



APMC 2025

2025 ASIA-PACIFIC MICROWAVE CONFERENCE

DEC 2 - 5, 2025 | ICC JEJU, Jeju Island, Korea

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)
Session Chair(s):	Maria Fuwa (AIST, Japan) Dongsu Kim (KETI, Korea)

[FF4-1] [Invited] 15:20-15:40

Ultra-Low Power Wideband Cryogenic CMOS Noise-Canceling LNAs for Quantum Computing
Shawn S.H. Hsu and Mahesh Kumar Chaubey (National Tsing Hua University, Taiwan); Yin-Cheng Chang, Po-Chang Wu and Hann-Huei Tsai (Taiwan Semiconductor Research Institute, NIAR, Taiwan)

[FF4-2] 15:40-16:00

K-Band Cryogenic VCO in 90-nm CMOS Process
Chun Hsuan Fan, Hsiao-Chin Chen and Yan-Ming Chang (National Taiwan University of Science and Technology, Taiwan); Min-Jui Lin and Jiun-Yun Li (National Taiwan University, Taiwan); 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 Hogyom 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, Taehwan Jang, Hyeonji Song 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, Tomonori Arakawa, Noriyoshi Hashimoto, Junta Igarashi, Shota Norimoto, Makoto Minohara and Hiroyuki Kayano (National Institute of Advanced Industrial Science and Technology (AIST), Japan)