

2014 3rd Asia-Pacific Conference on Antennas and Propagation (APCAP 2014)

**Harbin, China
26 – 29 July 2014**

Pages 1-752



**IEEE Catalog Number: CFP1407S-POD
ISBN: 978-1-4799-4353-1**



**2014 3rd Asia-Pacific Conference on
Antennas and Propagation
APCAP 2014**
July 26-29, 2014-Harbin China • www.apcap2014.org

Table of Contents

Topic I: Antennas		
PID	Paper Title/ Authors	Page
007	Operation Principle of a Loop-Monopole Composite Antenna <i>Xi-tong Wu, Tian-zhou Lu, Jin Xu, Wen-jun Lu, Hong-bo Zhu</i>	1
008	Numerical Analysis of Planar Dual-Band Off-Centered Slot-Dipole Composite Antenna <i>Jin Xu, Xi-tong WU, Tian-zhou Lu, Wen-jun Lu, Hong-bo Zhu</i>	4
010	Analysis of Radiation Characteristics of the Airborne VHF Antenna <i>Zhang Guang-yu, Jia Yun-feng, Yang liu, Li Zi-ning, SUN Fei</i>	8
011	Design and Simulation of a Novel Sinuous Antenna for GPS <i>yulin chen, pei Li</i>	11
012	Single Reflector Mutibeam Antenna Based on EBG Structure <i>Ye Wenxi, Li Zhengjun</i>	14
021	Novel Mechanical Reconfigurable PCB Antenna for 2.4 GHz Wireless Consumer Product <i>Gowrish B., Deepak John, Settu D., Ananjan Basu, Shibani K. Koul</i>	18
023	Compact Size High Gain Lens Corrected Pyramidal Horn Antenna for 71-76GHz Band <i>Mustafa K. Taher Al-Nuaimi, Wei Hong</i>	22
033	Compact MIMO PIFA for LTE/ WWAN Operation in the Mobile Application <i>Sicheng Sun, Ming Cheng, Shengjun Lu, Jinshun Lin</i>	26
037	Design of a Broadband Ku-Band Lens Horn Antenna for SAR Applications <i>Xuequan Yan, Yufeng Fang, Zhanbo Lu</i>	29
040	A Compact Four Bands Microstrip Patch Antenna With Coplanar Waveguide Feed <i>Jili Wang, Lixia Yang</i>	33
041	New Design of Helical Antenna Array for L-band Land Mobile Satellite Communications <i>Shiqiang Fu, Qinggong Kong, Chanjuan Li</i>	37
046	A Millimeter-Wave Fabry-Perot Antenna With High-Gain and Circular Polarization Operation <i>Bing Han, Xue-xia Yang, Hai-gao Xue</i>	40
057	Cross Plate Antenna <i>H. Nakano, M. Takeuchi, J. Yamauchi</i>	44

059	Design of Circularly-Polarized Dielectric Resonator Antenna with Wideband Feed Network <i>Rong-Cang Han, Shun-Shi Zhong, Jing Liu</i>	48
063	A Wideband Antenna for Global Navigation Satellite Systems <i>Shaoqing Hu, Jun Zhou, Xiaodong Chen, Yuan Yao, Junsheng Yu</i>	51
067	Reflectarray Elements with Clusters of Rectangular Ring-based Patches <i>You Xuan Tan, Eng Hock Lim*, Fook Loong Lo</i>	N/A
073	A Compact Wideband CPW-Fed Hybrid Slot Antenna Muhammad Abdul Basit, Guangjun Wen, Oteng Gyasi Kwame, Nouman Rasool	57
074	Meandered Loop Array Antenna for Omni-Directional Coverage <i>Yan-Ho Shih, Bo-Ren Hsiao, Wen-Jiao Liao</i>	61
076	Planar Compact Tablet Computer Monopole Antenna for 4G Mobile Communication System <i>Feng-Chuan Tsai, Jui-Han Lu</i>	63
077	Design of a Broadband Dual-Polarization Antenna <i>Qing Zhang, Yong-zhi Sun, Wei-guang Wang, Xu Zhao, Yi-xiao Wang</i>	67
095	FEM Simulation of Characteristics of Microstrip Antenna of RFID Tag at 5.5-6.5 GHz <i>Sergey Suchkov, Victor Nikolaevtsev, Dmitry Suchkov, Vladimir Ermishin, Andrey Rossoshansky</i>	N/A
097	Design of Triple-Band Dual-Linear Polarized Microstrip Antenna Sub-Array for SAR Applications <i>Hossam Hamza, Biao Hou</i>	73
100	Applications of Metamaterials-Based Microstrip Antennas <i>Wenquan Cao, Zuping Qian, Bangning Zhang, Zhi Ning Chen</i>	77
107	Design of Broadband Planar Magic-T Using 3-dB Branch-line Coupler and Phase Shifter <i>Wu Yangsheng, Hou Fuping, Kong Dewu</i>	81
108	A Wideband Dual-Polarized Patch Antenna <i>Dan Sun, Zhaocheng Zhang, Xuequan Yan</i>	84
111	Multi-Channel Phased Signal Generator for Scalable Active Antenna Array <i>Li Xie, Xiaoxing Yin, Liang Yang, Cheng Lu, Hongxin Zhao</i>	87
114	A Novel Unidirectional Circularly Polarized Antenna <i>Quan Xue, Shaowei Liao, Peng Wu, Dia'aaldin Bisharat</i>	90
119	A Novel Triple Band Slot Antenna for GPS and WLAN Applications <i>Shravan Kaundinya, Karthikeya G.S, Dr. Hariprasad S.A.</i>	N/A
122	Printed Small-size Monopole Antenna for LTE/WWAN Smartphone Application <i>Yunpan Wei, Jin Chen, Yongchao Cao, JinWei Man</i>	97
127	Study of Shaped Cylindrical Reflector Using the Spherical Wave Method <i>Shen Jun-hao</i>	101

130	Smart Antennas for Mobile Satellite Communications <i>Qi Luo, Steven Gao, Josaphat Tetuko Sri Sumantyo</i>	104
137	A Wide-Band High-Gain Antenna Fed by Probe Tangent to the Patch <i>Xin ZHANG, Shiwei TAN, Lei LI</i>	108
139	A Shaped Beam Antenna Array for Ultra High Frequency Radio Frequency Identification Reader Applications <i>Ziwei LI, Xin ZHANG</i>	112
143	Simulation of Novel Planar Wide Band Antennas for Terahertz Imaging <i>Amna Mir, Junsheng Yu</i>	116
144	Numeric Simulation of Self Complementary Antenna for Terahertz Imaging <i>Amna Mir, Junsheng Yu</i>	119
150	A Compact UWB Antenna with Reconfigurable Band-Notched Characteristics <i>Yonggan Song, Hongyan Tang, Hongxi Zhang, Wenxun Li, Pu Zhuo, Xiulei Gao, Lewei Li</i>	123
152	A Broadband Circular Polarization Cavity Antenna <i>ZHANG Kai, LI Jianying, YANG Yi, XU Rui</i>	127
153	A Novel Design of Circularly Polarized Waveguide Antenna <i>ZHANG Kai, LI Jianying, YANG Yi, XU Rui</i>	130
157	The Design of Two-way N-section Equal Split Wilkinson Power Dividers and The Loss Analysis <i>Zhuoru Bao, Dewu Kong</i>	134
169	Dual Band WLAN Four Antenna System for Access Point Uses <i>Bo-Ren Hsiao, Chen-Yu Hsieh, Jiun-Ting Yeh, Wen-Jiao Liao</i>	137
170	4D-Arrays for MIMO Radar Applications <i>Jixin Guo, Shiwen Yang, Quanjiang Zhu</i>	139
172	Single Ridge Waveguide Slot Incremental Conductance Analysis and Array Antenna Design <i>RUI XU, JIANYING LI, Dingyi Luo, GUANGWEI YANG</i>	143
177	Hemispherical Dielectric Resonator Antenna embedded in a novel Sierpinski Carpet Fractal based Photonic Band Gap Structure for wideband systems <i>Biswajeet Mukherjee, Pragati Patel, Jayanta Mukherjee</i>	147
178	Design of Compact Multifunction Antennas in a Common Aperture <i>Lei Chang, Jian-qiang Zhang, Yu-feng Wang, Bao-ming Li</i>	151
179	The Design of Cavity-Backed Slot Antenna with Multi-layer Dielectric Resonator Covered <i>Chongshuo Song, Yuqing Wu, He Wang, Guoqiang Chen, Xingji Tang</i>	155
182	A Novel Compact Dual-Band MIMO Antenna <i>Yong Cheng, Zhongyang Sun, Wenjun Lu, Hongbo Zhu</i>	157
187	A Compact Tunable Notched-Band Ultra-wide-band Antenna Using a Varactor Diode <i>Sai-Wai Wong, Zai-cheng Guo, Kai Wang, Qing-xin Chu</i>	161

