan); Ta-Yeh Lin and Chaoping Hsieh (Taiwan Semiconductor Research Institute, National Applied Research Laboratories, Taiwan); Da-Chiang Chang (Chip Implementation Center, National Applied Research Laboratories, Taiwan); Shawn S. H. Hsu (National Tsing Hua University, Taiwan)
T5B.1	Wireless Power Transfer and Power Management	16:20-16:40	Tuesday	30-Aug	Vernazza	Oral	Invited	1570804176	Wireless Powering and Communication With Miniaturized Implantable Devices	Sanghoek Kim (Kyung Hee University, Korea (South))
T5B.2	Wireless Power Transfer and Power Management	16:40-17:00	Tuesday	30-Aug	Vernazza	Oral	Invited	1570805019	Duty-Cycled Wireless Power Transfer for Biomedical Implants	Muhammad Abrar Akram (New York University Abu Dhabi, Abu Dhabi, UAE, United Arab Emirates); Kai-Wen Yang (Johns Hopkins University, Baltimore, United Arab Emirates); Sohyung Ha (New York University Abu Dhabi, United Arab Emirates)
T5B.3	Wireless Power Transfer and Power Management	17:00-17:20	Tuesday	30-Aug	Vernazza	Oral		1570806504	An 87% Efficient Wireless Powered System Using Adaptively Controlled Active Rectifier for Smart Electronics	Chamith Chandrarathna Seneke Ralalage (Kyung Hee University, School of Electronics and Information, Korea (South))

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T5B.4	Wireless Power Transfer and Power Management	17:20-17:40	Tuesday	30-Aug	Vernazza	Oral	Invited	1570806343	Research of Dual-Path DC-DC Power Converter	Se-Un Shin (UNIST, Korea (South))
T5B.5	Wireless Power Transfer and Power Management	17:40-18:00	Tuesday	30-Aug	Vernazza	Oral	Invited	1570801678	3D-Integrated Beyond-10MHz Buck Converter With Fe-Based Metal Composite Magnetic Core Inductor	Kousuke Miyaji (Shinshu University, Japan); Makoto Sonehara (Shinshu University & Faculty of Engineering, Japan); Toshiro Sato (Shinshu University, Japan)
W1A.1	mm-Wave/THz Signal Generation	09:00-09:20	Wednesday	31-Aug	Forum 1	Oral	Invited	1570805513	Progress in Silicon Based Millimeter-Wave and THz Signal Sources	Zhe Chen (Southeast University, China); Peigen Zhou (Southeast University & State Key Laboratory of Millimeter Wave, China); Rui Zhang, Jixin Chen, Pinpin Yan, Debin Hou and Wei Hong (Southeast University, China)
W1A.2	mm-Wave/THz Signal Generation	09:20-09:40	Wednesday	31-Aug	Forum 1	Oral		1570807408	Triple-Push VCO With Robust Start-Up Using Tri-Core in CMOS for 6G Communication	Seongwoog Oh (Seoul National University & Institute New Media and Communications (INMC), Korea (South)); Jungsuek Oh (Seoul National University, Korea (South))
W1A.3	mm-Wave/THz Signal Generation	09:40-10:00	Wednesday	31-Aug	Forum 1	Oral	Invited	1570806792	Design of Waveguide-Based H-Band Source Module Using InP HBT Integrated Circuits	Yeongchae Jeon, Yeongmin Jang, Hyungeun Kim and Jinho Jeong (Sogang University, Korea (South))
W1A.4	mm-Wave/THz Signal Generation	10:00-10:20	Wednesday	31-Aug	Forum 1	Oral	Invited	1570805242	A Compact Mm-Wave Multi-Band VCO Based on Triple-Mode Resonator for 5G and Beyond	Mohammad Chahardori (Washington State University, USA); Md Aminul Hoque (Washington State University, India); Mohammad Ali Mokri and Deukhyoun Heo (Washington State University, USA)
