



APMC 2025

2025 ASIA-PACIFIC MICROWAVE CONFERENCE

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

Session Title:

[FF2] [SS] AI-Driven Design and Signal Processing in RF, mmWave, and THz Systems

Session Date:

December 5 (Fri.), 2025

Session Time:

10:30-12:10

Session Room:

Room F (302)

[FF2-1]

10:30-10:50

Inverse Design of on-Chip Millimeter-Wave Wideband Filter via Equivalent Circuit-Based Learning Scheme

Jingwei Zhang (Zhejiang University, China)

[FF2-2]

10:50-11:10

Evaluating the Generalization of Supervised and Unsupervised Spectrum Anomaly Detection on Unseen Frequency Bands

Byungkwan Kim (Chungnam National University, Korea (South))

[FF2-3]

11:10-11:30

Y-Slot Patch Antenna Using MLP Neural Networks Trained on ADS Circuit Datasets

Muhammad Kamran Shereen, Xiaoguang Liu and Xiaohu Wu (Southern University of Science and Technology, China); Ayesha Naseem (FAMU-FSU College of Engineering Tallahassee, Florida, USA); Muhammad Uzair (Florida A&M University, USA)

[FF2-4]

11:30-11:50

Self-Supervised Deep Learning for THz-TDS Image Denoising

Seung-Hwan Jung and Woon-Ha Yeo (Sahmyook University, Korea (South)); Seung Jae Oh (Yonsei University, Korea (South)); Han-Cheol Ryu (Sahmyook University, Korea (South))

[FF2-5]

11:50-12:10

Analyzing the Effects of Raised-Cosine Tapering on WVD-CNN Detection of Pulsed Chirp Signals

Yunbae Kim (Electronics and Telecommunications Research Institute, Korea (South)); Jonghun Yoon (Electronics and Telecommunications Research Institute (ETRI), Korea (South)); Bongsu Kim (ETRI, Korea (South))