

2010 International Conference on Communications, Circuits and Systems

(ICCCAS 2010)

**Chengdu, China
28 – 30 July 2010**

**Volume 1
Pages 1-495**



**IEEE Catalog Number: CFP10807-PRT
ISBN: 978-1-4244-8224-5**

Contents of Proceedings of ICCCAS 2010

Track 01. *Wireless Communication Symposium*

TPC Co-Chairs: *Li-Chun WANG* (NJTU, Taiwan China)

Sofiene Afes (INRS, Canada)

A-C Pang (NTU, Taiwan China)

Baoming BAI (Xidian U, China)

Sammy Chan (CityU, Hong Kong)

C X Wang (Heriot-Watt U, UK)

Keang-Po Ricky Ho (NTU, Taiwan China)

#01_01_01	Novel Transmit Diversity Schemes and Iterative Channel Estimation for TDS-OFDM System	1
	<i>Wenting Chang and Jintao Wang and Chang yong Pan and Jian Song</i> Department of Electrical Engineering, Tsinghua University, Beijing, 100084, China	
#01_01_06	Two Novel Noise Estimation Methods with Low Complexity for the OFDM System	6
	<i>Shanshan Shen, Hang Long, Jinghua Kuang, Kan Zheng, Wenbo Wang</i> Key Laboratory of Universal Wireless Communication, Ministry of Education; Beijing University of Posts & Telecommunications, Beijing China.	
#01_01_08	Capacity of MIMO Broadcast Channels in Cognitive Radio Networks	10
	<i>Hai-Lin Xiao, Shan Ouyang, Member, IEEE, and Feng Zhao</i> School of Information and Communications, Guilin University of Electronic Technology, Guilin 541004, Guangxi, China	
#01_01_09	A Synchronization Scheme for MIMO OFDM System	15
	<i>Zhongjie Gao, Junhui Xu, Zhongpei Zhang</i> National Key Laboratory of Science and Technology on Communications University of Electronic Science and Technology of China	
#01_01_10	Simulation and Analysis of MIMO-OFDM System Based on Simulink	19
	<i>Jun Zhang, Qing Zhao</i> National Key Laboratory of Science and Technology on Communications, UESTC, Chengdu, China	
#01_01_11	Performance Comparison Between CI/OFDM and OFDM Systems	23
	<i>Pei Gao, Jun Wang, Shaoqian Li and Hui Hao</i> National Key Laboratory of Science and Technology on Communications University of Electronic Science and Technology of China, Chengdu, Sichuan, 611731, China	
#01_01_14	Simulation and Analysis of OFDM System	28
	<i>Jun Zhang, Zhongpei Zhang</i>	

	National Key Laboratory of Science and Technology on Communications, UESTC, Chengdu, China	
#01_01_04	A Novel Codebook Design with LBG Algorithm in Precoding Systems Under Spatial Correlated Channel	32
	<i>Yueying Zhang, Hang Long, Shanshan Shen, Kan Zheng, Wenbo Wang</i> Authors are with Wireless Signal Processing and Network Laboratory, Beijing University of Posts & Telecommunications, Beijing China.	
#01_01_03	Distributed Temporal Precoding with a Novel Power Allocation Scheme in Cooperative Systems	37
	<i>Fangxiang Wang, Hang Long, Yueying Zhang, Kan Zheng, Wenbo Wang</i> The authors are with the Wireless Signal Processing and Network Laboratory, key Laboratory of Universal Wireless Communication, Ministry of Education, Beijing University of Posts & Telecommunications, Beijing China	
#01_01_13	An Appropriate Radius for Reduced-Complexity Sphere Decoding	41
	<i>Tadaharu TAKAHASHI, Tatsuki FUKUDA, Chengkun SUN and Hua-An ZHAO</i> Graduate School of Science and Technology, Kumamoto University, Japan	
#01_02_03	The SP Algorithm Decoding of Convolutional Codes	45
	LIN Jing-li1, HUANG Yong1, ZHANG Yi2, YAN Gong-jun3 School of Electrical and Information engineering, Xihua University, Chengdu, Sichuan, China	
#01_10_04	Coexistence Studies for TD-LTE with Radar System in the Band 2300-2400 MHz	49
	<i>Wei LIU, Jian FANG, Haifeng TAN, Biao HUANG, Wenbo WANG</i> Wireless Signal Processing and Network Lab, Beijing University of Post and Telecommunications, Beijing	
#01_07_02	Semi-Persistent Scheduling for VoIP Service in the LTE-Advanced Relaying Networks	54
	<i>Jianhua Liu, Chunjing Hu, Zhangchao Ma, Kan Zheng, Wenbo Wang</i> The authors are with Wireless Signal Processing and Network Lab, Key Laboratory of Universal Wireless Communication, Ministry of Education, Beijing University of Posts & Telecommunications, Beijing, China.	
#01_10_07	A Novel Detection Scheme to Mitigate the TD-LTE Interference	59
	<i>Jian FANG, Xiaopei ZHU, Biao HUANG, Xingguo ZHOU</i> State Radio Monitoring Center, Beijing, China	
#01_03_01	Traffic Load Balance Methods in the LTE-Advanced System with Carrier Aggregation	63
	<i>Lei Zhang, Fei Liu, Lin Huang and Wenbo Wang, Member, IEEE</i> Key Lab of Universal Wireless Communications, Ministry of Education, Beijing	
#01_10_08	Linear Precoding and Power Allocation in the Downlink of Cognitive Radio Networks	68
	<i>Dongmei Jiang, Haixia Zhang and Dongfeng Yuan</i> School of Information Science and Engineering, Shandong University, China.	
#01_07_05	Optimal Training Power Allocation for Amplify and Forward Relay Networks	73
	<i>Yu Gao, Dengsheng Lin, Bo Li and Shaoqian Li</i> National Key laboratory of Science and Technology on Communications University of Electronic Science and Technology of China, Chengdu, China	
#01_08_01	Optimal Joint Resource Allocation in OFDMA-Based Relay System	78
	<i>Rui Yin, Yu Zhang, Jietao Zhang, Guanding Yu, and Zhaoyang Zhang</i> Institute of Information and Communication Engineering, Zhejiang University, Hangzhou 310027, China	
#01_06_01	The CRLB for WSNs Location Estimation in NLOS Environments	83

J.Y. Huang and Q. Wan

Dept. of Electronic Engineering, University of Electronic Science and Technology of China,
Chengdu, China

