

2021 International Applied Computational Electromagnetics Society (ACES-China 2021) Symposium

**Chengdu, China
28 – 31 July 2021**

Pages 1-350



**IEEE Catalog Number: CFP21ACH-POD
ISBN: 978-1-6654-3377-8**

**Copyright © 2021, Applied Computational Electromagnetics Society (ACES)
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:	CFP21ACH-POD
ISBN (Print-On-Demand):	978-1-6654-3377-8
ISBN (Online):	978-1-7335096-1-9

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

TABLE OF CONTENTS

WIDE-BEAM RECTENNA DESIGN USING MULTI-PORT METASURFACE-BASED ANTENNA.....	1
<i>Wenzhang Zhang, Yi Huang, Jiafeng Zhou</i>	
WIDEBAND TRANSMISSION/ABSORPTION ACTIVE METASURFACE.....	3
<i>Hong Xin Xu, Yong Jin Zhou</i>	
PROGRAMMABLE DIGITAL-CODING-FEEDING METASURFACES.....	5
<i>Si Jia Li, Zhuo Yue Li, Bo Wen Han, Guo Shuai Han, Xiang Yu Cao</i>	
DEEP LEARNING MESH GENERATION TECHNIQUES	7
<i>Wenhua Yu</i>	
HEATMAP-BASED MULTIPLE CO-CHANNEL TRANSMITTER LOCALIZATION WITH FULLY CONVOLUTIONAL NETWORK.....	9
<i>Meiyan Lin, Yonghui Huang, Baozhu Li, Zhen Huang</i>	
FAST PREDICTION OF ELECTROMAGNETIC SCATTERING CHARACTERISTICS OF TARGETS BASED ON DEEP LEARNING	11
<i>Junling Guo, Yaoyao Li, Shaoxiong Cai, Donglin Su</i>	
JOINT INVERSION OF AUDIO-MAGNETOTELLURIC AND SEISMIC TRAVEL TIME DATA USING ATTRIBUTE FUSION BASED ON DEEP LEARNING	13
<i>Hongyu Zhou, Rui Guo, Deqiang Tao, Guojun Deng, Maokun Li, Fan Yang, Shenheng Xu</i>	
A HYBRID INPUT SCHEME FOR DEEP-LEARNING BASED QUANTITATIVE MICROWAVE IMAGING	15
<i>Lu Zhang, Kuiwen Xu</i>	
NON-LINEAR HEAT CONDUCTION INVERSION METHOD BASED ON DEEP LEARNING	17
<i>Nianru Wang, Yinpeng Wang, Qiang Ren, Yuxuan Zhao, Jihui Jiao</i>	
HIERARCHICAL VALIDATION OF THE SIMULATED HIRF EFFECTS IN COMPUTATIONAL MODELS	19
<i>Yueqian Wu, Xianfeng Bao</i>	
ON THE INVESTIGATION OF TRIANGULAR INTERPOLATION-BASED MULTILEVEL FAST MULTIPOLE ALGORITHM.....	21
<i>Jiming Song, Jinbo Liu, Wen Luo, Zengrui Li</i>	
DIRECTIVE SHAPING OF PROPAGATING PLANE-WAVE FAST MULTIPOLE TRANSLATION OPERATORS.....	23
<i>Thomas F. Eibert</i>	
AN EFFICIENT STOCHASTIC HIE-FDTD ALGORITHM FOR UNCERTAINTY QUANTIFICATION OF ELECTROMAGNETIC FIELDS.....	25
<i>Kaikun Niu, Zhixiang Huang</i>	
SIMULATING NONLINEAR TERAHERTZ GENERATION USING FINITE-DIFFERENCE TIME-DOMAIN	27
<i>Zhicheng Xiao, Jian Feng, Ming Fang, Zhixiang Huang</i>	

A NOVEL LASER DESIGN BASED ON ALL-DIELECTRIC METASURFACE USING A MULTI-SCALE APPROACH	29
<i>Xingchen Liu, Ke Xu, Ming Fang, Zhixiang Huang</i>	
SCATTERING PROPERTIES FOR TYPICAL SATELLITE IN THE LOWER TERAHERTZ REGION	31
<i>Chen Gang, Dang Hongxin, Su Xiang, Zheng Shi, Lu Hailiang, Jin Xu, Li Hao</i>	
MASSIVELY PARALLEL APPROACH OF MULTILEVEL FAST MULTIPOLE ALGORITHM ON DCU CLUSTERS FOR LARGE ELECTROMAGNETIC SCATTERING PROBLEMS.....	33
<i>We-Jia He, Yi-Nan Kong, Kai-Feng He, Ming-Lin Yang, Xin-Qing Sheng</i>	
MULTI-DIMENSIONAL SCATTERING DISTRIBUTION FUNCTION FOR ROUGH SURFACE IN SAR IMAGES	35
<i>Xu Zhang, Feng Xu</i>	
ADAPTIVE ERROR CONTROL IN METHOD OF MOMENTS FOR ELECTROMAGNETIC SCATTERING ANALYSIS	37
<i>Shuo Cui, Jiangfei Bai, Shunchuan Yang, Donglin Su</i>	
A HYBRID WIDEBAND METHOD FOR ANALYSIS OF PERIODIC ARRAY.....	39
<i>Haifeng Liang, Hanru Shao</i>	
NUMERICAL STUDIES OF DIELECTRIC BREAKDOWN DURING HIGH-POWER OPERATION BASED ON SETD METHOD.....	41
<i>Lin Wang, Huaguang Bao, Dazhi Ding, Rushan Chen</i>	
TREBLE-LINEAR BASIS FUNCTIONS FOR SOLVING THE VOLUME INTEGRAL EQUATION ON INHOMOGENEOUS ANISOTROPIC BODIES	43
<i>Hongyang Chen, Jinbo Liu, Zengrui Li</i>	
APPLICATION OF EIGENMODE THEORY TO THE ANALYSIS OF LOW-FREQUENCY PROBLEMS.....	45
<i>Xiaojie Chen</i>	
APPLICATION OF CHARACTERISTIC BASIS FUNCTION METHOD BASED ON CHARACTERISTIC MODE THEORY TO SOLVE THE MONOSTATIC RCS OF OBJECTS	47
<i>Pan Wang, Zhonggen Wang</i>	
ON THE DISCONTINUOUS GALERKIN INTEGRAL EQUATION FOR HALF-SPACE SCATTERING PROBLEMS	49
<i>Bi-Yi Wu, Ze-Lin Li, Kai-Xuan Guo, Xin-Qing Sheng</i>	
STUDY ON THE EFFECTS OF FREQUENCY SELECTION IN MINIATURE ANTENNA AND SYSTEM CO-DESIGN: TOWARDS DISTRIBUTED AND BATTERY-LESS NEURAL INTERFACES.....	51
<i>Lingnan Song, Yahya Rahmat-Samii</i>	
LEARNING APPROACH TO INVERSE SCATTERING PROBLEMS WITH SPECIAL BOUNDARY CONDITIONS AND INHOMOGENEOUS BACKGROUND.....	53
<i>Xiuzhu Ye, Xudong Chen</i>	
A NOVEL METHOD FOR PASSIVE SHAPED BEAM SYNTHESIS	55
<i>Zhijiao Chen, Zeyu Song, Limei Qi, Yuan Yao, Junsheng Yu Xiaodong Chen</i>	
HIGH SENSITIVITY STRESS SENSOR BASED ON CHIPLESS RFID TAG	57
<i>Junjie Zhang, Qiangzhi Fu, Lei Song, Bian Wu</i>	

HIERARCHICAL LU DIRECT SOLVER BASED ON HIGHER ORDER BASIS FUNCTION.....	59
<i>Ningning Zhang, Zhi Rong, Yongpin Chen, Sheng Sun, Jun Hu</i>	
ON THE EXACT AND ASYMPTOTIC EXPRESSIONS FOR DYADIC GREEN'S FUNCTION ABOVE IMPEDANCE SURFACE: VERTICAL DIPOLE CASE	61
<i>Yun-Han Chen, Zi-Hao Zhao, Bi-Yi Wu, Xin-Qing Sheng</i>	
ERROR ANALYSIS OF ISOSCELES TRIANGULAR INTERPOLATION	63
<i>Wen Luo, Jinbo Liu, Zengrui Li, Jiming Song</i>	
DUAL-LINEAR POLARIZED ARRAY WITH 9.3:1 BANDWIDTH AND 50° SCANNING.....	65
<i>Zhe Wu, Congtian Zhang, Lijie Xu</i>	
WIDE-ANGLE AND WIDEBAND 1-D DUAL-POLARIZED LINEAR PHASED ARRAY	67
<i>Xin-Yue Zhang, Shi-Wei Qu</i>	
A DECOUPLING METHOD FOR COLLINEAR DIPOLES BASED ON DIFFERENTIAL AND COMMON MODE DECOMPOSITION	69
<i>Zitong Wang, Qi Wu</i>	
A LOW-PROFILE DUAL-BAND CO-APERTURE MONOPOLE ANTENNA BASED ON CROSS-LAYER FOLDED STRUCTURE.....	71
<i>Hua Hui Tu, Li Juan Wei, Yuan Chun Li, Quan Xue, Kai Xu Wang</i>	
DESIGN OF AN AXIAL MODE HELICAL ANTENNA USING FERRITE AND DIELECTRIC LOADING.....	73
<i>Yuanhong Zou, Zongliang Zheng</i>	
FORWARD-WAVE 0 DB DIRECTIONAL COUPLER BASED ON GROOVE GAP WAVEGUIDE TECHNOLOGY	75
<i>Ruiliang Shen, Wenjie Feng, Yongrong Shi</i>	
115GHZ LOW-COST OSCILLATOR-INTEGRATED REFLECTARRAY	77
<i>Jiajia Pan, Jiawei Yang, Yizhu Shen, Sanming Hu</i>	
A NEW WAVELET PREDICTION METHOD FOR GPR CLUTTER ELIMINATION BASED ON LSTM NETWORK.....	79
<i>He Juan, Wang Longxiang, Ye Hongxia</i>	
INVESTIGATION OF DEEP LEARNING BACKBONE INFLUENCE ON 2D PERMITTIVITY RECONSTRUCTION PERFORMANCE.....	81
<i>Yulong Zhou, Tiantian Yin, Xudong Chen</i>	
DESIGN OF TWO-LAYER 4X4 BUTLER MATRIX WITH WIDEBAND PERFORMANCE	83
<i>Shiyuan Zhang, Xiaohan Xue, Sheng Sun, Jun Hu</i>	
ELEMENT-ROTATED LINEAR, PLANAR, AND CONFORMAL ARRAYS RADIATING SHAPED PATTERNS	85
<i>Ming Li, Yanhui Liu, Shu-Lin Chen, Jun Hu, Y. Jay Guo</i>	
INFLUENCE OF ROUGH SURFACE SLOPE ON AIEM MODEL.....	87
<i>Huiting Yin, Zi He, Rushan Chen</i>	
HYSTERESIS MODELING OF PEROVSKITE SOLAR CELLS BY AN EQUIVALENT CIRCUIT MODEL.....	89
<i>Ting Xu, Wei E. I. Sha, Zishuai Wang</i>	