191	A Novel Reduce-Size Circularly Polarized Microstrip Antenna <i>Yong Cheng, Jinxin Fang, Wenjun Lu, Hongbo Zhu</i>	164
201	A Design of A Dual-band Circle Polarization Microstrip Antenna <i>Jiawei Wu, Jian Gao, Zhongxiang Zhang</i>	168
202	A Design of Low Side-lobe Slot Array Antenna at K-band <i>yiming Dai, Yiquan Liu, Zhongxiang Zhang</i>	171
212	Compact Planar Broadband Antenna with Modified Radiating Patch and Parastic Stubs <i>Zhangzhuo Zhao, Li Li, Xiaoli Yin</i>	173
213	A Novel Dual-polarized Dielectric Resonator Antenna Designed for WLAN Applications <i>He Yan, Lin Yi, Zhenghe Feng</i>	176
214	A Novel Circular Polarized Antenna for Minimally Invasive Devices <i>Jui-Han Lu, Hao-Shiang Huang, Yuan-Chih Lin</i>	178
229	Design of the Axially Displaced Monopulse Cassegrain Antenna with Low Profile at W Band <i>Yanxun Wang, Wenbin Dou, Hongfu Meng</i>	181
230	Helical Antenna to Measure Radiated Power Density Around a BTS: Design and Implementation <i>Fateme Ghayem, Farshad Rassaei</i>	185
231	Robust Adaptive Beamforming Based on Interference Covariance Matrix Reconstruction and Mismatched Steering Vector Compensation <i>Lu Yan, Xiaopeng Yang*, Wen Xi, Zongao Zhang, Tapan K.Sarkar</i>	189
233	A Simple UHF RFID Near-field Reader Antenna Based on Micro-stripe Transmission Line <i>Tianran Lu, Qi Liu, Yang Yang, Xiaoxiang He</i>	193
234	High Gain 4×4 Slot Dipole Antenna Array in the 5GHz Band <i>Naoto Iizasa, R. Pokharel, Haruichi Kanaya, Kuniaki Yoshitomi</i>	197
235	Antenna Selection in the Synthesis of Mutlple-Pattern Linear Arrays by Iterative Linear Programming <i>Yanhui Liu, Pengfei You, Shulin Chen, Liang Zhang, Qing Huo Liu</i>	201
236	A Novel Compact Slow-Wave Microstrip Resonant Antenna <i>Zixuan Yi, Meiling Li, Badar Muneer, Qi Zhu</i>	205
237	Design and Achievement of Miniaturization in Wi-Fi Base Station Antenna <i>Pengfei Liu, Jinqi Zhang, Shengjun Lu, Jinshun Lin</i>	208
239	Design of Low Sidelobe Slotted Waveguide Monopulse Antenna Array <i>Teng Li, Hongfu Meng, Wenbin Dou, Guifen Xia, Huaicheng Zhu</i>	212
241	A Dual-band Microstrip RFID Antenna Using Negative Permeability Fractal Metamaterial Stucture <i>Guo Liu, Liang Xu, Wenbin Zeng, Zhensen Wu</i>	215
245	Time Domain Partial Wave Based Euclid Distance for TEM Horn Antenna Optimization <i>Shunli Li, Xiaoxing Yin, Hongxin Zhao, Mei Yang, Li Xie</i>	218

246	Resistive Loading between the Antenna Array Elements <i>Mei Yang, Xiaoxing Yin, Hongxin Zhao, Shunli Li, Li Xie</i>	222
248	Research of Multi-beams Antenna Array Using Butler Matrix in MIMO Communication <i>Yulin Zheng, Guang Hua, Houxing Zhou, Wei Hong</i>	225
249	Miniature Dual-Band Patch Antennas with Mushroom-Structure Loading <i>Mei Yang, Xiaoxing Yin, Zhi Ning Chen</i>	228
250	An Ultra-wideband Dual-band Printed Monopole Antenna Design <i>Fan Jingjing, Zhou Jianming</i>	232
251	Electromagnetic Band Gap and Artificial Magnetic Conductor and Their Application to the Patch Antenna <i>Hongyuan Zhou, Leilei Liu, Feng Xu</i>	236
252	Design of Integrated Antennas with Dual Frequencies and Dual Circular-Polarizations <i>Yu-feng Wang, Lei Chang, Yu-feng Yu, Jiang-sheng Zhou</i>	240
253	Matching Slot Role in Bandwidth Enhancement of SIW Cavity-Backed Slot Antenna <i>Mohammad Vatankhah Varnoosfaderani, Junwei Lu, Boyuan Zhu</i>	244
254	Analysis of Polarization Matching and Transmitting/ Receiving Pattern Reciprocity of Antenna <i>Jianhua ZHANG, Ye HUANG, Zhenya LI</i>	248
256	Fixed-Frequency 1-D Fabry-Perot Leaky-Wave Antenna with Different Radial Direction <i>Xiaomin Yu, Yewen Zhang, Kai Fang, Li He</i>	252
258	Design of Miniaturized RFID Tag Antenna with BAP Technique <i>Yingchun Zheng, Guang Hua, Yulin Zheng, Wei Hong</i>	256
261	A Compact BAVA Design with Corrugated Edge <i>Yongchao Cao, Juan Lei, Yunpan Wei, Li Zhu</i>	259
263	Device-Integrated FPC Slot Antenna <i>Chen-Yu Hsieh, Yan-Ho Shih, Wen-Jiao Liao</i>	263
266	Compact Dual-band C-shaped Printed Antenna For WLAN Applications <i>Lei Chen, Xuetian Wang, Jiawei Zang, Mingyou Li, Guan Wang</i>	265
268	Paper-based Triple-Band Monopole Antenna for Next Generation Wireless Applications <i>Mingyou Li, Xuetian Wang, Wen Wang, Lei Chen</i>	269
274	Dual-band Wheel Slot Antenna Fed by CPW for WLAN Applications <i>Xin He, Yong-chang Jiao</i>	273
277	A Novel Horizontal Polarization Sensitive Active Frequency Selective Surface Without Biasing Network at 2.4GHz WiFi Band <i>Xuhui Xu, Yang Zhao, Fengchang Yu, Liang Zhang, Qinghuo Liu</i>	277
279	Analysis of Amplitude-phase Error of Phased Array Calibration in Mid-field <i>Qiang Gu, Chengran Dai, Chuanfang Zhang, Haopeng Yuan</i>	280

284	Design of a Coplanar Bowtie Antenna for WLAN and WiMAX Application <i>Qing-Le Zhang, Li-Ming Si*, Yu-Ming Wu, Yong Liu, Xin Lv</i>	284
285	Designing of Offset Gregorian Dual-Reflector Antennas with Non-circular Aperture using FEKO <i>Rudan Jiang, Chen Wang</i>	287
287	Antenna Pattern Synthesis of Shaped-Beam Using a New Combined Algorithm <i>GAO ZhiGuo, YANG Bin</i>	291
289	A Ka Band Circularly Polarized Corrugated Antipodal Tapered Slot Antenna <i>Meng-Meng Cui, Yu-Ming Wu, Zhuo Zhang, Chao Guo, Li-Ming Si, Kai Zhou, Yong Liu, Xin Lv</i>	294
290	Design of a Terahertz Circularly Polarized Planar Corrugated Horn Antenna <i>Yu-Meng Zhang, Yu-Ming Wu, Chao Guo, Zhuo Zhang, Li-Ming Si, Yong Liu, Xin Lv</i>	298
296	Design of a Wide Bandwidth Monopole Antenna with Graded Multi-layer Metal Slabs <i>Jialin Liu, Zhuo Zhang, Chao Guo, Yong Liu, Li-Ming Si, Yu-Ming Wu, Xin Lv</i>	302
300	Co-simulation Method to Predict Multi-physical Effects on Patch Antenna <i>Luo Ren-xi, Li Xiao-gang, Miao Jie-qiong, Li Zi-ning</i>	305
301	A Broadband High-Gain Planar Array Antenna for V-band Wireless Communication <i>Jie Wu, Wei Na Huang, Yu Jian Cheng*, Yong Fan</i>	309
305	An Iteration Method of Sidelobe Suppressing of Unequally Spaced Array <i>Lei Chen, Tian-Ling Zhang, Jian-Feng Yu, Xiao-Wei Shi</i>	313
306	Robust Adaptive Beamforming Based On Fast Rank-Reducing MVB Algorithm <i>Gui Fang, Shuang Qiu, Xiaofeng Ma, Weixing Sheng, Yubing Han</i>	317
313	Review of Recent Development of Minature and Multi-band Antennas for Mobile Handsets <i>Wei-Hua Zong, Chang-Hong Li, Xiao-Yun Qu</i>	321
314	A small size circularly polarized patch antenna <i>Wei Wang, Fangfang Fan</i>	325
316	A Compact Omni-directional Circularly Polarized Antenna <i>Yongming Yang, Yufeng Yu</i>	329
320	Low Mutual Coupling Tri-Polarized MIMO Slot Antennas <i>Leilei Liu, Chao Liu, Ying Yu, Yaming Bo</i>	333
321	Investigation of a Substrate Integrated 3D-Meandering Probe for Circularly-Polarized Patch Antenna <i>Quan Wei Lin, Xiu Yin Zhang, Hang Wong, Hau Wah Lai</i>	336
323	A Low Sidelobe and High Gain Omni-directional COCO Antenna Array <i>Junfeng Tang, Lili Fang, Hang Cheng</i>	339
325	A Broadband Polarization-insensitive Metamaterial Absorber and Its Application in Reducing Mutual coupling between dual-polarized Antennas <i>Li Wei, Juan Chen, Anxue Zhang, Wei Luo, Lei Zhang</i>	342