- #01_06_09 Research on the Optimization of Carbon emissions of Distribution Centers Location Decision 87**
Li Xiaoli Wen Jun Li Jun
School of Computer Science and Engineering, University of Electric Science and Technology of China, Chengdu, China, 610054
- #01_06_03 Distributed Source Localization in Wireless Sensor Networks 90**
Wanzhi Qiu, Peng Hao and Efstratios Skafidas
National ICT Australia, Department of Electrical and Electronic Engineering The University of Melbourne, Parkville, Victoria 3010, Australia
- #01_06_04 Large-scale Wireless Sensor Networks Situation Awareness Using Multivariate Time Series Association Rules Mining 95**
Weisong He, Hongmei Xiang
Chongqing College of Electronic Engineering, University of Electronic Science and Technology of China
- #01_06_02 Space-Time-Energy Based Forwarding Protocol For Underwater Acoustic Sensor Networks 98**
Qiming Tian, Juan Wen1, Guanding Yu
Dept. of Computer, Wenzhou Vocational & Technical College, Wenzhou 325035, China
- #01_06_05 Energy-aware Routing Algorithm in WSN using Predication-mode 103**
Ru Huang Zhihua Chen Guanghui Xu
School of Information Science & Engineering, East China University of Science and Technology, Shanghai, China
- #01_02_02 The Estimation of Multi-path based ARMA Spectrum Estimation in UWB Channel 108**
Lu Kan, ZHUO Yong Ning
National Key Laboratory of Science and Technology on Communications University of Electronic Science and Technology of China, ChengDu Sichuan 611731, China
- #01_06_10 Outliers Detection based on Negative Selection Algorithm 112**
Zhang Xiaoling, Wen Jun Wan XiaoFeng
Computer Science and Engineering University of Electronic Science and Technology of China Chengdu, China
- #01_10_02 A New Adaptive Predistorter Based on Estimator and LUT 115**
Zhang Song, Wen Hong, Zhang Gaoyuan, Ren Xiangwei
National Key Laboratory of Science and Technology on Communications, Univ. of Electronic. Sci. & Tech. of China, Chengdu, 610054
- #01_06_07 Automatic Identification Technology Research on Opto-Electronic Hybrid Pattern Recognition System 119**
XU Yi, LIU Zhong and WEN Jun
School of Computer Science and Engineering, University of Electronic Science and Technology of China, Chengdu, Sichuan, China
- #01_07_04 Performance Analysis of Scheduling Algorithms in the Relay-Aided Cellular Networks 122**
Yi Zhang, Zhangchao Ma, Jianhua Liu, Wenbo Wang
Wireless Signal Processing and Network Lab, Key Laboratory of Universal Wireless Communication, Ministry of Education, Beijing University of Posts

	& Telecommunications, Beijing, China.	
#01_10_03	Performance Analysis of the Cooperative DS/SS Systems in Single-tone Interference Over Flat Rayleigh Fading Channels	126
	<i>ZANG Guo-zhen GAO Yuan-yuan MU Jing</i>	
	Institute of Communications Engineering, PLA University of Science and Technology, Nanjing 210007, China	
#01_07_01	Selective Fractional Incremental Relaying Protocol in Cooperative Systems	131
	<i>Jinghua Kuang, Chunjing Hu, Hang Long, Kan Zheng, Wenbo Wang</i>	
	The authors are with Wireless Signal Processing and Network Lab, Key Laboratory of Universal Wireless Communication, Ministry of Education, Beijing University of Posts & Telecommunications, Beijing, China.	
#01_07_03	A New Strategy of Cooperative Communication for Wireless Networks	136
	<i>Lin PAN, Chen LIU and Hua-An ZHAO, Member, IEEE</i>	
	Coll. of Electronic Science and Engineering, Nanjing University of Posts & Telecommunications, 210046, China	
#01_10_06	MSK Signal Timing Recovery Technology Research	141
	<i>Zhang M i, Yan Xiao, Kaiyu Qin</i>	
	Institute of Astronautics & Aeronautics, University Of Electronic Science And Technology of China, Chengdu, 610054, PRC	
#01_06_06	An Authentication Approach to Enhance RFID Security	144
	<i>WEN Jun, IAN Wenhong, WANG Weidong</i>	
	Computer Science and Engineering, University of Electronic Science and Technology of China, Chengdu 610054, China,	
#01_06_08	A Scheme to Enhance Security of RFID Middleware	147
	<i>GENG Dongjiu WEN Jun TIAN Wenhong</i>	
	School of Computer Science & Engineering of University of Electronic Science and Technology of China, Chengdu, China	
#01_10_01	A Stream-Cipher Slow-Frequency-Hopping Communication System	150
	<i>Li Chunfu and Yu Juebang</i>	
	University of Electronic Science and Technology of China, Chengdu, Sichuan, China	
#01_08_02	Cross-layer Admission Control Based on Service Upgrading/Degrading in CDMA Systems with Successive Interference Cancellation	153
	<i>Zhaorong Zhou, Tianye Tang, Yide Zhang and Gang Feng</i>	
	School of Physics and Electronic Engineering, Sichuan Normal University, Chengdu, Sichuan, China	
#01_08_03	Cross-layer Rate Allocation in CDMA Systems with Imperfect Successive Interference Cancellation	158
	<i>Zhaorong Zhou, Tianye Tang, Zhongrong Wang, Gang Feng and Lemin Li</i>	
	School of Physics and Electronic Engineering, Sichuan Normal University, Chengdu, China	
#01_03_02	An MDP-based Handoff Decision Algorithm for Multi-Domain Heterogeneous Wireless Access Networks	163
	<i>Yaxin Chen, Huifang Chen, Lei Xie, Kuang Wang</i>	
	Dept. of Information Science and Electronic Engineering, Zhejiang University, Hangzhou 310027, P. R. China	
#01_03_03	GoS Based Admission Control in Power Constrained CDMA Systems with Successive Interference Cancellation	168

- Zhaorong Zhou, Zhongrong Wang, Yide Zhang and Lemin Li*
School of Physics and Electronic Engineering, Sichuan Normal University, Chengdu,
Sichuan, China
- #01_01_07 Power Allocation in Cognitive MISO Wireless Networks 173**
Hai-lin Xiao, Shan Ouyang, senior member, IEEE, and Feng Zhao
School of information and communication, Guilin University of Electronic Technology,
Guilin, Guangxi 541004, China
- #01_03_04 Interference Management in OFDMA Femtocell Systems Using Fractional Frequency Reuse 176**
Taeyoung Lee, Jisun Yoon, Sangtae Lee, non Member and Jitae Shin, Member, IEEE
School of Information and Communication Engineering Sungkyunkwan University,
Suwon, Kyeonggi, Korea
- #01_10_09 Selection Combining Receiver for FFH/BFSK Systems with Partial-band Noise Jamming 181**
Zhiqiang Zhou, Yufan Cheng and Shaoqian Li
National Key Laboratory of Communication, University of Electronic Science and Technology
of China,
- #01_10_10 Selective Paging Schemes for LEO Satellite Network Based on Dynamic Location Area 186**
Fan Hu, Lidong Zhu, Member, IEEE
National Key Laboratory of Communication, University of Electronic Science and Technology
of China, Chengdu, Sichuan, China

