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Rohde & Schwarz GmbH & Co. KG, Germany

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¹Rohde & Schwarz GmbH & Co. KG, Germany, ²Rohde & Schwarz International Operations GmbH, Germany

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¹Hokkaido University, Japan, ²Electronic Navigation Research Institute, Japan

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¹Tokyo Metropolitan University, Japan, ²National Institute of Information and Communications Technology, Japan, ³Kanazawa Medical University, Japan

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¹Chiba University, Japan, ²National Institute of Information and Communications Technology, Japan


T. Nagaoka¹, T. Niwa¹, S. Watanabe¹
¹National Institute of Information and Communications Technology, Japan, ²Tokai University School of Medicine, Japan

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K. Saito¹, Y. Kamimura²
¹Tohoku Gakuin University, Japan, ²Utsunomiya University, Japan

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¹Chungnam National University, Korea, ²Electromagnetic Environment Research Center, Korea, ³SAMSUNG Electronics, Korea

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Nagoya Institute of Technology, Japan


C. Li¹, ², T. Wu³
¹University of Science and Technology Beijing, China, ²China Academy of Telecommunication Research, China

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S. W. Park¹, E. H. Kim¹, K. Wake², S. Watanabe³
¹Korea Automotive Technology Institute, Korea, ²National Institute of Information and Communications Technology, Japan

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S. Ishihara¹, J. Higashiyama¹, T. Onishi¹, Y. Tarusawa¹, K. Nagase²
¹NTT DOCOMO, INC., Japan, ²Kanazawa University Hospital, Japan

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¹Medtronic Japan Co., Ltd., Japan, ²Hokkaido University, Japan

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Hokkaido University, Japan

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City University of Hong Kong, Hong Kong

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IT’IS Foundation, Switzerland

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USCI Holdings, Inc., Japan
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1 IT’IS Foundation, Switzerland, 2 ETH Zurich, Switzerland

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1 IT’IS Foundation, Switzerland, 2 ETH Zurich, Switzerland


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K. Osabe
Voluntary EMC Laboratory Accreditation Center Inc., Japan

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J. Medler
Rohde & Schwarz GmbH & Co. KG, Germany

D. M. Lauder1, R. C. Marshall2
1 University of Hertfordshire, United Kingdom, 2 Richard Marshall Limited, United Kingdom

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1 NEC AccessTechnica, Ltd., Japan, 2 Intertek Japan K.K., Japan, 3 Voluntary EMC Laboratory Accreditation Center Inc., Japan, 4 VCCI Council, Japan

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1 Bureau of Standards, Metrology and Inspection (BSMI), Taiwan, 2 Electronics Testing Center, Taiwan, 3 Da-Yeh University, Taiwan


Z. Chen
ETL-Lindgren, USA

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1 Tokyo Institute of Technology, Japan, 2 TDK Corp., Japan

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Hitachi Ltd., Japan

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M. Ishii1, K. Fujii2
1 National Institute of Advanced Industrial Science and Technology, Japan, 2 National Institute of Information and Communications Technology, Japan
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Tohoku University, Japan

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¹Okayama University, Japan, ²Industrial Technology Center of Okayama Prefecture, Japan

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¹Kobe University, Japan, ²Tohoku University, Japan, ³National Institute of Advanced Industrial Science and Technology, Japan, ⁴The University of Electro-Communications, Japan, ⁵Morpho, France, ⁶Pierre-and-Marie-Curie University, France, ⁷Telecom ParisTech, France

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S. B. Bhasin¹, J. Danger¹, S. Guilley¹, Z. Najm¹  
¹TELECOM-ParisTech, France, ²Secure-IC S.A.S., France

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Tohoku University, Japan

S. Bhasin¹, P. Maistr², F. Regazzoni³  
¹Telecom ParisTech, France, ²University Grenoble, France, ³ALaRI - University of Lugano, Switzerland


F. Xiao, Y. Kami  
The University of Electro-Communications, Japan

S.-H. Huang¹, C.-W. Kuo¹, C.-C. Wang², T. Kitazawa³  
¹National Sun Yat-Sen University, Taiwan, ²Advanced Semiconductor Engineering Inc., Taiwan, ³Ritsumeikan University, Japan

M. H. Lu¹, C. Wang², C. Kuo¹, T. Kitazawa³  
¹National Sun Yat-Sen University, Taiwan, ²Advanced Semiconductor Engineering Inc., Taiwan, ³Ritsumeikan University, Japan

O. V. Tereshchenko¹, F. J. K. Buesink¹, F. B. J. Leferink²  
¹University of Twente, The Netherlands, ²Thales Nederland B.V., The Netherlands

