

2025 IEEE 8th International Symposium on Electromagnetic Compatibility (ISEMC 2025)

**Hefei, China
10-12 October 2025**



**IEEE Catalog Number: CFP25J66-POD
ISBN: 979-8-3315-7916-6**

**Copyright © 2025 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 is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.***

IEEE Catalog Number:	CFP25J66-POD
ISBN (Print-On-Demand):	979-8-3315-7916-6
ISBN (Online):	979-8-3315-7915-9

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

Contents

SS1.Electromagnetic Measurement and Computation

Radio Environment Map Reconstruction via Multi-Scale Feature Fusion Convolutional Autoencoder

Qingwen Zhang, Fang Liu, Yuanan Liu(1)

Efficient Analysis of EM Scattering from Conducting Objects with Thin Lossy Coatings

Xiaocui Liu, Wei Du, Dechen Wang, Ping Bao, Yongpin Chen(4)

Efficient Analysis Method for Periodic Arrays with Metals and Thin Dielectrics

Xiaocui Liu, Wei Du, Songbing Cai, Yongpin Chen, Yuqiao Xu, Chunxia Pan(6)

Thru Based Method with the Aid of Electromagnetic Simulation for Millimeter-Wave De-embedding

Jun Fu, Wenpu Cui, Xudong Cai(8)

Measurement System for Millimeter Wave Electric Field Based on I/Q Demodulation Technique

Hui Zhao, Congsheng Li, Dianyuan Qi(11)

Research on Key Technologies and Methods for Over-the-Air Testing of Mobile Terminals Directly Connected to Low Earth Orbit Satellite Communication Networks

Guoqing Li, Hao Ren, Yang Hu, Chun Yu, Shasha Jiang(14)

Analysis of Electromagnetic Coupling Effects between Cables in the Wireway of Civil Aircraft's ERN Based on Field-line-circuit FDTD Method

Mingxuan Wang, Huaiyu Guo, Qifeng Liu, Wenhao Zhao, Yuqing Lu, Ye Yuan(19)

Low-Cost and High-Efficiency Electromagnetic Near-Field Scanning System Based on AI-Enabled Visual Manipulator

Wenting Liu, Yushi Deng, Zimeng Zeng, Shizhan Jiang, Da Yi, Ming-Chun Tang(23)

Adjustable Pulsed Magnetic Field Simulator Based on Helmholtz Coils

Xueqing Huang, Qi Zhang, Hailin Chen, Shangchen Fu, Lihua Shi(26)

SS2.Metasurfaces and Their Applications in the Regulation of Antenna Radiation and Scattering Characteristics

Scattering-Reduced Antenna Array Using Phase-Opposed Elements with Constant Reflection Amplitude Ratio

Bangbang Li, Peng Geng, Jiabao Luo, Yongtao Jia, Ying Liu(36)

Design of a 2-Bit Reconfigurable Reflectarray Antenna With Simple Structure Based on the Equivalent Circuit Theory

Ning Yang, Jiayi Yan, Yi Chen Zhong, Yongtao Jia, Ying Liu(39)

A Design Method of Directional Frequency Reconfigurable Fabry-Perot Cavity Antenna Based on Polarization Rotation Reflective Surface

Weihaio Tang, Yongtao jia, Ying Liu(42)

Rectangular Metamaterial Luneburg Lens for Dual Polarizations

Luyi Wang, Hongyu Shi, Long Huang(44)

Manipulation of Diffraction Fields with Electromagnetic Metagratings

Zhen Tan, Shah Nawaz Burokur(47)

Minimalist 1-bit Phase Coding Metasurface for Non-Diverging Vortex Beam Generation

Rui Feng, Yaokai Yu, Dongyang Wu, Shijian Tan, Qiulin Tan, Shah Nawaz Burokur(50)

Fast Design Optimization Framework for Low-Profile Dual-Polarization Frequency-Selective Resorber Using the Space Mapping Approach

Chang Hao Zhao, Yu Xing Li, Yi Qian Mao, Jian Wei You, Jia Nan Zhang(53)

SS3.EMI Mitigation Techniques in Wireless Communication

A New Composite Probe With high Sensitivity, and Multiple components

Lei Wang, Chengyang Luo, Quan Huang, Guoguang Lu(56)

A calibration method for spatial resolution of near field probe

Hongchuan Jia, Fayu Wan, Xiaohe Chen, Blaise Ravelo, Dmitry Kholodnyak(59)

AI-Driven Pre-Distortion and EMI-Aware Smart Antenna Arrays for Interference-Resilient 6G Communications in Dense Electromagnetic Environments

Muhammad Bilal Yaseen, Fayu Wan, Xiaohe Chen, Blaise Ravelo, Hongchuan Jia, Dmitry Kholodnyak(62)

A Dual Polarization-Independent Tunable Active Second-Order Filter Featuring Wideband Phase and Polarization Reconfigurable Functions

Zhefei Wang, Fang Xu, Qingsheng Zeng, Jianqiang Hou, Jiahui Fu, Qun Wu, Fayu Wan(65)

SS4.Analysis and Control Technology of Electromagnetic Environment for Complex Systems

Absorptive Energy Selective Surface Based on Resonant Structure with PIN Diodes

Shangjing Xi, Song Zha, Yanqing Cheng, Yuan Xu, Jijun Huang, Peiguo Liu(68)

Compact Broadband Discone Antenna for Electric Field Generators in EMC Testing

Jiaming Li, Qi Zou, Hao Ruan, Gaosheng Li(71)

Preliminary Analysis of Broadband Interference Characteristics at Nanshan Observatory

DU Qingqing, LIU Qi, MA Ling, CAi Minghui, LI Guanghui(74)

A High-power microwave field-line coupling analysis method based on the antenna reciprocity theorem

Bo Zhang, Song Zha, Jijun Huang, Ming Xu, Honglin Zhang, Zesen Li(78)

Ultra-Wideband Signal Receiver Front-End Based on Modulated Wideband Converter Technology

Meiling Chen, Wei Li, Mingliang Xie, Jiahao Zhang, Binbin Su, Lei Zhang(83)

SS6.Numerical Techniques in Electromagnetic Compatibility (EMC) Analysis

Research on Radiation Emission Simulation of Electric Drive System Based on Port Parameter Measurement

Tan Ze-qiang, Li Xiao-jiao, Dong Ya-wen, Fan Gui-quan, Song Pu-xuan, Lei Jian-mei(86)

An Efficient Surface Current Calculation Method Compatible with Cartesian Grids

Chenyi Liu, Zhaoyang Liu, Wen Shi, Jian Wang(89)

A Robust Algebraic Multigrid Solver for Electrothermal Simulation of PCBs

Hangkai Zhang, Xiaohe Chen, Shufang Li, Xinglin Sun, Yin Sun, Xu Wang, Jun Fan(92)

SS7.Emerging Trends in Radar Echo Generation and Scattering Center Modeling: Techniques, Applications, and AI Integration

Forward Parametric Modeling of Attributed Scattering Centers Based on Induced Surface Currents

Ziliang Zhao, Anqi Wang, Lixia Yang, Zhixiang Huang(95)

An SBR method Based on Panel Subdivision for RCS Prediction of Electrically Large Target

Jin-Peng Xiong, Juan Li, Wei Meng, Yu-Lu Biao, Lei Zhao,Zhe Li(98)

