

2016 IEEE International Conference on Computational Electromagnetics (ICCEM 2016)

**Guangzhou, China
23-25 February 2016**



**IEEE Catalog Number: CFP1699Y-POD
ISBN: 978-1-4673-9679-0**

**Copyright © 2016 by the Institute of Electrical and Electronics Engineers, Inc
All Rights Reserved**

Copyright and Reprint Permissions: Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

******This publication is a representation of what appears in the IEEE Digital Libraries. Some format issues inherent in the e-media version may also appear in this print version.***

IEEE Catalog Number:	CFP1699Y-POD
ISBN (Print-On-Demand):	978-1-4673-9679-0
ISBN (Online):	978-1-4673-9678-3

Additional Copies of This Publication Are Available From:

Curran Associates, Inc
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: (845) 758-0400
Fax: (845) 758-2633
E-mail: curran@proceedings.com
Web: www.proceedings.com

CURRAN ASSOCIATES INC.
proceedings
.com

■ 2016-02-23 PM

Room A

ORAL Session: TU1-ROOM A

Special Session 1 (Part-I): Multiphysics Modeling and Simulation

Co-Chairs: Mingyao Xia, Wei Sha

- 14:00 - 14:30 Backscattering of a Hypersonic Cone with Plasma Sheath at Different Attack Angles (*Invited*) (paper ID: 151) 1
Jiwei Qian¹, Haili Zhang², Mingyao Xia¹
(1-Peking University, Mainland China; 2-University of Electronic Science and Technology of China, Mainland China)
- 14:30 - 15:00 Numerical Investigate of Nonlinear response in metallic metamaterial (*Invited*) (paper ID: 92) 4
Ming Fang¹, Kaikun Niu¹, Zhixiang Huang¹, Wei Sha², Xianliang Wu¹
(1-Anhui University, Mainland China; 2-The University of Hong Kong, Hong Kong)
- 15:00 - 15:20 Analysis for Errors of Shunt Outrange Measurement Based on Finite Element Method (paper ID: 74) 7
Rundong Han, Qi Wang, Tianzheng Wang, Xiaojing Li
(Shanxi Electric Power Research Institute, Mainland China)
- 15:20 - 15:40 PIC-MCC simulations for microwave propagation in gas (paper ID: 89) N/A
Huihui Wang, Lin Meng, Dagang Liu, Laqun Liu
(University of Electronic Science and Technology of China, Mainland China)
- 15:40 - 16:00 Efficient Quantum Transport Calculation Using Selected Inversion (paper ID: 111) N/A
Yi Zhou, Jun Li, GuanHua Chen
(The University of Hong Kong, Hong Kong)
-

ORAL Session: TU2-ROOM A

Special Session 1 (Part-II): Multiphysics Modeling and Simulation

Co-Chairs: Wen Yan Yin, Zhixiang Huang

- 16:20 - 16:50 From Computational Electromagnetics to Multiphysics Methods and Their Applications (*Invited*) (paper ID: 165) 10
Wen Yan Yin
(Zhejiang University, Mainland China)
- 16:50 - 17:10 Multiphysics Modeling on Continuous Production of Biodiesel (paper ID: 133) 72
Chun Zhang, Huacheng Zhu, Tao Hong, Kama Huang
(Sichuan University, Mainland China)
- 17:10 - 17:30 Numerical Simulation of Flow Near the Entrance of Breakwater (paper ID: 158) 75
Qiang Li, Yong Liu
(Dalian Maritime University, Mainland China)
- 17:30 - 17:50 A Mixed Scheme for Solving Volume-Surface Integral Equations with Conducting-Dielectric Media (paper ID: 69) 11
PengCheng Wang, Xin Zhou Zhao, Wenjie Chen, Mei Song Tong
(Tongji University, Mainland China)
- 17:50 - 18:10 A Novel Signal Model for Integration of Radar and Communication (paper ID: 79) 14
Hao Lou^{1,2}, Yong Wu³, Qun Zhang¹, Xingyun Zhao¹, Zhiqiang Ma¹
(1-Air Force Engineering University, Mainland China; 2-Engineering University of CAPF, Mainland China; 3-Shanxi Institute of Metrology, Mainland China)

■ 2016-02-23 PM

Room B

ORAL Session: TU1-ROOM B

Special Session5: Multiscale and Multiphysics CEM Techniques

Co-Chairs: Roberto D. Graglia, Qing Huo Liu

- 14:00 - 14:30 Hierarchical Functions for Multiscale Problems (*Invited*) (paper ID: 184) 84
Roberto D. Graglia¹, Andrew F. Person², Paolo Petrini¹, Ladislau Matekovits¹
(1-Politecnico di Torino, Italy; 2-Georgia Institute of Technology, United States)
- 14:30 - 15:00 Multiscale Computational Electromagnetics and Applications (*Invited*) (paper ID: 185) 85
Qing Huo Liu
(Duke University, United States)
- 15:00 - 15:20 Robust Compressed Sensing Recovery for Detecting Two-Dimensional Scatters (paper ID: 66) 86
Bingwen Wang¹, Zhiqin Zhao¹, Yaohui Yang¹, Shuangli Liu¹, Zaiping Nie¹, Qing-Huo Liu²
(1-University of Electronic Science and Technology of China, Mainland China; 2-Duke University, United States)
- 15:20 - 15:40 Beam-Scanning Sparse Array Design with Minimum Spacing Constraint (paper ID: 153) 89
Jing Yang¹, Yanhui Liu¹, Xin Huang¹, Qing Huo Liu²
(1-Xiamen University, Mainland China; 2-Duke University, United States)
- 15:40 - 16:00 Research on Circuit Model of Shunts Based on Field-Circuit Coupling Method (paper ID: 35) 92
Rundong Han, Tianzheng Wang, Qi Wang, Xiaojing Li
(Shanxi Electric Power Research Institute, Mainland China)
-

ORAL Session: TU2-ROOM B

Special Session2 (Part-I): Advanced EM Modeling Techniques for Complicated Problems