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Hitachi, Ltd., Japan

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¹Murata Manufacturing Co., Ltd., Japan, ²Kyoto University, Japan

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H.-N. Lin¹, C.-C. Lu¹, H.-Y. Tsai¹, T.-W. Kung²  
¹Feng-Chia University, Taiwan, ²Bureau of Standards, Metrology & Inspection, M.O.E.A, Taiwan

**[Organized Session/Workshop: 14P1-B] IC Chip Level EMC for Telecommunication**

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J. Lim, J. Cho, M. Lee, B. Bae, J. Kim  
Korea Advanced Institute of Science and Technology, Korea
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<td>¹Graduate School of Engineering, Tohoku University, Japan, ²New Industry Creation Hatchery Center, Tohoku University, Japan</td>
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1University of Electro-Communications, Japan, 2Tokai University, Japan

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M. S. Lin1, Y. H. Huang2, C.-I G. Hsu1
1National Yunlin University of Science & Technology (NYUST), Taiwan

T. Iwamoto1, 2, T. Arima1, K. Wake3, K. Fujii2, S. Watanabe2
1Tokyo University of Agriculture and Technology, Japan, 2National Institute of Information and Communications Technology, Japan

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K. Quéléver1, 2, B. Derat1, O. Meyer3, T. Coradin2, C. Bonhomme2
1ART-FI SAS, France, 2Sorbonne Universités, UPMC Univ Paris 06, CNRS, UMR 7574, Laboratoire de Chimie de la Matière Condensée de Paris, Collège de France, Paris, France, 3Laboratoire de Génie Electrique de Paris Sorbonne Universités, UPMC Univ Paris 06, Supélec, Univ Paris Sud 11, CNRS UMR 8507, LGEP Gif-sur-Yvette, France


Y. Terai1, Y. Toyota1, K. Iokibe1, T. Watanabe2
1Okayama University, Japan, 2Industrial Technology Center of Okayama Prefecture, Japan

Y. Ji, K. Mouthaan, N. Venkatayalu
National University of Singapore, Singapore

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T. Takahashi1, L. Niu2, T. Hubing2
1Takushoku University, Japan, 2Clemson University, USA

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F. Nakamoto, Y. Sasaki, Y. Watanabe, C. Miyazaki, N. Oka
Mitsubishi Electric Corp., Japan

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T. Murakami1, M. Maeda1, Y. Mabuchi2, T. Matsushima1, T. Hisakado1, O. Wada1
1Kyoto University, Japan, 2Hitachi, Ltd., Japan

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D. Ioan1, G. Ciuprina1, W. Schilders2
1Polytecnic University of Bucharest, Romania, 2T. U. Eindhoven, The Netherlands

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Y. Shigeta1, N. Sato1, K. Arai1, M. Yamaguchi1, S. Kageyama2
1Tohoku University, Japan, 2Toppan Technical Design Center Corp., Japan

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1National Applied Research Laboratories, Taiwan, 2National Tsing Hua University, Taiwan, 3Bureau of Standards, Metrology & Inspection, M.O.E.A., Taiwan
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G. F. Bartak¹, A. Abart²
¹Consultant, Austria, ²Netz OÖ Gmbh, Austria

15P-B2. Electromagnetic Interference Examples of 581 Telecommunications System in the Frequency Range from 2kHz to 150kHz
K. Murakawa, H. Hirasawa, H. Ito, Y. Ogura
NTT EAST, Japan

15P-B3. CISPR Limits for the Conducted 585 Disturbances of DC Ports of PV-GCPCs
Y. Yoshioka
Fuji Electric Co., Ltd., Japan

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H. Hayashiya
East Japan Railway Company, Japan

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T. Shindo
Central Research Institute of Electric Power Industry, Japan

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W. Radasky
Metatech Corporation, USA

15P-B7. EMC Issues on Wireless Power Transfer
S. Obayashi¹, H. Tsukahara²
¹Toshiba Corp., Japan, ²Nissan Motor Co., Ltd., Japan

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H. Tsukahara
Nissan Motor Co., Ltd., Japan

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Metatech Corporation, USA

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H. Rochereau
EDF, France

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M. Tokuda
The University of Tokyo, Japan

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H. Ahn
KESRI (Korea Electrical Engineering & Science Research Institute), Korea

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J. Zheng
STIEE: Shanghai Testing & Inspection Institute for Electrical Equipment, China

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H. Ohsaki
The University of Tokyo, Japan