An Investigation on Composite EM Scattering by MoM-SBR-PTD Hybrid Technique

Yu-Lu Biao, Juan Li, Wei Meng, Jin-Peng Xiong, Chu-Yu Duan, Yong-Ji Xi(101)

Marine Small Target Detection Using Adjacent Clutter-Guided Attention Enhancement

Tian Li, Xueli Pan, Lixia Yang(104)

Research on Amplitude Statistics from Composite Rough Surface with Vegetated Sub-Regions Based

on the SBR-VRT Hybrid Method

Zou Yu-Feng, Chai Shui-Rong, Zhu Fang-yin, He Zhenxiang, Guo Li-Xin, Liu Wei(107)

SS8.Electromagnetic Modeling with Different Mathematical Methods for Reliable Analysis and Research

Sensitivity Analysis of Spherical Structures with the Adjoint Variable Method

Zishuo Chen, Yuxian Zhang, Xiaoli Feng(110)

A New Platform for Investigation of Electrode Moving Speed Effect and Characteristics in Small-gap Electrostatic Discharge

Ruan Fang-ming, Xu Kai, Lou Shi-chao, Wang Wen-li(113)

SS9.Electromagnetic Environmental Effects, Electromagnetic Compatibility and Protection Techniques

Design and Simulation of Ku Band Waveguide Energy-Selective Devices

Tongxin Liu, Chenxi Liu(119)

Design of a Vanadium Dioxide-Based Waveguide Energy Selective Surface

Yanqing Cheng, Chenxi Liu, Shangjing Xi, Yuan Xu, Peiguo Liu(122)

The Insertion Loss Prediction of EMI Filters Based on LSTM

Longfei Yang, Jinjing Ren(125)

Analysis of the Impact of Shielding Gasket Size Selection on Shielding Effectiveness in Shielding Design

Chao Zhang, Qi Liu, Na Wang, Yuming Fan, Xiaoming Su, Minghui Cai(128)

Near-field Electromagnetic Radiation Analysis of the Main Control Board in an Electrical Cabinet

Haoguang Xia, Qixin Mi, Zhenjiang Zhang, Yansong Huang, Zewei Wu, Jinling Zhang(131)

A Method for Rapid Calculation of Shielding Effectiveness of Irregular Cavities with Apertures

Xingrui Zhu, Jinjing Ren, Zhongyuan Zhou, Mingjie Sheng(134)

Research on Test Conditions for HIRF Directly Illumination Methods in Semi Anechoic Chamber of Civil Aircraft Power Supply

Jinkui Zhao(137)

SS10.Advanced Antenna Array and Beamforming Technologies

A Wideband Millimeter-Wave Circularly Polarized Magneto-Electric Dipole Phased Array for Wide-Angle Beam Scanning Application

Runzhi Xia, Zhuozhu Chen, Sha Xu(141)

Research on the Modes Purity of Frequency-Dependent Vortex Electromagnetic Waves Generated by UCA

Jingcan Ma, Jiazhen Cai, Yufei Fu(144)

Dual-Circularly Polarized Wearable Array Antenna Based on A Dual-Port Rotational Feeding Network

Wenfei Tang, Xiang Gao, Kun Guo, Yuesong Ding, Xiangyuan Bu, Jianping An(147)

An Interference Suppression Beamforming Method for Sparse Circular Arrays Based on the Joint UDL and CPSO Algorithms

Kun Guo, Xiang Gao, Wenfei Tang, Yuesong Ding, Xiangyuan Bu, Jianping An(150)

Compact Meander-Line Monopole Antenna with Parallel Matching for VHF Wearable Applications

Yuesong Ding, Xiang Gao, Kun Guo, Kun Guo, Wenfei Tang, Xiangyuan Bu, Jianping An(153)

A Wideband Circularly Polarized Filtering Folded Transmitarray with Enhanced Gain Bandwidth

Kezhan Zhang, Ruixue Zhang, Zhi Luo, Peng Li, Haoran Zu(156)

SS11.Advanced-Performance of Multi-Mode Resonance Antennas and Arrays

Design of a circularly polarized antenna with enhanced wide beam width

Chengjun Xiao, Nengwu Liu(159)

Design of a Dual-Resonance Circularly Polarized Microstrip Antenna

Xinfu Gao, Neng-wu Liu(162)

Filter Automatic Tuning by Using Harris Hawks Optimization Algorithm

Bo Situ, Fu-Chang Chen(165)

SS12.Low-Cost Phased Arrays for 6G Communication and the Integration of Sensing and Communication (ISAC)

Harmonic Beamforming for 2-Bit Time-Modulated Arrays

Yunying Man, Peng Yang, Hao Yang, Zhibo Zhang, Yingwei Zhao(168)

A Method for Dual-Circularly Polarized Harmonic Beamforming in Time-Modulated Array

Xumin Chen, Lu Yin, Zhirui Li, Chuan Chen(171)

Power-Only Calibration Method for Large-Scale Phased Array Based on Grouped Phase Shifting and Neural Network

Jiawang Zheng, Zengdi Bao(174)

High-Gain Low-Profile Vertically-Polarized Yagi Antenna Using High-Order Mode Magnetic Dipole

Peifeng Li, Yinbo Zhao, Zengdi Bao(176)

SS13.Advanced Spoof Surface Plasmon Polaritons Devices and Antennas

Circularly Polarized Beam-Scanning Leaky-Wave Antenna Based on Etched Asymmetric Circular Patch Fed by Spoof Surface Plasmon Polaritons

Zhang Wen Cheng, Meng Wang, Hui Feng Ma(178)

SS14.Time Domain Methods for Radio Frequency Circuit and Device Simulation

An Efficient TDR/TDT Simulation Method for High-Speed Interconnects

Beining Sun, Tingting He, Wenhao Zhou, Zheng Guo, Kanglong Zhang, Peng Zhao, Shichang Chen, Gaofeng Wang, Haogang Wang(181)

Design and Implementation of a Broadband Balun Using LTCC Technology

Shengping Huang, Jing Meng, Zhi Xu, Kanglong Zhang, Yi-Feng Cheng(184)

A Novel Dipole Antenna Design with ESD Protection Function by Loading LC Resonator

Zhi Xu, Shengping Huang, Kanglong Zhang, Yifeng cheng(187)

A Miniaturized Broadband Patch Antenna With Adjustable Feeding Position

Hong Xia Xu, Su Zhi Liao, Sheng Ping Huang, Zhi Xu, Yi-Feng Cheng, Peng Zhao, Gao Feng Wang(190)

An Ultra-Thin Flexible Ridge-Loaded Air-Cavity Transmission Line for Broadband Millimeter-Wave and Terahertz Applications

Yurou Li, Mengjun Wang, Chengjia Li, Mei Yang, Hongxing Zheng(193)

SS15.Array Techniques and Systems for Multi-beam Manipulation

Fast Calculation and Optimization of $\pm 45^\circ$ Polarized Multi-Beam Leaky-Wave Antenna

Zi-Jun Zheng, Fan-Yi Meng, Chang Ding(196)

A Miniaturized Bandpass Frequency Selective Surface Based On Liquid Crystal

Jian-Feng Lv, Ming Gu, Li-Sheng Liu, Fan-Yi Meng, Chang Ding(199)