330	Design Of a Quadrifilar Helix Antenna Based on LTCC Technology for Satellite Navigation Handset Application <i>Guo-Qiang Guo, Bin Li, Chao Guo, Yong Liu, Xin Lv</i>	346
333	Small-sized UWB Ellipse Pair Antenna <i>Xuan Zhang, Jianying Li</i>	N/A
334	Compact Differential Dual-Band Slot Antenna Based on LHMs <i>Yajuan Zhao, Caixia Wang, Yanfang Shen, Runbo Ma, Wenmei Zhang, Liping Han</i>	353
345	Miniaturized I-shaped Slot Circularly Polarized RFID Antenna <i>Wenbin Zeng, Guo Liu, Ming Li, Liang Xu</i>	357
351	Broadband Dual-Polarized Antennas with High Port Isolation for Portable Devices <i>Min Liang, Fushun Zhang, Guowei Zhang, Qiqiang Li</i>	359
353	Compact Coupled-fed Printed Antenna for Eight-Band WWAN/WLAN/ WiMAX Internal Mobile Phone <i>ZHOU Jiangsheng, WANG Yufeng, CHANG Lei, YU Yufeng, ZHOU Tao</i>	363
356	A Polarization Auto-Matching Retrodirective Method <i>Yazhou Dong, Shi-wei Dong, Lisheng Yang, Ying Wang, Zhengjun Li</i>	367
372	Design of a Ka/Ku Dual-Band Dual-Polarized Array <i>Lin Yi, He Yan, Manyuan Dai, He Wang, Hu Yang</i>	369
374	Robust Planar Textile Antenna Integrated in Three Dimensional Orthogonal Woven Fabrics <i>Cheng-Zhu Du, Fu-Hui Yang, Shun-Shi Zhong</i>	372
375	Design of a Metasurface Luneburg Lens Antenna with Flared Structure <i>Xiaoping Xiong, Yanhui Liu, Zhihui Yao, Liang Zhang, Weiwen Li, Qing Huo Liu</i>	375
376	Modeling of Radiated Characteristics of Plasma-Surrounded Antenna <i>Xiaotian Gao, Chunsheng Wang, Binhao Jiang</i>	379
377	BeiDou Navigation Terminal Multi-Mode Asymmetric Slots Circularly Polarized Microstrip Antenna <i>Liu Zhigang, Fang Shunyu, Zhu Shouzheng, Chen Dong, Cao Jie, Fu Lu, Luo Yang</i>	382
378	Multi-layer Dielectric Structure Covered Archimedean Spiral Antenna Design <i>Yuqing Wu, Chongshuo Song, Ge Gao, Hu Yang, Xinji Tang</i>	386
380	A Conformable Dual-Band Antenna Equipped with AMC for WBAN Applications <i>Yun-Hui Di, Xiong-Ying Liu, Manos M. Tentzeris</i>	388
381	Two Dual-Polarization Aperture Coupled Microstrip Antennas at Ka-band <i>Chengran Dai, Jingjing Fan, Houjun Sun</i>	392
382	Efficient Base Station Antenna Element For Mobile Communications <i>Joseph Carson, Oksana Manzhura, Edip Niver</i>	396
383	A Printed Monopole Antenna with Band Notches for WLAN/WiMAX Applications <i>Xingzhe Hou, Hongliang Sun, Lijun Yi, Yantao Yu, Mingchun Tang, Shiyong Chen, Tiancong Huang</i>	400

386	A Ka-band Axial Ratio Bandwidth Enhanced Circularly Polarized LTCC Patch Antenna with Truncated Artificial Magnetic Conductor <i>Baolin Cao, Jing Dai, Dan Li, Hao Wang, Weizhe Shi, Yong Huang</i>	403
391	Design and Study of UWB Differentially-driven Antenna with Band-notch Characteristics <i>Fengxian Zhao, Wenmei Zhang</i>	407
396	A Compact Differential Band-Notched Dipole Antenna <i>Xu Wu, Zhi-Hua Bao, Jin Shi, Jian Wang, Jian-Xin Chen, Qing-Hua Cao, Hui Chu, Hui Tang</i>	410
401	MIMO Antennas for Mobile Handsets <i>Xiaodong Chen, Sultan Shoaib, Imran Shoaib, C. G. Parini, Yuan Yao, Junsheng Yu, Xiaoming Liu</i>	412
405	The Application Research of Electric Field Probes with Pulse Modulated Fields <i>Liu xingxun, Huang chengzu, Peng bo</i>	415
408	A Dual-Polarized Cavity-Backed Annular Slot Antenna of High Isolation <i>Weiwen Li, Chen Wang, Zhenyi Xie, Yanhui Liu, Shulin Chen</i>	419
409	A Broadband Reflectarray using Multiresonant and Subwavelength Elements <i>Hua Li, Yong-Xin Guo</i>	423
413	A New Miniaturized Planar UWB Antenna with WLAN Band Notch Characteristics <i>Bo Lu, Tong Li, Xing Wang, Long Li</i>	426
415	High Gain Conical Beam Antenna With Large Beam-Pointing Angle by Using Hemitorus Lens-Reflector <i>Shi-Shan Qi, Wen Wu, Da-Gang Fang</i>	430
421	Examination of Watson's Microwave Yagi Aerial <i>Derek Gray</i>	433
422	Design of a New Millimeter Wave Paraboloidal Reflector Antenna Using MLFMM <i>Feng-tao WU</i>	437
424	A Novel Low Profile Rectangle Waveguide Planar Magic-T of Ka-Band <i>Ruizhen Wang, Guangjun Wen, Yuanhua Sun, Xiaolin Xue, Jun Luo, Haobin Zhang</i>	440
425	A Novel Hole Drilling Method for Plate Luneberg Lens Antenna <i>Zhihui Yao, Yanhui Liu, Xiaoping Xiong, Liang Zhang, Longfang Ye, Qing Huo Liu</i>	444
428	Novel Microstrip Antenna Array with Low RCS <i>Wen Jiang, Shuxi Gong, Yang Li, Kunzhe Zhang</i>	447
430	A Multi-System and Dual-Band Miniaturization Microstrip Antenna Loaded With CSRR for CNSS Applications <i>Cao Jie, Liu-ZhiGang, Fu Lu, Zhu Shou-zheng</i>	450
432	Changing the Polarization of Microstrip Antenna by Metamaterial and Transformation Optics <i>Shouliang Li, Zhan Zhang, Junhong Wang, Meie Chen, Zheng Li, Xianshi He</i>	454

433	Study and Design of Tri-Band Monopole Antenna Fed by A Coplanar Waveguide <i>Min Yang, Wenmei Zhang</i>	458
435	CPW-Fed Wearable Textile L-Shape Patch Antenna <i>Qingshuang Liu, Yilong Lu</i>	461
436	Broadband Circularly-Polarized Square Slot Antenna Fed By Coplanar Waveguide <i>Jian-Jun Mao, Li Zhang, Yong-Chang Jiao</i>	463
438	Functional Extension of Plate-laminated Hollow-waveguide Corporate-feed Slot Array Antennas <i>Jiro Hirokawa</i>	466
443	Miniaturized Probe-Fed Circularly Polarized Patch Antenna for BDS Arrays <i>Jianxing Li, Hongyu Shi, Shi Zheng, Anxue Zhang</i>	470
444	An MNG-TL Loop Antenna for UHF Near-field RFID Applications <i>Hu Liu, Ying Liu, Shuxi Gong</i>	473
445	Design of a Multi-system Circularly-Polarized Square Microstrip Patch Antenna for GNSS Navigation Devices <i>Fu Lu, Liu Zhi-gang, Cao Jie, Zhu Shou-zheng</i>	476
446	Circuit-defined Dual-wideband Antenna for LTE Tablet Device <i>Kin-Lu Wong, Li-Yu Chen</i>	480
450	A Novel Cascaded Optical Phased Array Antenna with A Phased Wedge <i>Qinggui Tan, Jiang Wei, Zhongbo Zhu, Liang Dong, Xiangru Wang</i>	483
453	Heart-Shaped Dual Band-Notched UWB Antenna <i>Juhong Shen, Chunlan Lu, Jiale Zhang</i>	487
455	Antenna Characterization for Wireless Power Transfer Using Near-Field Coupling of Multi-antenna <i>Qiang Chen, Mingda Wu, Qiaowei Yuan</i>	491
456	A Novel Low RCS Microstrip Antenna <i>Wen-qiang LI, Xiang-yu CAO, Jun GAO, Qun YANG, Si-jia LI</i>	495
457	Design of Compact Phased Array Antennas with shaped pattern <i>Yu-long Zhou, Jun GAO, Qun Yang, Xiang-yu Cao</i>	499
458	An Algorithm of Conformal Array DOA Estimation with Unknown Source Number <i>Qun Yang, Xiang-yu Cao, Jun Gao, Wen-qiang Li</i>	502
460	Compact MIMO Antennas for Mobile Terminal Applications <i>Kun Zhao, Shuai Zhang, Chi-Yuk Chiu, Zhinong Ying, Sailing He</i>	N/A
462	Parallel Aperture-Coupled Dual-band CP Antenna <i>The-Nan Chang, Jyun-Ming Lin</i>	510
467	Compact Design of Coupled-fed Meandered Monopole for WLAN Applications <i>Wen-Shan Chen, Chun-Lin Ciou</i>	N/A

472	Thinned Multi-Resolution Composite Array for High Resolution Digital Beamforming <i>Yilong Lu*, Yue Tang, Haobin Zhang</i>	516
473	A Reflector with Ridged Horn for Millimeter Band <i>Ze Shen</i>	520
474	Planar Inverted-F Antenna and Quarter Wavelength Slot Antenna <i>Hanyang Wang</i>	523
475	Broad Bandwidth Endfire Antenna Using Log-Periodic Directors <i>Yuanhua Sun, Guangjun Wen, Muhammad Abdul Basit, Xiaolin Xue, Ruizhen Wang, Haobin Zhang</i>	526
477	A Compact Dual-band Circularly Polarized square-ring Slot Antenna With a Wide Angle Circularly Polarization Performance <i>Xiaolin Xue, Guangjun Wen, Yuanhua Sun, Muhammad Abdul Basit, Ruizhen Wang, Haobin Zhang</i>	530
480	Unbalanced Fed Ultra Low Profile Inverted L Antenna on a Rectangular Conducting Plane <i>Mitsuo Taguchi, Erfan Rohadi</i>	N/A
481	A Novel Low Profile High Power Ka-Band Planar Sum and Difference Network <i>Ruizhen Wang, Guangjun Wen, Yuanhua. Sun, Xiaolin Xue, Jun Luo, Haobin Zhang</i>	537
487	A High Gain Array Antenna Using Giuseppe Peano Fractal Configuration <i>Zekui Zhang, Guanghui Xu, Zhi zheng, Xing Chen</i>	540
496	Design of W band Dual Polarized Microstrip Patch Antenna <i>Rui Ma, Pei Zheng, Mengjia Luo, Zhilei Wen, Houjun Sun</i>	543
502	A Wideband Circularly Polarized Antenna With Pattern Improvement <i>Zhi-Ya Zhang, Guang Fu, Peng Huang, Long Pan, Shao-Li Zuo, Jia Chen</i>	547
505	Multi-Band Miniaturized Slot Antenna with Multi-Band Impedance Matching Circuit <i>Haruichi Kanaya</i>	551
506	Directive Enhancement through Superdirective Array Function <i>Sheikh S. I. M., Hussain R., Johar, U. M., Hassan E. M., Dawoud M. M.</i>	N/A
507	Two Kinds of Miniaturized Dual-band RFID Planar Antennas <i>Ma Chao, Yang Guohui, Kong Weidong, Shi Shaorui, Wang Erchao</i>	558
508	A Novel Printed Slots Round Dual-Band Antenna <i>Yang Tiexin, Yang Guohui, Wang Erchao, Yang Shuai, Kong Weidong</i>	562
509	Prototype Ku-Band Dual Polarization SIW Monopulse Antenna <i>Dong-yeon Kim, Sangwook Nam, Chang-Hyun Park, Bae-Ho Jeong</i>	565
510	A Miniaturized Wideband Vivaldi Antenna and Phased Array <i>Zhou Changfei, Fu Jiahui, Kong Weidong, Sun Quan, Gao Yan</i>	569
515	A Study on the Characteristics of Frequency Selected Surfaces for Waves with High Incident Angles <i>LIU GUOSHENG, LIU LIN, XU YING</i>	573