A SINGLE-LAYER DUAL-BAND SHORTED-PATCH ANTENNA WITH SAME CIRCULARLY POLARIZATION BASED ON MULTI-RESONANT MODES	91
<i>Zhen-Jun Kang, Neng-Wu Liu, Lei Zhu, Guang Fu</i>	
A COAXIAL LUMPED PORT MODEL FOR THE NODAL DGTD METHOD	93
<i>Shi Chen Zhu, Yan Shi</i>	
FAST CALCULATION OF PCB ELECTROMAGNETIC RADIATION USING 1D BOUNDARY INTEGRATION	95
<i>Ling Zhang, Zheming Gu, Hang Jin, Er-Ping Li</i>	
A NUMERICALLY STABLE FORMULATION OF THE SPHERICALLY LAYERED MEDIA THEORY	97
<i>Haoyu Yuan, Bo O. Zhu</i>	
LOCAL TIME-STEPPING SCHEME FOR ARBITRARY HIGH-ORDER DGTD METHOD.....	99
<i>Tiancheng Zhang, Huaguang Bao, Dazhi Ding, Rushan Chen</i>	
RECONSTRUCT 3D GEOMETRY OF TARGET USING DIFFERENTIABLE SAR RENDERER.....	101
<i>Shilei Fu, Feng Xu</i>	
U-NET CONJUGATE GRADIENT SOLUTION OF ELECTROMAGNETIC SCATTERING FROM DIELECTRIC OBJECTS.....	103
<i>Bo-Wen Xue, Di Wu, Bo-Yue Song, Rui Guo, Xiao-Min Pan, Mao-Kun Li, Xin-Qing Sheng</i>	
A LAGRANGE INTERPOLATION SCHEME COMBINED WITH GENERALIZED TRANSITION MATRIX METHOD FOR PERIODIC ARRAY	105
<i>Yuyang Hu, Gaobiao Xiao</i>	
AN EFFICIENT APPROACH FOR TRANSIENT THERMAL SIMULATION OF INTEGRATED CIRCUITS AND PACKAGES	107
<i>Bo Li, Min Tang, Junfa Mao</i>	
VECTOR SS-SIE FOR ELECTROMAGNETIC ANALYSIS OF COMPLEX SCATTERERS EMBEDDED IN MULTILAYERS.....	109
<i>Zekun Zhu, Shunchuan Yang, Zhizhang Chen</i>	
PRECISE DESIGN AND LOSS ANALYSIS OF MILLIMETER WAVE ANTENNA.....	111
<i>Yuqi He, Ge Zhao, Sihan Lv, Mengkai Xi, Luyu Zhao</i>	
FEATURE-BASED SURROGATE-ASSISTED HARRIS HAWKS OPTIMIZATION ALGORITHM FOR MICROWAVE FILTERS.....	113
<i>Yaxi Jiao, Zhen Zhang, Yang Yu, Qingsha S. Cheng</i>	
IMPROVEMENT OF VIVALDI ANTENNA IN MICROWAVE IMAGING SYSTEM.....	115
<i>Naike Du, Yanhui Ji, Xiuzhu Ye</i>	
A SHARED-APERTURE DIELECTRIC RESONATOR ANTENNA WITH LINEAR AND CIRCULAR POLARIZATION DIVERSITY	117
<i>Ziwei Li, Zhijiao Chen, Yujian Jiang, Limei Qi, Yuan Yao, Junsheng Yu, Xiaodong Chen</i>	
FDTD ANALYSIS OF MAGNETIZED PLASMA BASED ON PRECISE-INTEGRATION TIME-DOMAIN	119
<i>Xiaoyue Li, Lixia Yang, Hong Jin Wang, Xiang Zhou, Wei Chen</i>	

A NOVEL DISCONTINUOUS GALERKIN METHOD FOR THE DC IR-DROP ANALYSIS OF POWER DISTRIBUTION NETWORKS	121
<i>Anfa Yang, Min Tang, Junfa Mao, Ping Li, Hakan Bagci</i>	
ROBUSTNESS OF APPROXIMATED STRATTON-CHU FORMULATION IN SOLVING LOW FREQUENCY PROBLEM	123
<i>Yang Bao, Jiming Song</i>	
A WIDEBAND MILLIMETER-WAVE BIDIRECTIONAL OAM ANTENNA USING SEQUENTIAL ROTATION FEEDING	125
<i>Jie Wu, Jian Feng, Zhixiang Huang, Xianliang Wu</i>	
DESIGN OF SIW-BASED W-BAND MAGNETOELECTRIC DIPOLE ANTENNA FOR ACTIVE PHASED ANTENNA ARRAY	127
<i>Ye Deng, Bin Li, Jinping Zhang, Lei Sun, Zhipeng Zhou</i>	
A MAGNETO-ELECTRIC DIPOLE ANTENNA WITH AN ENHANCED BANDWIDTH	129
<i>Yanfang Wang, Fuguo Zhu, Steven Gao</i>	
A COMPACT COPLANAR VIVALDI ANTENNA WITH L-SHAPED SLOTLINE	131
<i>Binwen Wang, Hui Ning, Youjie Yan, Wei Zhao</i>	
PATTERN RECONFIGURABLE MIMO ANTENNA BASED ON CHARACTERISTIC MODE THEORY	133
<i>Minmin Tian, G. S. Cheng, Y. T. Sun, Z. X. Huang</i>	
CHARACTERISTIC MODE ANALYSIS OF NEUTRALIZATION LINE FOR MIMO ANTENNA DESIGNS	135
<i>Y. T. Sun, G. S. Cheng, Minmin Tian</i>	
MATCHING DESIGN OF WEDGE-SHAPED STRUCTURE RADOME AND DUAL LINEAR POLARIZED SNA	137
<i>Peng Li, Pei Li, Zeling Kuang, Lingyan Si, Menglin Huang</i>	
A COMPACT OMNIDIRECTIONAL UHF ANTENNA BASED ON SPOOF SURFACE PLASMON POLARITONS	139
<i>Zhuohao Xiao, Binke Huang, Chunming Tian</i>	
A NOVEL CIRCULAR POLARIZATION ANTENNA	141
<i>Weihua Zhou, Lin Zha, Xinyu Li</i>	
A RECONFIGURABLE PRS LOADED ANTENNA WITH GAIN ENHANCEMENT AND BEAM STEERING PROPERTY	143
<i>Kang Chen, Yi Wang, Qunsheng Cao</i>	
EXPERIMENTAL STUDY OF THE INFLUENCE OF SHIELDING LAYER ON RADIATION CHARACTERISTICS OF SHIELDED CABLE	145
<i>Ying Li, Shaoqi Zuo, Jia Zhang, Yunfeng Wang, Dagang Xie, Peng Ruan</i>	
RADAR CROSS SECTION MEASUREMENT METHOD OF INHOMOGENEOUS PLASMA WITH ELECTRICALLY LARGE SCALE BASED ON NEAR-FIELD IMAGING	147
<i>Runhui Wu, Jiaqi Liu, Song Chai, Gang Meng, Jinjun Mo, Yinfang Xu, Wenhao Bai, Wenwu Fang</i>	

THEORETICAL SIMULATION AND EXPERIMENTAL ANALYSIS OF ELECTROMAGNETIC WAVE PROPAGATION CHARACTERISTICS IN SUB-DENSE NONUNIFORM PLASMA	149
<i>Runhui Wu, Jiaqi Liu, Song Chai, Gang Meng, Yanan Li, Yichun Cui</i>	
A NOVEL 3D ON-CHIP BANDPASS FILTER FOR WIRELESS COMMUNICATION.....	151
<i>Zhihao Liu, Yujin Zhou, Chonghu Cheng</i>	
DESIGN OF COMPACT ROTMAN LENS WITH WIDE-ANGLE SCANNING USING HIGH PERMITTIVITY SUBSTRATE	153
<i>Pei Li, Peng Li, Peigang Yang, Zeling Kuang, Xu Luo</i>	
RESEARCH ON BROADBAND MULTI-BEAMFORMING NETWORK BASED ON MICROSTRIP CIRCUIT	155
<i>Sa Ba, Biao Sun, Zhongji Yu</i>	
ULTRA-WIDEBAND HIGH PRECISION POSITIONING SYSTEM BASED ON SDS-TWR ALGORITHM.....	157
<i>Ying Liu, Xiaozhang Zhu, Xiaole Bo, Ziyang Yang, Zhiqin Zhao</i>	
SUPPRESSING FAKE TARGETS ON FOCUSING AZIMUTH PERIODICALLY GAPPED SAR DATA WITH SLIM.....	159
<i>Yulei Qian, Huaxing Kuang, Ying Zhang, Haocheng Yang</i>	
A DEEP LEARNING METHOD FOR SAR IMAGING IN SPARSE FIELD.....	161
<i>Yinger Zhang, Pan Zhang, Zhouyi Wu, Tianchen Tong, Jiangtao Huangfu</i>	
ULTRA-LOW VELOCITY MTD BASED ON KU-BAND CIRCULAR VIDEOSAR SYSTEM.....	163
<i>Ying Zhang, Zheng Ye, Yulei Qian, Daiyin Zhu</i>	
SIMULATION AND MEASUREMENT OF EM RADIATION FOR MOVING MAGLEV TRAIN.....	165
<i>Shi Xin-Yang</i>	
INERTIA RATIO PARAMETER EXTRACTION OF TYPICAL BALLISTIC TARGET BASED ON DEEP LEARNING	167
<i>Shiyuan Li, Tian Yang, Mengmeng Li, Rushan Chen</i>	
SPARSE ARRAY SYNTHESIS BASED ON SCHLOTTMANN APERIODIC TILING	169
<i>Luping Hou, Lirong Jian</i>	
APPLICATION OF SPHERICAL NEAR-FAR-FIELD TRANSFORMATIONAL ALGORITHM BASED ON SCATTERING MATRIX.....	171
<i>Chen Zi'An, Huang Zhengyu, Liu Shaobin, An Tong</i>	
CHARACTERISTIC MODE INSPIRED CIRCULAR POLARIZATION ANTENNA USING METAMATERIAL	173
<i>Chang Ding, Rigeng Wu, Jian Dong</i>	
TIME-REVERSAL SPARSE SOURCE RECONSTRUCTION WITH THE FOCAL UNDERDETERMINED SYSTEM SOLVER	175
<i>Bing Yan, Jinyan Li, Zhizhang Chen, Huapeng Zhao, Jingcheng Liang</i>	
DESIGN OF METASURFACE WITH NEAR COUPLINGS BASED ON DEEP LEARNING DRIVEN SPACE MAPPING.....	177
<i>Zixuan Ma, Weiye Li, Mengmeng Li, Rushan Chen</i>	

