



# APMC 2025

2025 ASIA-PACIFIC MICROWAVE CONFERENCE

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

<b>Session Title:</b>	<b>[FF4] Emerging Devices and Materials for RF Systems</b>
<b>Session Date:</b>	<b>December 5 (Fri.), 2025</b>
<b>Session Time:</b>	<b>15:20-17:00</b>
<b>Session Room:</b>	<b>Room F (302)</b>

**[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)