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)
Session Chair(s):	Ibrahim Abdo (NTT, Inc., Japan) Jeongsoo Park (Kumoh National Institute of Technology, Korea)

[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, Xin An and 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, Sascha Breun, Marco Kawan, Kai Scheller, Robert Weigel and 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 Laboratory 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 Laboratory of Mobile Network and Mobile Multimedia Technology, China); Keqing Ouyang and Zhijun Long (Sanechips Technology Co. Ltd, China)