

Session Title: [TE2] [SS] AI and Emerging Techniques in Antenna Design for IoT

and Microwave Systems

Session Date: December 4 (Thu.), 2025

Session Time: 10:30-12:10
Session Room: Room E (301)

Session Chair(s): Le Minh Thuy (Hanoi University of Science and Technology, Vietnam)

Sangkil Kim (Pusan National University, Korea)

[TE2-1] 10:30-10:50

A High SNR 2.4 GHz PCB Antenna Design for Compact IoT Devices

Anh Le Duc (Hanoi University of Science and Technology, Vietnam); Tam Nguyen Thanh (Le Quy Don Technical University, Vietnam); Quoc Cuong Nguyen (Hanoi University of Science and Technology, Vietnam); Minh Thuy Le (School of Electrical & Electronic Engineering, Vietnam & Hanoi University of Science and Technology, Vietnam)

[TE2-2] 10:50-11:10

A Circularly Polarized Filtenna for IoT Monitoring Applications

Quang Minh Pham, Quoc Cuong Nguyen and Nguyen Xuan Quyen (Hanoi University of Science and Technology, Vietnam); Minh Thuy Le (School of Electrical & Electronic Engineering, Vietnam & Hanoi University of Science and Technology, Vietnam)

[TE2-3] 11:10-11:30

Multilayer CPWG-to-Waveguide Transition for Circularly Polarized Ku-Band Antenna Systems

Hoyong Kim, Gyoungdeuk Kim and Sangkil Kim (Pusan National University, Korea (South))

[TE2-4] 11:30-11:50

A High Aperture Efficiency Leaky Wave Antenna with a Nonlinear Elliptical Slot Distribution for High Power Microwave Applications

Wonkyo Kim, Mee-Su Lee and Dong-Hoon Lee (Chungnam National University, Korea (South)); Junyeon Kim and Donggeun Seo (Agency for Defense Development, Korea (South)); Ick-Jae Yoon (Chungnam National University, Korea (South))

[TE2-5] 11:50-12:10

Diffusion Model Driven Inverse Design of Microstrip Patch Antenna Enabling Extendable FOM Modeling

Minje Kim, Jungsuek Oh, Taeyeong Yoon, Euiho Shin and Hooyoung Kim (Seoul National University, Korea (South))