Track 02. Network Security Symposium

TPC Co-Chairs:*Tao LI* (SCU, China)

Fengli ZHANG (UESTC, China)

Hongxia Wang (SWTJU, China)

- #02_02_03 Chaos Ant Colony Optimization Algorithm for the Multi-QoS Constraint Multicast Routing Problem 190**
Yang Hao, Xian Zheng-Zheng, Qin Zhiguang
College of Computer Science and Engineering, University of Electronic Science and Technology
of China, Chengdu, Sichuan, China
- #02_05_01 A Dynamic Group-based Scheduling Method for Low-latency Anonymous Communication Systems 193**
Chong Fu, Hu Xiong, Weizhong Qian, Hongrong Cheng, Zhiguang Qin
School of Computer Science & Engineering, University of Electronic Science
and Technology of China, Chengdu 610054, China
- #02_10_12 A Classification Algorithm of Signed Networks Based on Link Analysis 198**
Zehui Qu, Yong Wang, Juan Wang, Fengli Zhang and Zhiguang Qin,
School of Computer Science and Engineering, University of Electronic Science
and Technology of China, Chengdu 611731, China,
- #02_10_04 A Framework on Software Fault Localization: Variable Stress Reaction 202**
Peng Nie, Ji Geng and Zhiguang Qin

	School of Computer Science and Engineering, University of Electronic Science and Technology, 611731, Chengdu, China	
#02_02_02	Achievement and Design of Equipment Battle Simulation Database Based on HLA <i>Wu Rongchun Zhang Fengli</i> First A. Chengdu Commanding College of Chinese People Armed Force, Chengdu Sichuan 610213, China.	207
#02_02_06	Make Filters Smart in Multimedia Streams Environments <i>Jun Li, Peng Zhang, JianLong Tan, Li Guo, Ping Liu</i> School of Computer Sci. & Tech., Beijing Univ. of Posts & Telecommunications, Beijing, 100876, China	211
#02_02_08	The analysis and Collection of Network Characters <i>Fengli Zhang, Yong Wang, Juan Wang</i> School of Computer Science and Engineering University of Electronic Science and Technology in China Chengdu, Sichuan, PR. China	216
#02_02_05	Similarity-Based Hierarchical Structured Trust and Reputation Model in Peer-to-Peer Networks <i>Ting Zhong, Xiaojuan Liao, and Ji Geng</i> School of Computer Science & Engineering/University of Electronic Science and Technology of China/Chengdu, Sichuan, China	221
#02_02_09	The Influence of Active Measurement on Unstructured Peer-to-Peer Network <i>Ying Sha, Zhibin Zhang, Jianlong Tan</i> The Research Center of Information Security, Institute of Computing Technology National Engineering Laboratory for Information Security Technologies Chinese Academy of Sciences, Beijing, 100190, China	226
#02_05_02	Privacy Prevention Based on Trust Model for P2P Streaming Systems <i>Yong WANG, Kerui HUANG, Bin WANG, Zhiguang QIN, and Ge HUANG</i> Dept. of Computer Science, University of Electronic and Science Technology of China, Chengdu, China	231
#02_10_03	A P2P Reputation Model Based On Ant Colony Algorithm <i>Lei Yang, ZhiGuang Qin, Can Wang, Yao Liu, Chao Sheng Feng</i> College of Computer Science and Engineering, University of Electronic Science and Technology of China, Chengdu, China	236
#02_10_05	Modeling Passive Worm Propagation in Mobile P2P Networks <i>Feng Chao-sheng, Qin Zhi-guang, Yuan Ding, Liu Xia, Wang Jian-jun</i> School of Computer Science, Sichuan Normal University, Chengdu 610066, China	241
#02_10_08	Heterogeneity and Load Balance in Structured P2P System <i>Lin Xia, Han-Cong Duan1, Xu Zhou, Zhifeng-Zhao, Xiao-Wen Nie</i> of Computer Science & Engineering, University of Electronic Science and Technology of China, Chengdu, China	245
#02_10_09	A Reputation-Based Method for controlling Free-Ride in P2P networks <i>Lei Yang, ZhiGuang Qin, Hao Yang, Can Wang, ChaoSheng Feng</i> College of Computer Science and Engineering, University of Electronic Science and Technology of China, Chengdu, China	249
#02_02_01	Conducting Routing Table Poisoning Attack in DHT Networks <i>Haiman Lin</i> Beijing University of Posts and Telecommunications, China	254

#02_02_07	Analyzing the Availability of Fast-flux based Service Network Under Countermeasures	259
	<i>Xiao Wang, Jinqiao Shi, Longtao He, Li Guo and Qingfeng Tan</i>	
	Chinese National Engineering Laboratory for Information Security Technologies Information Security Research Center, Institute of Computing Technology, Chinese Academy of Sciences, Beijing, China	
#02_10_14	A Novel Encryption Scheme for Data Deduplication System	265
	<i>Can Wang, Zhi-guang Qin, Jing Peng, Juan Wang</i>	
	School of Computer Science and Engineering, University of Electronic Science and Technology of China, Chengdu, China	
#02_10_07	Design of Secure FTP System	270
	<i>Liu Xia, Feng Chao-sheng, Yuan Ding, Wang Can</i>	
	School of Computer Science, Sichuan Normal University, Chengdu 610068, China	
#02_10_15	KUBERA: A Security Model for Web Applications	274
	<i>Qiang Wang, Zhiguang Qin</i>	
	School of Computer Science and Engineering University of Electronic Science and Technology of China, Chengdu, China	
#02_10_02	Alert Analysis and Threat Evaluation in Network Situation Awareness	278
	<i>Juan Wang, Feng-li Zhang, Jing Jin, Wei Chen</i>	
	School of Computer Science and Engineering, University of Electronic Science and Technology, 611731, Chengdu, China.	
#02_10_06	A Novel Spam Image Filtering Framework with Multi-Label Classification	282
	<i>Hongrong Cheng, Zhiguang Qin, Chong Fu, and Yong Wang</i>	
	School of Computer Science & Engineering University of Electronic Science & Technology of China, Chengdu, Sichuan 611731, China	
#02_10_10	Damping at Anti-spam Gateway	286
	<i>Shuang Chen, Feng-li Zhang, Qiao Liu</i>	
	School of Computer Science & Software Engineering University of Electronic Science & Technology of China Chengdu, Sichuan, China	
#02_10_11	Image Spam Classification based on Low-level Image Features	290
	<i>Chao Wang, Fengli Zhang, Fagen Li, Qiao Liu</i>	
	School of Computer Science & Engineering University of Electronic Science & Technology of China, Chengdu, Sichuan, China	
#02_10_17	Feature Selection for Image Spam Classification	294
	<i>Qiao Liu, Feng-li Zhang, Zhi-guang Qin, Chao Wang, Shuang Chen, Qiu-ming Ma</i>	
	School of Computer Science and Engineering, University of Electronic Science and Technology of China, 610054, China	