525	Generation of OAM Radio Waves with Three Polarizations Using Circular Horn Antenna Array <i>Xudong Bai, Ronghong Jin, Junping Geng, Xianling Liang</i>	N/A
537	A Broadband Low Profile Microstrip Filter-Antenna with an Omni-Directional Pattern <i>Wei-Jun Wu, Rong Fan, Jun Wang, Qi Zhang</i>	580
540	CBFm Analysis of Planar Waveguide Array with longitudinal Slots <i>Ben Lai</i>	583
542	Design of a Broad-band Antenna for Time-domain Measurement <i>Liang Chen, Jianwei Lian, Haiyan Yan, Yi Liu</i>	587
557	A Novel Method for Frequency Splitting Suppression in Wireless Power Transfer <i>Yue-Long Lv, Fan-Yi Meng, Bang-Jun Che, Yue-Hang Wu, Qun Wu, Li Sun</i>	590
560	A Compact Printed Log-periodic Antenna with Loaded Stub <i>Quan Sun, Jinlong Wang, Jian Cui, Jiahui Fu, Changfei Zhou, Erchao Wang</i>	593
568	Design of a Microstrip Dual-circular Polarization Feeding Network <i>Pei Li, Yulin Chen</i>	596
571	Broadband Planar Luneburg Lens Composed of Artificial Impedance Surfaces <i>Hao Yu, Xumin Ding, Yuming Wu, Qun Wu</i>	N/A
572	Dual-Beam Realization of Reflectarray Antenna Based on Phase Synthesis Method(PSM) <i>Xiaoqi Fang, Qun Wu, Guohui Yang</i>	603
574	Study on Low Profile Wideband Antenna <i>Dingyi Luo, Jianying Li, Rui Xu, Kun Wei</i>	607
577	Design of Substrate Integrated Dielectric Resonator Antenna for Millimeter-wave Applications <i>Ke Gong, Xue Hui Hu, Yan Liu</i>	611
579	Comparison of the Performance Between a Parasitically Coupled and a Direct Coupled feed for a Microstrip Antenna Array <i>S. H. Yeung, A. García-Lampérez, T. K. Sarkar, M. Salazar-Palma</i>	N/A
588	Bending Effect on Antenna with Radiation Performance for Electronic Tag <i>Jian Ma, Song Li, Shihui Zhang</i>	619
589	Wideband 60-GHz On-chip Triangular Monopole Antenna in CMOS technology <i>DONG Gang, HU Ming-Yang, YANG Yin-Tang</i>	623
590	Study of a Planar Magnetic-electric Dipole Antenna <i>Wei Liu, Zhenghe Feng, Di Wu</i>	627
591	A novel conical horn antenna loaded with ball cone dielectric <i>Di WU, Zhenghe FENG, Wei LIU</i>	631
604	Research on Arrays of Microstrip Magnetic Dipole Yagi antennas <i>Ying Zhang, Zhenghui Xue, Jia Cao, Weiming Li, Wu Ren</i>	635

611	An Improved Design of Microstrip Slot Antennas Using Ring Structure <i>Hou Jianqiang, Huo Yunfeng, Zhu Manzuo</i>	639
623	Quad-ridge Dual Polarized Horn Antenna Design and Optimization <i>Zhu Wenliang, Qiu Jinghui, Shi Xianqing</i>	643
624	A Broadband Anti-metal RFID Tag with AMC Ground <i>Xumin Ding, Shengying Liu, Kuang Zhang, Qun Wu</i>	647
625	A 3.0GHz~13.8GHz Ultra-wideband Planar Monopole Microstrip Antenna <i>Pei-Pei Lu, Lei-Qiang Ma, Qun Wu</i>	650

Topic II: Wave Propagation		
PID	Paper Title/ Authors	Page
026	Extremely Sub-wavelength Magnetic Metamaterials without Using Lumped Elements <i>Jiafu Wang, Shaobo Qu, Jun Wang, Hongya Chen, Jieqiu Zhang, Hua Ma, Mingde Feng</i>	653
027	Manipulating the Reflection of Electromagnetic Waves using Reflective Metasurfaces <i>Jiafu Wang, Shaobo Qu, Hua Ma, Hongya Chen, Mingde Feng, Yongfeng Li, Jieqiu Zhang</i>	657
050	A Novel Ray Tracing Method for Predicting Indoor Channel Characteristics Map <i>Ma Xue, SHI Qin-jian, YIN Fu-rong, LIU Yuan-jian</i>	661
084	Propagation of LF Ground-wave Through Inhomogeneous Atmosphere <i>Yurong Pu, Zhengwei Li, Lili Zhou, Xiaoli Xi</i>	663
086	Computing Ray Tracing on polyhedral Surfaces <i>Weike Wang, Zhixian Chen</i>	667
091	A Fast Numerical Algorithm for Related Bessel Function Integrations <i>Jun Hua</i>	672
098	Research on Sea Surface Ka-band Stochastic Multipath Channel Modeling <i>Xiaodong CAO, Tao JIANG</i>	675
104	Investigation of the Hybrid SIW-CPW Integrated Guided Wave Structure <i>Yingsong Zhang, Tiquan Sun, Hao Zhang</i>	679
117	Design of A C-Band Microwave Power Transmission System for Long Distance Applications <i>Xue-Xia Yang, Hua-Wei Zhou, Guan-Nan Tan</i>	682
120	Reduced-rank Covariance matrix based Algorithm for DOA Estimation <i>Yuanming Guo, Wei Li, Jie Hu, Lili Shi, Xiaojun Feng, Cheng Liu</i>	686
121	Analysis and Simulation for Temporal Correlated Composite Fading Channels <i>Zhou Shenkui, Zhu Qiuming, Dai Xiuchao, Liu Xinglin, Chen Xiaomin, Qian Hongyan, Chen Bing</i>	690
123	Application of Backward Difference Algorithm in Radiowave Prediction Above Earth Surface <i>Xing jian Zhong, De Xin Qu, Jun Dong Ye, Jun Jin</i>	694
125	Research of Polarization and I-FEC on Wireless Communication in Mine Tunnel <i>Chen Peng, Liu Da-Tong, Yan Dong-Hui</i>	697
133	The Comparision of the Structure of LTCC Microstrip Low-pass Filter at L Band <i>SONG Xiao-wei, SHI Yan-feng, MO Jin-rong, LI Qing</i>	701
168	Study on the Propagation Characteristics of Radio Wave in Tunnels by the Method of SBR/Image <i>Yin Fu-rong, Song Dan, Chen Feng, Liu Yuan-jian</i>	706
180	Effect of Antenna Height on Propagation Characteristics Under Indoor Stair Environment <i>Yu Yu, Jie Dong, Ai-ping Ye, Bo Yang, Jing Liu, Yang Liu, Wen-jun Lu, Hong-bo Zhu</i>	710

198	Influence of UHF Tags in the Different Material Surface to RFID System <i>Li Hong Mei, Xing Li Kun, Wang Jin Yue, Yang Tie Xin</i>	713
205	The Impact of Radiation Field Distribution and Transmission Characteristics by Environment Medium for the RFID Information Reading <i>Li Hong Mei, Xing Li Kun, Wang Jin Yue, Yang Tie Xin</i>	716
208	Investigation of Near-Field Wireless Power Transfer Between Two Efficient Electrically Small Planar Antennas <i>Jin Zhang, Chonghu Cheng</i>	720
244	The Simulation of Short Wave Propagation by Ray- tracing Method in Sporadic E layer of Ionosphere <i>He Long, Guo Lixin, Li Jiangting</i>	724
262	Characterization of Large-Scale Fading for 45 GHz Indoor Channels <i>Jin Zhu, Haiming Wang, Wei Hong</i>	728
272	High Selective Dual-Band Microstrip Filter Using Zero-Degree Coupled SIR Feed Lines <i>Feng Qiu, Ling-Zhi Zhang, Bian Wu</i>	731
276	Electromagnetic Tunneling Through Epsilon-Negative Waveguide Paired with Mu-Negative Waveguide <i>Junfei Zhao, Yewen Zhang, Xiaomin Yu, Yunhui Li, Li He, Kai Fang</i>	734
278	A Novel Method of Carrier Suppression for UHF RFID Readers <i>Wu Xi, Yang Qing, Zhang Bingbing, Zeng Xianghua, Zheng Liming, Li Jiancheng, Zhang Jinyu</i>	738
286	Power Allocation Algorithm for V-BLAST System with Channel Correlation and Estimation Error <i>TAN Wei, CHEN Xiao-min, ZHU Yi-min, ZHU Qiu-ming, QIAN Ke-cang</i>	741
294	Propagation Characteristics of Graphene-Based Rectangular Waveguides in Terahertz Band <i>Qing Tang, Liang Zhou, Yue-Ping Zhang, Jun-Fa Mao</i>	745
295	Simulation of Fully Polarimetric Backscattering from Sea Surface <i>Junrui Zhang, Lizhong Song, Yuming Nie</i>	749
303	Ultraviolet Pulse Broadening in Non-line-of-sight Communication System <i>Yang Jiao, Lu Bai</i>	753
304	Predictive Map of Geoelectric Sections of North China <i>Yuri Buddich Bashkuev, Vladimir Dorzhiev, Viktor Advokatov, Ludmila Angarkhaeva, Yuri Ivoilov</i>	N/A
307	Predictive Map of Geoelectric Sections of North and South America <i>Yuri Bashkuev, Viktor Advokatov, Ludmila Angarkhaeva</i>	N/A
318	The Electrical Properties of the Arctic Coast in the VLF-LF-MF Bands <i>Yuri Bashkuev, Mikhail Dembelov, Ludmila Angarkhaeva, Darima Buyanova, Viktor Melchinov</i>	N/A

