

電磁環境/マグネティックス合同研究会

[電磁環境技術委員会]

[委員長] 山崎健一 (電力中央研究所)

[幹事] 関口秀紀 (海上技術安全研究所), 石上 忍 (東北学院大学)

[幹事補佐] 井淵貴章 (大阪大学)

[マグネティックス委員会]

[委員長] 山口正洋 (東北大学)

[幹事] 小原 学 (明治大学), 山田啓壽 (東芝)

日 時 平成29年5月18日 (木) 13:00~17:15

平成29年5月19日 (金) 10:00~14:50

場 所 Nanyang Technological University, Singapore

連 催 IEICE Technical Committee on Electromagnetic Compatibility (EMCJ)

協 賛 IEEE EMC Society Sendai Chapter

IEEE EMC Society Japan Joint Chapter

Investigating R&D Committee on Practical Applications of High-Frequency Magnetic Materials, IEEJ

議 題 テーマ「EMC 一般 (EMC Joint Workshop, 2017, Singapore)」

Thu, May 18 PM Regular session 1 13:00 - 14:25

13:00-13:05 Opening Address by Committee Chairs (5 min.)

13:05-13:10 Opening Address by NTU (5 min.)

EMC-17-009 Far field antenna factor calibration for ridged guide horn antenna

MAG-17-039 Satoru Kurokawa, Masanobu Hirose, Yuanfeng She, Michitaka Ameya
(National Institute of Advanced Industrial Science and Technology)

EMC-17-010 Impact of LISN on EMI filter design

MAG-17-040 Kangrong Li, Kye Yak See (Nanyang Technological University)

EMC-17-011 Evaluation of Fibre Weaving of Substrate on Differential Transmission Lines

MAG-17-041 Eng Kee Chua, Junwu Zhang, Kye Yak See, Wee Jin Koh, Weng Yew Chang
(Nanyang Technological University)

14:25-14:40 Break (15 min.)

Thu, May 18 PM Poster session 14:40 - 16:15

EMC-17-012 [Poster Presentation]

MAG-17-042 Fundamental Study on the Effect of Contact Condition at Gap of Transmission Line on Transmission Characteristic

Kenji Aihara (Tohoku University), Yu-ichi Hayashi (Tohoku Gakuin University),

Takaaki Mizuki, Hideaki Sone (Tohoku University)

- EMC-17-013 [Poster Presentation]
MAG-17-043 A Method of Fault Detection in Encryption Device based on Leaked EM Information from Adder Circuit
Naoto Saga (Tohoku University), Yu-ichi Hayashi (Tohoku Gakuin University), Takaaki Mizuki, Hideaki Sone (Tohoku University)
- EMC-17-014 [Poster Presentation]
MAG-17-044 Electromagnetic information leakage analysis of cryptographic IC by correlation power analysis
Yasunari Kumano, Yusuke Yano, Kengo Iokibe, Hiroto Kagotani, Yositaka Toyota (Okayama University)
- EMC-17-015 [Poster Presentation]
MAG-17-045 Continuity Condition on Single Conductor Transmission Line Model for Thin Wire Structures
Daiki Tashiro, Takashi Hisakado, Tohlu Matsushima, Osami Wada (Kyoto University)
- EMC-17-016 [Poster Presentation]
MAG-17-046 Evaluation of RF Immunity of CAN-FD Transceivers during Data-frame Communication by Using DPI Method
Kohei Kawanishi, Tohlu Matsushima, Takashi Hisakado, Osami Wada (Kyoto University)
- EMC-17-017 [Poster Presentation]
MAG-17-047 Communication Quality of Ethernet in Relation to Parameters of Pulse Disturbance and Imbalance of Signal Transmission System
Sayaka Matsushima, Osami Wada, Takashi Hisakado, Tohlu Matsushima (Kyoto University)
- EMC-17-018 [Poster Presentation]
MAG-17-048 Modal-Equivalent-circuit Analysis for Suppression of Emission by Mode Conversion in Four-Conductor Transmission-Line
Ryota Irishika, Kengo Iokibe, Yoshitaka Toyota (Okayama University)
- EMC-17-019 [Poster Presentation]
MAG-17-049 Transmission Characteristics of Band Pass Space Filter Using Metal Grid from Microwave to Millimeter Waves
Yuta Sugiyama, Shinichiro Yamamoto, Kenichi Hatakeyama (University of Hyogo), Takanori Tsutaoka (Hiroshima University)
- EMC-17-020 [Poster Presentation]
MAG-17-050 A study on the equivalent circuit modeling of dual LISN for evaluating wide-band conducted emission
Takaaki Ibuchi, Shunji Mori, Tsuyoshi Funaki (Osaka University)
- EMC-17-021 [Poster Presentation]
MAG-17-051 Study on current characteristic injected to vertical coupling plane in the ESD immunity test
Ryuta Koike, Ken Kawamata, Shinobu Ishigami, Shigeki Minegishi (Graduate School of Tohoku Gakuin University)
- EMC-17-022 [Poster Presentation]
MAG-17-052 Measurement of discharge current in electrode surface caused by micro gap ESD
Masato Oikawa, Ken Kawamata, Shinobu Ishigami, Shigeki Minegishi (Graduate School of Tohoku Gakuin University), Osamu Fujiwara (Nagoya Institute of Technology)
- EMC-17-023 [Poster Presentation]
MAG-17-053 High frequency properties of hexaferrite and its application to IC chip interposer
Mitsuharu Sato, Ranajit Sai, Akihiro Takahashi, Masahiro Yamaguchi (Tohoku University)