A DUAL-MODEL-BASE ADAPTIVE SAMPLING METHOD FOR FAST COMPUTATION OF BROADBAND SCATTERING	179
<i>Ziyue Cheng, Longfeng Xi, Shuo Li, Zhiwei Liu</i>	
A BROADBAND MAGNETO-ELECTRIC DIPOLE ANTENNA WITH A NOVEL FEEDING MECHANISM.....	181
<i>Yanfang Wang, Fuguo Zhu, Steven Gao</i>	
DESIGN OF A LOW-PROFILE WIDE-ANGLE SCANNING ARRAY ANTENNA BASED ON ARTIFICIAL MAGNETIC CONDUCTOR	183
<i>Zhixin Wang, Xiaoyan Zhao, Shichun Huang, Fangzheng Ji, Zhaoneng Jiang</i>	
DUAL-REJECT BAND FSS DESIGN USING EQUIVALENT CIRCUIT MODEL.....	185
<i>Yan Ma, Wei Wang, Jian Dong, Jinjun Mo</i>	
AN ANGULARLY STABLE BROADBAND REFLECTIVE POLARIZATION CONVERSION METASURFACE.....	187
<i>Zhongru Ren, Hongcheng Yin, Yongqiang Liu</i>	
FLEXIBLE MULTIPLEXING OF HIGH-ORDER POINCARÉ SPHERE BEAMS WITH REFLECTIVE METASURFACE.....	189
<i>Kai Qu, Ke Chen, Junming Zhao, Tian Jiang, Yijun Feng</i>	
ELECTRICALLY CONTROLLED TUNABLE BANDPASS FILTER BASED ON INNER-ROTARY COMPLEMENTARY SPLIT-RING RESONATOR	191
<i>Weilai Wang, Yong Mao Huang, Zhibin Wu, Yuliang Zhou, Haiyan Jin</i>	
BROADBAND FLAT-GAIN TRANSMITARRAY	193
<i>Guan-Long Huang, M. Abdelhady, Zi-Yu Pang, Jia-Jun Liang</i>	
GENERATION AND MANIPULATION OF OAM BEAMS USING PANCHARATNAM-BERRY CODING METASURFACE	195
<i>Mustafa K. Taher Al-Nuaimi, Guan-Long Huang</i>	
A CIRCULARLY-POLARIZED ZHONG-SHAPED MIMO ANTENNA WITH META-MATERIALS FOR WLAN APPLICATION.....	197
<i>Jianfeng Jiang, Chuan Yue, Yingfeng Xia, Bosong Qiu, Yingsong Li</i>	
MINIATURIZED RECONFIGURABLE RASORBER FOR INTELLIGENT ELECTROMAGNETIC PROTECTION	199
<i>Yuanfang Yu, Mingyu Sun, Aixin Chen</i>	
A SINGLE-LAYERED HOOK-SHAPED UNIT CELL DESIGN FOR WIDEBAND REFLECTARRAYS	201
<i>Peng Ning, Lu Guo</i>	
THE ECHO CHARACTERISTICS OF ELECTROMAGNETIC WAVES IN NONUNIFORM PLASMA.....	203
<i>Zhaoying Wang, Lixin Guo, Jiangting Li</i>	
UNCONDITIONALLY STABLE FDTD METHOD BASED ON CHEBYSHEV POLYNOMIALS—CHEBYSHEV(CS)FDTD.....	205
<i>Chao Li, Zheng-Yu Huang, Zi-An Chen, Shuai Zhu, Ai-Wei Yang, Zi-Jun Wang</i>	
AN EFFICIENT SCHEME FOR MULTIPLE FINE STRUCTURES IN HYBRID FETD	207
<i>Kaihang Fan, Bing Wei, Xinbo He</i>	

ANALYSIS AND EVALUATION OF PERIODIC MEDIUM STRUCTURE ON SHIELDING EFFECTIVENESS	209
<i>Xiangang Sun, Bing Wei</i>	
TRANSIENT ANALYSIS OF PROPAGATION CHARACTERISTICS IN LAYERED LOSSY MEDIUM	211
<i>Ning Shen, Bing Wei</i>	
ANALYSIS OF HIGH POWER ELECTROMAGNETIC PULSE COUPLING EFFECT OF PHOTOVOLTAIC PANEL BY USING FDTD METHOD	213
<i>Hai-Sheng Song, Ya-Tong Hou, Shan-Luo, Zheng-Yu Huang, Shuai Zhu, Chao Li</i>	
ADAPTIVE FDTD MESH GENERATION TECHNIQUE BASED ON CUBOID RAY COLUMN INTERSECTION METHOD	215
<i>Chunhui Mou, Juan Chen</i>	
RESEARCH ON ARBITRARY-ORDER FDTD METHOD BASED ON FACE-CENTERED CUBIC GRIDS	217
<i>Xinsong Wang, Guangzhi Chen, Wanli Du, Yonggen Wang, Donglin Su</i>	
THREE-DIMENSIONAL CONFORMAL LOD-FDTD METHOD FOR ACCURATE TRANSIENT ELECTROMAGNETIC ANALYSIS	219
<i>Hanhong Liu, Xianghua Wang, Xingqi Zhang, Shunchuan Yang, Zhizhang Chen</i>	
RESEARCH ON HYBRID ALGORITHM OF EXPLICIT NEWMARK-FDTD AND TRADITIONAL FDTD METHODS	221
<i>Xinbo He, Bing Wei, Kaihang Fan</i>	
OPTIMIZATION OF PHOTONIC BANDGAP STRUCTURE BASED ON GENETIC ALGORITHM AND AH FDTD METHOD	223
<i>Shuai Zhu, Zheng-Yu Huang, Zhi-Hao Ding, Chao Li, Zi-An Chen, Ying-Hui Zhou, Li-Hua Shi</i>	
APPLICATION OF MULTIBRANCH RAO-WILTON-GLISSON BASIS FUNCTIONS IN ELECTROMAGNETIC SCATTERING PROBLEMS	225
<i>Gaobiao Xiao, Shifeng Huang, Rui Liu, Yuyang Hu</i>	
ACCELERATING THE LAGUERRE-BASED FINITE-ELEMENT METHOD FOR TRANSIENT THERMAL SIMULATION	227
<i>Jie Li, Min Tang, Junfa Mao</i>	
A FAST ALGORITHM FOR COMPUTING FIELDS OF A VERTICAL MAGNETIC DIPOLE IN A DISSIPATIVE HALF-SPACE.....	229
<i>Hongyun Deng, Shifeng Huang, Gaobiao Xiao</i>	
FAST SIMULATIONS OF ELECTROMAGNETIC SCATTERING FROM ROUGH SURFACE BASED ON INTEGRAL EQUATION DOMAIN DECOMPOSITION METHOD	231
<i>An Qi Wang, Shu Jian Wang, Li Xia Yang</i>	
ITERATIVE SOLUTION FOR SIE BASED ON DOMAIN DECOMPOSITION METHOD FOR SCATTERING ANALYSIS	233
<i>Jiangfei Bai, Shuo Cui, Shunchuan Yang, Donglin Su</i>	
AN IMPROVED TDS-PO WITH THE CLOSED-FORM FORMULATION OF INTEGRALS FOR EM SCATTERING PROBLEMS.....	235
<i>Yang Liu, Haijing Zhou</i>	

TUNABLE TOPOLOGICAL PHOTONIC CRYSTAL WAVEGUIDES	237
<i>Menglin L. N. Chen, Li Jun Jiang, Wei E. I. Sha</i>	
FAST ANALYSIS OF SCATTERING FROM CHAFF CLOUDS BY EPA-BOR METHOD	239
<i>Beibei Zhang, Yamei Li, Zi He, Rushan Chen</i>	
THE SCATTERING CHARACTERISTICS OF CHAFF CLOUDS WITH DIFFERENT DISTRIBUTION BY VRT METHOD.....	241
<i>Yamei Li, Zi He, Rushan Chen</i>	
CACULATION OF DIFFRACTION FIELD OF CREEPING WAVES ON ARBITRARY CONVEX SURFACE BASED ON NON-UNIFORM FOCK CURRENTS	243
<i>Qi Huang, Siyuan He, Hao Yang, Yan Zhu</i>	
A NOVEL BLIND SOURCE SEPARATION ALGORITHM FOR ELECTROMAGNETIC INTERFERENCE SOURCES IDENTIFICATION	245
<i>Lu Xiaozhu, Hu Bo, Wu Qi, Su Donglin</i>	
RADIO WAVE PROPAGATION PREDICTION FOR FORESTS IN RAINY ENVIRONMENT	247
<i>Zi-Jian Lu, Hui-Tin Yin, Zi He, Ru-Shan Chen</i>	
SOLVING ELECTROMAGNETIC SCATTERING FROM DIELECTRIC PROBLEMS BY PMCHWT-SASF.....	249
<i>Ming Jiang, Zhi Rong, Xiong Yang, Lin Lei, Jun Hu</i>	
THE LAGRANGE INTERPOLATION METHOD FOR THE CAVITY EIGENVALUE PROBLEM WITH ELECTRIC FIELD INTEGRAL EQUATION	251
<i>Wei Zhu, Bo O. Zhu</i>	
AN EFFICIENT BUTTERFLY ALGORITHM-BASED METHOD FOR ELECTROMAGNETIC NEAR-FIELD CALCULATIONS	253
<i>Xiao-Wei Huang, Xin-Qing Sheng</i>	
3-D WIDE-BAND GLOBAL SCATTERING CENTER MODELING BASED ON SBR AND CLUSTERING TECHNIQUES	255
<i>Hua Yan, Lei Zhang, Jinwen Lu, Xiaoyu Xing, Hongcheng Yin</i>	
A REFLECTIVE METASURFACE GENERATES OAM BEAMS	257
<i>Zhiwei Li, Zhixin Wang, Yang Zheng, Yongxing Sha, Zhaoneng Jiang</i>	
PARALLEL SDIE METHOD BASED ON CFIE AND IBC FOR ELECTROMAGNETIC SCATTERING ANALYSIS OF LARGE-SCALE AND NONUNIFORM COATED OBJECTS	259
<i>Xue Yang, Hong-Wei Gao, Ming-Lin Yang, Xin-Qing Sheng</i>	
STUDY ON EXTRACTION OF CAPACITANCE PARAMETERS OF THREE DIMENSIONAL INTERCONNECT STRUCTURES BASED ON FINITE ELEMENT METHOD	261
<i>Han Qi Jin, Yu Mao Wu, Wei Jie Wang, Hai Jing Zhou</i>	
RESEARCH ON A NOVEL TEMPERATURE SENSOR AND ITS ANTI- ELECTROMAGNETIC INTERFERENCE CHARACTERISTICS.....	263
<i>Lu Xiaozhu, Hu Bo, Zhou Zongfei, Wu Qi, Su Donglin</i>	
AN EFFECIENT ESM TECHNIQUE FOR THREE-DIMENSION RADIATION SOURCE LOCALIZATION	265
<i>Bowen Luo, Qiang-Ming Cai, Xin Cao, Shuaihua Ren, Yuyu Zhu, Yi Yu, Jun Fan, Lei Han</i>	

CONCEPTUAL STUDY OF TRI-BEAM SPACEBORNE SAR.....	267
<i>Fengming Hu, Feng Xu</i>	
A RESEARCH ON 3-D POINT CLOUDS RECONSTRUCTION OF SAR IMAGES DRIVEN BY ELECTROMAGNETIC SCATTERING MECHANISMS.....	269
<i>Zhilong Yang, Feng Wang, Feng Xu</i>	
FAST SCATTERING CALCULATION OF SPARSE ARRAY BASED ON ARRAY AIM	271
<i>Mingxuan Zheng, Huiling Zhao, Chuwei Li</i>	
FAST ANALYZING BISTATIC SCATTERING PROBLEMS OF OBJECT USING HIGHER LEVEL CHARACTERISTIC MODES	273
<i>Zhenzhen Chen, Chenlu Li</i>	
THEORETICAL ANALYSIS AND MULTIPHYSICS SIMULATION OF AIRCRAFT DEPOSITION ELECTROSTATIC.....	275
<i>Hao Wu, Xuedong Fu, Jiamei Qin, Aixin Chen</i>	
FAST EDDY-CURRENT TESTING MODEL USING H MATRIX AND ACA ALGORITHM	277
<i>Ping Ping, Yang Bao, Yumei Chang</i>	
DESIGN OF A NOVEL COMPACT MICROSTRIP INTERDIGITAL FILTER BASED ON AGGRESSIVE SPACE MAPPING.....	279
<i>Yi Ou, Wen Ou, Shaohui Xiao, Yang Xia, Furong Qu, Yongjin Huai</i>	
INTEGRATED WAVEGUIDE-TO-MICROSTRIP TRANSITION WITH POWER DIVIDER AT W-BAND	281
<i>Bin Li, Jinping Zhang, Ye Deng, Zhipeng Zhou, Lei Sun</i>	
A 9:1 BANDWIDTH LOW-PROFILE TIGHTLY COUPLED DIPOLE ARRAY WITH COMPACT MATCHING NETWORK	283
<i>Bingjun Wang, Shiwen Yang, Yikai Chen, Shiwei Qu</i>	
CONFORMAL ULTRA-WIDEBAND TIGHTLY COUPLED ARRAYS WITH LOW- SCATTERING CHARACTERISTICS.....	285
<i>Zhechen Zhang, Xingyuan Guo, Shiwen Yang, Yikai Chen, Shi-Wei Qu</i>	
A FREQUENCY AND POLARIZATION RECONFIGURABLE SPIRAL ANTENNA BASED ON LIQUID METAL.....	287
<i>Tingting Zhang, Yikai Chen, Shiwen Yang</i>	
A COMPACT BROADBAND BASED STATION ANTENNA WITH HIGH GAIN FOR 5G APPLICATIONS.....	289
<i>Cheng Liu, Hongjin Wang, Lixia Yang, Guowei Li</i>	
UWB TIGHTLY COUPLED ARRAY OPTIMIZATION AND DESIGN OF UNEQUAL POWER DIVIDER	291
<i>Baifan Huang, Pengfei Gu, Dazhi Ding, Rushan Chen</i>	
RECONFIGURABLE LEAKY-WAVE ANTENNA BASED ON HALF-MODE BENT CORRUGATED SIW STRUCTURE WITH FIXED-FREQUENCY BEAM-SCANNING.....	293
<i>Dan Zhao, Huiyi Wang, Zhenzhong Rao</i>	
AN EASY-TO-INTEGRATE SUB-7G DUAL-POLARIZED BROADBAND MICROSTRIP ANTENNA.....	295
<i>Cao Jia Yi, Wang Yi Min</i>	