355	Transmission Properties of the Composite Structure Constructed by Air and Single Negative Metamaterials <i>Tuanhui Feng, Limin Wang</i>	N/A
360	Spatial Structure of Electromagnetic Field in the Power Transmitting Antenna Fresnel Region <i>Shiwei Dong, Yazhou Dong, Lisheng Yang, Zhengjun Li, Ying Wang, Wenli Fu</i>	773
362	Research on the Field Coverage Generated by Antennas in Confined Space <i>Junhong Wang, Yuwei Huang, Dawei Li</i>	775
364	The Characteristics of the Passive Radiation From Single Layer of Random Distributed Spherical Particles <i>Chuan Yin, Ming Zhang, Yaming Bo</i>	779
367	The Propagation Properties of Chaff clouds in Atmosphere <i>WANG Tao, XIE Hong-jie, LI Jian-bing, WANG Hai-jun</i>	783
411	The Application of PE in the Propagation of VLF Wave in Earth-ionosphere Waveguide <i>Fei Li, Zhensen Wu, Haiying Li, Jie Zhan, Lu Bai, Jinpeng Zhang</i>	789
451	On the Theory of Transition Radiation in a Waveguide with Anisotropic Magneto Dielectric Filling <i>Eduard A. Gevorkyan</i>	793
461	Through Wall Imaging: Inverse Scattering Approach <i>Xudong Chen, Xiuzhu Ye</i>	796
464	Spatial Resolution Enhancement Techniques of Space-borne Microwave Radiometer <i>Yu Sun, Xiangxin Meng, Weidong Hu, Xin LV, Yu Sun</i>	798
469	DOA Estimation of Wideband Signals Using Extended Virtual Array <i>Hiroyoshi Yamada, Satoshi Shirai, Yoshio Yamaguchi</i>	802
485	Difference between Single-tone and Multi-tone Excitations in RF Channel Measurement <i>Xiaotao Guo, Hang Li, Zhao He, Yichi Zhang</i>	806
491	One Kind of Channelized Receiver Structure Applied To Software Radio Platform <i>Chao Lv, Yun Lin</i>	810
492	A Method of Quadrature Amplitude Modulation Signals Identification at low signal-to-noise ratios <i>Boyang Feng, Qingbo Ji, Yun Lin</i>	814
493	Radio Frequency Propagation Characteristics in Disaster Scenarios <i>Jiao He, Sai-Qiong Zhou, Kun Liao, Xing-Chang Wei, Er-Ping Li</i>	818
501	RCS Computation and Analysis of Target Using FEKO <i>Xiaofeng Wang, Chen Wang, Yuan Liu</i>	822
545	Manufacturing Sensor Network Based on Multi-Radio and Multi-Channel <i>Ping REN</i>	826
558	The Radiation Performance of Inverted-F Antenna <i>Li Xiangyang, Qu Xiaoyun</i>	831

559	Sideband Suppression Capacity Analysis of Weighted Switch Signal <i>Tang Hongmei, Li Kai, Liu Ju</i>	835
564	A Novel Method for Omnidirectional Wireless Power Transmission <i>Bang-Jun Che, Fan-Yi Meng, Yue-Long Lv, Qun Wu</i>	839
565	The Physics of Mobile Wireless Communication Explained Through an Electromagnetic Macro Model <i>T.K.Sarkar, W.M.Dyab, M.N.Abdallah, M.Salazar-Palma, M.V.S.N.Prasad, S.W.Ting</i>	842
576	A Study on the Near Field OAM using the Rigorous Numerical Methods <i>Lingfang He, Haogang Wang*, Xianmin Zhang, Xiaofeng Jin, Huan Yu</i>	845
581	Effect of Window Function on Absorbing Layers Top Boundary in Parabolic Equation <i>Pei Zhang, Lu Bai, Zhensen Wu, Fei Li</i>	849

Topic III: Measurements		
PID	Paper Title/ Authors	Page
009	Casing and Hand Effect on PCB Antenna in 2.4 GHz Wireless Mouse <i>Gowrish B, Ananjan Basu</i>	853
044	A Simple Method for an Ultra-large Electrical-size Circular Polarization Antenna Measurement <i>Keyan Tian, Yiqian Zhang, Lizhi You</i>	857
052	Analysis of the Influences of Solar Panels on Antenna Far-Field Measurement <i>Jing Shen, Guobin Wan, Xuequan Yan</i>	861
066	Type N RF Calorimeter In Coaxial Line <i>Chuanzhong Xu, Chuntao Yang, Yunmei Chen, Lin Yang</i>	864
068	Design of a High RF-DC Substitutive Load for the RF Calorimeter <i>Meng Zhang, Chuanzhong Xu, Yunmei Chen, Chuntao Yang</i>	868
070	Design of a High-precision Temperature-Voltage Converting Circuit Applied to RF Power Calorimeter <i>Lin Yang, Chuanzhong Xu, Yunmei Chen, Chuntao Yang</i>	872
072	The Measure Method Research Regarding Attenuator of Basic High-powered Level <i>Haijiao Hou, Meng Zhang, Xujun Yang, Ting Liu</i>	876
089	Long-time Coherent Integration Method for Migrating Targets Detection <i>LU Manjun, TAN Zhi, SONG Ke</i>	880
149	Magnetic Anomaly Detection for Simultaneous Moving Target and Magnetometer <i>Hao Zhang, Ming-Yao Xia</i>	884
181	Third Harmonic Measurement in Printed Electronics <i>Anthony Samano, Dr. Yanmeng Xu*, Prof. David Harrison, Dr. Chris Hunt , Martin Wickham, Dr. Owen Thomas</i>	889
200	Application Study on MS2726C Handheld Spectrum Analyzer <i>QIN Shun-you, ZHANG Zhi-hua, CHEN Hui, WU Wei-wei</i>	892
227	Prediction of Passive Intermodulation Based on Tunneling Effect <i>Xiaoxiao Li, Wanzhao Cui</i>	895
302	Compensation of the Offset in Numerical Integration of a <i>D</i> -dot Sensor Measurement <i>Lijun Yao, Jianling Huang, Ning Kang, Tao Shen, Dong Liu, Feng Zhang, Hongliang Sun</i>	898
319	Calibration Method of Amplitude and Phase Consistency of W-band Transceiver Components <i>Zhilei Wen, Pei Zheng, Mengjia Luo, Rui Ma, Houjun Sun</i>	902
340	UWB ISAR High Resolution Imaging Using Near Field for Rotating Target <i>Shitao Zhu, Anxue Zhang*, Hongyu Shi, Zhuo Xu, Xiaoli Dong</i>	906

349	W-band Characterization of Substrate Dielectric Constant and Loss Tangent Based on Substrate Integrated Non-Radiating Dielectric Guide Resonator Method <i>Xiao Liang Liu, Yi Chen Zhong, Yu Jian Cheng, Yong Fan</i>	910
379	Multi-channel Amplitude and Phase Calibration based on Four Subarrays Single-polarized Antenna <i>LIU Fang, ZHAO Guoqiang, DAI Chengran, LI Zhangfeng, ZHANG Yi, TANG Junfeng</i>	913
384	A GA Based Real-time Voltage Platform for A 32-Element High Gain Beam-forming Antenna Optimization <i>Yang Zhao, Liang Zhang, Xuhui Xu, Fengchang Yu, Qinghuo Liu</i>	917
385	A Novel Near-Field Measurement Method for Predicting Far-Field Monostatic RCS of Targets <i>YU Ding, LIU Wei-long, YANG Lin, FU De-min</i>	920
400	Capacitance Correction Factor of Equivalent Capacitor Substitution Method (ECSM) for Monopole Antenna Calibration <i>SONG Zhenfei, WANG Weilong, XIE Ming</i>	924
437	Application of the Natural Frequency Estimation Technique for Mangosteen Classification <i>P. Leekul, M. Krairiksh, Tapan K. Sarkar</i>	928
516	A Near Filed Imaging System Using Multistatic Orthogonal Array <i>Wei Xiang, Zhaoyang Li, Chonghui Zhao, Danru Yu</i>	931
518	A New On-wafer Multiline Thru-Reflect-Line(TRL) Calibration Standard Design <i>Haiyan Lu, Zhijiang Zhou, Chengwei, Jianjun Zhou, Tangshen Chen, Chen Chen</i>	934
546	Probe Lift-off Compensation Method for Pulsed Eddy Current Thickness Measurement <i>Chen HUANG, Xinjun WU</i>	937