W1B.1	Antennas and Metasurfaces	09:00-09:20	Wednesday	31-Aug	Vernazza	Oral		1570806445	Sensor-Integrated RIS Unit Element Featuring Mutual Coupling Reduction	Myeonggin Hwang, Youngno Youn, Suho Chang, Daehyeon Kim, Cheonga Lee and Donggeun An (Pohang University of Science and Technology, Korea (South)); Wonbin Hong (Pohang University of Science and Technology (POSTECH), Korea (South))
W1B.2	Antennas and Metasurfaces	09:20-09:40	Wednesday	31-Aug	Vernazza	Oral		1570805192	Reconfigurable Metasurface With an Intermediate Phase Shift Scheme for Beam Steering	Sebastian Johan Verho, Van Thang Nguyen, Philip A. Dzagbletey and Jae-Young Chung (Seoul National University of Science and Technology, Korea (South))
W1B.3	Antennas and Metasurfaces	09:40-10:00	Wednesday	31-Aug	Vernazza	Oral		1570803602	100GHz-Band On-Chip 1x2 Phased Array Antenna Fed by Hybrid Coupler on 45nm CMOS SOI	Jean Temga (Tohoku University & RIEC, Japan); Mizuki Motoyoshi (Shizuoka Institute of Science and Technology, Japan); Noriharu Suematsu (Tohoku University, Japan)
W1B.4	Antennas and Metasurfaces	10:00-10:20	Wednesday	31-Aug	Vernazza	Oral		1570808589	Design of Chip Integrated Circularly Polarized Phased Array System	Jeong-Wook Kim (KAIST, Korea (South)); Sol Kim (Korea Advanced Institute Science and Technology(KAIST), Korea (South)); Hyunyoung Cho (KAIST, Korea (South)); Soo-Chang Chae (Korea Electronics Technology Institute, Korea (South)); ByungKuon Ahn and Jong-Won Yu (KAIST, Korea (South))
W2A.1	Advanced Power Amplifier Designs	10:40-11:00	Wednesday	31-Aug	Forum 1	Oral	Invited	1570805187	A 38 GHz Ultra-Compact High Power Density CMOS Power Amplifier	Jeng-Han Tsai, Chun-Lin Chen and Chuan-Chi Hung (National Taiwan Normal University, Taiwan)

Session Code	Session Title	Time	Day	Date	Session Room	Pres Type	Remarks	Paper No.	Paper Title	Authors/ Speakers with affiliation and country
W2A.2	Advanced Power Amplifier Designs	11:00-11:20	Wednesday	31-Aug	Forum 1	Oral	Invited	1570806741	Deep Learning Enabled mmWave PA and Antenna Design	Kaushik Sengupta, Zheng Liu and Emir Karahan (Princeton University, USA)
W2A.3	Advanced Power Amplifier Designs	11:20-11:40	Wednesday	31-Aug	Forum 1	Oral		1570802991	A 57-64 GHz Two-Way Parallel-Combined Power Amplifier With 16.6 dBm Psat and 23.6% Peak PAE in 40nm Bulk CMOS	Junjie Gu, Haoqi Qin, Guixiang Jin and Hao Xu (Fudan University, China); Rui Yin and XiaoLiang Shen (National Integrated Circuit Innovation Center, China); Na Yan (State Key Lab of ASIC & System, Fudan University, China)
W2A.4	Advanced Power Amplifier Designs	11:40-12:00	Wednesday	31-Aug	Forum 1	Oral	Invited	1570806916	A Wideband E-Band Power Amplifier Utilizing Interstage Networks With Low-Coupling Transformers	Jung-Dong Park and Van-Son Trinh (Dongguk University, Korea (South))
W2B.1	Passive Components	10:40-11:00	Wednesday	31-Aug	Vernazza	Oral	Invited	1570807222	Spatial Separations of Multiple Harmonics	Gangil Byun (Ulsan National Institute of Science and Technology (UNIST), Korea (South))
W2B.2	Passive Components	11:00-11:20	Wednesday	31-Aug	Vernazza	Oral		1570808074	Multi-Beam Metasurface Scheme Using Polarization Matching for Improving Resource Efficiency	Sol Kim (Korea Advanced Institute Science and Technology(KAIST), Korea (South)); Hyunyoung Cho, Jeong-Wook Kim, Hyo-Won Lee and Jong-Won Yu (KAIST, Korea (South))
