

Session Title: [WE2] [SS] EMC Test and Noise Reduction

Session Date: December 3 (Wed.), 2025

Session Time: 15:40-17:20
Session Room: Room E (301)

Session Chair(s): Niamat Hussain (University of Glasgow, UK)

Seungyoung Ahn (KAIST, Korea)

[WE2-1] 15:40-16:00

#### Phase Retrieval Method Using Dual Synchronous Receivers for EMI Scanning Applications

Hailing Zhao (Southwest University of Science and Technology, China & Mianyang, China); Anfeng Huang (DeTooLIC Technology Co., China); Xiaohe Chen (China University of Petroleum, China); Shufang Li (Beijing University of Posts and Telecommunications, China); Yin Sun and Xu Wang (DeTooLIC Technology Co., China); Jun Fan (Missouri University of Science and Technology, USA)

[WE2-2] 16:00-16:20

## Electromagnetic Immunity Analysis for Wireless Communication Devices Using near-Field Noise Injection Testing

Naeun Kim (Kwangwoon University, Korea (South) & Electronics and Communications Engineering, Korea (South)); Eakhwan Song (Kwangwoon University, Korea (South))

[WE2-3] 16:20-16:40

# Analysis of Inductance Reduction by Reactive Shield Coil and Methodology for Eliminating RX-Side Series Capacitor in LCC-LCC WPT Systems

Yujun Shin (Keimyung University, Korea (South)); Seongho Woo (Korea Advanced Institute of Science and Technology, Korea (South))

[WE2-4] 16:40-17:00

#### Sheet Impedance Dependence on Conductive Noise Suppression Performance of Composite Sheet with Carbonized Rice Husk

Eito Kamano (Tohoku University, Japan); Seiji Kumagai and Yusuke Abe (Akita University, Japan); Takamichi Miyazaki and Saijian Ajia (Tohoku University, Japan); Motoshi Tanaka (Akita University, Japan); Yasushi Endo and Sho Muroga (Tohoku University, Japan)

[WE2-5] 17:00-17:20

### A Study on the Noise Source Analysis of Capacitance Differences Between Single IGBT and Module for Automotive Power Systems

Jaewon Rhee, Sanguk Lee, Seungmin Ha, Hongseok Kim and Jiseong Kim (Korea Advanced Institute of Science and Technology, Korea (South)); Dongil Shin, Semin Woo and Seokhyeon Son (Hyundai Motor Company, Korea (South)); Seungyoung Ahn (Korea Advanced Institute of Science and Technology, Korea (South))