Topic IV: Electromagnetics		
PID	Paper Title/ Authors	Page
006	A New Sandwich Linear Polarization and Frequency Selective Surface Design <i>Yunxiang Zhang, Zhiqin Zhao, Jiangniu Wu, Bo Lv</i>	940
013	Study on Equivalent Electromagnetic Parameters and Optimal Design of EM Absorbing Composites <i>Fu Zihao, Li Yanfang, Lu Guizhen</i>	943
042	Surrogate Modeling Techniques for Frequency-Selective Surfaces and Metamaterials Design <i>Fabrizia Ghezzi, Loris Serafino, Chunlin Ji, Ruopeng Liu</i>	947
064	Conformal High-Order Finite-Difference Time Domain Method for Curved Objects <i>Min Zhu, Lei Zhao, Huangyan Li, Qunsheng Cao</i>	951
083	A New Modeling Procedure for the IE-Based Non-overlapping Domain Decomposition Method <i>Kai-Lai Zheng, Hou-Xing Zhou, Wei Hong</i>	955
096	An IE-ODDM With Higher-Order Hierarchical Legendre Basis Functions <i>Wei-Bin Kong, Hou-Xing Zhou, Wei Hong</i>	959
105	Analysis of Radio Wave Scattering from Rough Sea Surfaces Based on High Frequency Approximation Algorithm <i>Lanchao ZHANG, Tao JIANG</i>	963
116	SARC Algorithm in the FDTD Analysis of Ferrite Magnetized at an Arbitrary Direction <i>Wang Fei, Wei Bing, Ge De-biao</i>	N/A
154	Sparsified Multilevel Adaptive Cross Approximation <i>Xinlei Chen, Changqing Gu, Zhuo Li, Zhenyi Niu</i>	971
155	A High-efficiency Rectangular Waveguide to Domino Plasmonic Waveguide Converter in X-band <i>Liangliang Liu, Zhuo Li, Bingzheng Xu, Jian Yan, Pingping Nin, Changqing Gu</i>	974
160	Design of a Tunable Absorber Based on Graphene in the Terahertz Band <i>Bingzheng Xu, Changqing Gu, Zhuo Li, Liangliang Liu, Zhenyi Niu</i>	978
184	A Forward Approach Of Constructing Three-Dimensional Electromagnetic Parametric Scattering Model Base On Geometrical Model <i>Xingji Tang, Junru Gong, Jin Cheng, Houqiang Kang, Junjie Mao</i>	982
186	Discontinuous Galerkin Time-Domain Method Based on Regular Hexahedron <i>Junru Gong, Da Peng, Yanlin Xu, Hu Yang, Xingji Tang</i>	985
189	Near Field Electomagnetic Scattering Model Studying for Rough Land Surface <i>Gu Jun, Wang Xiaobing</i>	987
190	Study on Multi Scattering Point Modeling for Target in Fuze RF Simulation and Its Application <i>Chen Qian, Gu Jun, Zhou ChunHua, Wang XiaoBing</i>	991

196	The Characteristical Analysis of The Synthetic Basis Function Method <i>Yanlin Xu, Xinji Tang, Ge Gao, Zhiliang Guo, Hu Yang</i>	995
224	Polarization Selective One-Way Microwave Absorber Based on Composite Metamaterial <i>Liang Sun, Junming Zhao, Bo Zhu, Yijun Feng</i>	998
225	Electromagnetic Wave Deflection and Backward Scattering Reduction by Flat Meta-surfaces <i>Nan Jia, Ke Chen, Bo Zhu, Yijun Feng*</i>	1002
257	An Adaptive Cross Approximation Recompressed Degenerate Kernel Algorithm with Radial Bases for Scattering from PEC Objects <i>Canlin Pan, Ming Zhang, Leilei Liu, Yaming Bo</i>	1006
271	Ultra-Wideband Polarization Conversion Metasurfaces <i>Hongya Chen, Hua Ma, Shaobo Qu, Jiafu Wang, Fengli Yong, Hangying Yuan, Zhou Xu</i>	1009
293	Antenna Optimization Based on Non-conformal IE-DDM and PSO <i>Xiaoqiong Wang, Jun Hu, Wei Zhu, Ming Jiang, Ran Zhao, Zai-ping Nie</i>	1012
297	Study on the Scale Relation of Electromagnetic Scattering from Perfectly Conducting Target <i>Jiao Zhao, Zhensen Wu, Yaohui Li</i>	1016
312	A New Compact High-Q Resonator with μ -Near Zero Metamaterial and Microwave Bandpass Filter Applications <i>Joung-Geun Park, Jong-Chul Lee, Ki-Cheol Yoon</i>	1020
317	Simulation of a Microstrip Array using Parallel FDTD on a Supercomputer with 100K CPU Cores <i>Shugang Jiang, Zhongchao Lin, Yu Zhang, Bing Wei, Chen Cao, Hui Zhao</i>	1024
326	GPU Accelerated Parallel MoM for Simulating Microstrip Antenna Array <i>Yan Chen, Yu Zhang, Zhongchao Lin, Xunwang Zhao, Shugang Jiang</i>	1027
329	A Polarization Insensitive High Reflective Mirror based on SOI Subwavelength Grating Structrue <i>Yehong Li, Yongqing Huang, Xiaofeng Duan, Jinhua Hu</i>	1030
337	Multi band Polarization Converter Based on Anisotropic Metasurface <i>Hongyu Shi, Jianxing Li, Anxue Zhang*, Shitao Zhu, Yansheng Jiang</i>	1033
339	FETD Applied to EM Scattering by Arbitrary Shape Cylinder <i>Li Linqian, Yang Qian, Wei Bing, Cao Le, Ge Debiao</i>	1036
341	Analysis the Scattering of Arbitrary Cylinder by Edge FETD: TE Case <i>Yang Qian, Li Linqian, Wei Bing, Cao Le, Ge Debiao</i>	1039
347	Equivalent Circuit Model of Cross and Circular Ring FSS Using Vector Fitting <i>Payal Majumdar, Zhiya Zhao, Yutao Yue, Chunlin Ji, Ruopeng Liu</i>	1042
350	Realizing Electromagnetic Energy Tunneling through Waveguide Bends <i>Mingyi Xu, Lei Chen, Xiaowei Shi</i>	1046
352	A Switchable Zero Index Metamaterial <i>Nan Xiang, Qiang Cheng, Jie Zhao, Tie Jun Cui, Wei Xiang Jiang, Hui Feng Ma</i>	1050

366	Analysis of Wideband Characteristics and Jamming Technology of Chaff Cloud <i>XIE Hong-jie, LI Jian-bing, XU Zhong-fu, WANG Tao</i>	1053
397	A Study of Composite Electromagnetic Scattering from Rough Sea Surface and Missile-like Target Basing on the Efficient Numerical Algorithm <i>Yu Liang, Xiang-hua Zeng, Li-xin Guo, Zhen-sen Wu</i>	1058
406	Empirical Analysis of Chirp and Multitones Performances with a UWB Software Defined Radar: Range, Distance and Doppler <i>Julien Le Kernec, Derek Gray, Olivier Romain</i>	1061
418	Electromagnetic Invisibility Cloaks Based on Inverse Design Method <i>Su Xu, Yuyu Jiang, Qinghui Yan, Xiangxiang Cheng, Hongsheng Chen*, Hua Chen, Faxin Yu</i>	1065
429	Dynamic Control of Electromagnetic Wave Polarization and Phase through Active Metasurfaces <i>Yijun Feng, * Bo Zhu, Junming Zhao, Tian Jiang</i>	1069
449	Nonuniform FFT with Improved Accuracy and Its Application to Analyses of Microstrip Circuits <i>Jen-Tsai Kuo, Hsin-Ying Lee, Ke-Ying Su</i>	1072
468	Hybrid JMCIE-DDM for Electromagnetic Modeling of Composite Structures <i>Jun Hu, Ming Jiang, Lin Lei, Ran Zhao, Zaiping Nie</i>	N/A
544	Analysis of EM Scattering by Large Scale Composite Structures Based on the Time-domain Iterative Method <i>Wu Nan, Chen Liang</i>	1080
567	A Novel Wide Band FSS Structure Based on the Double-Layered Hexagonal Unit <i>Wan Chen, Jiahui Fu, Kuang Zhang, Qun Wu</i>	1083
578	A Novel Double Zero Metamaterial Made by All Dielectric Resonator <i>Ju Gao, Kuang Zhang, Qun Wu</i>	1089
582	The Study on a New Type of Low-profile and Passive Radar Retro-reflector <i>Li Li*, Fengwei Yao, Qiping Chen, Xiaobing Wang, Kun Cai*, Honghao Cai</i>	1092
583	Optical Force in Terahertz Band Generated by the Semiconductor (InSb) <i>Wan Chen, Jiahui Fu, Kuang Zhang, Qun Wu</i>	1095
584	EM Scattering of A Target over Sea Surface Based on Physical Optics <i>Hua Zhao, Li-xin Guo, Song-hua Liu</i>	1098
599	High-Efficiency Numerical Computing in Low-Grazing Scattering from Sea Surface Using Resistive Tapering and Forward-Backward method <i>Yaohui Li, Zhensen Wu, Jiao Zhao</i>	1102
602	The Distinguish and Statistical Analysis of Sea Clutter Spikes <i>Xiaoyi Liu, Zhensen Wu, Tao Wu, Yaohui Li, Xing Li</i>	1105
605	Characteristics of Aerial Targets under Earth-Atmosphere Environment in visible BAND Based on MODIS Data <i>Wanjun Wang, Zhensen Wu, Yaohui Li</i>	1109

609	IEEE Antennas and Propagation Society Distinguished Lecture <i>Qing Huo Liu</i>	N/A
614	Electromagnetic Pulses Effects of Electronic Information System and Corresponding Multilayer Protection Methods <i>Qifeng Liu</i>	N/A
616	A Broadband Polarization-insensitive Metamaterial Absorber Based on Multi-mode Resonance <i>Xiao-Xin Liu*, Guo-Hui Yang, TAO Er Gen, Lei-Qiang Ma, Yue-Long Lv, Wei-Can Shi</i>	1115
620	Inversion of Ground Parameters Using Genetic Algorithms and Engineering Modeling for Bistaticscattering <i>Xing Li, Yaohui Li, Zhensen Wu, Yunhua Cao</i>	1119