W2B.3	Passive Components	11:20-11:40	Wednesday	31-Aug	Vernazza	Oral		1570804105	Microstrip Line Non-Reciprocal Bandpass Filter With Tunable Center Frequency	Girdhari Chaudhary, Jaehun Lee and Phanam Pech (Jeonbuk National University, Korea (South)); Yongchae Jeong (Chonbuk National University, Korea (South))
W2B.4	Passive Components	11:40-12:00	Wednesday	31-Aug	Vernazza	Oral	Invited	1570805153	Study on Loss of Varactor-Loaded Tunable Microstrip Antennas Considering Q Factor	Eisuke Nishiyama, Ryo Araki and Ichihiko Toyoda (Saga University, Japan)
W3A.1	Advanced mm-Wave/THz Circuit Design Techniques	13:30-13:50	Wednesday	31-Aug	Forum 1	Oral	Invited	1570805261	RF Front-Ends for 6G Wireless Communication: Challenges and Opportunities	Munkyo Seo (Sungkyunkwan University, Korea (South))
W3A.2	Advanced mm-Wave/THz Circuit Design Techniques	13:50-4:10	Wednesday	31-Aug	Forum 1	Oral		1570805249	A D-Band Variable-Gain LNA With Triple-Inductive Coupling Gm-Boosting	Ilgwon Kim (KAIST, Korea (South))
W3A.3	Advanced mm-Wave/THz Circuit Design Techniques	14:10-14:30	Wednesday	31-Aug	Forum 1	Oral		1570806787	A Mm-Wave CMOS Feed-Forward Amplifier Based on a Quasi-Balanced Structure	Minjae Jung (University of California, San Diego, USA); Gyoung June Jeon and Byung-Wook Min (Yonsei University, Korea (South))
W3A.4	Advanced mm-Wave/THz Circuit Design Techniques	14:30-14:50	Wednesday	31-Aug	Forum 1	Oral		1570805097	Mm-Wave CMOS Matrix Distributed Amplifier for Ultra-Wideband Applications	Gunwoo Park, Minwoo Kim and Sanggeun Jeon (Korea University, Korea (South))

Session Code	Session Title	Time	Day	Date	Session Room	Pres Type	Remarks	Paper No.	Paper Title	Authors/ Speakers with affiliation and country
W3A.5	Advanced mm-Wave/THz Circuit Design Techniques	14:50-15:10	Wednesday	31-Aug	Forum 1	Oral		1570801374	A Novel Design of Gain-Boosting Amplifier for Gain-Bandwidth Improvement	Jiseul Kim, Chan-Gyu Choi and Ho-Jin Song (POSTECH, Korea (South))
W3B.1	Emerging Technologies, Circuits, Systems, and Applications	13:30-13:50	Wednesday	31-Aug	Vernazza	Oral	Invited	1570803555	A Wearable Oscillator Tag for Heart Health Monitoring	Tzyy-Sheng Jason Horng (National Sun Yat-sen University, Taiwan); Rezki El Arif (Universitas Brawijaya, Malang & National Sun Yat-Sen University, Kaohsiung, Taiwan); Wei-Chih Su (National Sun Yat-sen University, Taiwan)
W3B.2	Emerging Technologies, Circuits, Systems, and Applications	13:50-14:10	Wednesday	31-Aug	Vernazza	Oral	Invited	1570807417	Planar Microwave Sensors for Measuring Materials Composition and Mechanical Parameters	Kamran Ghorbani and Amir Ebrahimi (RMIT University, Australia)
W3B.3	Emerging Technologies, Circuits, Systems, and Applications	14:10-14:30	Wednesday	31-Aug	Vernazza	Oral	Invited	1570805419	Emerging Computing Systems Utilizing Electro-Magnetic Near-Field Connectivity	Noriyuki Miura (Osaka University, Japan)
W3B.4	Emerging Technologies, Circuits, Systems, and Applications	14:30-14:50	Wednesday	31-Aug	Vernazza	Oral	Invited	1570803306	140 GHz Silicon I/O Interconnect Exploiting Metadevices for Short-Range OOK Communications	Hao Yu (SUSTech, China); Yuan Liang (Nanyang Technological University, Singapore); Hao Chi Zhang and Tie Jun Cui (Southeast University, China)