Co-Chairs: Chao-Fu Wang, Gaobiao Xiao

- 16:20 - 16:50 Development of Hybrid High Frequency Simulation Tool for Rapid Modeling of Electromagnetic Scattering from Large and Complex Structures (*Invited*) (paper ID: 104) 95
Chao-Fu Wang, Chun Yun Kee, Zi-Liang Liu
(National University of Singapore, Singapore)
- 16:50 - 17:20 The Numerical Contour Deformation Method for Calculating High Frequency Scattered Fields From the 3-D Convex Scatters (*Invited*) (paper ID: 41) 98
Yu Mao Wu¹, Weng Cho Chew², Ya-Qiu Jin¹, Tie Jun Cui³, Li Jun Jiang⁴
(1-Fudan University, Mainland China; 2-University of Illinois at Urbana-Champaign, United States; 3-Southeast of University, Mainland China; 4-The University of Hong Kong, Hong Kong)
- 17:20 - 17:40 An Improved Method for Tracking of Characteristic Modes (paper ID: 78) 100
Zhao Yang, Donglin Su, Yaoyao Li, Yan Liu
(Beihang University, Mainland China)
- 17:40 - 18:00 An Augmented EFIE With Discontinuous Galerkin Discretization (paper ID: 52) 191
Kai-Jiang Xu, Xiao-Min Pan, Xin-Qing Sheng
(Beijing Institute of Technology, Mainland China)

■ 2016-02-23 PM

Room C

ORAL Session: TU1-ROOM C

Special Session8 (Part-I): Emerging technologies related to small/wideband antennas

Co-Chairs: Takeshi Fukusako, Hang Wong

- 14:00 - 14:30 A Review of Recent Circularly Polarized Antenna Designs Supported by Electromagnetic Simulation (*Invited*) (paper ID: 159) 154
Takeshi Fukusako
(Kumamoto University, Japan)
- 14:30 - 14:50 A Wideband CP Antenna by using 3D Printing polarizer (paper ID: 124) 174
Kai Xu Wang, Hang Wong
(City University of Hong Kong, Hong Kong)
- 14:50 - 15:10 Determination of Element Spacing for Wideband Circularly-Polarized Antenna Arrays (paper ID: 152) 177
Kwok L. Chung, Chunwei Zhang (Qingdao Technological University, Mainland China)
- 15:10 - 15:30 A Prototype of Rectenna with Self-Resonant Antenna Coil in AM Radio Frequencies (paper ID: 156) 180
Shingo Otsuka, Norimasa Nakashima (Fukuoka Institute of Technology, Japan)
- 15:30 - 15:50 Small Antenna Measurement System with Optical Fiber Link Technologies in the Millimeter-wave Band (paper ID: 160) 183
Yuanfeng She¹, Michitaka Ameya¹, Satoru Kurokawa¹, Jiro Hirokawa², Makoto Ando²
(1-National Institute of Advanced Industrial Science and Technology, Japan; 2-Tokyo Institute of Technology, Japan)
-

ORAL Session: TU2-ROOM C

Special Session8 (Part-II): Emerging technologies related to small/wideband antennas

Co-Chairs: Jianming Jin, Takeshi Fukusako

- 16:20 - 16:40 Antenna Gain Pattern Estimation for Log Periodic Dipole Array Broadband Antenna using Near Field Radiation Pattern and Amplitude Center (paper ID: 162) 185
Satoru Kurokawa, Masanobu Hirose
(National Institute of Advanced Industrial Science and Technology of Japan, Japan)
- 16:40 - 17:00 A Ring Antenna for Dual-Sense Circular Polarization (paper ID: 164) 188
Kittima Lertsakwimarn¹, Chuwong Phongcharoenpanich², Takeshi Fukusako³
(1-Rambhai Barni Rajabhat University, Thailand; 2-King Mongkut's Institute of Technology Ladkrabang, Thailand; 3-Kumamoto University, Japan)
- 17:00 - 17:20 A Dual-Band Circularly Polarized Antenna with Differential Feeding for Implanted Bio-Sensors (paper ID: 61) 194
XianTao Yang, XiongYing Liu, Bing Li
(South China University of Technology, Mainland China)
- 17:20 - 17:40 A Broadband Circularly Polarized Omnidirectional Antenna with Circular Open-Loops (paper ID: 10) 197
Yi Fan, XiongYing Liu, Ronglin Li
(South China University of Technology, Mainland China)
- 17:40 - 18:00 A Modal Approach to Evaluating the Axial Ratio of Circularly Polarized Antennas (paper ID: 115) 199
Jiang-Feng Lin, Qing-Xin Chu, (South China University of Technology, Mainland China)

■ 2016-02-24 AM

Room A

ORAL Session: WE1-ROOM A

Computational Methods - Integral Equation

Co-Chairs: Raj Mittra, Rushan Chen

- 08:30 - 09:00 The Art and Science of Matrix Preconditioning—A Review (*Invited*) (paper ID: 154) 17
Raj Mittra¹, Chao Li^{1,2}
(1-University of Central Florida, United States; 2-University of Jinan, Mainland China)
- 09:00 - 09:30 Nonlinear Analysis of a PIN Diode Limiter Using Time Domain Volume Surface Integral Equation
(*Invited*) (paper ID: 122) 20
Shitao Chen¹, Dazhi Ding¹, Junjian Bi², Zhenhong Fan¹, Rushan Chen¹
(1-Nanjing University of Science and Technology, Mainland China; 2-Ordinance Engineering
College, Mainland China)
- 09:30 - 09:50 A Fast Direct Solver for the MoM-EFIE Formulation (paper ID: 30) N/A
*Mario Alberto Echeverri Bautista¹, Matteo Alessandro Francavilla², Per Gunnar Martinsson³,
francesca Vipiana¹*
(1-Politecnico di Torino, Italy; 2-Istituto Superiore Mario Boella, Italy; 3-University of
Colorado-Boulder, United States)
- 09:50 - 10:10 An Intuitive Formulation of Discontinuous Galerkin Surface Integral Equations (paper ID: 36) 23
Gaobiao Xiao, Yibei Hou, (Shanghai JiaoTong University, Mainland China)
- 10:10 - 10:30 Accurate Solution of Time-Domain Electric Field Integral Equations for Transient
Electromagnetic Scattering by Dielectric Objects (paper ID: 26) 26
Wenjie Chen, Guochun Wan, Pengcheng Wang, Meisong Tong
(Tongji University, Mainland China)
-