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K. Kawamata¹, S. Minegishi¹, O. Fujiwara²
¹Tohoku Gakuin University, Japan, ²Nagoya Institute of Technology, Japan

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T. Ohtsu¹, H. Doyama¹, K. Sagisaka¹, T. Shirayama²
¹Suzuka National College of Technology, Japan, ²Yukadenishi Co., Ltd., Japan

15P1-S3. Characteristics of Small Gap Discharge Event and their EMI Effects
M. Honda¹, S. Isofuku²
¹Impulse Physics Laboratory, Inc., Japan, ²Tokyo Electronics Trading Co., Ltd., Japan

15P1-S4. The Distinction among Electromagnetic Radiation Source Models Based on Directivity with Support Vector Machines
Z. Liu¹, D. Shi², Y. G. Gao¹, Y. Q. Shen², J. J. Bi³, Z. L. Tan³
¹Beijing University, China, ²Telecommun. Metrol. Center, China, ³Key Lab. of Electromagn. Environ. Effect, Shijiazhuang Mech. Eng., China
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   Y. Miyaji¹, M. Shimada¹, Y. Mizuno¹, K. Naito³
   ¹Nagoya Institute of Technology, Japan, ²N. S. Co., Ltd., Japan

   B. H. K. Chia
   Sarawak Energy Berhad, Malaysia

   D. T. Le¹, L. Hamada¹, S. Watanabe¹, T. Onishi²
   ¹Gangwon National Institute of Information and Communications Technology (NICT), Japan, ²NTT DOCOMO, INC., Japan

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   B. C. Kim, H. Choi
   ETRI, Korea

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   J. Wiart¹, E. Conil¹, N. Varsier¹, T. Sarrebourse¹, A. Hadjem², L. Martens², G. Wermeeren², Y. Yoann Corre³
   ¹Orange Labs / WHIST lab, France, ²Iminds / Ghent University, Belgium, ³SIRADEL, France

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   D. G. Choi¹, K. H. Kim¹, S. Y. Chung¹, Y. M. Gimm²
   ¹National Radio Research Agency, Korea, ²Dankook University, Korea

16A2-H4. Simulated Near-Field Gain and E-Field Intensity of Insulated Loop Antenna in the Liquid at 30 MHz
   N. Ishii¹,², R. Takezawa¹, L. Hamada¹, S. Watanabe³
   ¹Niigata University, Japan, ²National Institute of Information and Communications Technology, Japan

16A2-H5. An Ultra Wideband Alternative to Dipoles for SAR System Verification
   B. Derat¹, A. Lages¹, L. Aberbour¹, T. Julien¹, D. Manteuffel²
   ¹ART-Fi, France, ²CAU Kiel, Germany

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   J. Higashiyama, Y. Tarusawa
   NTT DOCOMO, INC., Japan

   N. Kuster, M. G. Douglas
   IT’IS Foundation / ETH Zurich Switzerland
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B. G. Loader1, M. J. Alexander1, R. Osawa2  
1National Physical Laboratory, United Kingdom,  
2Seiko-Giken, Japan

16P3-H2. Metal-free Electric-field Probe based on Photonics and its EMC Applications  
H. Togo  
NTT Microsystem Integration Laboratories, Japan

16P3-H3. Active Electro-Optical Probe System for B1-Field Polarization Mapping in Magnetic Resonance Imaging Systems  
S. N. Kuehn1, B. Kochali2, N. Kuster1  
1IT’IS Foundation / ETH Zurich, Switzerland,  
2Schmid&Partner Engineering AG, Switzerland

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S. Kurokawa1, M. Hirose1, M. Ameya1, Y. Toba2  
1National Institute of Advanced Industrial Science and Technology, Japan, 2SEIKOH GIKEN Co.,Ltd., Japan

16P3-H5. Shielding Effectiveness Evaluation of Enclosure with Apertures Using Electro-Optic Sensor  
N.-W. Kang1, D.-J. Lee1, W. Kang2, Y.-S. Chung3  
1Korea Research Institute of Standards and Science, Korea, 2Kwangwoon University, Korea

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Airbus Defence and Space, France

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1University of Twente, The Netherlands, 2Thales Nederland B.V., The Netherlands

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Belarusian State University of Informatics and Radioelectronics, Belarus

16A2-A2. Measurement of Radio Receivers’ Front-End Nonlinearity by the Frequency Slipping Technique  
E. Sinkevich, V. Mordachev  
Belarusian State University of Informatics and Radioelectronics, Belarus