Time-Modulated Metasurface-Based SAR-GMTI 2D Jamming for Drone Reconnaissance

Qishuo Sun, Xiuwen Tian, Jinwei Chen, Xinmin Fu, Chang Ding, Huilin Mu(202)

Power Amplifier Nonlinearity in Multibeam DFRC Systems

Daomin Hao, Jiahao Zhang, Zhi Huang, Zhanbiao Yang, Hengfeng Wang, Jundi Wang(205)

SS16.Advancements in Antenna Design and Filter Technologies for Next-Generation Electromagnetic Compatibility

Optimization Design of Sparse Conical Array Based on An Adaptive Genetic Algorithm

Conghui Qiu, Huan Yang, Foxiang Liu(208)

Auto-Design and Prediction of Ultra-Wideband Terahertz Metasurface Absorber Based on Deep Learning

Jinyu Liu, Xiaowei Wang, Kun Zhan, Pin Wen(211)

A Broadband High-Gain Radiation Pattern-Reconfigurable Lens Antenna Based on Liquid Metal

Zhixin Lei, Zhiming Liu, Huilin Zhou, Yuhao Wang, Yuxuan Huang(214)

A Compact Wide-Stopband Glass-Based Bandpass Filter Using Slow-Wave SIW Structure With Non-Uniform Blind Vias

Xiaoxuan Xia, Yulin Peng, Dan Wang, Pin Wen(217)

Inverse Design of Polyaniline Metasurface Based on CGAN Neural Network

Yunbo Chu, Naixing Feng, Zhixiang Huang(220)

A Differentially Fed Filter-in-Antenna (FiA) Design with High Selectivity and Low Cross-Polarization

Zhenyao Qian, Yifan Chen, Shengtao Jiang, Jinxia Chen, Lei Ge(223)

SS17.Electromagnetic Environmental Effects and Reliability

Fast Microwave Magnetic Field Imaging Method Based on Diamond NV Center

Jiong Tang, Yangyang Zhou, Peng Han, Jian Qiu, Yiqiang Chen, Weiheng Shao(226)

RF Current Distribution Measurement based on Fourier Space Reconstruction for PCB Interconnect Structure

Xie Yusong, Zhou Yangyang, Qiu Jian, Han Peng, Cheng Yiqiang, Shao Weiheng(229)

Fast Sparse Multi-Frequency Near-Field Scanning Based on SVT-Assisted Low-Rank Reconstruction

Ziyu Weng, Shasha Li, Wenxiao Fang(232)

Conducted EMI Measurements of Cables Based on Time-Domain Signal Reconstruction Method by Using a Current Probe

Xin Cheng, Tongtong Liu, Lianghua Ye, Yunlei Shi, E Shao, Weiheng Shao(235)

Reliability Evaluation of DC/DC Converters under Irradiation-Accelerated Degradation Testing

Ling Zhao, Bin Suo(239)

Towards Robust Hardware Trojan Detection Using Electromagnetic Radiation in Integrated Circuits

Hou Bo, Wang Liwei, Shao Weiheng, Huang Zhongkai, Luo Yongzhen, Qu Chenbing(242)

Quantification of Margins and Uncertainty in the Resistance of a Power Supply Circuit to Synergistic Effects of Gamma Radiation and Electrical Fast Transients

Chicheng Liu, Cui Meng, Meiqing Zhong(246)

Design of Electromagnetic Environment Data Visualization System for Civil Aircraft

Chunyong Han(249)

Shielding Characteristics of Aircraft Electronic Equipment Compartment Against Electromagnetic Pulse

Chunyong Han(252)

Design and Application of a Visualization System for Airport HIRF Environmental Data

Min Liang(255)

SS18.Advanced Numerical Methods and Simulation Techniques for Electromagnetic Field Analysis and Their Applications in Electromagnetic Compatibility (EMC)

Study of Crosstalk Prediction Method for High-Voltage and Low-Voltage Wire Harnesses Considering Electromagnetic Parameter Dynamic Variations

Hao Zhang, Changsong Cai, Junhua Wang, Yanpu Zhao, Xiaolong Jia, Jiaji Yang, Wen Xiang, Leke Wan, Zhaoyang Yuan, Wenfang Li, Liwei Feng, Yiting Wang, Xiaolin Lian(258)

Electromagnetic Interference Characteristics and Compatibility Enhancement of Wireless Charging Coupling Mechanism for Electric Vehicles

Wanzhu Zhu, Changsong Cai, Junhua Wang, Hao Zhang, Xiaolong Jia, Jiaji Yang, Wen Xiang, Yanpu Zhao, Leke Wan, Zhaoyang Yuan, Yeqiu Xiong(261)

SS19.Innovation of Electromagnetic Compatibility Testing Technology and Strategies for Interference Suppression and Rectification

A thermal protection method of transmitter based on thermal monitoring mechanism

Chuan yang Liu, Yuansheng Shi, An yan Liu(264)

Microwave Pulse Duration Measurement Based on Thermoacoustic Signals

Tiantao Hu, Lin Huang, Yulong Guo, Jiawei Long, Xiaolu Wang, Xing Liu(267)

Integrated Circuit Level Narrow Spectrum High Power Microwave Test Method Research

Wei Song, Xing Liu, Shiyue Wu, Jun Chen, Yunfeng Qiu, Jianjing Zhou, Yu Zhao, Xingwang Hou(270)

Analysis of radiated immunity test to automotive integrated circuit using cellular mobile communication signals

Qi Li, Li li Lei, Ying Liu(273)

Directional Dipole Antenna for Through-Wall Radar with Reduced Back Radiation

Naike Du, Yuchao Guo, Ruoyu Wang, Guangzhong Zhang, Chao Sun, Xiuzhu Ye(277)

A Novel Filtering Strategy for Mainlobe Interference Suppression Using Temporal Feature Extraction in Polarization Sensitive Array

Hongzhang Gao, Hengfeng Wang, Juntian Bo, Xi Yu, Jiahao Zhang, Jin Meng(279)

SS20.Recent advances of highly integrated multi-functional devices

Bandwidth-Enhanced Platform-Integrated Compact VHF Antenna for CubeSat Applications

Changjiao Duan, Lihua Wang, Baofeng Cao, Peng Li, Yingsong Li, Adrian Bekasiewicz(283)

Dual-Band Pattern Diversity All-Textile Antenna Based on TM00 and TM10

Li-Hua Wang, Chang-Jiao Duan, Bao-Feng Cao, Peng Li, Yingsong Li, Adrian Bekasiewicz(285)

A Low Complexity and High Accuracy Underground Pipeline Detection Method Based on Measurements Using VHF/UHF Antenna

Hongyu Zhou, Guanghui Xu, Yingsong Li, Zhixiang Huang(287)

All-metal Corrugated Horn Antenna with Out-of-Band RCS Reduction

Zhuqiong Lai, Guanghua Liang, Yaxin Xu, Wei Han, Yuan Zhou, Jianxing Li(290)

Dual-Band Decoupling Network for Two Compact Antennas Based on Combination of Hybrid Coupled Resonator and Transmission Line

Hairong Deng, Qi Yu, Jianmin Zhang, Luyu Zhao, Yingsong Li, Adrian Bekasiewicz(293)

A Broadband Circularly Polarized Phased Array with Wide-Angle Scanning Capability for Telemetry Communication