ORAL Session: WE2-ROOM A

Applications - Nano-electronics

Co-Chairs: Wenhua Yu, Zhi-Hong Tu

- 10:40 - 11:00 LOD-FDTD Method for Broadband Simulation of Graphene Structures (paper ID: 96) 29
Xiang-Hua Wang¹, Jian-Yun Gao², Hong-Xing Zheng¹
(1-Tianjin University of Technology and Education, Mainland China; 2-Tianjin Vocational
Institute, Mainland China)
- 11:00 - 11:20 Characterization and Performance Comparison of MWCNT and GNR Arrays in Microwave
Frequency (paper ID: 29) N/A
Jiefu Zhang, Yufeng Wang, Xianglong Bai, Jianhua Zhou
(Shanghai Hollywell Electronic System Co.Ltd, Mainland China)
- 11:20 - 11:40 High sensitive refractive index sensor in a graphene-based nanoribbon waveguide system
based on the finite-difference time-domain method (paper ID: 87) 278
Xu Han, Tao Wang, (Huazhong University of Science and Technology, Mainland China)
- 11:40 - 12:00 Near Field Enhancement by Magnetized Surface Plasmon Polaritons at THz Band (paper ID:
161) 31
Xue-Shi Li, Fu-Min Lin, Kun-Hua Wen, (Guangdong University of Technology, Mainland China)
- 12:00 - 12:20 Finite Element Simulation of Eddy Currents Induced by Gradient Coils in Superconducting MRI
(paper ID: 174) 34
Xuwei Ping¹, Zihui Zhu¹, Xinghui Yin¹, Li Li¹, Jiaqi Chen¹, Qingbo Li²
(1-HoHai University, Mainland China; 2-Huaiyin Normal University, Mainland China)

■ 2016-02-24 AM

Room B

ORAL Session: WE1-ROOM B

Special Session2 (Part-II): Advanced EM Modeling Techniques for Complicated Problems

Co-Chairs: Jun Hu, Sheng Sun

- 08:30 - 09:00 Efficient Solution of Electromagnetic Problems Based on Integral Equation (*Invited*) (paper ID: 149) 103
Huapeng Zhao, Jun Hu
(University of Electronic Science and Technology of China, Mainland China)
- 09:00 - 09:20 An efficient implementation of the UPML for truncating DGTD domains (paper ID: 93) 105
Qian Yang, Bing Wei, Linqian Li, Debiao Ge, Fei Wang
(Xi'dian University, Mainland China)
- 09:20 - 09:40 Near Field Analysis of an Aircraft on the Layered Half Space by FDTD Method (paper ID: 108) 108
Xinbo He, Bing Wei, Fei Wang
(Xi'dian University, Mainland China)
- 09:40 - 10:00 Analysis of Microwave Breakdown with a Spectral Element-based Electromagnetic Solver (paper ID: 120) 111
Dazhi Ding¹, Chen Qian¹, Rushan Chen¹, Junjian Bi²
(Nanjing University of Science and Technology, Mainland China; 2-Ordinance Engineering College, Mainland China)
- 10:00 - 10:20 A Fast-accurate Algorithm for Analysis on EM Scattering of Multi-cylinders (paper ID: 125) N/A
Hui Zhou, Feng Xing, Qikun Liu, Zhaowei Xing
(Zhengzhou Institute of Information Science and Technology, Mainland China)
-

ORAL Session: WE2-ROOM B

Applications - RF and Microwave Circuits

Co-Chairs: Quan Xue, Tapan K. Sarkar

- 10:40 - 11:10 A New Category of Waveguide E-plane Filters Using Planar Resonators (*Invited*) (paper ID: 62) 115
Quan Xue¹, Jun Ye Jin¹, Xian Qi Lin²
(1-City University of Hong Kong, Hong Kong; 2-University of Electronic Science and Technology of China, Mainland China)
- 11:10 - 11:30 Microstrip Tri-band Bandpass Filter Using Dissimilar Stepped-Impedance-Resonator With Controllable Multiple Transmission Zeros (paper ID: 166) 169
Haiwen Liu, Yang Peng, Jianwei Liu, (East China Jiaotong University, Mainland China)
- 11:30 - 11:50 A Four-Way Compact Unequal Power Divider with Arbitrary Power Ratio (paper ID: 170) 118
Tianyu Zhang, Wenquan Che
(Nanjing University of Science and Technology, Mainland China)
- 11:50 - 12:10 Frequency-Division Technique for Simultaneous Wireless Power Transfer to Two Receivers (paper ID: 65) 121
Shangkun Ge, Weiwei Liao, Qingfeng Zhang, Linni Jian, Yifan Chen
(South University of Science and Technology of China, Mainland China)
- 12:10 - 12:30 Dual-mode Dielectric Filter (paper ID: 110) 123
Qing-Tao Huang, Qing-Xin Chu
(South China University of Technology, Mainland China)

■ 2016-02-24 AM

Room C

ORAL Session: WE1-ROOM C

Applications - Antennas

Co-Chairs: Yongxin Guo, Long Li

- 08:30 - 09:00 Enabling Wireless Power and Data Telemetry for Bio-implants (**Invited**) (paper ID: 144) N/A
Yongxin Guo
(National University of Singapore, Singapore)
- 09:00 - 09:20 The Design and Optimization of Ultra Wideband Antenna Based on Particle Swarm Algorithm
(paper ID: 33) 202
Yizhi Wu¹, Xiongbing Wang¹, Yifan Wang², Saba Rashid¹, Yongsheng Ding¹, Youtao Zhang³
(1-Donghua University, Mainland China; 2-University of Queensland, Australia; 3-University of Pittsburgh, United States)
- 09:20 - 09:40 A Simple Printed Square Monopole Antenna With Wideband Circular Polarization (paper ID: 86) 205
Da Yang Chen, Zhi Hong Tu, Qing Xin Chu
(South China University of Technology, Mainland China)
- 09:40 - 10:00 A Small-Size Ultrawideband MIMO Antenna with Triple Band-Notched Function and High Isolation (paper ID: 47) 208
Hui-Fen Huang, Bin Wang
(South China University of Technology, Mainland China)
- 10:00 - 10:20 A Small-Size MIMO Antenna for Portable Devices in Bluetooth/WIMAX/WLAN/UWB Application (paper ID: 57) 211
Hui-Fen Huang
(South China University of Technology, Mainland China)
-