ULTRAWIDEBAND LOW-PROFILE TIGHTLY COUPLED DIPOLE ARRAY	297
<i>Wen-Man Zou, Jia Fang, Mouping Jin, Songyang Liu, Quan Wang</i>	
A TWO-ELEMENT 24 GHZ PLANAR END-FIRE DIPOLE ANTENNA ARRAY	299
<i>Yanfei Mao, Shiju E, Suli Yan</i>	
A DUAL-BAND FILTERING DIELECTRIC RESONATOR ANTENNA WITH HIGH SELECTIVITY	301
<i>Qian Lin Yang, Jin Pan</i>	
BROADBAND 3D PRINTED CONFORMAL DIELECTRIC LINEAR-TO-CIRCULAR POLARIZATION METASURFACE CONVERTER.....	303
<i>Xi-Bei Zhao, Xiao-Yu Tong, Feng Wei, Yong Yang, Xiaoning Yang, Nankai Wu</i>	
A MODE MATCHING METHOD FOR EFFICIENT EVALUATION OF SHORT BACKFIRE ANTENNAS LOADED WITH ANISOTROPIC IMPEDANCE SURFACES	305
<i>Mengyuan Bie, Manxin Peng, Zhi Hao Jiang</i>	
WIDEBAND CONFORMAL ANTENNA INTEGRATED WITH LENS FOR IMPLANTABLE CAPSULE SYSTEM.....	307
<i>Li-Jie Xu, Zhen-Yu Ma, Zhe Wu</i>	
A NON-RADIATIVE WIRELESS POWER TRANSFER BASED ON SPARSE QUASI-STATIC CAVITY RESONATOR.....	309
<i>Zhen Yue, Qiaoli Zhang, Deshuang Zhao, Bing-Zhong Wang</i>	
SIMPLIFIED MODELING OF WIRELESS POWER TRANSMISSION PROBLEM BASED ON FOCUSED ARRAY ANTENNA.....	311
<i>Peng-Fa Li, Shi-Wei Qu</i>	
STUDY ON THE INFLUENCE OF SUNNY AND RAINY DAYS ON THE RADIATION EMISSION TEST OF RAIL TRANSIT VEHICLES	313
<i>Dawei Liu, Jia Zhang, Shaoqi Zuo, Jianwei Qi, Peng Ruan</i>	
THE ABSORBING CHARACTERISTICS OF PLASMA-FILLED DOUBLE-LAYER JAUMANN SCREEN	315
<i>Man Liang, Deng Hao-Chuan</i>	
DESIGN OF A ULTRA-WIDEBAND CONFORMAL CIRCUIT ANALOG ABSORBER.....	317
<i>Yue Li, Pengfei Gu, Dazhi Ding, Rushan Chen</i>	
MOTION TARGETS IDENTIFICATION FOR BISTATIC THROUGH-THE-WALL RADAR.....	319
<i>Xianzhong Tian, Yanbo Zhang, Xingwen Zhao, Xiangdong Li, Zijiang Yang</i>	
ELECTRON DENSITY INVERSION FOR PLASMA MEDIUM BASED ON ANTENNA PERFORMANCE PARAMETERS	321
<i>Liping Gan, Lixin Guo, Linjing Guo, Jiangting Li</i>	
TUNABLE MILIMETERWAVE EQUALIZER BASED ON FOLDED SUBSTRATE INTEGRATED WAVEGUIDE	323
<i>Nan Song, Zheng-Bin Wang, Jun-Ma Zhang, Hui Chen</i>	
DESIGN OF SUB-6G 150W HIGH EFFICIENCY DOHERTY POWER AMPLIFIER.....	325
<i>Wang Yimin, Cao Jiayi, Li Jiawang</i>	
DESIGN OF KA BAND LOW NOISE AMPLIFIER BASED ON 65NM CMOS TECHNOLOGY	327
<i>Xiangyu Liang, Liguo Sun, Dongwei Pang, Shiwei Wu</i>	

SIMULATION FOR THE ELECTROMAGNETIC SCATTERING FROM THE 3D ADVANCING BREAKING WAVES	329
<i>Letian Wang, Jiong Liu, Gang Min, Yunhong Xie</i>	
IMAGE RECONSTRUCTION OF ELECTRICAL IMPEDANCE TOMOGRAPHY BASED ON DEEP LEARNING.....	331
<i>Shaocong Li, Qinghe Zhang, Guoliang Zheng</i>	
POTENTIAL APPLICATION OF ANTENNA-IN-PACKAGE IN LEO SATELLITE	333
<i>Yukai Liu, Yan Li, Jixiang Wan</i>	
INVESTIGATE MAGNETIZED GRAPHENE-BASED FSS WITH SPLIT FIELD HIE-FDTD METHOD.....	335
<i>Xiang-Hua Wang, Jian-Yun Gao</i>	
A SWITCHABLE POLARIZATION CONVERTOR BASED ON ACTIVE METASURFACE USING VARACTOR DIODE.....	337
<i>You Li, Zhifeng Lian, Zhixuan Zhang, Min Zhu</i>	
DESIGN OF MILLIMETER WAVE ARRAY ANTENNA DECOUPLING CONSTRUCTION BASED ON METASURFACE.....	339
<i>Tianzheng Zhen, Zhongxiang Zhang, Xianliang Wu</i>	
INVESTIGATION ON ELECTROMAGNETIC SCATTERING CHARACTERISTICS OF NEAR SEA SURFACE WITH BREAKING WAVES.....	341
<i>Jianghui Zhu</i>	
SIMULATION OF ACTIVE MILLIMETER WAVE IMAGING IN HUMAN SECURITY	343
<i>Jianan Lin, Zhenhong Fan, Xuan Li, Rushan Chen</i>	
CALCULATION OF ORTHOGONAL DECOMPOSITION OF SCATTERED FAR FIELD.....	345
<i>Xunwang Dang, Chong Wang, Liangsheng Li, Hongcheng Yin, Lei Zhang, Chao Li</i>	
DESIGN OF A FREQUENCY AND POLARIZATION RECONFIGURABLE SLOT ANTENNA WITH S-PINS	347
<i>Tong An, Shaobin Liu, Zhiyong Hu, Yuning Yang</i>	
ACCURATE MODAL ANALYSIS OF MICROSTRIP PATCH ANTENNAS USING SUB- STRUCTURE CHARACTERISTIC MODES.....	349
<i>Shaode Huang, Ming-Chun Tang, Chao-Fu Wang</i>	
LOW-PROFILE AND BROADBAND FERRITE-LOADED ANTENNA FOR VHF/UHF APPLICATIONS.....	351
<i>Zongliang Zheng, Ping Yin, Quanyuan Feng</i>	
DESIGN OF AN UWB END-FIRE QUASI-YAGI ANTENNA WITH DIELECTRIC LOADING	353
<i>Jiabin Xu, Zongliang Zheng</i>	
ENHANCED DIRECTIONAL FLUORESCENCE SPONTANEOUS EMISSION VIA MULTIPOLAR INTERFERENCE IN METAL-DIELECTRIC HYBRID NANOANTENNA.....	355
<i>Song Sun, Huigao Duan</i>	
METAMATERIAL PROMOTING 5G MIMO ANTENNA WITH ISOLATION ENHANCEMENT.....	357
<i>Wei Zhou, Chuan Yue, Yingsong Li</i>	

PATTERN-RECONFIGURABLE ANTENNA WITH THREE SWITCHABLE BEAMS BASED ON GRAPHENE.....	359
<i>Jia-Qi Zhou, Xiaoyu Pang, Shining Sun, Chi Fan, Bian Wu</i>	
MILLIMETER-WAVE WIDEBAND ENDFIRE ANTENNA WITH SMALL GROUND CLEARANCE FOR 5G MOBILE TERMINALS.....	361
<i>Changjiang Deng, Yuqing Zhu</i>	
A DUPLEXING QUASI-YAGI ANTENNA.....	363
<i>Hang Yuan, Fu-Chang Chen</i>	
HIGH SELECTIVITY FILTERING SLOT ANTENNA BUILED ON MULTI-MODE CAVITY	365
<i>Kai-Ran Xiang, Fu-Chang Chen</i>	
PERFORMANCE IMPROVED VOLTAGE CONTROLLED OSCILLATOR AND DOUBLE BALANCED MIXER CHIP DESIGN.....	367
<i>Wen-Cheng Lai</i>	
EFFICIENT SOLUTION OF WIDEBAND RCS USING WIDEBAND CHARACTERISTIC MODE BASIS FUNCTION METHOD WITH IMPEDANCE INTERPOLATION.....	370
<i>Liyang Zhang, Xinlei Chen, Ziwei Li, Fan Gao, Changqing Gu</i>	
ANALYSIS OF NUMERICAL DISPERSION WITH TIME STEP FOR FDTD(2,2) AND FDTD(2,4) METHOD ON FACE-CENTERED CUBIC GRIDS	372
<i>Wanli Du, Shunchuan Yang, Guangzhi Chen, Xinsong Wang, Yu Cheng, Donglin Su</i>	
THE RK-SINC METHOD FOR SCHRÖDINGER EQUATION.....	374
<i>Min Zhu, Yi Wang</i>	
ANALYSIS ON LOW-FREQUENCY SCATTERED FIELDS FROM UNDERWATER TARGET	376
<i>Chuanwei Wu, Kuisong Zheng, Xiaoman Sun, Xingming Zhang, Zenghui Yan, Bin Li</i>	
DESIGN OF DUAL-FREQUENCY RECONFIGURABLE ANTENNA WITH FLUID MEDIUM.....	378
<i>H. Yuan, H. Zheng, M. Wang</i>	
RADIATED FIELDS OF F=8HZ UNDERWATER ELECTRIC DIPOLE WITH SNIM	380
<i>Xiaoman Sun, Kuisong Zheng, Chuanwei Wu, Xingming Zhang, Zenghui Yan, Huaiyun Peng</i>	
RESEARCH ON HIGH PRECISION SIMULATION TECHNOLOGY OF SPECIFIC ABSORPTION RATE OF HUMAN HEAD MODEL	382
<i>Weibo Liang, Lu-Chu Han, Hongxing Zheng</i>	
EXPLOITING HIGH-ISOLATION 2ND-HARMONIC BACKSCATTERS FOR DISTANCE-ADAPTIVE MICROWAVE POWER DELIVERY	384
<i>Hao Zhang, Yong-Xin Guo</i>	
SINGLE-BEAM REALIZATION METHOD BASED ON 1-BIT RECONFIGURABLE REFLECTARRAY.....	386
<i>Shuyao Yue, Zeqing Lu, Long Li</i>	
AN ADJOINT-BASED SHAPE OPTIMIZATION DESIGN SYSTEM FOR THE RADAR CROSS SECTION REDUCTION.....	388
<i>Ming Li, Chaoyu Liu, Feng Qu, Junqiang Bai</i>	
MULTIFUNCTIONAL ARRAY FOR ACHIEVING ORBITAL ANGULAR MOMENTUM VORTEX WAVE AND RCS REDUCTION.....	390
<i>Zan Kui Meng, Yan Shi</i>	