16A2-A3. A Novel LTE MIMO Antenna with Decoupling Element for Mobile Phone Application  
J. Chou1, D. Lin2, C. Wu3, H. Li1  
1National Taiwan University, Taiwan, 2National Taipei University of Technology, Taiwan

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S. J. Ambroziak, R. J. Katulski  
Gdansk University of Technology, Poland

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Ukrainian State Centre of Radio Frequencies, Ukraine

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T. Maekawa1, K. Ogawa2  
1Panasonic Corp., Japan, 2Toyama University, Japan

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Metatech Corporation, USA
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16P2-A3T. Recent Trend of TC 77 and its Subcommittees
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EDF, France

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Consultant for Schneider Electric, France

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R. Sitzmann
Siemens AG, Germany

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D. Heirman
Don HEIRMAN Consultants, USA

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L. B. Chang1, C. Shih1, T. Huang1, C. Tien2, P. Kuei2
1Chang Gung University, Taiwan, 2National Defense University, Taiwan

16A1-B2. Improvement of ESD Robustness in Gallium Nitride-based Flip-Chip HEMT by Introducing Metal-Insulator-Metal Capacitor
P. Kuei1, N. Cheng1, Y. Ferng1, A. Das1, S. Lin3, C. Lin1, L. Chang1, Y. Chen2
1National Defense University, Taiwan, 2National Central University, Taiwan, 3Chang Gung University, Taiwan

16A1-B3. A Case Study on ESD Immunity Test for a Small-Type Control Board
C. Ji1, D. Anzai1, J. Wang1, I. Mori2, O. Fujiwara1
1Nagoya Institute of Technology, Japan, 2Suzuka National Collage of Technology, Japan

16A1-B4. Assessing the Effect of Discharge Gap Shape on High-Speed Electrostatic Discharge Events
M. Masugi1, Y. Okugawa2, Y. Akiyama1, N. Hirasawa1, K. Murakawa1
1Ritsumeikan University, Japan, 2NTT corp., Japan,

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Y. Taka1, O. Fujiwara2
1Kushiro National College of Technology, Japan, 2Nagoya Institute of Technology, Japan

T. Ishida1, Y. Tozawa1, M. Takahashi1, O. Fujiwara2, S. Nitta2
1Noise Laboratory Co.,LTD., Japan, 2University of Electro-Communications, Japan

16A2-B3. Statistical Measurement of Burst Discharge Currents through Fingertip from Charged Human
Y. Kagawa1, I. Mori2, Y. Taka3, O. Fujiwara1
1Nagoya Institute of Technology, Japan, 2Suzuka National College of Technology, Japan, 3Kushiro National College of Technology, Japan

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D. Anzai, J. Wang
Nagoya Institute of Technology, Japan

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M. Ishii, Y. Yamazaki
National Institute of Advanced Industrial Science and Technology, Japan

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Y. Watanabe, T. Uchida, Y. Sasaki, N. Oka, H. Ohashi
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H. Echigo, K. Aizawa
Tohoku Gakuin University, Japan

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S. Yamamoto1, K. Suezaki1, K. Hatakeyama1, I. Tsujioka2
1University of Hyogo, Japan, 2Hiroshima University, Japan
16P1-B5. Optimized Shielding Pattern of RF Faraday Cage
N. Ohmura1, Y. Okano2, S. Ogino1
1Microwave absorbers Inc., Japan, 2Tokyo City University, Japan

16P1-B6. EM-Wave Absorber Composed of Periodic Patch Antennas Designed for Both H- and V-polarized Waves at 2.4GHz Band
H. Okawa, A. Nishikata
Tokyo Institute of Technology, Japan

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16P2-B1. Effect of Height and Width of Pyramid on Temperature Distribution Characteristics of Pyramidal Radiowave Absorbers
S. Imai1, K. Taguchi1, T. Kashiwa1, T. Tabata2, K. Kubo1, E. Satou1
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16P2-B3. Analysis of the Permeability Spectra of Fe-Al-Si Granular Composite Materials
T. Tsutaoka1, H. Kinoshita1, T. Kasagi2, S. Yamamoto3, K. Hatakeyama3, M. Y. Koledintseva4
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16P2-B4. Effect of Demagnetizing Field on Frequency Dispersion of Complex Permeability
S. Muroga, M. Yamaguchi
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16P2-B5. Multilayer Ground Determination from Apparent Resistivities and Impact on Grounding Resistances
G. P. Papaiz-Garbini1, L. Pichon2, M. Cucchiaro1, N. Haddad1
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16A1-S1. Numerical Calculation of Electromagnetic Scattering from Multiple Objects by Superposition Solution Combined with MoM — Multilevel Algorithm —
M. Tanaka
Gifu University, Japan