ORAL Session: WE2-ROOM C

Computational Methods - Transient Time Domain Analysis

Co-Chairs: Eng Leong Tan, Yan Shi

- 10:40 - 11:10 Unconditionally Stable Laguerre Polynomial-Based Discontinuous Galerkin Time-Domain Method (**Invited**) (paper ID: 20) 214
Cheng-Yi Tian, Yan Shi, Long Li
(Xidian University, Mainland China)
- 11:10 - 11:40 Variants of Second-Order Temporal-Accurate 3-D FLOD-FDTD Schemes with Three Split Matrices (**Invited**) (paper ID: 67) 272
Zaifeng Yang, Eng Leong Tan, Ding Yu Heh
(Nanyang Technological University, Singapore)
- 11:40 - 12:00 An Efficient Spectral Element Method for the Analysis of PIN diodes (paper ID: 123) 217
Huaguang Bao¹, Dazhi Ding¹, Junjian Bi², Zhenhong Fan¹, Rushan Chen¹
(1-Nanjing University of Science and Technology, Mainland China; 2-Ordnance Engineering College, Mainland China)
- 12:00 - 12:20 An Alternative Explicit and Unconditionally Stable Time-Domain Finite-Element Method for Analyzing General Lossy Electromagnetic Problems (paper ID: 132) 220
Woochan Lee, Dan Jiao
(Purdue University, United States)

■ 2016-02-24 PM

Room A

ORAL Session: WE3-ROOM A

Applications - EM Scattering

Co-Chairs: Lixin Guo, Yanhui Liu

- 14:00 - 14:30 Analysis of the Electromagnetic Wave Scattering Characteristics of Time-Varying Plasma Sheath
(Invited) (paper ID: 24) 37
Wei Chen, Lixin Guo, Jiangting Li, De Liu
(Xi'dian University, Mainland China)
- 14:30 - 14:50 Accurate Analysis of Electromagnetic Scattering from Periodic Circular Cylinder Array Including Impurity Cylinders (paper ID: 21) 40
Koki Watanabe, (Fukuoka Institute of Technology, Japan)
- 14:50 - 15:10 Propagation of Electromagnetic waves on a Relativistically moving non-uniform plasma with WKB method (paper ID: 25) 43
Linjing Guo, Lixin Guo, Jiangting Li, (Xi'dian University, Mainland China)
- 15:10 - 15:30 Efficiency Enhancement of Long-Distance Wireless Power Transmission Using Time Reversal Technique (paper ID: 14) 46
Bing Li, Bin-jie Hu, Xiaohuan Li, Min Deng, Zong-Heng Wei
(South China University of Technology, Mainland China)
- 15:30 - 15:50 Scattering Analysis of Magnetized Plasma Objects with Spectral-Element Time-Domain Method (paper ID: 121) 49
Hao Xu, Zi He, Dazhi Ding, Rushan Chen
(Nanjing University of Science and Technology, Mainland China)
- 15:50 - 16:10 Compact Leaky Wave Antenna with low SLL and Highly Linear Behavior over Broad Beam Scanning Angles (paper ID: 84) N/A
Qaisar Fraz, Muhammad Ismail, Shujaat Tanoli
(COMSATS, Pakistan)
- 16:10 - 16:30 A New 2D Unconditionally Stable Finite-Difference Time-Domain Algorithm Based on the Crank-Nicolson Scheme (paper ID: 113) 52
Seyed-Mojtaba Sadrpour, Vahid Nayyeri, Mohammad Soleimani
(Iran University of Science & Technology, Iran)

■ 2016-02-24 PM

Room B

ORAL Session: WE3-ROOM B

Applications - EBG and Frequency Selective Surfaces

Co-Chairs: Qunsheng Cao, Xiuyin Zhang

- 14:00 - 14:30 Recent Research on Active Frequency Selective Surface in NUAAA (**Invited**) (paper ID:187) N/A
Qunsheng Cao
(Nanjing University of Aeronautics and Astronautics, Mainland China)
- 14:30 - 14:50 Electromagnetic Shielding for WLAN using Modified-Hilbert Fractals (paper ID: 100) 126
Tauseef Hussain¹, Chenchen Yang¹, Qunsheng Cao¹, Irfan Majid²
(1- Nanjing University of Aeronautics and Astronautics, Mainland China; 2-Radar Technology Center, Pakistan)
- 14:50 - 15:10 Simulation and Analysis of UWB Propagation characteristics in the Indoor non-line-of-sight Environment (paper ID: 19) 129
Shuangde Li, Yuanjian Liu, Xiaojun Zhang, Guanyun Wang
(Nanjing University of Posts and Telecommunications, Mainland China)
- 15:10 - 15:30 A Parabolic-Loop Reflector Array for Orbital Angular Momentum Beam Focusing (paper ID: 176) 132
Haogang Wang, Yang Lyu, Youfei Zhang, Xianmin Zhang, Xiaofeng Jin
(Zhejiang University, Mainland China)
- 15:30 - 15:50 Conceptual Design of A Nonreciprocal Bandstop filter Using Metamaterial Thue- Morse Multiferroic Superlattices (paper ID: 118) 171
Zheng-Hua Tang, Da-Jun Lei, Jian-Quan Huang, Feng Qiu, Gui Jin, Min Yao
(Xiangnan University, Mainland China)
- 15:50 - 16:10 An X-band Tunable Circulator Based On Yttrium Iron Garnet Thin Film (paper ID: 107) N/A
Yuanyuan Zhang, Xixi Feng, Kaiqiang Zhu, Xi Yang, Houmin Li
(Beijing Institute of Technology, Mainland China)
- 16:10 - 16:30 Novel Third-Order Band-Pass Frequency Selective Surface for Ku Band Applications (paper ID: 43) N/A
Chenchen Yang, Tauseef Hussain, Huangyan Li, Qunsheng Cao, Yi Wang
(Nanjing University of Aeronautics and Astronautics, Mainland China)

■ 2016-02-24 PM

Room C

ORAL Session: WE3-ROOM C

Applications - Metamaterial and Artificial Materials

Co-Chairs: Wenquan Che, Xiao-Hua Wang

- 14:00 - 14:30 Design Method of Compact Filters Based on Composite Right- and Left-handed (CRLH) Structures and Experimental Verifications (*Invited*) (paper ID: 168) 223
Wenquan Che, Guangxu Shen, Ying Xiong
(Nanjing University of Science and Technology, Mainland China)
- 14:30 - 14:50 The Comparison Between Optical and Homogeneous Pumping with FDTD Method (paper ID: 91) 224
Kaikun Niu, Ming Fang, Zhixiang Huang, Bo Wu, Lihua Wang, Xianliang Wu
(Anhui University, Mainland China)
- 14:50 - 15:10 Manipulating Electromagnetic Wave in Subwavelength Using Infinity-anisotropic Metamaterials (paper ID: 58) 227
Yuwei Lin, Junming Zhao, Yijun Feng
(Nanjing University, Mainland China)
- 15:10 - 15:30 Modeling and Simulation of Practical Metamaterial Structures SRR, Structures (paper ID: 71) 253
Ridha Salhi, Mondher Laabidi, Fethi Choubani
(Sup'Com, Tunisia)
- 15:30 - 15:50 A Split-Ring Resonator(SRR) based Millimeter-wave SPST Switch in 0.13um BiCMOS Technology (paper ID: 73) 230
Dongning Hao, Nan Li, Xiuping Li
(Beijing University of Posts and Telecommunications, Mainland China)
- 15:50 - 16:10 A Double-Slot Structure as the Metasurface Geometric Phase Generating Atom for Beam Controlling (paper ID: 163) 233
Hao Gang Wang¹, Chi Hou Chan², Kwai Man Luk²
(1-Zhejiang University, Mainland China; 2-City University of Hong Kong, Hong Kong)

