



ANNUAL CONFERENCE OF THE IEEE INDUSTRIAL ELECTRONICS SOCIETY

Chicago | Illinois, November 3-6, 2024

Special Session on

Electromagnetic Interference and Security in Power Electronic Systems

Organized and co-chaired by:

Prof. Hong Li, Beijing Jiaotong University, Beijing, China

Prof. Shuo Wang, University of Florida, USA

Dr. Yitao Liu, Shenzhen University, Shenzhen, China

Dr. Zhenyu Zhao, National University of Singapore, Singapore

Dr. Yanwei Jiang, Fuzhou University, China.

hli@bjtu.edu.cn

shuowang@ieee.org

liuyt@szu.edu.cn

zhaozy@nus.edu.sg

jiang_yanwei@fzu.edu.cn

Call for Papers

Technical Outline of the Session and Topics:

Power electronics, which are essential for converting and controlling electrical power efficiently, have become ubiquitous in various applications, from renewable energy systems and electric vehicles to industrial and consumer electronics. However, the very nature of these systems, especially with the integration of Wide Bandgap (WBG) technologies, introduces significant challenges in terms of EMI and security. Although several electromagnetic compatibility standards have included immunity tests for different applications, the electromagnetic susceptibility requirements against EMI attacks are usually not covered. The development of high-power electromagnetic sources leads to a higher likelihood of EMI attacks on power electronics-related critical assets. In view of these, this special session aims to share the latest research progress of electromagnetic interference and security in WBG power electronics.

Topics of the Session include, but are not limited to:

- EMI prediction and measurement
- Conducted/radiated EMI modeling and analysis
- EMI mitigation and electromagnetic components integration
- Electromagnetic security testing and solution
- Computational electromagnetics for electromagnetic security analysis
- Application of artificial intelligence in EMI and security

Author's schedule:

Deadline for submission of special session papers	April 15, 2024
Notification of acceptance	June 10, 2024
Deadline for submission of final manuscript	July 01, 2024
Early submission is highly encouraged for early decision notifications!	

All the instructions for paper submission are included in the conference website:

www.iecon-2024.org