ELECTROMAGNETIC INTERFERENCE BETWEEN MULTIPLE QUANTUM MECHANICAL DOMAINS IN ELECTRONIC DEVICES.....	392
<i>Lingyi Meng, Chiyung Yam, Quan Chen</i>	
A PHYSICS-INFORMED NEURAL NETWORK FOR RRAM MODELING	394
<i>Yanliang Sha, Lingyun Ouyang, Quan Chen</i>	
DOPPLER SPECTRUM ANALYSIS OF HYPERSONIC VEHICLE BASED ON DYNAMIC RCS	396
<i>Zheng Bian, Jiangting Li, Lixin Guo</i>	
PROGRESS AND PROSPECTIVE OF ELECTROMAGNETIC PERIODIC STRUCTURES	398
<i>Shengjun Zhang, Lei Mu, Chunshou Shao, Xia Ai, Weidong Wang, Song Chai, Yichun Cui, Shengdong Liu, Cuiyun Sun, Nan Zhou, Lei Xie, Chunyu Li, Luting Jiao, Yue Wang, Zhaohui Qi, Minghao Wang, Zhengyu Yong, Yuan Sun, Dewang Kong</i>	
DESIGN OF FREQUENCY SELECTIVE RADOME BASED ON PYRAMID LATTICE SANDWICH STRUCTURE	402
<i>Lu Cong, Tao Jiang, Hanyu Shan, Bin Cao</i>	
TUNABLE MULTI-BAND PLASMA FSS REALIZED BY ARTIFICIAL DEFECTS	404
<i>Ji Liu, Zhaowen Yan, Jinzu Ji, Qi Chang, Jiayi Zhang</i>	
CONFORMAL ARRAY ELEMENT FAILURE CORRECTION BASED ON PSO-CS ALGORITHM.....	406
<i>Bin Cao, Zhenyi Xu, Jiaxin Yao, Tao Jiang</i>	
RECENT ADVANCES IN SPACE-MAPPING-BASED MULTIPHYSICS OPTIMIZATION FOR MICROWAVE FILTERS	408
<i>Wei Zhang, Feng Feng, Shuxia Yan, Wenyuan Liu, Weicong Na, Qi-Jun Zhang</i>	
A LOCAL ENHANCED SAMPLING STRATEGY FOR SURROGATE-BASED MICROWAVE COMPONENT OPTIMIZATION.....	410
<i>Zhen Zhang, Qingsha S. Cheng</i>	
SMT: A SPACE-MAPPING-BASED TUNING SOFTWARE SYSTEM FOR A POST-FABRICATION BANDPASS FILTER.....	412
<i>Yu Kuang, Song Li, Xiaolin Fan, Qingsha S. Cheng</i>	
RECENT ADVANCES IN PARALLEL AUTOMATED NEURAL-BASED MODELING OF MICROWAVE DEVICES	414
<i>Weicong Na, Ke Liu, Feng Feng, Wanrong Zhang</i>	
LOW-COST ANTENNA OPTIMIZATION BY MEANS OF GRADIENT SEARCH AND PRINCIPAL COMPONENTS	416
<i>Jon Atli Tomasson, Slawomir Koziel, Anna Pietrenko-Dabrowska, Qingsha S. Cheng</i>	
THE COMPUTATION OF QUANTUM RCS FOR THE REGULAR HEXAGONAL PRISM	418
<i>Chonghua Fang, Shi Xinyang</i>	
A HIGHER-ORDER MODE AIR-PATCH ANTENNA WITH A T-SHAPE FEED.....	420
<i>Wei-Jun Wu, Yu-Jia Liu, Lu-Yu Zhao, Hui Guo, Shuang Li, Yi-Fu Zhao</i>	
FAST RCS OPTIMIZATION OF SHIP SUPERSTRUCTURE BASED ON SURROGATE MODEL.....	422
<i>Du Xiaojia</i>	

A SPECTRUM ALLOCATION ALGORITHM WITH FAST RESPONSE TO INTERFERENCE	424
<i>Mengxue Li, Dongdong Wang</i>	
THE COUPLING OF LIGHTNING ELECTROMAGNETIC PULSE ON SHIPS WITH A NOVEL FDTD MODELING SCHEME.....	426
<i>Hai-Sheng Song, Jia-Chen Zhao, Zheng-Yu Huang, Zi-Jing Xiao, Yan-Tao Duan, Li-Hua Shi</i>	
RESEARCH ON THE SCATTERING CHARACTERISTICS OF MOTION MODULATED ULTRA-LONG CHAFF	428
<i>Gan Lin, Li Jianbing, Liu Xin, Wang Xuesong</i>	
FAST WIDEBAND RCS ANALYSIS OF LARGE-SCALE FINITE PERIODIC STRUCTURES USING MB-CBF METHOD AND RATIONAL INTERPOLATION	430
<i>Sheng Zhang, Ping Du, Gang Zheng</i>	
RESEARCH ON BOUNDARY CONDITIONS OF NEAR-FAR FIELD EXTRAPOLATION BASED ON FCC-FDTD METHOD	432
<i>L. F. Wang, L. X. Yang, W. Chen, Z. X. Huang, Z. Y. Wang</i>	
SURFACE ACOUSTIC SCATTERING BASED ON THE SMALL SLOPE APPROXIMATION METHOD.....	434
<i>Yingjie Li, Lixin Guo, Shuirong Chai</i>	
CALCULATION AND PREDICTION FOR BACKSCATTERING OF HINGED MODEL.....	436
<i>Zhaowang Cao, Gengjiang Yao, Ling Miao, Jianjun Jiang</i>	
ANALYSIS OF THE PROPAGATION CHARACTERISTICS OF THZ WAVES IN THE BGK COLLISION MODEL: CASE OF OBLIQUE INCIDENCE.....	438
<i>Z. Y. Wang, W. Chen, L. X. Yang, Z. X. Huang, L. F. Wang</i>	
CALCULATION OF MATERIAL PERMITTIVITY AND PERMEABILITY BASED ON TRUST REGION ALGORITHM.....	440
<i>Jinhao Zhang, Heng Zhou, Wenxi Hao, Tingyong Jiang, Shengtao Wang, Changlin Han</i>	
DIGITAL PROCESSING SYSTEM OF GEOMAGNETIC WEAK SIGNAL DETECTION	442
<i>Peipei Zhang, Hongtao Li, Yiren Shao</i>	
UNDERGROUND SPACE DETECTION SYSTEM BASED ON WOLA STRUCTURE	444
<i>Yiren Shao, Hongtao Li, Peipei Zhang</i>	
FDTD-TL METHOD FOR THE PREDICTION OF THE TRANSIENT RESPONSE OF SHIELDED CABLE ABOVE THE GROUND	446
<i>Jinhong Wei, Youjie Yan, Shengtao Wang, Tinyong Jiang, Fengshun Gao</i>	
AN IMPROVED OPTICAL CONVOLUTION PROCESS IN SPIRAL PHASE CONTRAST IMAGING BASED ON FRFT	448
<i>Haocheng Yang, Huaxing Kuang, Boyang Wang, Yulei Qian</i>	
APPLICATION OF IMPROVED FDTD ALGORITHM IN SOLAR PANELS.....	450
<i>Tingjun Liu, Le Xu, Tao Liu, Xiaowei Shi</i>	
AN SIC-BASED BROADBAND HIGH-GAIN ARRAY ANTENNA APPLICABLE FOR 5G FR1 BAND.....	452
<i>Shengjie Wang, Liguo Sun</i>	

A NEW TYPE OF SINGLE-LAYER DUAL-POLARIZATION ELEMENT USED FOR FOLDED REFLECTARRAY.....	455
<i>Hong-Xi Zhang, Shi-Wei Qu, Shiwen Yang</i>	
A COMPACT DUAL-BAND LINEARLY POLARIZED SHARED-APERTURE BASE STATION ANTENNA.....	457
<i>Yuwen Feng, Yunxue Xu, Lu Zhang, Yuhao Zhang</i>	
CORRELATION PROPERTY OF BROADENED MICROWAVE SHORT-PULSE COMBINED IN TIME DOMAIN.....	459
<i>Wei Zhao, Tingyong Jiang, Binwen Wang</i>	
AN ULTRA-WIDEBAND MINIATURIZED DUAL-POLARIZED VIVALDI ANTENNA.....	461
<i>Jiao Yin, Jing Li, Dongsheng Tan, Huiqing Zhai, Wuning Zhong</i>	
A WIDE-BEAMWIDTH DUAL-POLARIZED PRINTED DIPOLE ANTENNA.....	463
<i>Yuhao Zhang, Yunxue Xu, Lu Zhang</i>	
A DECOUPLING STRUCTURE FOR ARRAY ANTENNA.....	465
<i>Yunfeng Su, Qiulin Huang</i>	
STUDY ON THE INFLUENCE OF DIFFERENT CONFORMAL SURFACES ON ANTENNA BANDWIDTH AND PATTERN.....	467
<i>Sha Luo, Di Jiang, Kai Zhu, Tianming Bai, Tianliang Zhang</i>	
DESIGN OF UHF SEMI-ACTIVE TAG ANTENNA.....	469
<i>Jiayin Hu, Jun Ouyang, Chu Zhang, Tao Zhou, Xiaoyan Liang</i>	
PERFORMANCE EVALUATION OF RADAR COMMUNICATION INTEGRATED BROADBAND TRANSMITTER.....	471
<i>Shenghua Zheng, Yuyang Zheng, Renfei Zhang, Zhenyu Zhang</i>	
A NEW DOWNHOLE EWR MEASUREMENT AND COMMUNICATION SYSTEM BASED ON DPSD.....	473
<i>Xinxin Chi, Xinhuai Wang, Haijian Zhang, Linzhu Wang</i>	
DESIGN OF A MULTILAYERED FREQUENCY SELECTIVE SURFACE ABSORBER FOR THE SUPPRESSION OF GRATING LOBES.....	475
<i>Ze Huang, Ling Miao, Jianjun Jiang</i>	
RESEARCH ON PLASMA ELECTRON DENSITY BASED ON EMISSION SPECTROSCOPY CALIBRATED BY PROBE.....	477
<i>Xiaomin Shi, Jiangting Li, Dong Yue, Lixin Guo</i>	
STUDY ON DYNAMIC RCS OF HYPERSONIC VEHICLE.....	479
<i>Haifeng Zhang, Jiangting Li, Zheng Bian, Lixin Guo</i>	
DESIGN OF A MINIATURE X-BAND BROADBAND UNEQUAL POWER DIVIDER MMIC USING BRIDGED-T COILS.....	481
<i>Senwen Hu, Guoming Qian</i>	
DESIGN OF A X-BAND MINIATURIZED POWER DIVIDER USING THE SILICON-BASED IPD PROCESS.....	483
<i>Yongjing Tao, Guoming Qian</i>	