■ 2016-02-25 AM

Room A

ORAL Session: TH1-ROOM A

Special Session4: Miniaturization Techniques for Antenna Design

Co-Chairs: Bing Wei, Yong-Dan Kong

- 08:30 - 08:50 A Triple-Band Microstrip Antenna Using a 1/8 Annular Sector Patch with Slots and Vias (paper ID: 42) 78
Xiyao Liu, Yuanxin Li, Zhixi Liang, Shaoyong Zheng, Juhua Liu, Yunliang Long
(Sun Yat-Sen University, Mainland China)
- 08:50 - 09:10 Novel Compact Diplexer Using Net-Type Resonators (paper ID: 76) 55
Xiaolan Zhao, Xiaofeng Liu, Jinxu Xu, Li Gao
(South China University of Technology, Mainland China)
- 09:10 - 09:30 Sparse Focused Array Antenna Based on Subarrays (paper ID: 83) 58
Peng-Fa Li, Shi-Wei Qu, Shiwen Yang
(University of Electronic Science and Technology of China, Mainland China)
- 09:30 - 09:50 A polarization reconfigurable aperture-fed patch antenna array (paper ID: 101) 60
Wei Lin, Hang Wong, (City University of Hong Kong, Hong Kong)
- 09:50 - 10:10 Broadband Monopolar Patch Antennas With Linear and Circular Polarizations (paper ID: 112) 388
Juhua Liu, (Sun Yat-Sen University, Mainland China)
-

ORAL Session: TH2-ROOM A

Computational Methods - Fast and Efficient Techniques

Co-Chairs: Ulrich Jakobus, Hou Zhang

- 10:30 - 11:00 Analysis of EM Wave Propagation Characteristics in Plasma Sheath of Hypersonic Reentry Blunted Cone (*Invited*) (paper ID: 126) 63
Zimu Yang¹, Xiong Yin², Hou Zhang¹, Shanshan Chen³
(1-Air Force Engineering University, Mainland China; 2-Unit 95948 of the PLA, Mainland China; 3-Electronic Systems Engineering Corporation of China, Mainland China)
- 11:00 - 11:20 The Application of the DGT D Method in the Analysis of Electromagnetic Cavity Properties (paper ID: 45) N/A
Huiping Li^{1,2}, Meilin Liu³, Yi Wang¹, Qunsheng Cao¹
(1-Nanjing University of Aeronautics and Astronautics China, Mainland China; 2-Henan University, Mainland China; 3-Shanghai Institute of Satellite Engineering, Mainland China)
- 11:20 - 11:30 Social-Aware Data Forwarding in Smartphone-Based Delay-Tolerant Networks (paper ID: 38) 81
Fang Xu, Huiyin Zhang, Min Deng, Ning Xu, Zhiyong Wang, (Wuhan University, Mainland China)
- 11:30 - 11:50 An Iterative Reconstructed Method for CNTs-Enhanced Breast Tumor Detection in Microwave Induced Thermo-Acoustic Tomography (paper ID: 46) 66
Shuangli Liu, Xiaozhang Zhu, Zhiqin Zhao
(University of Electronic Science and Technology of China, Mainland China)
- 11:50 - 12:10 Research on Control Strategy of Maximum Power Point Tracking of Doubly-fed Asynchronous Wind Generator (paper ID: 54) N/A
Yuhao Liu, Yunliang Wang, (Tianjin University of Technology, Mainland China)
- 12:10 - 12:30 The Numerical Steepest Descent Path Method to Calculate Physical Optics Radiations with Concave Phase Variations (paper ID: 64) 69
Sijia Teng, Yumao Wu, (Fudan University, Mainland China)

■ 2016-02-25 AM

Room B

ORAL Session: TH1-ROOM B

Special Session3: Antennas Modeling, Design and Optimization for Modern Wireless Communications

Co-Chairs: Zhizhang Chen, Yongling Ban

- 08:30 - 08:50 Experimental Design of CSRR Based Dual Band Antenna for WLAN Application (paper ID: 114) 135
Kumaresh Sarmah¹, Sivaranjan Goswami¹, Angana Sarma¹, Kandarpa Kumar Sarma¹, Sunandan Baruah²
(1-Gauhati University, India; 2-Assam Don Bosco University, India)
- 08:50 - 09:10 An Improved Image Segmentation Algorithm Based on Rough Set (paper ID: 37) 138
Fan Liao, Ruichang Li, (Henan University of TCM, Mainland China)
- 09:10 - 09:30 An Improved Quadric Error Metrics Algorithm Based on Triangle Strips (paper ID: 85) 143
Wei Wang, Mingquan Zhou, Wuyang Shui, Zhongke Wu, Ying Zhou
(Beijing Normal University, Mainland China)
- 09:30 - 09:50 Electromagnetic Simulations and Numerical Models for an Accurate Prediction of Indoor Radio Wave Propagation in an Office Environment (paper ID: 28) 146
Atsushi Kyoya, Manabu Omiya, (Hokkaido University, Japan)
- 09:50 - 10:10 Fast Filling the Near-Matrix and Accelerating Near-MVPs in the MLFMA or the ACA on GPU Platform (paper ID: 182) N/A
Xing Mu, Houxing Zhou, Zhe Song, Wei Hong, (Southeast University, Mainland)
-

ORAL Session: TH2-ROOM B

Special Session6: Novel Methodologies and Designs for Broadband Antenna and High Gain Antenna