Track 03. Optical and Broadband Communication Symposium

TPC Co-Chairs: *Kun QIU* (UESTC, China)

Ping Shum (NTU, Singapore)

Ricky Keanpo Ho (NTU, Taiwan China)

#03_07_01	A Distributed Algorithm for Optimal Network Resource Allocation Considering Delay Sensitive Traffic	298
	<i>Gang Sun, Lemin Li, Hongfang Yu, Hao Di</i>	
	School of Communication & Information Engineering University of Electronic Science and Technology of China, Chengdu, Sichuan, China	
#03_09_01	10Gb/s RS-BCH Concatenated Codec with Parallel Strategies for Fiber Communications	303
	<i>Qingsheng HU, Chengkun SUN and Hua-An ZHAO</i>	
	Institute of RF & OE-ICs., Southeast University, Nanjing 210096, China	
#03_09_02	Performance Estimation of Three Dimensional Free Space Optoelectronic Switching Network	308
	<i>Yun-Parn Lee and Yulei Zhang</i>	
	Department of Electronic Engineering, Ming Chuan University, Taoyuan, Taiwan China	

Track 04. Signal Processing Symposium

TPC Co-Chairs: *H K Kwan* (UWindsor,Canada)

Ali Akansu (NJIT,USA)

Maja Bystrom

Wing-Kuen Ling (KCL,UK)

Chia-Hui WANG (MCU,Taiwan China)

#04_01_01	A Novel Fast High-Resolution SSMUSIC Algorithm Based on Short Data Samples	313
	<i>Xian-Zhou CHEN, Lu GAN, and Li-Ping LI</i>	
	Electronic Engineering/University of Electronic Science & Technology of China, Chengdu, Sichuan, China	
#04_03_01	An Algorithm for Precisely Estimating Loop-Delay in Digital Predistortion System	318
	<i>Xiaowei Kong, Zishu He and Wei Xia</i>	
	School of Electronic Engineering University of Electronic Science and Technology of China, Chengdu, Sichuan, China	
#04_03_02	A UNIFIED EXPRESSION FOR SPLIT-RADIX DFT ALGORITHMS	323
	<i>Guoan Bi,Gang Li and Xiumei Li</i>	
	School of Electrical and Electronic Engineering,, Nanyang Technological University, Singapore.	
#04_05_04	An Adaptive Digital Image Stabilization based on Empirical Mode Decomposition	327
	<i>Yuefei Zhang, Mei Xie, Ling Mao and Dongming Tang</i>	
	School of Electronic Engineering, UESTC, Chengdu, Sichuan, China	
#04_05_22	An Investigation of FPGA Implementation for Image Processing	331
	<i>JianXiong, Q. M. Jonathan Wu</i>	
	Department of Electrical and Computer Engineering University of Windsor, Windsor, ON N9B 3P4	
#04_05_14	Motion Codevector Based Search for Fast Motion Estimation	335
	<i>Zhen Li and Ce Zhu</i>	

	School of Electrical and Electronic Engineering, Nanyang Technological University, Singapore 639798	
#04_05_12	Single-Frame Image Interpolation Using Edge-Adaptive RDWT <i>Fei Yu, Q. M. Jonathan Wu</i> Department of Electrical and Computer Engineering University of Windsor, Windsor, ON N9B 3P4	339
#04_05_11	An Image Enhancement Method for Dim Target in Through-the-Wall Radar Imaging <i>Qireng Liang, Lingjiang Kong and Yong Jia</i> School of Electronic Engineering University of Electronic Science and Technology of China, Chengdu, China	343
#04_05_09	Face Location with LBP Scale Transform <i>Yunlong Wei, Mei Xie, Rui Sun, Tao Li</i> School of Electronic Engineering, School of Communication and Information Engineering University of Electronic Science and Technology of China ChengDu, SiChuan, China	347
#04_05_10	Display Ambient Light Adaptive Tone Mapping Algorithm <i>Yongqing Huo and Qicong Peng</i> School of Communication and Information Engineering, Lab 140, University of Electronic Science and Technology of China, Chengdu, Sichuan 611731, China	351
#04_05_03	Preceding Vehicle Detection Using Histograms of Oriented Gradients <i>MAO Ling, XIE Mei, HUANG Yi and ZHANG Yuefei</i> School of Electronic Engineering/University of Electronic Science and Technology of China, Chengdu, Sichuan, China	354
#04_05_01	Foreground Detection Based on Optical Flow and Background Subtract <i>Wei LI, Xiaojuan WU, Koichi MATSUMOTO and Hua-An ZHAO</i> School of Information Science and Engineering, Shandong University, Shandong, 250100, China.	359
#04_05_07	A Network Intelligent Video Analysis System Based on Multimedia DSP <i>Qi WANG, Qing GUAN, Sheng XU, Fang TAN</i> School of Communication and Information Engineering University of Electronic Science and Technology of China, Chengdu, China	363
#04_05_06	Lane Detection Using Heuristic Search Methods Based on Color Clustering <i>Chao Ma, Ling Mao, Yuefei Zhang, Mei Xie</i> School of Electronic Engineering/UESTC, Chengdu, Sichuan, China	368
#04_05_05	A New H.264 Video Encryption Scheme Based on Chaotic Cipher <i>B. Y. Lei, K. T. Lo and Haijun Lei</i> Dept. of Electronic and Information Engineering, The Hong Kong Polytechnic University, Hong Kong	373
#04_05_02	Improving Mixture Gaussian Background Model by Integrating Trace Information Obtained From Kalman Filter <i>HE Shan, GUAN Qing, XU Sheng, LI Ying, WU Yao</i> School of Communication and Information, University of Electronic Science and Technology of China, Chengdu, China	378
#04_06_01	Design of Complementary Sequence Sets Based on Orthogonal Matrixes <i>Zhenyu Zhang, Fanxin Zeng and Guixin Xuan</i> College of Communication Engineering, Chongqing University, Chongqing, China	383
#04_06_02	Joint Timing Synchronization Algorithm for OQPSK Real-time Multi-domain Measurement	388