BAYESIAN COMPRESSIVE SENSING APPROACH FOR PHASELESS MICROWAVE IMAGING	485
<i>Baozhu Li, Zhen Huang, Nicola Anselmi, Lorenzo Poli</i>	
REALIZATION OF SEA SURVEILLANCE AND IMAGING RADAR SIGNAL PROCESSING SYSTEM BASED ON DOMESTIC DIGITAL SIGNAL PROCESSOR.....	487
<i>Mengxue Li, Hao Wang</i>	
WIRELESS SYNCHRONIZED UWB TDOA POSITIONING SYSTEM BASED ON IEEE 802.15.4Z	489
<i>Ziyan Yang, Xiaozhang Zhu, Wei Yang, Zhiqin Zhao</i>	
APPLICATION OF AN IMPROVED NEAREST NEIGHBOR METHOD	491
<i>Qi Li, Dalong Xu</i>	
RCS PREDICTION OF POLYGONAL METAL PLATE BASED ON MACHINE LEARNING	493
<i>Yong Zhao, Jianjun Jiang, Ling Miao</i>	
DESIGN OF A CIRCULARLY POLARIZED PHASED ARRAY ANTENNA FOR SATELLITE APPLICATIONS.....	495
<i>Hu Liu, Yan Li, Chunbang Wu, Jixiang Wan</i>	
THE DIAGNOSIS OF PLANAR ARRAY ANTENNA BASED ON PATTERN-COUPLED SPARSE BAYESIAN LEARNING	497
<i>Yuhui Xu, Fangfang Wang</i>	
LINEAR-TO-CIRCULAR POLARIZATION CONVERTER BASED ON TRANSMISSION METAMATERIAL	499
<i>Huixiang Li, Xianliang Wu, Liang Zhang</i>	
FOUR-ELEMENT UWB-MIMO FRACTAL ANTENNA WITH 8.5GHZ BAND-NOTCHED CHARACTERISTIC	501
<i>Yong Cai, Xingang Ren, Shuping He, Zhixiang Huang</i>	
ANALYSIS ON THE FCC-FDTD METHOD OF ELECTROMAGNETIC SCATTERING CHARACTERISTICS FOR METAL BALL COATED WITH PLASMA	503
<i>W. Chen, L. F. Wang, L. X. Yang, Z. X. Huang, Q. Q. Deng</i>	
A NONLINEAR ELECTROMAGNETIC INVERSE SCATTERING METHOD BASED ON HIERARCHICAL BAYESIAN MODEL	505
<i>Xian Cheng, Fangfang Wang</i>	
INTRODUCING INCIDENT PLANE WAVE INTO DGTD GRID BY 1D-DGTD PROPAGATOR	507
<i>Shaoqing Duan, Lei Kuang</i>	
MONTE CARLO METHOD FOR STUDYING THE TRANSMISSION PROPERTIES OF ELECTROMAGNETIC WAVES IN DUSTY PLASMA	509
<i>Dong Yue, Lixin Guo, Jiangting Li</i>	
A FAST ECHO EVALUATION METHOD OF CHAFF CLOUD	511
<i>Yu Le, Liu Songhua, Zuo Yanchun, Liu Wei, Guo Lixin</i>	
RESEARCH ON ELECTROMAGNETIC SCATTERING BASED ON SPHERICAL NEAR-FAR FIELD TRANSFORM	513
<i>Yuhang Guo, Zuo Yanchun, Lixin Guo, Wei Liu</i>	

RADAR CROSS SECTION EVALUATION OF CHAFF CLOUD BY PULSE BASED METHOD OF MOMENT	515
<i>Wu Donghui, Zuo Yanchun, Guo Lixin, Liu Wei</i>	
AN ASYNCHRONOUS PARALLEL IMPLEMENTATION OF MULTILEVEL FAST MULTIPOLE ALGORITHM ON GPU CLUSTER FOR 3D ELECTROMAGNETIC SCATTERING PROBLEMS	517
<i>Rong-Ping Xi, We-Jia He, Ming-Lin Yang, Xin-Qing Sheng</i>	
SINGLE PATCH ANTENNA DESIGN FOR ANGLE OF ARRIVAL ESTIMATION	519
<i>Pujing Lin, Zhouyi Wu, Yinger Zhang, Xinyu Hong, Peiying Lin, Jiangtao Huangfu</i>	
A MINIATURIZED DUAL-POLARIZED BASE STATION ANTENNA WITH STABLE RADIATION PATTERN	521
<i>Liang Cao, Yikai Chen, Shiwen Yang</i>	
LOW PROBABILITY OF INTERCEPTION BEAMFORMING IN SINGLE-SIDEBAND TIME-MODULATED ANTENNA ARRAYS	523
<i>Haotian Li, Yikai Chen, Shiwen Yang</i>	
ANTENNA ARRAY MINIATURIZATION BASED ON SLOW WAVE HMSIW-SSPP STRUCTURE.....	525
<i>Ren-Tang Hong, Jiaqi Shi, Dong-Fang Guan, Wenyu Ma, Chuang Wang, Wenquan Cao, Zuping Qian</i>	
A WIDEBAND AND WIDE-SCANNING IRREGULARLY CONFORMAL ARRAY	527
<i>Zeqing Du, Ming Jiang, Genbao Xu, Feng Yang, Jun Hu, Pei Li</i>	
OMNIDIRECTIONAL MULTI-BEAM CONFORMAL ANTENNA BASED ON SURFACE PERIODIC METALLIC STRUCTURES	529
<i>Lin Peiying, Wu Zhouyi, Zhang Yinger, Hong Xinyu, Lin Pujing, Huangfu Jiangtao</i>	
A MINIATURIZED PATCH ANTENNA WITH PINS FOR BREAST TUMOR NONINVASIVE FOCUSED MICROWAVE THERAPY	531
<i>Wenxing Li, Cheng Lyu, Yunlong Mao</i>	
A PRELIMINARY EXPERIMENT FOR MICROWAVE THORAX IMAGING BASED ON ONE-STEP GAUSS NEWTON METHOD.....	533
<i>Haolin Zhang, Tong Zhang, Hongyu Zhou, Maokun Li, Fan Yang, Shenheng Xu, Yeyu Cao</i>	
RESEARCH ON RADIO WAVE PROPAGATION PREDICTION MODEL USING 3-D PARABOLIC EQUATION OVER ROUGH SEA SURFACE.....	535
<i>Hui Zhang, Qingliang Li, Xiangming Guo, Chunzhi Hou</i>	
A DETERMINISTIC TERAHERTZ CHANNEL MODEL FOR INTER-SATELLITE COMMUNICATION LINK.....	537
<i>Xing Hu, Kai-Xuan Guo, Bi-Yi Wu, Xin-Qing Sheng</i>	
RESEARCH ON UNDERSAMPLING APPLICATION ON NARROWBAND ANTENNA IN PLANNER NEAR-FIELD MEASUREMENT	539
<i>Hongjun Ying, Rong Li, Lanwei Guo</i>	
RESEARCH ON THE ELECTROMAGNETIC SENSITIVITY MECHANISM OF LASER RANGING SYSTEM.....	541
<i>Peng Huang, Bing Li, Ze Yu, Fei Wang, Rong Kong, Donglin Su</i>	

DESIGN OF THE 2.92MM COAXIAL CALIBRATION KIT	543
<i>Kunzhe Zhang, Guangfeng Zhao</i>	
MULTIFREQUENCY E-FIELD MEASUREMENT BY OPTICAL UNDER-SAMPLING SYSTEM.....	545
<i>Yan Yang, Shuguo Xie, Yumo Tian, Meiling Yang</i>	
DESIGN OF AN X-BAND TR MODULE BASED ON SICL.....	547
<i>Zhang Xingwen, Zhang Guoan, Sun Chao, Chen He</i>	
DESIGN OF A POINT FREQUENCY SOURCE BASED ON SRD.....	549
<i>Hongbo Yin, Dahai Ni, Kun Chen, Decai Zhang, Cheng Chen</i>	
DESIGN OF BROADBAND HIGH POWER AMPLIFIER BASED ON ODD EQUAL POWER.....	552
<i>Sun Biao, Sun Chao, Wang Hai Jiang, Wei Liang Gui, Wang Yong</i>	
RESEARCH ON DESIGN OF ODD POWER SYNTHESIS BASED ON HYBRID CIRCUITS.....	554
<i>Sun Biao, Li Zhe, Lu Fan, Deng Chang, Wang Yong</i>	
RESEARCH ON SIMULATION TECHNOLOGY OF RF MICROSYSTEM BASED ON HARDWARE-IN-THE-LOOP SIMULATION.....	556
<i>Yong Wang, Wei Wei, Xingwen Zhang, Biao Sun, Xinxing Fei</i>	
DESIGN OF IN-PHASE AND OUT-OF-PHASE FILTERING POWER DIVIDERS WITH THIN-FILM IPD TECHNOLOGY.....	558
<i>Yuxuan Tang, Hu Tang, Yuchen Wang, Chonghu Cheng</i>	
NEAR-FIELD TIME-REVERSAL IMAGING COMBINED WITH NUMERICAL MODE MATCHING METHOD	560
<i>Geng Jianrong, Wan Jiaxin, Ye Hongxia</i>	
STUDY ON SAR IMAGING OF THE TARGETS COATED WITH PLASMA SHEATH.....	562
<i>F. Xu, Y. Bo, L. X. Yang, W. Chen, Z. X. Huang</i>	
A KALMAN FILTER APPROACH TO AIRBORNE SAR MOTION COMPENSATION INTEGRATED WITH THE CHIRP SCALING ALGORITHM.....	564
<i>Tao Chen, Yongfei Ding, Yu Li, Zheng Fang, Qiming Qiu, Hengyang Zhang</i>	
STUDY ON LOW-FREQUENCY DATA LEARNING FOR INVERSE SCATTERING PROBLEMS WITH HIGH NONLINEARITY.....	566
<i>Zhichao Lin, Rui Guo, Maokun Li, Aria Abubakar, Tao Zhao, Fan Yang, Shenheng Xu</i>	
FAILURE DIAGNOSIS OF ANTENNA ARRAY USING RESIDUAL CONVOLUTIONAL NEURAL NETWORK.....	568
<i>Guoliang Zheng, Qinghe Zhang, Shaocong Li</i>	
A PORTABLE DESIGN OF IMAGE TIMING ACQUISITION SYSTEM BASED ON RASPBERRY PI.....	570
<i>Congbo Qi, Xiaozhang Zhu</i>	
TEST AND ANALYSIS OF ELECTROMAGNETIC SENSITIVITY MECHANISM CHARACTERISTICS OF MOTOR CONTROL SYSTEM.....	572
<i>Peng Huang, Bing Li, Ze Yu, Yuan Wang, Tao Zhang, Donglin Su</i>	
A FACET METHOD FOR EM BACKSCATTERING FROM HIGH-STATE SEA SURFACE WITH FOAM.....	574
<i>Jiahao Yan, Conghui Qi, Qixiang Peng</i>	

