



APMC 2025

2025 ASIA-PACIFIC MICROWAVE CONFERENCE

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

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)