	<i>Qian Wang, Xiao Yan and Kaiyu Qin</i>	
	Institute of Astronautics & Aeronautics, University of Electronic Science and Technology of China, 610054, PRC	
#04_06_03	Closed-form Solution to Mobile Location Using Robust Objective Function	393
	<i>J.Y. Huang and Q. Wan</i>	
	Dept.of Electronic Engineering,University of Electronic Science and Technology of China, Chengdu, China	
#04_06_04	A Novel Slice Group Unit for H.264 Flexible Macroblock Ordering and Its Embedded Implementation	395
	<i>Jing-Siang Wei, Zeng-Yao Lin and Chian C. Ho</i>	
	Embedded SoC Laboratory, Department of Electrical Engineering, National Yunlin University of Science and Technology, Douliou, Yunlin County 64002, Taiwan China.	
#04_10_02	Speech Emotion Recognition Base on Supervised Locally Linear Embedding	401
	<i>Shiqing Zhang, Lemin Li, Zhijin Zhao</i>	
	School of Communication and Information Engineering, University of Electronic Science and Technology of China, Chengdu, China	
#04_08_01	Adaptive Weighted Data Fusion Based on Evidence Theory	405
	<i>XIONG Yanming, MAO Ling, YANG Zhanping, Li Shiling</i>	
	Institute of Electronic Engineering, China Academy of Engineering Physics, Mianyang, Sichuan,China	
#04_08_03	An Entropy-based HRR Detection Strategy in compound Gaussian Clutter with Partially Correlated Texture	409
	<i>Xiaofei Shuai, Lingjiang Kong, and Jianyu Yang</i>	
	School of Electronic Engineering University of Electronic Science and Technology of China, Chengdu, China	
#04_08_05	HRR Detection Theory in Coherent Weibull Clutter	413
	<i>Xiaofei Shuai, Lingjiang Kong, and Jianyu Yang,</i>	
	School of Electronic Engineering University of Electronic Science and Technology of China, Chengdu,China	
#04_09_01	Design and FPGA Realization of a Pseudo Random Sequence Generator Based on a Switched Chaos	417
	<i>Aixue Qi , Chunyan Han, Guangyi Wang</i>	
	Department of Physics and Electronic Science Binzhou University, Binzhou, Shandong, China	
#04_09_02	A Blind and Robust Watermarking Scheme for H.264 Video	421
	<i>B. Y. Lei, K. T. Lo and Haijun Lei</i>	
	Dept. of Electronic and Information Engineering, The Hong Kong Polytechnic University, Hong Kong	
#04_09_03	Blind Despreading of the Long-code Direct Sequence Spread Spectrum Signal	425
	<i>Huaguo Zhang, Ping Wei, Member, IEEE</i>	
#04_10_01	Analysis and Compensation of Errors of Precalculated Satellite Overpass Time and Aircraft Navigation System in Spaceborne Airborne Hybrid Bistatic SAR	433
	<i>Zhou Peng, Pi Yiming, Dai Yongshou</i>	

School of Information and Control Engineering, China University of Petroleum,
Dong Ying, P. R. China

- #04_10_04 Image Formation Algorithm for Wide-Coverage Spaceborne/Airborne Hybrid Bistatic SAR 437**
Liu Zhe, Yang Jianyu, Zhang Xiaoling
School of Electronic Engineering University of Electronic Science and Technology Chengdu China
- #04_10_05 Tracking Accuracy Analysis of Dynamic Programming Track Before Detect Algorithm 441**
Shuai Yue, Lingjiang Kong, Jianyu Yang, Wei Yi
School of Electronic Engineering, University of Electronic Science and Technology of China, Chengdu, China
- #04_10_06 An Algorithm of Resolving the Range Ambiguity Using a Single PRF 444**
Wei Zhang, Lingjiang Kong, Xiaobo Yang, Xiaojing Wang
School of Electronic Engineering University of Electronic Science and Technology of China, Chengdu, China
- #04_10_07 A Kalman Filtering-Based Dynamic Programming Track-Before-Detect Algorithm for Turn Target 449**
Shuai Yue, Lingjiang Kong, Jianyu Yang, Wei Yi
School of Electronic Engineering, University of Electronic Science and Technology of China, Chengdu, China
- #04_10_08 Performance Analysis of Sequential Detection in Early Warning Radar Applications 453**
Hui Zhang, Lingjiang Kong, Xiaobo Yang
School of Electronic Engineering University of Electronic Science and Technology of China
- #04_10_09 Robust Space-Time Adaptive Processing in Heterogeneous Environment with Internal Clutter Motion 457**
Weiyi Zeng, Bin Tang, Youzhou Zeng, Wei Peng
Chengdu Aeronautic Vocational and Technical College, Chengdu, China
- #04_10_11 Implement Technology of Tibetan Input Based on Windows Mobile 461**
NYIMA Trashi, YU Yong-bin, YONG Tso, QUN Nuo, YIXI Ciwan, g YUAN Yuan
Modern Education Technology Center, Tibet University, Lhasa 850012, China

Track 05. Neural Network and Computational Intelligence Symposium

TPC Co-Chairs: *Francisco Barcelo-Arroyo* (UPC, Spain)

Xiaofeng LIAO (CQC, China)

Yi Zhang (SCU, China)

Xiang Gui (Massey U, New Zealand)

- #05_01_01 Text Spam Neural Network Classification Algorithm 466**
Qiuming Ma, Zhiguang Qin, Fengli Zhang, Qiao Liu
School of Computer Science & Engineering University of Electronic Science & Technology of China, Chengdu, Sichuan, China
- #05_02_01 Chaos Control of LMSER Principal Component Analysis Learning Algorithm 470**

Lin Zuo, Zhang Yi and Jiancheng Lv

School of Computer Science and Engineering, University of Electronic Science and Technology of China, Chengdu 610054, P.R. China

#05_04_01 Anti-spam Technical Research Based on Artificial Immune System 475

WU Peng, LIU ShuYan, WANG Jian

Computer science and Technology/Sichuan Engineering Technical College, Deyang, Sichuan, China

#05_05_01 An Intelligent Personalized Fashion Recommendation System 479

Q. Tu, L Dong

Institute of Intelligent Systems and Information Technology School of Computer Science and Engineering, University of Electronic Science and Technology of China, Chengdu, China

#05_05_02 Prune the set of SV to Improve the Generalization Performance of SVM 486

Ziqiang Li, Mingtian Zhou, HaiBo Pu

School of Computer Science and Engineering, University of Electronic Science and Technology of China, Chengdu, P.R. China

#05_10_01 Some Properties of the Competitive Layer Model with Application to Object Regions Extraction 491

Bochuan Zheng and Zhang Yi

School of Computer Science and Engineering University of Electronic Science and Technology of China, Chengdu 610054, P. R. China.