16A1-S2. Scattering Analysis of the Microstrip Array Antenna by Using the PMCHWT-CBFM
T. Tanaka, Y. Nishioka, Y. Inasawa, H. Miyashita
Mitsubishi Electric Corp., Japan

16A1-S3. A Subgridding Technique for the CIP Method
Y. Ando1, T. Hirota2
1The University of Electro-Communications, Japan, 2Simulatio Co. Ltd., Japan

16A1-S4. Estimation of Induced EMF Value in Ground Wire During Ice-Melting Procedure
K. Netreba1, N. Korovkin1, S. Vinogradov1, V. Goncharov1, M. Hayakawa2, A. Repin3, A. Shershnev4, N. Silin5
1St. Petersburg State Polytechnic University, Russia, 2The University of Electro-Communications, Japan, 3Advanced Wireless Communications Research Center and Research Station on Seismo Electromagnetics, Japan, 4Joint-Stock Company High Voltage Direct Current Power Transmission Research Institute, Russia, 5Far Eastern Federal University, Russia

16A1-S5. Pulse Responses in the Dispersion Media
R. Ozaki, T. Yanaka, N. Sugizaki, T. Yamasaki
Nihon University, Japan

16A1-S6. Efficient Reflection/transmission Coefficient by Two-layered Dielectric Slab for Accurate Propagation Analysis
R. Sato1, H. Shirai2
1Niigata University, Japan, 2Chuo University, Japan

[16A2-S] Numerical Modeling (4)

16A2-S1. Comparison of Steady-State Genetic Algorithm and Asynchronous Particle Swarm Optimization on Inverse Scattering of a Partially Immersed Metallic Cylinder
C. H. Sun1, C. H. Chen2, C. H. Huang3, C. L. Li1, E. N. Chiu1, S. L. Lee1
1National Taiwan University of Science and Technology, Taiwan, 2Taipei College of Maritime Technology, Taiwan, 3Tamkang University, Taiwan
16A2-S2. Inverse Scattering Problem of a Two-Dimensional Dielectric Cylinder in Slab Medium
C. H. Chen1, C. H. Huang1, C. H. Sun1, C. L. Li1, P. R. Lai1, G. C. Wang1
1Taipei College of Maritime Technology, Taiwan, 2National Taiwan University of Science and Technology, Taiwan, 3Tamkang University, Taiwan


16P1-S1. Acceleration of Various Direct/Iterative Solvers for MoM by GPU and its Computational Cost
K. Konno1, Q. Chen1, H. Katsuda2
1Tohoku University, Japan, 2NTT Network Innovation Laboratories, Japan

16P1-S2. High Performance Computing Techniques for Efficient 3D Full-Wave Simulation of EMC Problems
I. Hänninen, F. Wolfheimer, A. Barchanski, D. Kostka
CST AG, Germany

16P1-S3. GPU Acceleration on Computational Dosimetry for Rabbit Eyes Exposed to Millimeter Waves
Y. Suzuki1, A. Koike1, M. Takamura1, M. Taki1, M. Kojima2, K. Sasaki3, J. Chakarothai2, K. Wake1, S. Watanabe1
1Tokyo Metropolitan University, Japan, 2Kanazawa Medical University, Japan, 3National Institute of Information and Communications Technology, Japan

16P1-S4. GPU Calculation Algorithm for Radiation from MMIC Passive Components
N. Morita
M Wave Solver Lab., Japan

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16P2-S1. Electromagnetic Interference Control Techniques for Spacecraft Harness
A. Junge1, J. Wolf1, N. Mora2, F. Rachidi2, P. Pelissou1
1ESA - ESTEC, The Netherlands, 2EPFL, Switzerland, 3Astrium SAS, France

16P2-S2. EMC Issues on Bepicolombo Spacecraft
K. Kempkens
Astrium GmbH, Germany

16P2-S3. Comparison of Rotational-Run vs Hybrid-Measurement by Modelling of a Large Test Object/Satellite
H. Kuegler
IABG, Germany

16P2-S4. Sensitivity to Setup Configuration of the Response of Differential Lines Driven by an External Field
F. Grassi1, S. A. Pignari1, G. Spadacini1, F. Marliani2
1Politecnico di Milano, Italy, 2European Space Agency (ESA), The Netherlands

16P2-S5. VHF Switching DC/DC Converter Electromagnetic Emissions Assessment
C. Delepaut1, J. Wolf1, F. Leroy2, O. Deblecker2, F. Dualibe2, N. Le Gallou1
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