W3B.5	Emerging Technologies, Circuits, Systems, and Applications	14:50-15:10	Wednesday	31-Aug	Vernazza	Oral	Invited	1570805198	RF Front-End Transmitting System for Agricultural Applications	Phanam Pech, Samdy Saron, Girdhari Chaudhary, Yu Kyeong Shin and Jun Gu Lee (Jeonbuk National University, Korea (South)); Yongchae Jeong (Chonbuk National University, Korea (South))
W4A.1	mm-Wave/THz Systems and Applications	15:30-15:50	Wednesday	31-Aug	Forum 1	Oral	Invited	1570801220	Millimeter-Wave/THz CMOS Phased-Array Transceiver for 5G and Beyond	Kenichi Okada (Tokyo Institute of Technology, Japan)
W4A.2	mm-Wave/THz Systems and Applications	15:50-16:10	Wednesday	31-Aug	Forum 1	Oral	Invited	1570800985	Recent Researches of Microwave and Millimeter-Wave System Applications at National Taiwan University	Huei Wang (National Taiwan University, Taiwan)
W4A.3	mm-Wave/THz Systems and Applications	16:10-16:30	Wednesday	31-Aug	Forum 1	Oral	Invited	1570805256	Potential of Terahertz Communication Not Limited to Short-Range Communication	Minoru Fujishima (Hiroshima University, Japan)
W4A.4	mm-Wave/THz Systems and Applications	16:30-16:50	Wednesday	31-Aug	Forum 1	Oral	Invited	1570807237	A 260GHz Wireless Transmission Over 100m for Beyond 5G Xhaul Networks	Soek-Bong Hyun (ETRI, Korea (South))
W4A.5	mm-Wave/THz Systems and Applications	16:50-17:10	Wednesday	31-Aug	Forum 1	Oral	Invited	1570801408	300-GHz Self-Heterodyne-Mixing-Receiver-Based Wireless Data Transmission	Sangyeop Lee (Hiroshima University); Yohei Morishita (Panasonic Industry Co., Ltd.); Shuhei Amakawa, Takeshi Yoshida and Minoru Fujishima (Hiroshima University, Japan)

Session Code	Session Title	Time	Day	Date	Session Room	Pres Type	Remarks	Paper No.	Paper Title	Authors/ Speakers with affiliation and country
W4B.1	Radar and Imaging	15:30-15:50	Wednesday	31-Aug	Vernazza	Oral	Invited	1570805126	Multiple-Input Multiple-Output-Beam Mixing Radar for Fast Sweeping Applications	Tsai Zuo-Min (National Yang Ming Chiao Tung University & Institute of Communication Engineering, Taiwan)
W4B.2	Radar and Imaging	15:50-16:10	Wednesday	31-Aug	Vernazza	Oral	Invited	1570805240	Feature Extraction for Target Classification Using an FMCW Radar Sensor	Sungho Lee (Korea Electronics Technology Institute, Korea (South))
W4B.3	Radar and Imaging	16:10-16:30	Wednesday	31-Aug	Vernazza	Oral		1570806016	Compact Concentric Antenna Module Integrated With Coplanar T/Rx Array and Multi-Channel CMOS Radar IC	JiHo Lee, Hyun-Jun Dong, Hakmin Lee and Woo Hee Lim (Chung-Ang University, Korea (South)); Donghyun Baek (Chung-ang University, Korea (South)); Han Lim Lee (Chung-Ang University, Korea (South))
W4B.4	Radar and Imaging	16:30-16:50	Wednesday	31-Aug	Vernazza	Oral		1570806471	Frequency Discrimination Based on the Different Number of Peaks in Envelope Detection of Two-Tone CW Radar	Jae Young Sim and Jong-Ryul Yang (Yeungnam University, Korea (South))
W4B.5	Radar and Imaging	16:50-17:10	Wednesday	31-Aug	Vernazza	Oral		1570801304	Terahertz 3D Imaging With a 300-GHz CMOS Multi-Chip Array Detector	Kiryong Song (Samsung Electronics, Korea (South)); Doyoon Kim (Korea University, Korea (South)); Jungsoo Kim (ETRI, Korea (South)); Jai Heon Cho (Samsung Electronics, Korea (South)); Jae-Sung Rieh (Korea University, Korea (South))