2010 International Conference on Communications, Circuits and Systems

(ICCCAS 2010)

**Chengdu, China
28 – 30 July 2010**

**Volume 2
Pages 496-904**



**IEEE Catalog Number: CFP10807-PRT
ISBN: 978-1-4244-8224-5**

Contents of Proceedings of ICCAS 2010

Track 06. Power Devices and Power Circuits Symposium

TPC Co-Chairs: *Yasuaki Inoue* (WasedaU, Japan)

Bo ZHANG (UESTC, China)

Z J Li (UESTC,China)

Bor-Ren Lin (YunTech, Taiwan China)

#06_01_01	Ultra-low On-resistance Trench Gate MOSFET with Buried P-Island	496
	<i>Xiaorong Luo, Member, IEEE, Daping Fu, Huanmei Gao, Xi Chen</i> State key Laboratory of Electronic Thin Films and Integrated devices, University of Electronic Science and Technology of China, Chengdu, China	
#06_02_02	High-Voltage PSOI with Complementary Interface Charge Islands Structure	499
	<i>WU Lijuan , HU Shendong and Zhang Bo, LI Zhaoji</i> State Key Laboratory of Electronic Thin Films and Integrated Devices of UESTC, Chengdu, Sichuan, 610054, China	
#06_02_01	High Voltage SJ-p LDMOS with Variation Lateral Doping Drift Layer	503
	<i>Bo Luo, Ming Qiao, Yongchun Wang, Mingliang Kou, Jun Ye, Bo Zhang, and Zhaoji Li</i> State Key Laboratory of Electronic Thin Films and Integrated Devices, University of Electronic Science and Technology of China, Chengdu 610054, China	
#06_02_03	Application of Field Plate in SLOP-LDMOS	507
	<i>Wenlian Wang, Bo Zhang, , Zehong Li, and Zhaoji, Li</i> State Key Laboratory of Electronic Thin Films and Integrated Devices, University of Electronics Science and Technology of China, Chengdu, China.	
#06_04_01	A High Speed Current Output Stage with Digital Assistant Circuit	510
	<i>Ping Luo, Lei Shen, and Shaowei Zhen</i> State Key Laboratory of Electronic Thin Films and Integrated Devices University of Electronic Science and Technology of China, Chengdu, Sichuan, China	
#06_04_03	A Novel Pmos Controlled High Voltge Current Source	514
	<i>Hao Hu and Xingbi Che</i> State Key Laboratory of Electronic Thin Films and Integrated Devices, UESTC, Sichuan, China	
#06_09_01	A Kind of Switch Current Source with High Order LC Filter Output	518
	<i>Bumin Liu, Cuiqin Fu, Bincheng Que</i> University of Electronic Science and Technology of China, Chengdu, Sichuan, China	
#06_04_02	Effective Protection Circuits Used in High Power Step-Down Converter	522
	<i>Zhou Zekun, Lu Xuan, Ming Xin, Zhang Bo</i> State Key Laboratory of Electronic Thin Films and Integrated Devices, University of Electronics Science and Technology of China, Chengdu 610054, China	
#06_04_06	Multi-Channel Constant Current LED Driver with Temperature and Voltage Compensation	527

	<i>Wan-Rone Liou, Cheng-Yu Lin, Tsung-Hsing Chen,</i> Walton B. Lacorte 151 University Road, Sanxia, Taipei, Taiwan China.	
#06_04_07	Optimization of Switching Losses and EMI in a Gate Driver Circuit for IGBT Devices <i>Han Wang Bo Zhang</i> State Key Laboratory of Electronic Thin Films and Integrated Devices University of Electronic Science and Technology of China, Chengdu, Sichuan, China	532
#06_05_01	High-Efficiency Capacitive Idling SEPIC PFC Converter with Varying Reference Voltage for Wide Range of Load Variations <i>Fei Zhang, Jianping Xu, Ping Yang, Min Qin and Haikun Yu</i> School of Electrical Engineering, Southwest Jiaotong University, Chengdu, Sichuan, China	536
#06_04_04	A Novel Dual-Mode Synchronous High Efficiency Buck Converter with Adaptive Deadtime Control <i>Ya-Wu Chung, Siddarth Rai Mahendra, Wan-Rone Liou and Chih-Yung Cheng</i> Department of Electrical Engineering, National Taiwan Ocean University, Keelung, Taiwan 20224 China.	541
#06_04_05	Integrated Low-Voltage Filter-less Class-D Audio Power Amplifier with PWM DC/DC Buck Converter <i>Wan-Rone Liou, Chun-Nan Pan and Jia-Hsin Lin</i> National Taipei University, 151 University Road, Sanxia, Taipei, 23741, Taiwan China.	546
#06_05_02	Stability Analysis of V2 Controlled Buck Converter Operating in CCM and DCM <i>Guohua Zhou, Jianping Xu, Yanyan Jin, Jin Sha</i> School of Electrical Engineering, Southwest Jiaotong University, Chengdu 610031, China	551
#06_05_05	An Adaptive Voltage Scaling Buck Converter Based on Improved Pulse Skip Modulation <i>Hangbiao Li, Bo Zhang, Ping LuoE, Shaowei Zhen, Xiaodong Tang, Jiangkun Li, Sijian Hou, Ruhui Yang, Jun Chen,</i> State Key Laboratory of Electronic Thin Films and Integrated Devices, University of Electronic Science and Technology of China, Chengdu, Sichuan, 610054, P. R. China	556
#06_05_06	A Single-Inductor Dual-Output Buck Converter with Voltage Mode Pulse-Train Control <i>Xueshan Liu, Jianping Xu,, Zhifei Lu, Jinping Wang</i> School of Electrical Engineering, Southwest Jiaotong University, Chengdu, Sichuan, China	561
#06_05_03	On-Chip Compensated Error Amplifier for Voltage-Mode Buck Converters <i>Shaowei Zhen, Bo Zhang, Ping Luo, Jun Chen, Huiming Wu</i> State Key Laboratory of Electronic Thin Films and Integrated Devices, University of Electronic Science and Technology of China, Chengdu, Sichuan, 610054, P. R. China	565
#06_05_04	A Fast Transient Recovery Device for Switching DC-DC Converters <i>Jinping Wang, Jianping Xu and Yanni Lan</i> School of Electrical Engineering, Southwest Jiaotong University, Chengdu 610031, Sichuan, China	569
#06_05_08	Bi-Frequency PWM Technique for Switching DC-DC Converters <i>Yanni Lan, Jianping Xu, Jinping Wang and Yu Gao</i> School of Electrical Engineering, Southwest Jiaotong University, Chengdu, 610031, China	572
#06_05_17	A Novel High Frequency ZVS-PWM Boost DC-DC Converter with Auxiliary Resonant Snubber <i>Enhui Chu, Weiyu Hu, Jinxing Gong, Rui Hou, Mutsuo Nakaoka</i> College of Information Science & Engineer Northeastern University, Shenyang, China	576
#06_05_21	Stochastic Resonance in a DC-DC Converter with Colored Noise <i>Yurong Zhou, Chongqiu Fang</i>	581