TUNABLE RADAR ABSORBER USING RESISTIVE FREQUENCY-SELECTIVE SURFACE AND PLASMA	576
<i>Qi Chang, Jinzu Ji, Yunpeng Ma, Jiayi Zhang, Ji Liu</i>	
DESIGN OF A LOW SIDELobe AND MULTI-BEAM ROTMAN LENS ARRAY ANTENNA	578
<i>Qiong Chen, Yangyang He, Xinyi Wang, Fanchao Zeng</i>	
MICROWAVE INVERSE SCATTERING IMAGING SYSTEM: CALIBRATION OF THEORETICAL AND MEASURED SCATTERED FIELD VALUES	580
<i>Yanhui Ji, Naïke Du, Xiuzhu Ye</i>	
MULTIPLE-RESONATOR-BASED WIDEBAND AND MULTIBAND MICROSTRIP PATCH ANTENNAS	582
<i>Neng-Wu Liu, Lei Zhu</i>	
WIDEBAND THREE-WAY CAVITY FILTERING CROSSOVER ARRAY	584
<i>Sai-Wai Wong, Jing-Yu Lin, Guo-Wen Chen, Lin Wang, Zhi-Min Du, Long Zhang, Yang Yang, Yejun He</i>	
LOW-PROFILE MICROSTRIP PATCH ANTENNA WITH IMPROVED-BANDWIDTH BY EXCITING MULTI-MODE OF THE MPA AND NETWORK.....	586
<i>Sen Gao, Neng-Wu Liu, Guang Fu, Lei Zhu</i>	
A COMPACT HIGHLY-SELECTIVE PLANAR TRIPLE-BAND BANDPASS FILTER	588
<i>Bing-Xiong Zhao, Jian-Hui Guo, Sai-Wai Wong, Ze-Ming Xie, Long Zhang, Lei Zhu, Yejun He</i>	
CONCEPTUAL DESIGN OF HIGH GAIN CIRCULARLY POLARIZED DUAL-RESONANT PATCH ANTENNA ARRAY.....	590
<i>Fei-Yan Ji, Jian Yu, Wen-Jun Lu</i>	
ANTENNA AND FEEDER SYSTEMS OF P-BAND METEOROLOGICAL RADAR.....	592
<i>Ruofei Sun, Xiaofan Sun</i>	
3D BEAMFORMING METHOD FOR NEAR-FIELD-FOCUSED ACTIVE PHASED ARRAY: 3D SCANNING AND 3D POLARIZATION MANIPULATING.....	594
<i>Ya Fei Wu, Yu Jian Cheng, Yong Fan</i>	
MILLIMETER WAVE BROADBAND MICROSTRIP ANTENNA WITH COAXIAL FEED FOR PHASED ARRAY APPLICATIONS	596
<i>Zongyu Zhang, Jiawang Li</i>	
PROPOSAL AND SYNTHESIS DESIGN OF MULTI-BAND FILTERING POWER DIVIDERS	598
<i>Gang Zhang, Zhuowei Zhang, Rui Li, Lei Zhu</i>	
A WIDEBAND BANDPASS POWER DIVIDER WITH IMPROVED ISOLATION PERFORMANCE	600
<i>Xin Gao, Nan Zhang, Xiaolong Wang, Jian Ma, Chun-Ping Chen, Zhewang Ma</i>	
DIELECTRIC SENSORS WITH MULTIPLE COMPLEMENTARY META-MATERIAL RESONATORS.....	602
<i>Zeyu Zhang, Xiaolong Wang, Jian Ma, Chun-Ping Chen</i>	
WIDEBAND AND WIDE-ANGLE FSS BASED ON QUARTER-MODE SUBSTRATE INTEGRATED WAVEGUIDE TECHNOLOGY	604
<i>H. B. Wang, Y. J. Cheng</i>	

WIDE-BAND L/X DUAL-BAND SHARE-APERTURE PHASED ARRAY ANTENNA.....	606
<i>Wen-Liang Zhou, Shi-Wei Qu</i>	
A NOVEL IN-BAND SCATTERING CANCELLATION TECHNIQUE FOR VIVALDI ANTENNA ARRAY	608
<i>Zhiyuan Liu, Yikai Chen, Shiwen Yang</i>	
SYNTHESIS OF SPARSE ANTENNA ARRAYS VIA ITERATIVE CONVEX OPTIMIZATION	610
<i>Feng Yang, Shiwen Yang, Yikai Chen</i>	
STUDY ON THE PERFORMANCE OF THE IMPLICIT HYBRIDIZABLE DISCONTINUOUS GALERKIN TIME-DOMAIN METHOD WITH DIFFERENT GRIDS FOR MAXWELL'S EQUATIONS	612
<i>Xing Li, Li Xu, Bin Li</i>	
LOCAL TIME STEPPING AND LOAD BALANCE OF DGTD ON HIGH-PERFORMANCE COMPUTING ARCHITECTURES	614
<i>Weijie Wang, Dehong Tang, Zhenguo Zhao, Haijing Zhou</i>	
A NOVEL PSEUDOSPECTRAL TIME DOMAIN METHOD FOR COMPLEX EM SIMULATIONS	616
<i>Qiwei Zhan, Wen-Yan Yin, Qing Huo Liu</i>	
A HIGH ORDER DGTD METHOD FOR OPEN DOMAIN PROBLEMS WITH PLASMA	620
<i>Hao Wang, Li Xu, Bin Li</i>	
SADDLE-SHAPED PATTERN SYNTHESIS BY ELEMENT ROTATION AND PHASE OPTIMIZATION FOR LINEAR DIPOLE ARRAY	622
<i>Ming Li, Yanhui Liu</i>	
ACCURACIES OF CHANNEL EMULATION METHODS FOR SECTORED MULTI-PROBE ANECHOIC CHAMBER.....	624
<i>Xiaoyu Huang, Huiling Pei, Muhammad Abdullah, Xiaoming Chen</i>	
A HS-CVX ALGORITHM FOR SPARSE LINEAR ARRAY WITH LOW SIDELobe PATTERN	626
<i>Xikuan Dong, Hailin Li, Jiawen Hu, Yuanjin Tian</i>	
A NOVEL HIGHER-ORDER PROBE CORRECTION ALGORITHM FOR SPHERICAL NEAR FIELD SCANNING	628
<i>Haobo Yuan, Ruixue Zhang, Jungang Ren</i>	
A WIDE-ANGLE SCAN TERAHERTZ BAND PHASED ARRAY ANTENNA	630
<i>Yan Li, Min Gao, Jixiang Wan, Chunbang Wu, Peng Yang, Buning Tian, Jianping An</i>	
A TIME MODULATED ANTENNA ARRAY WITH PHASE MODULATION WAVEFORMS	632
<i>Qianwei Zeng, Peng Yang, Hao Lin, Lu Yin, Feng Yang, Shiwen Yang</i>	
DUAL-POLARIZED STACKED PATCH PHASED ARRAY ANTENNA WITH CAVITY- BACKED CONFIGURATION	634
<i>Huajie Ren, Shi-Wei Qu</i>	
NUMERICAL SIMULATION AND ANALYSIS OF SAR IMAGE FOR LUNAR SURFACE BASED ON DEM DATA	636
<i>Qixiang Peng, Conghui Qi, Jiahao Yan, Yong Mao Huang</i>	
PARALLEL MAGNETOTELLURIC MODELING WITH SPECTRAL ELEMENT METHOD.....	638
<i>Xiang Zhou, Changwei Li, Wenwu Wan</i>	

ENABLING EFFICIENT UNIDIRECTIONAL FORWARD SCATTERING VIA METAL-DIELECTRIC HETERODIMER	640
<i>Song Sun, Dacheng Wang, Zheng Feng, Wei Tan</i>	
SMALL-SIZE INTEGRATED SHIELDING DIAPHRAGM IN MINIATURIZED HIGH-POWER MICROWAVE CAVITY	642
<i>Liu Tang, Mei Li, Ming-Chun Tang, Da Yi, Xing-Chang Wei</i>	
A HYBRID BOUNDARY SCHEME FOR REDUCING RECTANGULAR WAVEGUIDE CUTOFF FREQUENCY	644
<i>Di Wang, Guo-Ping Zou, Xing-Chang Wei, Zhi Yang</i>	
A METHOD FOR MODELING ELECTROMAGNETIC COUPLING TO RANDOMLY WIRING MULTICONDUCTORS	646
<i>Pei Xiao, Jiawei Li, Chao Zhang, Jinxin Li, Gaosheng Li</i>	
FIVE-COIL WIRELESS CHARGING STRUCTURE WITH RADIATED SLOTS IN UAVS FOR MUTUAL INDUCTANCE REDUCTION	648
<i>Zuming Wang, Xin Cao, Yuying Zhu, Yuyu Zhu, Qiangming Cai, Jun Fan</i>	
AN ADAPTIVE FITTING METHOD FOR THE EFFICIENT EVALUATION OF GREEN'S FUNCTIONS IN PLANAR LAYERED MEDIA	650
<i>Zi-Hao Zhao, Ze-Lin Li, Bi-Yi Wu, Xin-Qing Sheng</i>	
THE STUDY ON NEAR FIELD EM SCATTERING OF TARGET LOCATED ABOVE A SEA SURFACE UNDER SHORT WAVE BAND BASED ON MOM-PO	652
<i>Chai Shui-Rong, Guo Li-Xin</i>	
TRANSITION METHOD FOR CREEPING RAY TRACING ON NURBS PATCHES	654
<i>Xi Chen, Lan-Wei Guo, Jing-Yang Xue, Hong-Jun Ying, Yuan Song</i>	
PERFORMANCE ANALYSIS OF FREQUENCY-DOMAIN CHANNEL EMULATION METHOD	656
<i>Kangning Yan, Nianzu Zhang, Wei Hong</i>	
A MULTILAYER MICROSTRIP PRINTED UWB LPDA	658
<i>Yijie Wang, Xiaolin Zhang, Songyang Liu</i>	
KA-BAND CIRCULARLY POLARIZED WIDEBAND PLANAR ANTENNA ARRAY ELEMENT WITH LOW PROFILE	660
<i>Dinuo Bu, Shi-Wei Qu</i>	
A CASSEGRAIN ANTENNA DESIGN FOR TERAHERTZ FOCAL PLANE IMAGING SYSTEM	662
<i>Yifan Wang, Kaiqiang Zhu, Yu Xiao, Houjun Sun, Shiyong Li</i>	
LOW SCATTERING X-BAND PHASED VIVALDI ARRAY ANTENNA	664
<i>Shigang Fang, Shi-Wei Qu</i>	
P-L BAND PLANAR ULTRA-WIDEBAND MODULAR ANTENNA (PUMA) ARRAYS	666
<i>Haotong Wang, Shi-Wei Qu</i>	
RESEARCH ON SCATTERING CHARACTERISTICS OF ANTENNA ARRAY	668
<i>Ao Chen, Xianzheng Zong, Zaiping Nie, Fan Liu, Youcheng Wang, Peng Jiang</i>	
SYNTHESIS OF SUBARRAYED LINEAR ARRAYS VIA K-MEANS METHOD	670
<i>Yu Zheng, Shaoqiu Xiao</i>	

DESIGN OF FABRY-PEROT RESONATOR ANTENNA USING NON-UNIFORM SUPERSTRATE	672
<i>Yichao Zhou, Xiaofeng Que, Xin Qi</i>	
ELECTROMAGNETIC CANCELLATION BASED ON THE EQUIVALENCE PRINCIPLE.....	674
<i>Qingshuai Feng, Xiaofeng Que, Zaiping Nie, Xin Qi</i>	
ULTRA-WIDEBAND RCS REDUCTION BASED ON CHESSBOARD SURFACE AND ACTIVE FSS.....	676
<i>Xianliang Zeng, Chonghua Fang, Weijun Wu, Linxi Zhang</i>	
CONTROLLABILITY ANALYSIS OF POLARIZATION CHARACTERISTICS OF SCATTERING ELEMENTS FOR REPRODUCTION APPLICATION	678
<i>Jie Guo, Liang Man, Hongcheng Yin, Xin Li, Min Li</i>	
DESIGN OF INTEGRATED SUBSTRATE GAP WAVEGUIDE 3-DB RECTANGULAR-JUNCTION COUPLERS	680
<i>Ruitian Yang, Wenping Ren, Dongya Shen, Xiupu Zhang</i>	
DESIGN OF BEAM FORMING NETWORK FOR SATELLITE-BORNE PHASED ARRAY.....	682
<i>Feng Ge, Pengcheng Yu</i>	
AN S-BAND PA MODULE SUITABLE FOR SPACEBORNE MEASUREMENT AND CONTROL TERMINAL.....	684
<i>Pengcheng Yu, Ke Li, Liming Zhang</i>	
3D PRINTED WIDEBAND COAXIAL WILKINSON DIVIDER.....	686
<i>Yaxin Lu, Hanxuan Li, Bo Li</i>	
RESEARCH ON ANTI-INTERFERENCE RADIO FREQUENCY CODING METHOD BASED ON MILLIMETER WAVE RADAR.....	688
<i>Xiaohang Li, Nianzu Zhang, Gang Xu</i>	
REAL-TIME IMAGING PROCESSOR FOR HIGHLY SQUINTED AIRBORNE SAR BASED ON MULTICORE DSPS	690
<i>Xingwei Meng, Daiyin Zhu, Lan Dong</i>	
A NOVEL DESIGN OF WIDEBAND GYSEL POWER DIVIDER	692
<i>Han Xiao, Bin Xia</i>	
FDTD SIMULATIONS OF MODULATED METASURFACE BY SURFACE IMPEDANCE BOUNDARY CONDITION	694
<i>Yuhan Zuo, Xinyu Fang, Mengmeng Li, Dazhi Ding, Rushan Chen</i>	
STUDY OF MULTI-VIEW UAV TARGET RECOGNITION.....	696
<i>Feng Xuejian, Chaoying Huo, Deng Haochuan, Wei Xiao, Hongcheng Yin</i>	
SINGLE-SIDE BAND SPACE-TIME-MODULATED METASURFACES FOR DOPPLER CLOAK.....	698
<i>Zihao Ning, Han Zeng, Xinyu Fang, Mengmeng Li, Rushan Chen</i>	
A MILLIMETER-WAVE RADOME WITH VARIABLE THICKNESS FOR IMPROVEMENT OF RADIATION PATTERNS.....	700
<i>Kai-Dong Hong, Xiao Zhang, Zhe Chen, Tao Yuan</i>	
RCS RECOGNITION METHOD OF CORNER REFLECTORS BASED ON 1D-CNN	702
<i>Huidong Huangfu, Xiaojun Meng, Jiachen Shen, Jianhua Zhang, Peng Zhang</i>	

