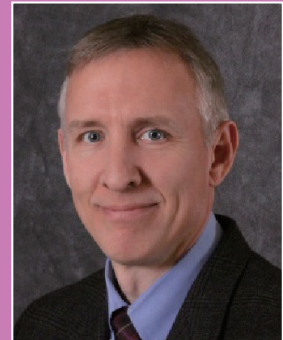




03 Latest Technology Updates for Automotive, Simulation, and Standards



Dr. Todd Hubing

PERSPECTIVE

- 08** Measuring Electromagnetic Information Leakage *Hideaki Sone*
- 10** EMC Challenges in 5G Communication *Er-Ping Li*
- 13** Key EMC Technologies for High-voltage Electrical Drive System of New Energy Vehicle *Xiaofan Zhao*

PROFESSIONAL RESEARCH

- 16** Intentional Radiated Interference: On the Worst-Case Scenario for Wiring in Smart Buildings *Sergio A. Pignari, Tao Liang, Giordano Spadacini, et al.*
- 22** Marriage of Electromagnetics, Computational Electromagnetics, and Electromagnetic Compatibility *W.C. Chew*
- 30** De-risking Resonances in Single Conductor Structures, such as 'Ground' *Keith Armstrong*
- 39** HEMP Filter Design To Meet MIL-STD-188-125 PCI Test Requirements *Paul Currie*
- 43** Discussion on Uncertainty Evaluation of Automotive Components Radiation Emission Test *Yuan Liu*

Competent Authorities: Ministry of Industry and Information Technology of PRC

Sponsor: China Electronics Standardization Institute(CESI)

Publication No: CN 11-3452/TM
ISSN 1005-9776

Editor,Publisher: SAFETY & EMC Magazine Editorial Office

Chief Editor: Wang Shuhua
Executive Editor: Wang Shuhua

Address: No.1 Andingmen Dongdajie,Beijing, China

Post Code: 100007
Tel: +86-10-64102629
+86-10-64102630
Fax: +86-10-64102617

Email: Wangsh@cesi.cn

Http: //www.safetyandemc.com



Contents

MATERIAL APPLICATION IN EMC

- 50** DGS-based High Frequency Common-mode Noise Filtering for SI/PI and EMC
Richard Xian-Ke Gao
- 55** Frequency Selective Surface with High Selectivity by Adding an Inductive Layer
Muaad Hussein, Zhenghua Tang, Yi Huang, Jiafeng Zhou
- 62** Numerical Simulation for the Effect of Embedded High Dielectric Constant Material on Signal Integrity of Via Transition
Hu Yusheng

TESTING & MEASUREMENT

- 67** 5G Millimeter Wave Devices: The Impact on EMC Compliance Tests
James Young, Jari Vikstedt
- 73** EMC Measuring Chamber with Unique Measuring Technology
Jakob Mooser

EMI Suppression Technology

- 75** Radiation Suppression of Step-down Chopper Type Power Supply Using Noise Suppression Sheet
Masaki Kurimoto¹, Koichi Kondo¹, Masashi Ikeda¹, et al.

CERTIFICATION & MARKS

- 80** Voluntary Control of Emissions from Multimedia Equipment in Japan
Akira Oda

SAFETY & EMC
welcomes your contribution!