Topic V: Microwaves, Millimeter Waves and THz		
PID	Paper Title/ Authors	Page
015	Design of UWB BPF Using SIR with Open- and Short-Circuit Stubs for Bandwidth Enhancement <i>Cheng-Siou Li, Min-Hua Ho, Wanchu Hong</i>	1123
022	Design of a V-Band Power Amplifier/Combiner Based on Spatial Power-combining Technique <i>Jian Liu, Wenhua Chen, Zhenghe Feng</i>	1127
028	A High Speed Programmable Frequency Divider <i>Ping Jiang, Ming Cheng, Shengjun Lu, Jinshun Lin</i>	1130
029	Design and Discussion of a Compact Feeding Network for Ku-Band Active Phase Array <i>Qingqiang He, Haidong Chen, Xu Wei, Wenquan Che</i>	1134
048	The Design of Ka Band Filter with Active Space Mapping Algorithm <i>Qingwen Deng, Tongxiu Fan, Shengjun Lu</i>	1140
049	A Multi-directional SAR Imaging Mode for Change Detection Based on Phased Array Radar <i>Wen Xiaoyang, Kuang Gangyao, Hu Jiemin, Zhang Jun</i>	1144
051	Tracking Antennas for Inter-satellite Communications at Sub-millimeter Wavelengths <i>Wenbin Dou, Long Zhang, Hongfu Meng, Zongxin Wang</i>	1149
062	An Optimal Low Noise Power Amplifier of Ultra-High Gain Extensively Applicable from 2.1 to 5.1 GHz <i>Hsin-Chia Yang, Guan-Hao Shen</i>	1153
071	Design of High Efficiency GaN HEMT Class-F Power Amplifier at S-band <i>Ying Wang, Shiwei Dong, Lisheng Yang, Zhengjun Li, Yazhou Dong, Wenli Fu</i>	1157
075	A Method of Design Ka-band E-faced-folded Compact Waveguide Magic-T Junction <i>Liting Wang, Bingyun Shi</i>	1159
085	A Design of Q-Band Noise Injector <i>Tingting Yuan, Xiaoxing Yin, Hongxin Zhao, Jun Shi, Weiye Zhong, Qinghui Liu</i>	1162
088	Surface Micro-machined Wideband Circularly Polarized Antenna Array for 60GHz Radios <i>Xiuping Li, Hua Zhu, Nan Li, Bo Ai, Yang Tian, Hong Wang</i>	1165
092	A CMOS Envelope Tracking Power Amplifier for 4G LTE Mobile Terminal Applications <i>Junghyun Ham, Youngoo Yang</i>	1169
109	A Double Waveguide Frequency Bands Waveguide-to-Microstrip Transition <i>Shufeng Sun, Yi Huang</i>	1172
112	Even-Mode Excited Substrate Integrated Coaxial Line for Short Pulse and Ultra Wideband Applications <i>Li Xie, Xiaoxing Yin, Cheng Lu, Liang Yang, Hongxin Zhao</i>	1176

115	Miniaturized Balanced Low Noise Amplifier for TD-SCDMA application <i>Chen Sun, Tao Su, Qingqing Zhang, Rongrong Chen</i>	1179
128	Compact Size Pyramidal Horn Lens Antenna for E-band Gigabit Point-to-Point Communications <i>Mustafa K. Taher Al-Nuaimi, Wei Hong</i>	1183
162	A Broad Band Rectifier with Wide Input Power Range for Electromagnetic Energy Harvesting <i>Mei-Juan Nie, Xue-Xia Yang, Guan-Nan Tan</i>	1187
166	A Low Power Demodulator Using Sub-threshold Design <i>Mario Mendizabal, Chunhong Chen, Feng Zhou</i>	1190
183	Novel Ultra-Wideband (UWB) Bandpass Filter With a Notched Band Using Defected Ground Structure <i>Chang Su, Tao Jiang</i>	1194
188	A Miniaturized Surface Mount Bandpass Filter Implemented with Substrate Integrated Coaxial Line <i>Cheng Lu, Xiaoxing Yin, Li Xie, Qiao Chen, Hongxin Zhao</i>	1198
197	Suspended Microstrip Line Covered with Dielectric in the Ground Plate for THz Transmission <i>Xinglin Shen, Tingzhou Jiang, Yi Liu, Xingji Tang, Guoqiang Chen</i>	1201
203	Novel Millimeter-Wave Bandpass Filter Using Discriminating Coupling for Fundamental Mode Suppression <i>Qing-yi Guo, Xiu yin Zhang, Li Gao, Shaoyong Zheng</i>	1203
204	Ultra-band Microwave Absorber Using a Composition of Phase Gradient Metasurface and Magnetic Materials <i>Yongfeng Li, Jieqiu Zhang, Shaobo Qu, Jiafu Wang, Lin Zheng, Hongya Chen, Mingbao Yan</i>	1206
207	A wavelength demultiplexer based on plasmonic broadband slow-wave systems <i>Yong Jin Zhou*, Bao Jia Yang</i>	1210
216	End Gap Coupled Flexible CPW Resonators on Polyimide with New Analytic Bent Configuration <i>Hyunwook Lee, Hae-Soo Jeong, Tae-Young Kim, Jung-Tae Kim, Jong-Chul Lee</i>	1213
232	Compact Dual-band Bandstop Resonator Based on CRLH-TL <i>Yang Wang, Zufu Zhang, Min-Jae Lee, Jong-Chul Lee, Ki-Cheol Yoon</i>	1217
259	Low-loss LTCC-based Gap Waveguide Feeding Network for W-band Application <i>Baolin Cao, Dan Li, Hao Wang, Weizhe Shi, Yong Huang</i>	1220
260	Electromagnetic Scattering and Doppler Spectra Analysis of Sea Surface Covered by Oil Spills <i>Lixin Guo, Pengju Yang</i>	1224
265	Design and implementation of an SIW triple-mode filter <i>Feng Chao Ren, Wei Hong, Ke Wu</i>	1228

267	Parallel Coupled Microstrip and E-plane Metal Insert Waveguide Band-pass Filter at W-band <i>Chengran Dai, Luo Hao, Shuhua Bo, Houjun Sun</i>	1231
269	A Second-order Band-pass Frequency-Selective Surface Using Hexagonal Aperture Coupled Patches: Design and Validation <i>Lin Zheng, Shaobo Qu, Jiafu Wang, Jieqiu Zhang, Hang Zhou, Mingbao Yan, Yongfeng Li</i>	1234
275	Design of the 110GHz High Order Multiplier Base on IMPATT Diode <i>Zhongbo Zhu*, Wanzhao Cui, Qingui Tan, Wei Jiang, Shuantao Li</i>	1239
282	Development of LTE Wideband Receiver <i>Chengshuai Liu, Ling Tian, Yu Xiang, Wei Hong</i>	1242
283	Design of LTE Wideband Transmitter <i>Mei Jiang, Ling Tian, Juan Yu, Wei Hong</i>	1245
288	Front End Design of 8mm Polarimetric Microwave Radiometer <i>Qing Li, Yong Liu, Yu-Ming Wu, Li-Ming Si, Xin Lv</i>	1248
298	Effects of Signal Line References on Non-ideal Ground Plane <i>Li Zi-ning, Jia Yun-feng, Yang Liu, Zhang Guang-yu, Lu Ling</i>	1252
299	A Novel Planer Transition Structure from Micro-strip Line to Waveguide <i>Hao Luo, Chengran Dai, Yu Xiao, Houjun Sun</i>	1256
308	Ultra-broadband, High Resolution Frequency Synthesizer for LTE Radio Channel Emulator <i>Bo Liu, Ling Tian, Wei Hong</i>	1260
310	PCB Pad Design for Board to Board SMP Connector <i>Anwang Xu, Zhuo Li, Jian Yan, Jianye Liu</i>	1264
336	Design of Quasi-Optical 500GHz Duplexer <i>Jun Deng, Xue-tian Wang, Chi Liu, Wei Wang</i>	1267
343	A Miniaturized LTCC Marchand Balun Used in THz System-on-Package <i>Mingxun Li, Jinchao Mou, Fengwen Gao, Bo Yuan, Xin Lv</i>	1271
344	Study on the Method of Noise Temperature Measurement for Terachertz Mixers <i>Shu-Hua BO, Jin-Chao MOU, Cheng-Ran DAI, Hao-Peng YUAN, Wei-Hua YU</i>	1275
346	A Low RCS Metasurface for THz Applications <i>Li Hua Gao, Nan Xiang, Jie Zhao, Di Sha Dong, Ke Wang, Qiang Cheng</i>	1279
348	Study on Integrated Lens for 220 GHz Quasi-optical Mixers <i>Ran Yang, Jin-Chao Mou, Xin Lv</i>	1282
357	Compact Bandpass Filter Using Integrated Passive Devices Fabrication Process on GaAs Substrate for Global System for Mobile Communications <i>Yang Li, Cong Wang, Nam-young Kim</i>	1286
363	A New W-band H-plane T-junction Combiner <i>Lei Li, Anxue Zhang, Ting Zhan</i>	1288

365	A Compact 3-dB 90° Directional Coupler in Integrated Passive Devices Manufacturing Process for LTE Applications <i>Cong Wang, Yang Li, Nam-young Kim</i>	1291
373	A Terahertz Waveguide Splitter using the Principle of Photonic Crystal Band-Gap <i>Ying Li, Wei Wang, Kai Zhou*, Jun Deng, Lin Yang</i>	1293
395	A Novel Planar Interconnection Structure with Substrate Integrated Waveguide <i>Hui Zhang, Wei Hong, Peng Chen, Hongjun Tang</i>	1296
399	Analysis and Application of Solenoid Inductor <i>Bo Xiang, Hongfu Meng, Zhongchao Yin, Shuanzhu Hao</i>	1300
434	Doherty Power Amplifiers with Improved Load Modulation for 100 MHz LTE-advanced Application <i>Xiao-Wei Zhu, Jing Xia, Lei Zhang, Jian-Feng Zhai, Yin-Jin Sun, Fan Meng, Chang Liu, Wan-Cheng Ju</i>	1303
439	Integration of Heterogeneous Phased Arrays using Multi-operational Mode Synthesized Transmission Lines <i>Tzyh-Ghuang Ma, Chi-Hui Lai, Chen-Yuan Shiau</i>	N/A
452	Radio-Frequency Direction Finding Inspired by Human Ears <i>Xiaoju Yu, Hao Xin</i>	N/A
478	Microwave Tomographic Imaging for Industrial and Medical Applications <i>Zhipeng Wu</i>	1312
479	RF Devices for Reconfigurable Transceiver System <i>Kukjin Chun, Sehwan Kim, Jinmyung Kim</i>	1316
482	A Novel Design and Characterization for 67GHz NLTL-Based Harmonic Phase Reference <i>Yuanxiao Gou, Jiahui Fu, Maoliu Lin</i>	1320
495	Design of a 6~15GHz Folded Mixer in 0.13um CMOS Technology <i>Lin Shengmeng, Zhuang Xiaobo</i>	1324
512	A Novel Compact Dual-band Butler Matrix Design <i>Changfei Zhou, Jiahui Fu, Haifeng Sun, Qun Wu</i>	1327
513	A 2.45GHz High-Power and High-Efficiency Rectifier Based on a Power-Dividing Network <i>Lei-Qiang Ma, Fan-Yi Meng*, Xiao-Xin Liu, Peng-Yuan Wang</i>	1331
514	Terahertz Imaging System for Remote Sensing and Security Applications <i>Feifei Xin, Hongyan Su, Yong Xiao</i>	1335
519	100nm MHEMT Transistor Technology for W-band Amplifier <i>Kang Yaohui, Wang Weibo, Gao jianfeng, Chen chen</i>	1339
520	A Millimeter wave 11W GaN MMIC Power Amplifier <i>Xuming Yu, Wei Hong, Weibo Wang, Hongqi Tao, Chunjiang Ren</i>	1342
521	Design of Single Crystal Silicon Based RF MEMS Switch with High Contact Force <i>Mei Di, Wu Jing, Yu YuanWei, Zhang PeiRan, Zhu Jian</i>	1345