Qi Yu, Jianmin Zhang, Hairong Deng, Qing Zhang, Yingsong Li, Luyu Zhao, Adrian Bekasiewicz(295)

Geman-McClure Function Constrained Sparse Beamforming Algorithm

Wanli Shi, Shaoqing Zhang, Pengjiao Li, Linan Wang, Shuangyu Zhao, Yingsong Li(298)

A Spoof Surface Plasmon Polariton Duplexer for K/Ka-band Satcom

Zhongxian Zheng, Guanghua Liang, Yaxin Xu, Wei Han, Yuan Zhou, Sifan Wu, Jianxing Li(301)

Ultra-Wideband Balanced Band-Pass Filter Using Spoof Surface Plasmon Polaritons

Yi song, Qian Yang, MengRan Zhao, Hong Yuan, Gang Liu, AnXue zhang(304)

Combination Decoupling for Adjacent Antenna Elements Using Dual SRRs and T-Slot

Kai Fei, Shengyuan Luo, Dmitry Kholodnyak, Xiwen Fu, Bowei Zhou, Yingsong Li(307)

SS21.Applications and Numerical Methods of Metasurfaces in Electromagnetic Compatibility (EMC)

Performance Analysis of Metasurface Unit Cells Based on Deep-learning

Yinuo Wen, Xiao Jia, Jianjun Xiao(310)

Automatic Modulation Recognition in Wireless Communication Based on ResNet

Tianyu Zhang, Xiao Jia, Mingjiang Wang(313)

FDTD Algorithm for Magneto-thermal Coupling Analysis

Shanghai Chen, Xiao Jia, Yinghong Wen(316)

A Novel Approach for 2D Electromagnetic Imaging of Human Brain Based on ODIL

Haonan Gong, Xue Wang, Tao Shan(319)

A New Approach for 2D Microwave Imaging Based on ODIL

Tai Xu, Xue Wang, Tao Shan(321)

SS22.Advanced Technologies in Metasurface and Metasurface Based Components

Dynamic Control of Guiding Wave Amplitude and Phase Using PIN-Diode-Loaded Spoof Plasmonic Metasurfaces

Dawei Zhang, Yaxiu Sun, Kuang Zhang, Yingsong Li, Tao Jiang, Shah Nawaz Burokur(323)

Design of a Metagrating-Based PCB Spatial Power Divider with Arbitrary Ratio

Zhen Tan, Jianjia Yi, Shah Nawaz Burokur(326)

Federated Learning Empowered Sum-Rate Optimization in IRS-Enabled NOMA

Songchao Chen, Fang Liu, Yuanan Liu, He Ji(329)

Full-Space Reconfigurable Metasurface for Wavefront Manipulation

Yaokai Yu, Rui Feng, Quanhan Mao, Shah Nawaz Burokur(332)

Active Frequency Selective Surface with Tuning/Absorption Functionality in S band

Haobin Yang, Huaibin Wang, Yefeng Tong, Chong-Zhi Han, Jian Shu, Ying Huang(334)

Active Frequency Selective Surface with Tunable and Switchable Characteristics in Dual Bands

Huaibin Wang, Haobin Yang, Yefeng Tong, Chong-Zhi Han, Ying Huang, Jian Shu(337)

Wideband Dual-Polarized Filtering Antenna with Wide Out-of-Band Suppression

Ziyang Huang, Zhiyi Liu, Changfei Zhou, Yingsong Li(340)

SS23.Recent Advances in EMC and OTA Testing Technology

Dynamic performance evaluation of test site turntable using time-domain analysis

Tieying Feng, Qiang Cui, Pinzhang Zhao(343)

Consistency Comparison of Interference Detection for EMI Receiver

LiYan Su, JunQing Wang, HaiLong An, BaoDian Liu, LiCheng Dong, Xue Jiang(346)

Over-the-Air Phase Recovery and Array Calibration Method Based on Power-Only Measurements

Pengli Wang, Huaqiang Gao, Xiaoming Chen, Yuanan Liu(349)

Research on the Impact of the Time Occupancy of Interference on Wireless Receiving Systems

Wei Xu, Dongmei Mu, Zhaodong Gao, Ming Su, Fan Wu, Yuanan Liu(352)

Hardware-Decoded Latch Control System for Phased Array Antennas

Yijie Wang, Feng Tian, Chong Li, Qianlong Gao, Qian Xu, Lei Xing(355)

ENDC MIMO OTA Testing for 5G User Equipment Using a Symmetric Per-Link Evaluation

Methodology

Yuchen Wang, Han Wu, Zhigang Yang, Siyang Sun, Na Wang, Qinyuan Zhang(359)

Utilizing a DUT Charging Cable in 5G Millimeter-Wave OTA Testing

Na Wang, Siyang Sun, Yuchen Wang(362)

OTA Pattern Issues in 5G OTA Certification Testing

Jinghui Zhang, Xuwei Lv, Siyang Sun(365)

A Low-Cost Ferrite Permeability Measurements Based on Coaxial Transmission Line Model

Lingfeng Xue, Lei Xing, Qian Xu, Yijie Wang, Qianlong Gao(368)

SS24.Design and Modeling of Antenna Array and Metarray for Electromagnetic Manipulation, Shielding, Compatibility

Numerical Analysis of 1-Bit Finite Periodic Arrays Using Efficient Modified SSED Basis Function Method

Ping Du(371)

Dual-Band Circuit Analog Absorber based on wide-angle impedance matching

Yu Feng, Xiongbai Wu, Yihao Xu, Daolin Fu, Wei Xiong, Yongjin Zhou(374)

A Coaxial Resonant Cavity Sensor for Trace Moisture Detection in Transformer Oil

Yucheng Feng, Qiaoyu Li, Dena Ma, Yongjin Zhou(377)

Broadband Conformal Dual-polarized Phase-Reconfigurable Meta-atom

Jiachen Li, Hongyu Zhang, Haifan Li, Dao Lin Fu, Wei Xiong, Yongjin Zhou(380)

Conformal Dual-polarization Independently Phase-tunable Metasurface

Jiewen Tao, Yu Feng, Ziming Wei, Dao Lin Fu, Wei Xiong, Yongjin Zhou(383)

SS25.Numerical method and application for electromagnetic biological effect

Design of a Broadband Electromagnetic Exposure System for In Vitro Experiments

Wentao Hu, Wanchun Yang, Li Guo(386)

An electromagnetic exposure system based on microscopy

Enjie Lv, Wanchun Yang, Yun Fang(389)

A Magnetic Dipole Source Implementation Technique for FCC-FDTD method

Boyan Cui, Guangzhi Chen, Xinsong Wang, Yaru Zhang(392)

An Efficient Subgridding Method for SAR Calculation Based on the SBP-SAT Technique

Hanhong Liu, Weibo Wu, Shunchuan Yang(395)

SS26.Advanced Electromagnetic Materials and Multiphysics Simulation in Electromagnetic Compatibility (EMC) Applications

Analysis of RCS Scattering Characteristics of Wind Turbine

Fugui Zhang, Sen Zhang, Pengju Chen, Jing Li, Yuan Zhao(397)

MXene Aerogel-Filled Honeycomb Structures for Broadband Absorption

Bowen Tan, Denglin Wang, Shuaijie Liu, Nannan Chen, Le Cao, Xuqing Liu(400)

Flexible Transparent Broadband Absorber Enabled by Cu(S,I) Gradient-Impedance Films