Co-Chairs: Cheng Jin, Huapeng Zhao

- 10:30 - 10:50 Terahertz Dielectric Reflectarray Antenna with Elements of Different Permittivity (paper ID: 90) 149
Yu-Xuan Xia, Bin Li, Xiao-Chao Duan, Meng Zhang, Yong Liu, Xin Lv
(Beijing Institute of Technology, Mainland China)
- 10:50 - 11:10 Ka-Band Circularly Polarized Crank-Line Antenna (paper ID: 105) 152
Yuxiao Liang, Chuanfang Zhang, (Beijing Institute of Technology, Mainland China)
- 11:10 - 11:30 An active receiving phased array for Satellite Communication in K band (paper ID: 131) 157
Huanju Wang^{1,2}, Houjun Sun¹, Guodong Han²
(1-Beijing Institute of Technology, Mainland China; 2-The 54th Research Institute of China Electronics Technology Group Corporation, Mainland China)
- 11:30 - 11:50 Dual Polarization Lens Antenna for W-Band (paper ID: 135) 160
Xiangcheng Lu¹, Guoqiang Zhao¹, Huanju Wang^{1,2}
(1-Beijing Institute of Technology, Mainland China; 2-The 54th Research Institute of China Electronics Technology Group Corporation, Mainland China)
- 11:50 - 12:10 *Using Zero-Index Metamaterial to Enhance the Gain of an Broadband Microstrip Patch Antenna* (paper ID: 183) 163
Tianming Zeng, Dongying Li, Wenxian Yu, (Shanghai Jiao Tong University, Mainland China)
- 12:10 - 12:30 *Estimation of Directive Radiator's Beam-width Based on Iteration-Free Near to Far Field Transformation* (paper ID: 186) 167
Huapeng Zhao, Ying Zhang, Jun Hu, Zhizhang Chen
(University of Electronic Science and Technology of China, Mainland China)

■ 2016-02-25 AM

Room C

ORAL Session: TH1-ROOM C

Applications - Co-Simulation of Electronic Circuits

Co-Chairs: Yuanan Liu, Zeming Xie

- 08:30 - 08:50 A Multilevel Green's Function Interpolation Method for the Analysis of Metasurface-Based Antennas (paper ID: 40) 236
Peng Zhao¹, Daqing Liu², Chi Hou Chan³, Gaofeng Wang¹
(1-Hangzhou Dianzi University, Mainland China; 2-Huawei, Mainland China; 3-City University of Hong Kong, Hong Kong)
- 08:50 - 09:10 An Improved Localization for Wireless Sensor Network Using Support Vector Regression (paper ID: 177) 265
Mei Wang, Wen-xin Fu, Ya-dong Li, Heng-wei Li
(Tianjin Entry-Exit Inspection and Quarantine Bureau, Mainland China)
- 09:10 - 09:30 Design of Low Phase-Noise Oscillator Based on a Novel Bandpass Filter (paper ID: 130) 256
Xiaoliang Zhang, Yongle Wu, Lingxiao Jiao, Yuanan Liu
(Beijing University of Posts and Telecommunications, Mainland China)
- 09:30 - 09:50 Low Power Injection-Locked Frequency Divider Using Native MOS (paper ID: 11) N/A
Sheng-Lyang Jang, Wen-Cheng Lai, Wei-Te Liu, Ching-Wen Hsue
(National Taiwan University of Science and Technology, Taiwan)
- 09:50 - 10:10 The Design of Cylindrical Longitudinal Gradient Coils with Simulated Annealing (paper ID: 178) 239
Li Li^{1,2}, Zihui Zhu¹, Xuwei Ping¹
(1-HoHai University, Mainland China; 2-Nanjing University of Science and Technology)
-

ORAL Session: TH2-ROOM C

Special Session7: Antennas and Microwave Techniques for 5G and Future Communications

Co-Chairs: Kwai Man Luk, Sai-Wai Wong

- 10:30 - 10:50 A Magneto-Electric Dipole Antenna with Tunable H-plane Beamwidth (paper ID: 138) 242
Lei Ge¹, Kwai Man Luk²
(1-Shenzhen University, Mainland China, 2-City University of Hong Kong, Hong Kong)
- 10:50 - 11:10 A Novel End-Fire Magneto-Electric Dipole Antenna Fed by Substrate Integrated Waveguide (paper ID: 148) 245
Yujian Li¹, Kwai-Man Luk²
(1-Beijing Jiaotong University, Mainland China, 2-City University of Hong Kong, Hong Kong)
- 11:10 - 11:30 New Output Combiner Design for Broadband Doherty Power Amplifier (paper ID: 136) 390
Shichang Chen, (Hangzhou Dianzi University, Mainland China)
- 11:30 - 11:50 Comparisons of Via-Coupling and Gap-Coupling for End-Coupled Bandpass Filters (paper ID: 141) 247
Wei Qin¹, Wenwen Yang¹, Jian-Xin Chen¹, Qing-Yuan Lu¹, Jin Shi¹, Quan Xue²
(1-Nantong University, Mainland China; 2-City University of Hong Kong, Hong Kong)
- 11:50 - 12:10 A Printed Dual-Wideband Magneto-Electric Dipole Antenna and Its MIMO System for WLAN and WiMAX Applications (paper ID: 142) 250
Botao Feng¹, Jianfeng Zhu², Li Deng², Wenxing An³
(1-Shenzhen University, Mainland China; 2-Beijing University of Posts and Telecommunications; 3-Tsinghua University)
- 12:10 - 12:30 A New Design Method for Balun Bandpass Filter with Triple Mode Response (paper ID: 147) N/A
Jianpeng Wang, Xuedao Wang, Gang Zhang, Feng Huang
(Nanjing University of Science and Technology, Mainland China)