15:15-16:15 Demonstrations (60 min.)

16:15-16:25 Break (10 min.)

Thu, May 18 PM Invited Talk 16:25 - 17:15

- EMC-17-024 [Invited Talk]
MAG-17-054 Magnetic noise suppressor to facilitate compatibility between power electronic system and next generation RF IC for telecommunication
Masahiro Yamaguchi, Satoshi Tanaka (Tohoku University), Makoto Nagata(Kobe University),Kazushi Ishiyama (Tohoku University), Koichi Kondou(NEC TOKIN Corporation), Yasuyuki Okiyoneda (SHOWA AIRCRAFTINDUSTRYCO.,LTD.)

Fri, May 19 AM Regular session 2 10:00 - 11:40

EMC-17-025 5 MHz switching operation of a GaN-based DC-DC converter with a metal composite bulk
MAG-17-055 magnetic core inductor

Takaaki Ibuchi, Tsuyoshi Funaki (Osaka University)

EMC-17-026 A Study on Design of Bent Differential-Paired Lines by Preference Set-based Design
MAG-17-056 Method

Yoshiki Kayano, Yoshio Kami, Haruo Ishikawa, Fengchao Xiao
(University of Electro- Communications),
Hiroshi Inoue (Open University)

EMC-17-027 Common-Mode Noise Filter Design based on Defected Ground Structure (DGS) for
MAG-17-057 Multilayer PCBs

Hui Min Lee, Si Ping Gao, Richard Xian-Ke Gao, En Xiao Liu (A*STAR IHPC)

EMC-17-028 A Power Distribution Network Design pre-layout model for High-Speed circuit Power
MAG-17-058 Integrity design and analysis

Junwu Zhang, Eng Kee Chua, Kye Yak See, Wee Jin Koh, Weng Yew Chang
(Nanyang Technological University)

11:40-13:00 Lunch Break (80 min.)

Fri, May 19 PM Invited talk 13:00 - 14:50

EMC-17-029 [Invited Talk]

MAG-17-059 2.5D Method of Modeling and Simulation for Signal/Power Integrity of High Speed
Electronics

En-Xiao Liu, Siping Gao, Hui Min Lee (A*STAR IHPC)

EMC-17-030 [Invited Talk]

MAG-17-060 Towards Higher Speed and Less Interference: Virtual EMC Lab

Richard Xian-Ke Gao, Huapeng Zhao, Eng Kee Chua, Binfang Wang (A*STAR IHPC)

14:40-14:50 Closing Address (10 min.)

◎ 講演時間

ポスター講演：発表3分＋フロアディスカッション60分

一般講演：発表20分＋質疑応答5分

特別講演：発表45分＋質疑応答5分

◎このプログラムは予告なく変更になる場合がございます