Xiangchuan Zheng, Xiaojian Chen, Yifan Xiao, Yuxi Liu, Le Cao, Chang Yang(403)

SS27.Advanced Antenna and Sensor Technologies for Next-Generation Healthcare, IoT, and WBAN

An Unidirectional and Broadband Antenna for Microwave based Head Imaging System

Yuying Huang, Shuchao Liu, Ghulam Mohayy Ud Din, Liming Si, Lili Fang, Houjun Sun, Xiue

Bao(406)

Compact Wideband Circularly Polarized Magneto-Electric Dipole Antenna for Millimeter-Wave

Communications

Ting Wu, Chen Zhang, Jian-Zhuang Kang(409)

A Back Radiation Suppressed Groundless Dual-Band Antenna for Wearable Applications

Kai Zhang, Zhuoyue Li, Mingjun Wang(412)

High Isolation Circularly Polarized MIMO Antenna Array: Cooperative Decoupling and Polarization Conversion Technology Based on Multi-layer Metasurfaces

Ting Wu, Fang Ma, Libin Wang(415)

A Metasurface-Based Circularly Polarized Magneto-Electric Dipole Antenna With Wide Bandwidth for Ku Band

Ting Wu, Min-Yao Wang, Zhuo-Yue Bai(418)

A Compact Multilayer HMSIW Bandpass Filter with Five Modes and Four Transmission Zeros

Ting Wu, Jingyu Ren(422)

A Compact Dual-Circular Polarization Antenna Based on SIW Cavity-Backed Structure and Bilayer Anisotropic Metasurface for Microwave Communications

Ting Wu, Zi Kang Zhang(425)

SS28.Machine Learning Techniques in Electromagnetic Compatibility (EMC) Applications

High-Field Enhancement Isolator for 1.5TMRI SurfaceCoil-Metamaterial Decoupling

Qun Ren, Munan Wang, Yuxin Lang, Xiuyu Wang, Hao Huang, Yanwei Pang(429)

Broadband Frequency Selective Surface with Improved Amplitude and Phase Consistency for High-Incidence Angle Applications

Yuqing Sun, Da Li, Bao Wang, Erping Li(432)

SS29.High-Performance on Electromagnetic Wave Absorption and Shielding Materials: Design and Applications

Response Characterization of High Power Microwave Impulse Interference Shielding Efficiency of Carbon-based Materials

Jun Chen, Shiyue Wu, Wei Song, Jianjing Zhou, Xiaosong Wu(435)

Ultra-wideband Metasurface Absorbers with Programmable Features for Electromagnetic Compatibility and Shielding Applications

Jun Wei Zhang, Wanwan Cao, Zhen Jie Qi, Hui Dong Li, Jun Yan Dai, Qiang Cheng(438)

Structures and Microwave-Absorbing Properties of Graphene Aerogels

Wang Maotang, Wang Shuo, Chen Gang, Zhao Lei(441)

SS30.Advanced Techniques in Electromagnetic Analysis 、 Optimization and Application

A Frequency Selective Absorber Based on PIN Diodes under Dual Polarization

C. H. Yang, B. C. Wang, P. F. Gu, T. T. Shang, X. Zeng, D. Z. Ding(444)

SS31.Millimeter-wave and Terahertz-wave Electron Devices

Design Method of Multi-way Multi-stage Power Divider With Omnidirectional Resistor Based on Graphene Flake

Li Liu, Meng Yang, Fengtao Wu, Junfeng Chen, Long Xiao(447)

Design and measurement of a 0.22 THz rectangular TE10 to circular TE01 mode converter

Shengtao Hong, Guoxiang Shu, Longshen Huang, Binbin Shi, Xinqiang Li, Wenlong He(450)

Design of Oscillator Based on GaN Power Amplifier And Harmonic Control Network

Qiuyu Xie, Daotong Li, Qi Jiang, Ying Liu, Yujie Song(453)

A 28GHz Mm-Wave Polarization and Incident Angle-Insensitive Metasurface

Yujie Song, Daotong Li, Qiuyu Xie, Ying Liu, Qi Jiang(456)

Study of an Ultra-wideband High-frequency System for Terahertz Band Dual Mode Sheet Beam Traveling Wave Amplifier

Jiacai Liao, Guoxiang Shu, Xinqiang Li, Wenlong He(459)

Millimeter-Wave Absorptive Reflectionless Bandpass Filter Based on Single-Crystal Lithium Niobate

Qi Jiang, Daotong Li, Ying Liu, Qiuyu Xie, Jiang Dong(462)

SS32.Reliability Modeling and Analysis of Advanced Packaging

Defect Aware Signal Integrity Analysis of Differential TSVs in GSSG Configuration

Yuyang Cui, Weimin Wang, Yongle Wu, Yuanan Liu, Bojun Zhang(465)

SS33.Advanced Electromagnetic Simulation Techniques and Their Applications

Polarization HRRP Target Recognition Neural Network Based on Adaptive Feature Fusion

Yangbo Zhou, Xiaomin Pan, Sen Liu(468)

Application of A Parallel hp-Adaptive FEM Solver for Radiation Problems in Antennas with Radome

Yan-Nan Liu, Wei-Jie Wang, Jing-Jie Xu, Shao-Liang Hu(471)

Multiresolution Physics-Informed Deep Learning to Solve Electromagnetic Inverse Scattering Problems

Ji-Yuan Wang, Liang Zhang, Yun-Chuan Wang, Cheng-Tao Zhao, Xin-Yue Lou, Xiao-Min Pan(474)

Active RCS Enhancement Using Reflective Amplifier and Phase Control

Lijie Chen, Xuezhi Ding, Gengjiang Yao, Fan He(477)

Forward Modeling of Metasurfaces using PINNs with Generalized Sheet Transition Conditions

Zheng Ma, Hai Lin, Jing Jin(480)

A Balanced Bandpass Filter with Wide Stopband Based on Stepped Impedance Resonators

Xue-Zhi Ding, Lijie Chen, Gengjiang Yao, Fan He, Peiliang Wang, Chongyao Ning(483)

A Design Method of Decoupling Microwave Transmission from Electrothermal Based on Cascade Choke

Peiliang Wang, Lijie Chen, Genjiang Yao, Xuezhi Ding, Fan He, Qinyun Yang(486)

SS34.Applications of Computational Electromagnetics in Electromagnetic Compatibility (EMC)

A novel FDTD-PE-FDTD method for prediction of echo signals from maritime target

Linchun Zhong, Yongqin Yang, Ting Su, Fuliang Zhong, Kuo Chi(489)

Low-Profile High-Gain Broadband Antenna based on Anisotropic Metasurface

Qijun Chen, Yongqin Yang, Ting Su, Shidong Li(492)

A Deep Learning-Based Solver for Radiation Pattern of Microstrip Antenna Arrays

Jie Yang, Zheng Lang Jia, Qing Cai, Heng Xi Zhu, Zhi Peng Du, Huan Huan Zhang(495)

A High Gain and High Directivity Vivaldi Antenna based on Near Zero-Index Metamaterial (NZIM)

Xinzeng Gu, He Shuang, Lang Wu, Bingzan Sun, Cheng Peng, Zhaoneng Jiang(498)