	School of Information and Electric Engineering, Panzhihua University, Panzhihua, Sichuan, China	
#06_05_07	A Low Power and High Precision DAC in 0.13μm CMOS for DVS System <i>Tingting Shi, Sijian Hou, Ping Luo, Ruhui Yang, Jun Chen, Shaowei Zhen, and Bo Zhang</i> State Key Laboratory of Electronic Thin Films and Integrated Devices, University of Electronic Science and Technology of China, Chengdu, Sichuan, 610054, P. R. China	585
#06_05_19	Parallel Control Strategy of Single-Phase Inverter Based on Virtual Impedance <i>Shungang Xu, Jianping Xu</i> College of Physics and Electronic Engineering, Chongqing Normal University, Chongqing, China	589
#06_05_20	Design of Photovoltaic High Frequency Link Inverter Based on Push-pull Forward Converter <i>Shungang Xu</i> College of Physics and Electronic Engineering, Chongqing Normal University, Chongqing, China	593
#06_07_01	A Small Scale Solar Power Generation, Distribution, Storage, MPPT and Completed System Design Method <i>Yun-Parn Lee, En-Chi Liu, and Huang-Yao Huang,</i> Department of Electronic Engineering, Ming Chuan University, Guai-San, Taoyuan County, Taiwan China	597
#06_09_02	An Improved Chipset of Synchronous Rectification Controller Applied In Isolated Topology <i>Bincheng Que, Bumín Liu, Cuiqin Fu</i> University of Electronic Science and Technology of China, Chengdu, Sichuan, China	601
#06_10_01	A Simple and Effective ESD Protection Structure for High-Voltage-Tolerant I/O Pad <i>Hang Fan, Lingli Jiang, Bo Zhang</i> University of Electronic Science and Technology of China, Chengdu, Sichuan 610054, China	605
#06_10_02	Photovoltaic Generation and Its Applications in DC-MOTOR <i>Xiaoping Zhang, Huimei Pan and Gang Wu</i> School of Information and Electric Engineering, Panzhihua University, Panzhihua 617000, China,	609
#06_10_03	Study on Soft-switching Technology of Photovoltaic Grid-connected System <i>Chongqiu Fang and Yurong Zhou</i> School of Information and Electric Engineering, Panzhihua University, Panzhihua 617000, China.	612

Track 07. Microwave Theory and Technology Symposium

TPC Co-Chairs: *Lewei Li* (NUS, Singapore)

Tie Jun Cui (SEU, China)

Kiyotoshi Yasumoto (Kumamoto University, Japan)

#07_M1_01	A Simple and Versatile Design Method of Resonator-coupled Wireless Power Transfer System <i>Ikuo Awai and Takuya Komori</i> Department of Electronics and Informatics, Ryukoku University 1-5 Yokotani, Seta-oecho, Otsu, Shiga 520-2194, Japan	616
#07_M1_02	Miniaturized Bandpass Filters Based on Multilayer Substrate Technologies	621

- Taras Kushta, Hisashi Ishida, and Takashi Harada*
System Jisso Research Laboratories, NEC Corporation, Japan
- #07_M1_03 Reception Antenna Composed with Unbalanced Fed Inverted L Element for Digital Terrestrial Television in Japan 625**
Mitsuo Taguchi and Shaojie Yang
Dept. of Electrical & Electronic Eng., Nagasaki University, Nagasaki, 852-8521 Japan
- #07_M1_04 Theoretical Study on Coupled Multi-Layer CRLH Transmission Lines with Specifically Designed Left-handed Shunt Inductors 631**
Yasushi Horii
Faculty of Informatics, Kansai University 2-1-1 Ryozenji, Takatsuki, Osaka 569-1095 Japan
- #07_M1_05 Gain Enhancement of Low-profile, Electrically Small Capacitive-feed Antennas Using Stacked Meander Lines 636**
Takeshi Fukusako, Kazuki Ide and Satoshi Ijiguchi
Kumamoto University, Kumamoto 860-8555, Japan
- #07_M1_06 Guided-wave Resonance Transmission in One-dimensional Metallic Gratings with Surface Impedances on Its Walls of Slits 642**
Ruey Bing (Raybeam) Hwang
Department of Electrical Engineering, Chiao-Tung University 1001, Ta-Hsueh Road, Hsinchu, Taiwan China
- #07_M1_07 Printed Millimeter Wave Vertical Patch Antenna 647**
Hang Wong, Kung Bo Ng, Kwai Man Luk, Chi Hou Chan, and Quan Xue
State Key Laboratory of Millimeter Waves City University of Hong Kong 83 Tat Chee Avenue, Kowloon Tong, Kowloon, Hong Kong, China
- #07_M1_08 Broadband Circular Polarizer Based on Chiral Fiber Gratings 650**
Li Yang, Senior Member, IEEE, Cheng Li, Jue Su, and Jing-Ren Qian
Department of Electronic Engineering and Information Science, University of Science and Technology of China, Hefei, Anhui, P R China
- #07_M1_09 Semi-analytical Approach for Cylindrical Electromagnetic Bandgap Structures with Defects 654**
Vakhtang Jandieri and Kiyotoshi Yasumoto
Faculty of Exact and Natural Sciences, Physics Department, Tbilisi State University 0128 Chavchavadze Ave. 3, Tbilisi, Georgia
- #07_M1_10 A Novel Transformation for Exploring Open Cloaks 660**
Cheng-Wei Qiu and Tiancheng Han
Department of Electrical and Computer Engineering, National University of Singapore, Kent Ridge, Singapore 119620, Republic of Singapore.
- #07_M1_11 Power Distributions in Breast and Heart during Microwave Breast Cancer Treatment 663**
Dan-Dan Liang, Le-Wei Li and Tat Soon Yeo
Department of Electrical and Computer Engineering, National University of Singapore, Kent Ridge, Singapore 119260
- #07_M1_12 A New Well-Conditioned Surface Integral Equation Formulation for Finite Microstrip Structures 667**
Wei-Jiang Zhao, Le-Wei Li and Ke Xiao
Department of Electrical and Computer Engineering National University of Singapore, Kent Ridge, Singapore 119260
- #07_M1_13 Array Signal Processing in Four-Dimensional Antenna Arrays 671**