■ 2016-02-23 PM

Building#31 Lobby , 16:00 - 17:30

Poster Session - Best Paper nominations

- P1. Numerical Study on the Field Projection Error in the Equivalence Principle Algorithm (paper ID: 134) 326
Maokun Li, Xunwang Dang, Fan Yang, Shenheng Xu
(Tsinghua University, Mainland China)
- P2. Researches on Far-Field Super-Resolution Imaging Based on Time-Reversed Electromagnetics at UESTC (paper ID: 18) 329
Bing-Zhong Wang, Ren Wang, Zhi-Shuang Gong, Qiang Gao, Xiao-Hua Wang
(University of Electronic Science and Technology of China, Mainland China)
- P3. Fast Direct Solution of Volume Integral Equations Based on Skeletonization by Method of Moments (paper ID: 53) 332
Ming-Ming Xu, Yan-Nan Liu, Xiao-Min Pan, Xin-Qing Sheng
(Beijing Institute of Technology, Mainland China)
- P4. Numerical SOC/SOL Calibration Technique for De-Embedding of Periodic Guided-wave Structures (paper ID: 70) 335
Lei Zhu¹, Qionsen Wu¹, Sai-Wai Wong²
(1-University of Macau, Macau; 2-South China University of Technology, Mainland China)
- P5. Efficient phase-only linear array synthesis including mutual coupling and platform effect (paper ID: 80) 338
Xin Huang¹, Yanhui Liu¹, Pengfei You¹, Jing Yang¹, Qing Huo Liu²
(1-Xiamen University, Mainland China; 2-Duke University, United States)
- P6. A Simple Way for Near-field Source Localization with MUSIC (paper ID: 94) 340
Jianzhong Li¹, Yide Wang², Cédric Le Bastard³, Gang Wei¹, Biyun Ma¹
(1-South China University of Technology, Mainland China; 2-Ploytech Nantes, France; 3-Cerema, France)
- P7. Numerical Dispersion Analysis of Energy Conserved Splitting FDTD Method for Maxwell's Equations (paper ID: 139) 343
Lei Zhao, Wen Li, Wenhua Yu
(Jiangsu Normal University, Mainland China)
- P8. Calculation of the scattering field of lossy finite-size object (paper ID: 143) 346
Junhong Wang, zhan Zhang
(Beijing Jiaotong University, Mainland China)
- P9. Sparse Solution Methods for Inverse Problems in Antennas and Propagation (paper ID: 150) 348
Huapeng Zhao
(University of Electronic Science and Technology of China, Mainland China)
- P10. Towards the Wave-equation Based Explicit FDTD Method Without Numerical Instability (paper ID: 175) 262
Wei Fan¹, Zhizhang(David) Chen^{1,2}, Shunchuan Yang³
(1-Dalhousie University, Canada; 2-University of Electronic Science and Technology of China, Mainland China; 3-The University of Toronto, Canada)
- P11. Distributed Joint Antenna and User Selection for MIMO Broadcast Channels (paper ID: 51) 268
Song Xue, Zuping Qian, Wei Shao, Wei Zhong
(PLA UST, Mainland China)
- P12. Nondominated Ranking Team Progress Algorithm for Multiobjective Optimization and Antenna Design (paper ID: 68) 350
Bowei Zhao^{1,2}, Lijie Xu¹, Yiming Tang^{1,2}, Ming Zhang^{1,2}, Yaming Bo^{1,2}

-
- (1-Nanjing University of Posts and Telecommunications, Mainland China; 2-Southeast University, Mainland China)
- P13. Derivation and Resolution of an Electromagnetic Inverse Source Problem in Two Dimensions (paper ID: 15) N/A
Reza C. Janalizadeh, Bijan Zakeri
(Babol Noshirvani University of Technology, Iran)
- P14. Numerical Calculation of Ship Squat Base on CFD (paper ID: 146) 382
Qiang Li, Bi-guang Hong, Xiao-ri Gao
(Dalian maritime University, Mainland China)

■ **2016-02-23 PM**

Building#31 Lobby , 16:00 - 17:30

Poster Session 1

- P15. Simulation and Analysis of Indoor Millimeter-wave Propagation Based on the Ray Tracing Method (paper ID: 48) 353
Guan yun Wang, Yuan jian Liu and, Shuang de Li
(Nanjing University of Posts & Telecommunications Nanjing, China)
- P16. One-step Leapfrog WCS-FDTD Method for Lossy Media (paper ID: 97) 356
Jian-Yun Gao¹, Xiang-Hua Wang²
(1-Tianjin Vocational Institute, Mainland China; 2-Tianjin University of Technology and Education, Mainland China)
- P17. Design of a Corrugated Tapered Slot Antenna for Microwave Imaging (paper ID: 34) 359
Saba Rashid¹, Yizhi Wu¹, Xiongbing Wang¹, Yifan Wang², Yongsheng Ding¹
(1-Donghua University, Mainland China; 2-University of Queensland, Australia)
- P18. Stability of the Extended Four-Step ADI-FDTD Method Including Lumped Capacitors (paper ID: 167) 361
Yong-Dan Kong, Xing-Wei Xiao, Qing-Xin Chu
(South China University of Technology, Mainland China)
- P19. Development of the CPML for Four-Stages Split-Step Unconditionally-Stable FDTD Method (paper ID: 169) 364
Yong-Dan Kong, Xing-Wei Xiao, Qing-Xin Chu
(South China University of Technology, Mainland China)
- P20. A Differentially Fed Implantable Antenna with Circularly Polarization for Biomedical Telemetry (paper ID: 59) 367
Bing Li, Xiong-Ying Liu
(South China University of Technology, Mainland China)
- P21. A Compact Printed Triple-band MIMO/Diversity Antenna for WLAN/WiMAX Applications (paper ID: 60) 370
Hui-Fen Huang, Shu-Guang Xiao
(South China University of Technology, Mainland China)
- P22. Wearable PIFA antenna for Smart Glasses Application (paper ID: 63) 373
Yu-Fa Zheng¹, Sai-Wai Wong², Qi-Kai Huang²
(1-Guangdong Power Grid Co., LTD, Mainland China; 2-South China University of Technology, Mainland China)
- P23. Differential Wide-Slot UWB Antenna With Band-Notched Applications (paper ID: 77) 275
Zhi-Hong Tu, Yan-Yan Liu, Qing-Xin Chu

-
- (South China University of Technology, Mainland China)
- P24. Monopole-like Bowtie Slot Antenna for Ultrawideband Applications (paper ID: 82) 376
Saba Rashid, Yizhi Wu, Yongsheng Ding
(Donghua University, Mainland China)
- P25. A Spiral Electrically Small Magnetic Antenna With High Radiation Efficiency for Wireless Power Transfer
(paper ID: 157) 379
Hui-fen Huang, Ting Li
(South China University of Technology, Mainland China)
- P26. Simulation-Driven Optimization of a Fabry-Perot Cavity Resonator Antenna with Gradient Index Superstrate (paper ID: 22) N/A
Maria Kovaleva, Basit Ali Zeb, David Bulger, Karu P. Esselle
(Macquarie University, Australia)