A Broadband Low-RCS Circularly Polarized Antenna

He Shuang, Xinzeng Gu, Lang Wu, Bingzan Sun, Weixing Gao, Zhaoneng Jiang(501)

Gain Enhancement of a Microstrip Patch Antenna Using a Near-Zero-Index Metamaterial Lens and an Optimized Ground Plane

Lang Wu, Xinzeng Gu, He Shuang, Bingzan Sun, Weixing Gao, Zhaoneng Jiang(504)

A Low Profile Reflectarray Antenna Based on Spoof Surface Plasmon Polariton

Bingzan Sun, Xinzeng Gu, He Shuang, Lang Wu, Weixing Gao, Zhaoneng Jiang(507)

SS35.Challenges, Methods, and Applications of Time-Domain Simulation for System-Level Electromagnetic Safety

Time Domain Calculation Method for Coupling Analysis of Double-Layer Shielded Cable

Zhihong Ye, Yuanhang Zou, Zihan Meng(510)

A Novel Numerical Method for Cable Electromagnetic Radiation Prediction

Ying Xi, Ying Wang, Wen Shi, Jian Wang(513)

The Transient Coupling Analysis of Shielded Multicore Twisted Cable above Ground Plane

Ying Wang, Ying Xi, Jian Wang(516)

Electromagnetic-Thermal-Stress Simulation Based on FDTD Method

Xuehan Ding, Menglin Zhai, Rui Pei, Wei-Bing Lu(519)

A (2,4) SBP-SAT FDTD Method for MTL Equations with Guaranteed Stability

Weibo Wu, Yuhui Wang, Hanhong Liu, Langran Deng, Shunchuan Yang(522)

SS36.New Trends and Advances for Wireless Power Transfer and Harvesting

RF Energy Harvesting and Management for Autonomous Battery-free Wireless Microrobot

Qiang Fu, Ruoyu Jia, Yuxuan Deng, Hao Zhang, Ying Wang, He Guan(525)

An Ultra-Wideband Circularly Polarized Rectenna for Energy Harvesting

Xuan Zhang, Zhuozhu Chen, Sha Xu(528)

Reliability Degradation in Passive Filters Utilizing Through Glass Via(TGV) Technology Considering Defect Strain

Chenbing Qu, Yuanxin Yang, Liwei Wang, Chen Sun, Bo Hou(531)

Output Voltage and Current Parameter Estimation Based on Data-Driven UWPT System

Wei Zhu, Dong Guo(534)

Research on the Coexistence of Interference between Mobile and Portable WPT Devices and Broadcast Service

Xiaoyong Liu, Ke Chen(537)

SS37.New Progresses of RF/Microwave Devices in Communication and Sensor Applications

Design of a High-Performance L-Band IPD Bandpass Filter

Qiaonan Wang, Qi Fu, Siyu Liu, Jiachen Ren, Cong Wang(540)

Design and Application of Microwave 3dB Couplers

Shubin Chen, Shixiong Deng, Changzheng Gao(543)

Tri-Band Bandpass Filters With Wide Separated Passbands Using Quarter-Mode Substrate-Integrated Rectangular Cavity

Jue Wang, Ruihong Fang, Yang Wang, Shiwen Xiong, Yuanjun Liu, Cong Wang(546)

Signal Integrity and Power Integrity Simulation Optimization for High-Density SiP Packaging Products

LI Zhenchao, He Peng, Zhang Shuye(549)

Hydrogen-Terminated Diamond MOSFETs with 10-10 mA/mm Leakage Current and 1012 ON/OFF Current Ratio

Yongxin Duan, Nana Gao, Mingyang Yang, Xinxin Yu, Yuanci Gao, Yuehang Xu(552)

SS38.Advances in Radar Techniques and Their Association with Electromagnetic Compatibility (EMC)

Interrupted-Sampling Repeater Jamming Suppression Based on Multi-Domain Parameter Reconstruction

Wutong Wang, Zhenhua Wu, Jinxin Cui, Wen Shi, Lixia Yang(555)

Study on Optimizing Phase Code Sets Using Modified Genetic Algorithm for MIMO Radar

Xinquan Wang, Junlai Shi, Yu Zhang, Kai Tan(560)

An Ultra-Sparse MIMO Radar Array Topology Using Redundancy and Utilization of Elements

Yu Zhang, Xinquan Wang, Kai Tan(563)

Recognition of Composite Jamming Signals Based on YOLOv13 Under the Complex Electromagnetic Environment

Jiaxiang Wang, Jin Meng, Xun Ni, Fengkai Liu, Juntian Bo, Jiahao Zhang(566)

Cognition-Inspired Radar Jamming Identification and Suppression Technology

Jiahao Zhang, Jiaxiang Wang, Xi Yu, Jundi Wang, Wantian Wang, Wei Li, Jin Meng(569)

Design of a Miniaturized TR Module with Low RF Interference in K-band

Hao Li, Zhi Li, Xiangbo Zhang, Zongcheng Wang, Tao Xiu(572)

SS39.Numerical method for multi-physics modeling of nonlinear semiconductor

A Tetrahedral Spectral Element Method for Multiphysics Co-Simulation of Semiconductors

Jia-Hui Zhou, Qi Qiang Liu, Da-wei Wang, Wen-Sheng Zhao, Absalom E. Ezugwu, Hairong Wang(575)

Non-Uniformly Spaced Circular Array Synthesis Based on Multi-Population Differential Evolution

Jie Wang, Cong Guo, Zhixin Liu, Yuehong Sun, Shengyuan Wang, Foxiang Liu(578)

An Adaptive Optimization Algorithm for GaN Modeling

Yunfei Yue, Tiancheng Zhang, Chunyu Li, Huaguang Bao, Dazhi Ding(581)

Electromagnetic scattering from random rough spherical surfaces

Jingyu Zhang, Peng Xu(584)

Modeling Temperature-Induced Harmonic Shifts in the Conducted Emissions of DC-DC Converters

Hongzhan Song, Guangzhi Chen, Jingxuan Chen, Junhao Zhang, Yaru Zhang, Youlong Weng(587)

SS40.Two-dimensional Structure and Electromagnetic shielding

Design of a Dual-Polarized All-Metal Vivaldi Antenna with Back-Feed Configuration

Xiangyu Li, Zhaoran Chen, Xiayuan Yao(590)

Sub-millimeter Wave Frequency Selective Surface with Hybrid Resonance for Quasi-optical System

Zhaoran Chen, Junjie Hu, Xiayuan Yao(593)

SS41.Microwave energy application

Direct-Insertion High-Efficiency Microwave Heating System Based on a Gradient Index Dielectric Wedge

Jianbin Zhu, Huacheng Zhu(596)

A Numerical Simulation Model for Powder Sintering under Microwave Fields Based on the Phase Field

Jiayi Liu(599)

Electrostatic Field Effects on D-Glucose Optical Activity

Quanlin Guo, Yun Ma, Chenxi Zhao, Xianjing Zhang, Linqian Dai, Dezhi Gou(601)

COMSOL-Based Simulation and Optimization of Microwave Cavity for Coffee Roasting

Junxi Zhu, Chenxi Zhao, Yun Ma, Xueying Li, Qiuping Mi, Dezhi Gou(604)

A Review of the Effects of Microwave and Electric Fields on the Properties of Biological Molecular Solutions

Dezhi Gou, Chenxi Zhao, Quanlin Guo, Xianjing Zhang, Yun Ma, Linqian Dai(607)