522	Low Insertion Loss GHz GaN SAW Device Fabricated on Self-standing GaN Substrate <i>Jianjun Zhou, Liang Li, Haiyan Lu, Cen Kong, Yuechan Kong, Tangsheng Chen, Chen Chen, Xiaoyu Wang, Haodong Wu</i>	1348
526	The Study of Effective Accumulation Algorithm of the Missile-borne Chirp Radar <i>Zhang Jun, Wang Wen-peng, Fan Qing-hui</i>	1351
527	Comparative Study of Two Methods of Tracking Point Selection <i>Xiao Yong, Fan Qing-hui, Wang Wen-peng</i>	1355
528	Design of A New Active Frequency Selective Surface(FSS) <i>Deng Feng</i>	1359
530	A New Equivalent Circuit Of Miniaturized Frequency Selective Surface <i>Deng Feng</i>	1363
533	Investigation on the Pulse Characteristics of RF/Microwave Limiter Based on Multistage PIN Diodes and Schottky Diodes <i>Dongdong Wang, Lan Gao, Shengquan Zheng, Feng Deng, Dongyun Hou</i>	1366
534	Investigation on the EMP Damage Characteristics of RF/Microwave PIN Diode Limiter <i>Dongdong Wang, Lan Gao, Shengquan Zheng, Feng Deng, Dongyun Hou</i>	1370
535	The Near-field Measurement and Near-Far field Transformation of Microwave Scattering of a Plate at Different Distances <i>Chonghua Fang, Qifeng Liu, Fan Ding, Xiaonan Zhao, Jing Xiao</i>	1373
561	A Novel Wideband Microwave Gain Equalizer Using SIR Branch Lines <i>Tai-fu Zhou, Jian Huang</i>	1377
563	A High Power Amplifier At Ka-band <i>Yang Jiansong, Guo Dechun</i>	1380
570	The BER Performance of MB-IR-UWB System Based on MIMO <i>Yu Xin, Qi Lin, Dou Zheng</i>	1384
575	An S-Band Left-Handed Tunable Phase Shifter Based on BST Thin Film <i>Lei-Qiang Ma, Fan-Yi Meng*, Xiao-Xin Liu, Peng-Yuan Wang</i>	1389
580	How Can We Unify Numerical Methods With A Single Mathematic Framework? <i>Zhizhang (David) Chen, Shunchuang Yang, Yiqiang Yu</i>	1392
587	A Novel Tunable Phase Shifter Based on Composited Right/Left Handed Transmission Line <i>Quan Sun, Wan Chen, Bo Lv, Jian Cui, Jiahui Fu</i>	1396
592	A 0.33THz Schottky Diode Frequency Doubler with 8% Efficiency and 5.4mW Output Power <i>Changfei Yao, Ming Zhou, Yunsheng Luo</i>	1399
593	Microstrip to Coplanar Strip Double-Y Balun with Very High Upper Frequency Limitation <i>Ma Ruyu, Fu Jiahui</i>	1402
595	Design of A Ku-Band AlGaIn/GaN Low Noise Amplifier <i>Fengqiang Guo, Zhihong Yao</i>	1406

596	A Tunable S-band Lumped Phase Shifter Based on Similar Principle of Composite Right/Left Handed Transmission Line <i>Ma Ruyu, Fu Jiahui</i>	1409
603	An S-Band Defferential Power Divider Based on Defected Ground Structure <i>Lei-Qiang Ma, Rui-Zhi Liu, Fan-Yi Meng, Peng-Yuan Wang</i>	1412
608	Folded-Type Waveguide and Its Application in High Power Millimeter Wave and THz Sources <i>Y.Y.Wei, Y.B.Gong, J.Xu, H.R.Gong, L.N.Yue, H.R.Yin, G.Q.Zhao, M.Huang, T.Tang, Z.Lu, Z.L.Wang, Z.Y.Duan, W.X.Wang, J.J.Feng, J.Cai, B.Qu, Y.F.Hu, H.Y.Li, Y.Tang</i>	N/A
613	Research on the Method for Producing a Highly Linear FMCW Signal Based on the PLL Circuits <i>Hou jianqiang, Shi kaiyun, Lei zhenya</i>	1416

Topic VI: EMC & EMI		
PID	Paper Title/ Authors	Page
087	An Investigation of Calibration Approaches to RS105 Test System of MIL-STD-461 <i>Lijun Yao, Feng Zhang, Dong Liu, Hongliang Sun, Tao Shen, Ning Kang, Jianling Huang</i>	1420
090	EMC Analysis for Multi-point Grounding Cable of Aircraft <i>Lei yongliang, Lei zhenya, Lv zhiqing, Wang liying, Yan yaofeng, Shi Kaiyun, Huo Yunfeng</i>	1423
135	Analysis of Response of the X-band Microstrip Antenna Array to Electromagnetic Pulse <i>Lei LI, Xin ZHANG</i>	1427
142	Coordination of the Diode and Capacitor in the Tx Line For the Protection of the Chipset from EOS <i>Sigyung Song, Bo Pu, Taeho Kim, Jungje Bae, Duckjin Kim, Wansoo Nah</i>	1432
192	A Sub-circuit-based Method to Model the Passive Distribution Network <i>Zhenyi Wang, Changlin Zhou, Tong Liu</i>	1436
193	Simulation Analysis of Electromagnetic Susceptibility for 32-Bit Digital Signal Controllers <i>Changlin Zhou, Tong Liu, Zhenyi Wang, Hongtao Yang, Weidong Zhu, Shiyong Guo</i>	1440
322	Signal Integrity Analysis of Localized New EBG Structure for Ultra-wideband Simultaneous Switching Noise Suppression <i>Haopeng Yuan, Lili Fang, Chenjuan Li, Shuhua Bo, Wang Guan</i>	1444
327	Integrated Near Field Scanning System for High Frequency Devices <i>Hengxu Li, Boyuan Zhu, M.Vatankhah Varnoosfaderani, Junwei Lu</i>	1447
361	Analysis of the Antenna Coupling between Electronic Information Equipment for Intersystem EMC Prediction <i>Wei Wang, Xuetian Wang, Yutao Zhou, Xiaozhong Shui, Jiafei Zhao</i>	1451
398	Credibility Evaluation of Uncertainty Analysis Results of EMC Simulation <i>Jinjun Bai, Gang Zhang, Lixin Wang, Alistair Duffy</i>	1454
531	Higher Frequency Filtering based on Absorbing Material <i>Tan Hui, Ding Qiao</i>	1458
532	Modeling and Simulation of the Nonlinear Response of Receiver Amplifiers <i>Tan Hui, Wu Wei</i>	1461
536	Performance Simulation and Analysis of Typical Mode of Jamming on TDLCS <i>Da Gang XIE, Qi Feng Liu, Xiao Yu An, Ying Biao Cheng</i>	1466
538	Simulation of LF Radiated EME of Cabin <i>Da Gang Xie, Nan Wu, Chun Wang, Mou Hui Huang</i>	1470
539	Theory and Experiment Research on Electromagnetic Coupling of Microwave Antennas <i>Song Dong-an, Ding Qiao, Huang Ming liang, Zhang Qi</i>	1474
543	Transient Response Analysis of the Broad-Band Planar Antenna Illuminated by an external EMP Source <i>Qi-Feng Liu, Jun Yu, Jing-Wei Liu</i>	1477

550	Lightning Menace to Ship and Corresponding Protection Design Requirements <i>Zheng Sheng-quan, Hou Dong-yun, Deng Feng, Wang Dong-dong</i>	1481
551	Experimental Validation of the Metamaterial Absorber for RCS Reduction <i>Ding-e Wen, Jia Zhang, Chonghua Fang, Qiao Ding, Jianwei Lian, Qi Zhang, Jianfeng Zhang</i>	1485
553	Research on the Surface Current Automatic Measurement Technology <i>Jia Zhang, Wenwu Song, Wei Zhang, Chunguang Li</i>	1489
573	A Novel Algorithm for Attributes of Lightning Electromagnetic Field in Large Range <i>Shaoqing Zhang, Hong Lei, Xiaoliang Si</i>	1492
626	Investigation on the Radiation Features of the Flexible Antenna at 5.8GHz <i>Shao-Rui Shi, Yu-Ming Wu, Pei-Pei Lu, Qun Wu</i>	1496
627	Folded-Type Waveguide and Its Application in High Power Millimeter Wave and THz Sources <i>Y.Y. Wei, Y. B. Gong, J. Xu, H.R.Gong, L.N.Yue, H.R.Yin, G.Q.Zhao, M.Huang, T. Tang, Z. Lu, Z.L.Wang, Z.Y.Duan, W.X.Wang, J.J. Feng, J. Cai, B. Qu, Y.F.Hu, H.Y.Li, Y.Tang</i>	1501