AN IMPROVED SBR-BASED 3-D SCATTERING CENTER MODELING ALGORITHM FOR WIDEBAND RCS RECONSTRUCTION	704
<i>Lei Zhang, Hua Yan, Jinwen Lu, Xiaoyu Xing, Hongcheng Yin</i>	
UNDULATING TERRAIN MODELING FOR MAGNETOTELLURIC BASED ON COMSOL	706
<i>Zhongqian Li, Changwei Li, Weiwen Song</i>	
DESIGN AND ANALYSIS OF RADIATION PERFORMANCE OF IR COATING AT HIGH TEMPERATURE	708
<i>Cuiyi Chun, Ai Xia, Wang Xiaoli, Qiu Guihua, Li Yanan, Wang Qun</i>	
DESIGN AND MOISTURE INFLUENCE ANALYSIS OF A HIGH TEMPERATURE RESISTANCE FSS RADOME	710
<i>Yinfang Xu, Jiaqi Liu, Xia Ai, Xin Chen, Shengdong Liu</i>	
DYNAMIC BEAM-STEERING BY ACTIVE HUYGENS' METASURFACE	712
<i>Yang Xu, Zhixin Chen, Xiuzhi Wang, Rui Wang, Lu Hao</i>	
RESEARCH ON RADAR ECHO BEAMFORMING BASED ON PERIODIC STRUCTURE.....	714
<i>Yakun Zhang, Zhixin Chen, Zhenbo Wu, Lu Hao, Rui Wang, Xiaofei Liu</i>	
DESIGN OF A RESISTIVELY LOADED FREQUENCY SELECTIVE SURFACE WITH LOW REFLECTION IN TRANSITION BAND	716
<i>Peigang Yang, Pei Li, Peng Li, Zeling Kuang, Liming Xu</i>	
DESIGN OF BEAM DEFLECTION OF ARTIFICIAL ELECTROMAGNETIC METASURFACE BASED ON META LIBRARY	718
<i>Qingyu Xu, Xiaofeng Que</i>	
ANALYSIS OF THERMAL AND ELECTROMAGNETIC FIELDS COUPLING ON ACTIVE ARRAY ANTENNAS.....	720
<i>Chen Zhang, Liming Zhang</i>	
FAR-FIELD CALCULATION OF NEMP SIMULATOR NEAR GROUND BY TRANSFER FUNCTION.....	722
<i>Heng Zhou, Tingyong Jiang, Youjie Yan, Zhen Liu, Jinhao Zhang, Shengtao Wang</i>	
SPACE-FREQUENCY DOMAIN NON-BLIND METHOD FOR WIDEBAND ELECTROMAGNETIC IMAGING RESTORATION.....	724
<i>Meiling Yang, Shuguo Xie, Shenda Zhang, Yan Yang</i>	
FIELD-CIRCUIT SIMULATION BASED ON PARALLEL FDTD-SPICE METHOD	726
<i>Chen Shun Yue, Yu Mao Wu, Wei Jie Wang, Hai Jin Zhou</i>	
BROADBAND, WIDE-SCANNING AND LOW-PROFILE ANTENNA ARRAY BASED ON TIGHTLY COUPLED DIPOLES	728
<i>Genbao Xu, Ming Jiang, Zeqing Du, Feng Yang, Jun Hu</i>	
THE DESIGN OF DUAL-POLARIZATION SLOTTED WAVEGUIDE PHASED ARRAY ANTENNA.....	730
<i>Jing Miao, Xiaolin Zhang, Mouping Jing</i>	
DESIGN OF A DIELECTRIC DOME LENS ANTENNA WITH 80° SCANNING ABILITY	732
<i>Cheng Zhang, Lin Xiao, Shi-Wei Qu</i>	

DESIGN OF AN ARRAY-FED MULTI-BEAM REFLECTOR ANTENNA BASED ON GENETIC ALGORITHM.....	734
<i>Xianlong Lu, Tao Yang, Jingfeng Li, Zhonghua Wang</i>	
A LOW-RCS PARABOLIC REFLECTOR ANTENNA USING ABSORPTIVE FREQUENCY-SELECTIVE REFLECTOR.....	736
<i>Hanjing Xu, Xuankai Zhao, Bo Li</i>	
DESIGN OF CONICAL EQUIANGULAR SPIRAL ANTENNA WITH WIDE BANDWIDTH AND HIGH GAIN	738
<i>Liping Zong, Xianzheng Zong, Zaiping Nie, Youcheng Wang, Peng Jiang</i>	
DESIGN OF A MINIATURIZED AND BROADBAND EMBEDDED COMMUNICATION ANTENNA.....	740
<i>Fan Liu, Xianzheng Zong</i>	
A MINIATURIZED LOG-PERIODIC ANTENNA FOR SKA LFAA	742
<i>Wei Guan, Jia Fang, Wenman Zou</i>	
ANALYSIS OF THE INFLUENCE FACTORS OF THE MONOCONE ELECTRIC FIELD.....	744
<i>Xiaojia Wang, Tingyong Jiang, Fengshun Gao, Youjie Yan, Jinhao Zhang</i>	
HIGH GAIN 2X4 RECTANGULAR PATCH ANTENNA ARRAY AT 3500MHZ FOR 5G APPLICATIONS.....	746
<i>Bouba Ibrahim, Lixia Yang, Hongjin Wang, Hafiz Usman Tahseen</i>	
A WIDEBAND HIGH-FREQUENCY CIRCULARLY POLARIZED CROSS-DIPOLE ANTENNA.....	748
<i>Ke Li, Yuhong Liang, Jian Wen</i>	
DESIGN OF A SELF-DIPLEXING CYLINDRICAL DIELECTRIC RESONATOR ANTENNA.....	751
<i>Miao Chi, Sheng Sun</i>	
HIGH-GAIN MAGNETIC DIPOLE ANTENNA BY LOADING METAL MATERIALS.....	753
<i>Liming Zhang, Pengcheng Yu</i>	
DESIGN OF A LOW-PROFILE BROADBAND CIRCULARLY POLARIZED METASURFACE ANTENNA BASED ON CHARACTERISTIC MODE	755
<i>Lina Qiu, Gaobiao Xiao</i>	
RESEARCH ON BISTATIC ELECTROMAGNETIC SCATTERING OF SURGE AND SEA SURFACE.....	757
<i>Balin Ye, Pei Qian, Enkai Liu</i>	
A HIGH-VOLTAGE POWER SUPPLY DESIGN AND ELECTROMAGNETIC COMPATIBILITY ANALYSIS OF THZ POWER MODULE.....	759
<i>Zhenfeng Tian, Jinling Zhang</i>	
A NOVEL 5.8GHZ HARMONIC-SUPPRESSED RECTENNA FOR WIRELESS POWER TRANSMISSION	761
<i>Zhenliang Zhou, Yumei Chang</i>	
THE ADAPTABILITY ANALYSIS OF BASIC EMISSION WAVEFORM THEORY IN THE EMC PROBLEM OF AUTOMOBILE CAN BUS	763
<i>Jiayi Wu, Donglin Su</i>	

NOVEL RADOME DESIGN FOR RF INTEGRATION	765
<i>Jinjing Ren, Yezhen Zheng, Shenhui Jing, Qi Tang</i>	
DESIGN OF A RECONFIGURABLE LINEAR-TO-LINEAR POLARIZATION CONVERSION METASURFACE.....	767
<i>Jianxiao Wang, Dawei Song, She Shang, Xiaojun Li, Xi Luo, Dong Li</i>	
RESEARCH ON PERFORMANCE OF PLASMA COVERED ANTENNA WINDOW USING SANDWICH STRUCTURE WITH METASURFACE.....	769
<i>Yizhan Li, Xianzheng Zong, Zaiping Nie, Liping Zong, Chaoguang Lin, Hongyu Chu, Geliang Sun</i>	
DESIGN OF HARMONIC-SUPPRESSED COUPLER WITH INTEGRATED FILTERING BLOCKS	771
<i>Weihua Li, Yiyao Hu, Sheng Sun</i>	
DESIGN OF A SWITCH TYPE PHASE SHIFTER USING LUMPED COMPONENTS	773
<i>Xiaojing Zhang, Sheng Sun</i>	
A KA-BAND POWER AMPLIFIER WITH 14.2-DBM POWER IN 65-NM CMOS	775
<i>Shiwei Wu, Dongwei Pang, Lingling Wei, Hongliang Zhao</i>	
THE EXPLORATION OF 3D LATTICE STRUCTURE AS THE OUTER DIELECTRIC BONDING FOR ANGULARLY STABILIZING THE FSS	777
<i>Xiang Li, Ruili Yuan, Ming Jin</i>	
AN EFFICIENT METHOD IN QUANTUM RADAR CROSS SECTION PREDICTIONS OF 3D COMPLEX TARGETS	779
<i>Chang Liu, Zhiteng Wang, Cunxiao Ji, Tiancheng Zhang</i>	
APPLICATION OF RAY-TRACING METHOD IN ELECTROMAGNETIC NUMERICAL SIMULATION ALGORITHM	781
<i>Xueda Niu, Haibo He, Ming Jin</i>	
THE PROGRESS IN OPTIMIZATION OF SMALL-SCALE CALIBRATION TARGETS AT THZ FREQUENCIES	783
<i>Ruili Yuan, Xiang Li, Qingsong Gao, Yuan Tao, Ming Jin</i>	
GRAPHENE-BASED NARROW BAND-PASS FREQUENCY SELECTIVE SURFACE.....	785
<i>Wen-Hua Gao</i>	
A DUAL-BAND MECHANICAL BEAM-SCANNING REFLECTARRAY WITH FIXED FEED POSITION.....	787
<i>Le Zuo, Yang Li, Ying Zhang</i>	
RADIATION PATTERN DESIGN OF PEROVSKITE LIGHT-EMITTING DIODES BY NANOSTRUCTURES	789
<i>Qing Ci, Xingang Ren, Zhixiang Huang, Xianliang Wu</i>	
AN OPTIMIZED METHOD OF LOW RCS CARRIER DESIGN	791
<i>Hanfei Zhang, Xianzheng Zong, Zaiping Nie, Youcheng Wang, Peng Jiang</i>	
A DESIGN OF MILLIMETER WAVEBAND LENS ANTENNA TO IMPROVE GAIN.....	793
<i>Xiaolei-Zhao, Zhi-Ya Zhang, Chuangzhu Zhou, Aobo Chen</i>	

Author Index