Design of microwave plasma source based on metamaterials

Long Chen, Fengming Yang, Yuanyuan Wu, Huacheng Zhu(610)

SS42.Advanced Multiple Antenna System: Challenges and Promising Solutions

A Dual-Polarized Omnidirectional Stepped Dielectric Resonator Antenna with Enhanced Gain and Bandwidth

Bohao Yu, Zhanjun Lai, Kwok Wa Leung, Guosheng Su, Jianzhang Liang(613)

Effect of Ground Plane Size on the Radiation Pattern of Dielectric Resonator Antenna

Shaofeng Bi, Kwok Wa Leung, Bohao Yu, Liwen Huang, Guosheng Su(616)

SS43.Mhz Ghz Thz Multi Scale Metamaterials

Symmetry-Protected Dual Bound States in Continuum Metasurfaces for Terahertz Photonic Applications

Qun Ren, Zhiyi Cheng, Qiwen Wu, Minxue Wang, Yan Chen, Kaiwen Zou, Yongshan Liang, Munan Wang, Sheng Jia, Hao Huang, Xiuyu Wang, Jianquan Yao(619)

Study on High-Q Nonlinear Metasurfaces Based on Symmetry-Breaking-Induced Quasi-BIC

Qun Ren, Yu Liu, Xiuyu Wang, Hao Huang, Yongshan Liang, Jianquan Yao, Yongjing Dang, Qiwen Wu(622)

Excitation and Verification of Multi-Channel BICs in Metasurfaces Based on Structural Symmetry Breaking

Qun Ren, Liuchang Wang, Minxue Wang, Qiwen Wu, Yan Chen, Kaiwen Zou, Sheng Jia, Hao Huang, Xiuyu Wang, Jianquan Yao(626)

SS44.Near-Field Electromagnetic Theory, Modeling and Calculation for Sensing Systems

A Solution Method for Target Near-Field Electromagnetic Scattering in an Infinite Medium

Miaomiao Li, Yu Cheng, Jingli Guo, Jie Ma(629)

Design of a Broadband and Low-profile Base Station Antenna with AMC

Yu Cheng, Miaomiao Li, Jie Ma(632)

A Time-Domain Physical Optics for Near-Field RCS Prediction of Electrically Large Objects

Jincong Huo, Jie Ma, Jiangjun Yang, Zhongxu Zhang, Xueyao Xiong, Dong Yang(635)

A SBR Algorithm for Near-field RCS Simulation of Targets

Jincong Huo, Jie Ma, Shigang Zhou, Weishan Li, Xueyao Xiong, Haoming Ren(638)

Radar HRRP Generation Using a Scattered Echo Calculation Model Based on the Generalized RCS

Chen Guan, Shigang Zhou, Haitao Mi, Jie Ma, Wentao Mei(641)

2. Coupling, Shielding, Grounding, Filtering, and Measurement, etc.

Method for Evaluating the Impact of Diode Grounding in Microwave Electronic Systems

Ruiqi Su, Fan Wu, Cong Zhang, Bo Sun, Yuanan Liu(644)

Design and Application of a Window-Based Fixture for Shielding Effectiveness Measurement

ZHENG Xianze, LIU Qi, LI Rong, SU Xiaoming, LI Xiaofeng(648)

3. Electromagnetic Environment, Electromagnetic Multi-Physics-Interaction

Research on Antenna Radome Simulation Technology Based on Multi-Physics Field Coupling

Xiangxue Wang, Junsen Huang, Baopeng Dong, Xi Chen(651)

Study on The Mutual Interference Mechanism of Dual-Channel and Dual-Stage Amplifier Circuits

Hao You, Hong-Bao Liu, Zhi-Yang Qi, Hao Du, Wei Guo, Da Yi, Ming-Chun Tang(654)

4. Electromagnetic Computation in Complex Environment

Recursive Digital Predistortion With Data-Driven Behavioral Modeling

Pengle Wen, Xiong Chen, Kaiming Ding, Bin He(657)

5. Microwave Circuits and RFIC

Design of RF Front-end Electromagnetic Protection Limiter

Yining Cheng, Peiran Liu, Xiao Li, Yingwei Chen, Shixiong Liang, Dawei Liu(660)

Design of an X-Band Quadrupler Chip with High Fundamental Suppression Based on CMOS Process

Luqi Tu, Zezheng Li, Dongwei Pang, Shiwei Wu(663)

Millimeter-wave Low-loss GaAs Bandpass Filter

Chao Ma, Yinzhi Wang, Guohui Yang, Kuang Zhang(666)

Design of Millimeter-wave Phase Shifter Based on Varactor Diode Modulation

Chao Ma, Yeqi Li, Guohui Yang, Kuang Zhang(669)

Development of V-Band Receiver for Satellite Applications

Xiaohui Wang, Wenjing He, Delu Gu, Beibei Zhao, Shengqi Shen, Wensi Zhu(672)

Design of a Temperature-Stable Gallium Nitride Linear Power Amplifier for Satellite Data Transmission Systems

Chen Peng, Liu Nengwu, Shen Shengqi, Wu Jiafeng, Wang Xiaohui, Zheng Xinchao(675)

A Frequency-Reconfigurable Load-Modulated GaN Power Amplifier With a Reconfigurable Phase Shifter and Reconfigurable Capacitors

Yizhen Xu, Xu Zhu, Pei-Ling Chi, Tao Yang(679)

Metamaterial-Loaded Equilateral Triangular Substrate Integrated Waveguide Resonator with Miniaturized Lateral Size

Cong Li, Xiaofei Xu(682)

A Study on the Design of a High-Efficiency 2.45GHz RF Power Amplifier Using LDMOS Technology

Zhiqi Li, Dan Zhang, Yan Sun, Borui Bian, Yue Juan, Hao Li(685)

6. PCB/IC/SOC Modelling & Design

Coupling Path Visualization and Noise Mitigation for the Power Network of AI Core System

Jiaqi He, Chenxi Liu, Xu Wang, Jun Fan, Xiuqin Chu, Feng Luo, Bo Pu(688)

Design of Hydrogen Sensor Circuit Based on Renesas R5F10BMG Chip

JianXue Chen, ZhongXiang Zhang, XinGang Ren(691)

A Reconfigurable Electromagnetic Bandgap Structure for Wide-Band SSN Suppression in High-Speed PCBs

Qiwei Liu, Dan Shi, Yanchi Liu, Na Sun(695)

8. EMC Standards, Regulation and Management

Analysis on The Application of Test based on an Additional Acceptance Limit

Meishuang Chen, Chao Liu, Qiang Cui, Jun Fu, Zhipeng Li(698)

9. Antenna, Array and System Design

Tri-Polarized Low-Profile Broadband Antenna Using AMC Structure and Dipole Elements

Yanliang Huang, Zhong-Xun Liu, Yongtao Jia, Ying Liu(701)

A Low-Profile Wide-Angle Reconfigurable Transmit Array Antenna Based On Array Equivalent Source

Chengjie Lv, Hailong An, Licheng Dong, Baodian Liu, Xue Jiang, Junqing Wang(704)

Wideband High-Isolation Dual-Polarized Antenna Analyzed Using Characteristic Mode Analysis

YaPeng Li, ChenYu Liu, Lei Ling, Yilin He, Hailong Yang, Xuping Li(707)