■ 2016-02-24 PM

Building#31 Lobby , 15:30 - 17:00

Poster Session - 2

- P1. A Wideband Dual-Polarized Antenna for Base Station Applications (paper ID: 109) 281
Dong-Ze Zheng, Qing-Xin Chu, (South China University of Technology, Mainland China)
- P2. Implementation A Compact Microstrip Antenna for Wireless Fidelity (Wi Fi) At 2.4 GHz (paper ID: 16) 285
Yuli Kurnia Ningsih, Indra Surjati, Risma Lukito
(Trisakti University, Indonesia)
- P3. Design of Microstrip Antenna Array Feeding Structure with 31dB Side Lobe Level (paper ID: 27) N/A
Abdulgader Z. Abdalla
(College of Electronics Technology, Libya)
- P4. Immune Algorithms using in Pattern Synthesis of Antenna Array (paper ID: 31) N/A
Yufeng Wang, Jiefu Zhang, Xianglong Bai, Jianhua Zhou
(Shanghai Hollywell Electronic System Co.,Ltd, Mainland China)
- P5. A Conformal Antenna Array with Coplanar Waveguide Series Feed Configuration (paper ID: 88) 288
Xue Chen, Jinrong Su, Liping Han, Xinwei Chen, Wenmei Zhang
(Shanxi University, Mainland China)
- P6. Simulation and Analysis of 60GHz millimeter-wave Propagation characteristics in Indoor Complex Environment (paper ID: 17) 291
Yong Li¹, Guanyun Wang², Shuangde Li², Feng Chen², Yuanjian Liu², Pengfei Wang²
(1-Zhongxing limited corporation of telecommunications, Mainland China; 2-Nanjing University of Posts & Telecommunications, Mainland China)
- P7. Research on the electromagnetic scattering characteristics of the ablation particles in plasma sheath in reentry process (paper ID: 23) 294
De Liu, Li-Xin Guo, Jiang-Ting Li, (Xi'dian University, Mainland China)
- P8. Novel Imaging Method Based on The Symmetry of The Cross-correlation Function for Noise Suppression (paper ID: 98) N/A
Guangmin Zhang, Yue Song
(Dongguan University of Technology, Mainland China)
- P9. A Novel Dual-Band Power Divider Using Symmetric Stepped-Impedance Inverters (paper ID: 32) N/A
Xi Miao, Yun Liu
(Nanjing University of Aeronautics and Astronautics, Mainland China)
- P10. Dual-Band Rotary Standing Wave Voltage-Controlled Oscillator for Fiber Lasers in Microwave Generation (paper ID: 50) N/A
Wen-Cheng Lai, Sheng-Lyang Jang, Ching-Wen Hsue
(National Taiwan University of Science and Technology, Taiwan)
- P11. Compact Planer Quasi-Elliptic Balanced Filter With Extended Upper-Stopband and High CM Suppression (paper ID: 117) 297
Zhao-An Ouyang, Qing-Xin Chu
(South China University of Technology, Mainland China)
- P12. Triple-mode Wideband Bandpass Filter Using Single Rectangular Waveguide Cavity (paper ID: 81) 300
Shi Fen Feng¹, Sai-Wai Wong¹, Fei Deng¹, Lei Zhu², Qing Xin Chu¹
(1-South China University of Technology, Mainland China; 2-University of Macau, Macau)
- P13. Balanced BPF With Controllable Dual Passband Performance (paper ID: 99) 385
Xiaohu Wu, Junxiang Ge, Fuchang Chen

-
- (Nanjing University of Information Science and Technology, Mainland China)
- P14. A New Modified Broadband Asymmetric Doherty Power Amplifier (paper ID: 102) 320
Qijin Yu, Cuiping Yu, Bihua Tang, Mingshuang Fan, Yuanan Liu
(Beijing University of Posts and Telecommunications, Mainland China)
- P15. Design of a Dual-Band Doherty Power Amplifier Utilizing Improved Combiner (paper ID: 103) 323
Mingshuang Fan, Cuiping Yu, Qijin Yu, Yuanan Liu
(Beijing University of Posts and Telecommunications, Mainland China)
- P16. Multimode Band-pass Filter with Four Transmission Zeros on SIW Structure (paper ID: 106) 303
Qing-Tao Huang, Qing-Xin Chu, Kai Wang, Sai-Wai Wong
(South China University of Technology, Mainland China)
- P17. Miniaturization of I-Slot Antenna With Improved Efficiency and Gain (paper ID: 75) 305
Mondher Labidi, Fethi Choubani
(Innov'com, Tunisia)
- P18. A dual-port frequency reconfigurable antenna for cognitive radio applications (paper ID: 179) 305
Guiping Jin, Houbi Liao, Dan Liu
(South China University of Technology, Mainland China)
- P19. Design and Analysis of a Frequency Selective Radome (FSR) with Wideband Absorbing Properties (paper ID: 44)
Huangyan Li, Qunsheng Cao, Chenchen Yang, Yi Wang
(Nanjing University of Aeronautics and Astronautics, Mainland China)
- P20. Graphene Absorber with 40.6% bandwidth in THz (paper ID: 9) N/A
Jiahui Fu¹, Meng Chang¹, Weidong Kong¹, Junqian Niu², Zhennan Yang³, Qun Wu¹
(1-Harbin Institute of Technology, Mainland China; 2-Beijing General Research Institute of Electronic Engineering, Mainland China; 3-Harbin University of Science and Technology, Mainland China)
- P21. UWB planar monopole antenna With Two Band-Notched Characteristics (paper ID: 155) 259
Guiping Jin, Dan Liu, Houbi Liao
(South China University of Technology, Mainland China)
- P22. Ring-Circled Mono-Cone Antenna for Wireless Body Area Network Applications (paper ID: 95) 308
Yue Zhang, Weiwei Liao, Qingfeng Zhang, Yifan Chen
(South University of Science and Technology of China, Mainland China)
- P23. A Sector-Shaped Dual-Polarized Antenna with T-Shaped Feeding Structure (paper ID: 116) 311
Dong Hua Huang, Qing Xin Chu
(South China University of Technology, Mainland China)
- P24. A Broadband Dual-Polarized Butterfly Antenna for Base Stations (paper ID: 119) 314
Rui Wu, Qing Xin Chu
(South China University of Technology, Mainland China)
- P25. A Novel Wideband High Gain Dual-Polarized Dipole Antenna for Base Station (paper ID: 127) N/A
Lei Hou, Xue Lei, Guang-Qiu Zhang
(Information Engineering University, Mainland China)
- P26. A Slot-Coupled Water-Based Stacked-Patch Antenna for Wireless Communications (paper ID: 129) 317
Ren-Gui Fan, Qing-Xin Chu
(South China University of Technology, Mainland China)
- P27. A Higher Efficiency Approximation Algorithm for Directed Steiner Tree (paper ID: 128) N/A
Yunpeng Yu, Fei Wang
(Harbin Institute of Technology, Mainland China)