Channel-Dependent Envelope Correlation Coefficient Parameters

Cheng Cheng, Yongtao Jia, Ying Liu(710)

A Dual-Polarized and Double-Slot Vivaldi Antenna with Low Cross Polarization

Chao Han, Huaqiang Gao, Xiaoming Chen, Yuanan Liu(713)

A Low Cross Polarized Frequency Scanning Antenna Fed by Spoof Surface Plasmon Polariton

Chao Han, Xiaoming Chen, Huaqiang Gao(716)

Difference Between Characteristic Mode Theory and Cavity Mode Theory for Square and Circular Microstrip Antennas

Hao Deng, Xingyue Guo, Yuanan Liu(719)

Modified Babinet Principle for Input Impedances of Complementary Antennas in a Dielectric Half-Space

Jiaqian Ding, Xiaobo Liu, Pengli Wang(722)

Design of Low-cost Wearable Antenna for Wireless Body Area Network Application

Yu Gan, Yanxia Wang, Yanfeng Huo, Hongxing Zheng(725)

Design of a Broadband Antenna for Partial Discharge Detection in Miniaturized Switchgear Cabinet

Rui Zhu, Jieqing Fan, Hanhan Hu, Zhaomin Han(729)

Frequency and pattern reconfigurable antenna based on liquid metal

Jiajun Ma, Ming Su, Shuqi Zhang, Xingyu Li, Fang Liu, Yuanan Liu(732)

An Inverted T-Shaped Slot MIMO Antenna for Mobile Phone Applications

Jiahao Zeng, Yufa Sun(735)

A Frequency- and Pattern-Reconfigurable Dipole Array Antenna Employing Liquid Metal

Xingyu Li, Ming Su, Jiajun Ma, Shuqi Zhang, Fan Wu, Yuanan Liu(738)

Research On High Relative Permeability Compression Higher-Order Mode Dipole

Yangkun Song, Yu Luo, Ningning Yan, Kaixue Ma(741)

1.2GHz Wideband Radio Frequency Transceiver System

Jinmiao Piao, Cuiping Yu, Yuanan Liu(744)

Low-loss PTFE Dielectric Waveguide for 220 GHz Traveling Wave Tube (TWT) Applications

Muhammad Asad, Jinchi Cai, Qurat Ul Ain, Zixuan Su, Xinke Zhang, Yanyu Wei(747)

Frequency Reconfigurable Pixelated Antenna Using VO2 Phase Transition Material

Zhanlong Lou, Lele Liao, Yujie Wang, Yu Yang, Junlin Li, Shuyao Yan(750)

Optimization of Cross-Polarization Level in Circularly Polarized Antenna Arrays Based on Rotated-Element Modeling

Minwei Deng, Jun Hu(753)

A Miniaturized Antenna with Triple Band-Notched Characteristics

Rongjiayu Tu, Han Lin, Zhonggen Wang(756)

Generation of High-Purity Vortex Beams via Genetic Algorithm-Optimized Plasmonic Metasurfaces

Xinyu Ma, Wenjie Guo, Qing'an Sun, Hang Yu, Lixia Yang(759)

Design of a 77-GHz Antenna Array for Automotive Radar

Fukang Wang, Zhongxiang Zhang, Lixia Yang(762)

An OAM Multiplexing Method based on 1-bit Phase Resolution

Zhifeng Pan, Hang Yu, Lixia Yang(766)

10. ESD, EMP/NEMP, Lightning, TEMPEST

Modeling and Simulation Study of GDT Radio Frequency Lightning Suppressor Based on Debye Model

Hongli Tan, Jintao Zhang, Zemin Duan(769)

Research on the Irradiation Coupling Characteristics of HPM to Horn Antennas

Zhi Li, Zhe Liu, Lei Zhao, Lihua Cai, Sai Zhu(773)

The Electromagnetic Pulse Coupling Characteristics of Aircraft Electronic Equipment Cable

Chunyang Han(776)

Lightning VHF Weak Radiation Source Detection by Siamese Neural Network

Shuangjiang Du, Yun Li, Xiaojun Luo, Lihua Shi(779)

12. EMC in Industry, Science, Transportation, Medical, Power, Communications, Aircraft & Space, Radar, Military

A method for communication fault localization and protection reinforcement of train control MVB network cards

ChengBin Jiao, BuZhao Niu, Chunhe Yu, XiaoTong Mu, NaiLei Sui, BinFeng Yao(782)

Research and Application of Differential Mode Interference Monitoring Technology for MVB(Multifunction Vehicle Bus) Train Control Bus

Bo Zhang, BuZhao Niu, ChengBin Jiao, XiaoTong Mu, NaiLei Sui, BinFeng Yao(787)

Silicon optical modulator with Cu traveling wave electrode based on BEOL process

You Wang, Fuyan Yuan, Yongjie Fan, Anneng Yang, Qing Fang, Hua Chen(791)

A Chip-Level Dual-Core Lockstep Safety Verification Method Based on Electromagnetic Fault Injection

Zhongkai Huang, Liwei Wang, Yongzhen Luo, Chenbing Qu, Bo Hou, Chen Sun(797)

A Multi-Scale SAR Aircraft Detection Method with Strip Pooling Attention Enhancement

Shuochen Zhang, Xueli Pan, Lixia Yang(800)

Measurement and Standardization Insights into Transient Radiated E Fields of ESD Generators

Hongyan Li, Yang Liu, Bing Bai, Pan Huang(803)

Low-altitude Electromagnetic Spectrum Acquisition Based on Improved Metaheuristic Algorithms

Peilin Song, Youlong Weng, Guangzhi Chen(806)

A Reinforcement Learning-Based GPS Spoofing Trajectory Generation Method for Navigating Unmanned Vehicles

Zhenhua Wen, Youlong Weng, Guangzhi Chen(810)

Others

Optimizing Persistent Fault-Based Collision Attacks via Collision Differential Analysis

Yaqi Zhang, Hongxin Zhang, Xing Fang, Yuanzhen Wang, Hua Zhang(813)

Improved YOLOv8-based crack detection model for road bridges

Xiangyu Li, Liang Chen, Haiyang Zhang, Jian Ma(819)

Phase Diagnosis of Reconfigurable Intelligent Surfaces Based on Hadamard Matrix Inversion

Huaqiang Gao, Hangning Ran, Zhen Jie Qi, Xiaoming Chen, Qiang Cheng, Yuanan Liu(822)

Design of a three-dimensional nonorthogonal light field array based on Damman gratings and Fresnel phase shifts

Yang Li, Yahui Su(825)

Study on Droplet Evaporation Dynamics Based on Femtosecond Laser-Processed Arrays

Changsong Qi, Yahui Su(829)

Finite Element Tearing and Interconnecting Method for Efficient Simulation of Multi-Finger MOSFETs

Yushuo Zhai, Min Tang(832)

MSNR-Based Blind Source Separation for Mainlobe Jamming Suppression in Sum-Difference Four-Channel Systems

Fuxue Jia, Fengkai Liu, Mingliang Xie, Hongzhang Gao, Jiahao Zhang, Jin Meng(835)

Impact of Interferer Azimuth on Angle Estimation Accuracy after Interference Cancellation in Monopulse Phased Array Radar

Siheng Zhan, Liang Zhou, Wei Cai(838)