	<i>Shiwen Yang, Gang Li, and Zaiping Nie</i>	
	Department of Microwave Engineering/School of Electronic Engineering, University of Electronic Science and Technology of China/Chengdu, P. R. China	
#07_M1_14	Using Chirp Signal for Accurate RFID Positioning	675
	<i>Ling Huang, Yilong Lu and Wei Liu</i>	
	School of Electrical and Electronic Engineering, Nanyang Technological University, Singapore 2Singapore Institute of Manufacturing Technology, Singapore	
#07_07_02	A Wideband LNA Design for Ku-Band Applications	680
	<i>Wan-Rone Liou, Siddarth Rai Mahendra, and Tsung-Hsing Chen</i>	
	Graduate Institute of Electrical Engineering, National Taipei University, 151, Univ. Road, Sanxia, Taipei, 23741, Taiwan China.	
#07_10_01	A New Approach to YTO Control and Synchronization	685
	<i>HAN Yao QIN Kai-yu</i>	
	Institute of Astronautics & Aeronautic,UESTC, Chengdu, Sichuan, China	
#07_04_01	Three-Dimensional Frequency Selective Surfaces	688
	<i>Amir K. Rashid and Zhongxiang Shen</i>	
	School of Electrical and Electronic Engineering Nanyang Technological University, 50 Nanyang Avenue, Singapore 639798	
#07_04_02	Coupled Microstrip-Line Bandpass Filters with Wide Upper Stopband and High Frequency Selectivity	692
	<i>Sha Luo, Lei Zhu and Sheng Sun</i>	
	School of Electrical & Electronic Engineering, Nanyang Technological University, Singapore Institute of Microwave Techniques, University of Ulm, Germany	
#07_04_03	A Novel Microstrip Bandpass Filter Using Lumped Resistor-Loaded Configuration	696
	<i>H. Chen, Z.-Q. Zhao, Y.-X. Zhang, Y.-H. Wu, and Y.-M. Yang</i>	
	Scholl on Electronic Engineering, University of Electronic Science and Technology of China, Chengdu, 610054, Sichuan, China	
#07_04_04	A Narrow Band-Pass Filter with Wide Stopband Using Short-ended Resonator and Open-Loop Resonator with Microstrip/Slot Broadside-Coupled Unit	699
	<i>H. Chen, Z.-Q. Zhao, Y.-X. Zhang, Y.-H. Wu, and Y.-M. Yang</i>	
	School of Electronic Engineering, University of Electronic Science and Technology of China, Chengdu, 610054, Sichuan, China	
#07_04_05	A Compact Narrow Bandpass Filter Using Meandered Lines Shunted with Microstrip Open-Ended Stepped Impedance Resonators	702
	<i>H. Chen, Z.-Q. Zhao, H.-S. Zhong, and Y.-X. Zhang</i>	
	School of Electronic Engineering, University of Electronic Science and Technology of China, Chengdu, 610054, Sichuan, China	
#07_05_01	Design of a Novel 5-bit Distributed MEMS Phase Shifter	706
	<i>Yijia Du, Jingfu Bao, Wenchang Wu, Cheng Tu, Pengfei Mu</i>	
	University of Electronic Science and Technology of China, Chengdu, China	
#07_05_02	Modeling and Analysis of Distributed MEMS Phase Shifter with Metal-Air-Metal Capacitor	710
	<i>Yijia Du, Jingfu Bao, Wenchang Wu, Cheng Tu, Pengfei Mu</i>	
	University of Electronic Science and Technology of China, Chengdu, China	
#07_07_01	A Low Power High-Speed Programmable Divider for GHz Frequency Synthesizer	714
	<i>Wenting Liu, Xiaolin Zhang, and Wenbo Xia</i>	

	Electronic Information Engineering, BeiHang University, Beijing, China	
#07_07_03	An X-band Broad-band Lumped-element Quadrature Hybrid Implemented in SiGe Technology	718
	<i>Saier Liu, Jin Lan and Wenquan Sui</i>	
	Zhejiang-California International Nanosystem Institute, Electronic Department, Zhejiang University Hangzhou, 310029 P.R. China	
#07_07_04	Impulse Sensitivity Function-Based Linear Time-Varying Analysis of Noise in an Active Mixer	722
	<i>Xiaolei Li, Xuliang Zhang</i>	
	School of EE, University of Electronic Science and Technology of China, Chengdu, China	
#07_08_01	The deterministic CRLB for DOA Estimation in Non-Gaussian Environments	727
	<i>J.Y. Huang and Q. Wan</i>	
	Dept. of Electronic Engineering, University of Electronic Science and Technology of China, Chengdu, China	
#07_08_02	A Novel Digital Beamforming Approach with Single Microwave Digital Receiver	731
	<i>Yilong Lu and Dawei Cui</i>	
	School of Electrical and Electronic Engineering, Nanyang Technological University Singapore, 639798	
#07_10_04	Application of Method to Look for Basis Functions of C2V for Solving 2D Scattering Problems	735
	<i>Lina Liu, Feng Zhu, Dapeng Niu, and Changwei Xu</i>	
	School of Electric Engineering, Southwest Jiaotong University, Chengdu, Sichuan, China	
#07_01_01	Calculation Adaptive Mesh Generation of FEM with Applications in Electromagnetic Scattering	738
	<i>Li Qiang, Chen Hang</i>	
	College of Marine/Northwestern Polytechnical University, Xi'an, Shannxi, China	

Track 08. *Nonlinear Circuits and Systems Symposium*

TPC Co-Chairs: *Xiang Chen* (UWindsor,Canada)

Yoshifumi Nishio (U Tokoshima,Japan)

Jinhu Lv (ISS,China)

#08_08_03	A New 4D Four-Wing Hyperchaotic Attractor and its Circuit Implementation	742
	<i>Yuxia Li, Yongchao Cao, Xia Huang, Ming Gao</i>	
	Key Laboratory of Robotics and Intelligent Technology, College of Information & Electrical Engineering, Shandong University of Science and Technology, Qingdao 256610, P. R. China	
#08_04_01	Generating Multi-Scroll Chaotic Attractor from a Linear System Driven by Saturated Function Series	747
	<i>Bocheng Bao, Lei Zhu, Xiaofeng Wang, Zhong Liu and Jianping Xu</i>	
	School of Electrical and Information Engineering, Jiangsu Teachers University of Technology, Changzhou 213001, P. R. China	
#08_04_02	Generation of Tetrapterous Butterfly Attractors from Lorenz System	752

	<i>Bocheng Bao, Qiang Xu, Qihong Wang, Wen Hu and Xiaohua Qiao</i> School of Electrical and Information Engineering, Jiangsu Teachers University of Technology, Changzhou 213001, P. R. China	
#08_02_01	Generation of a Chaos-based PN Sequence and its Quality Analysis <i>Qianying Guo, Guangyi Wang</i> School of Electronics Information, Hangzhou Dianzi University, Hangzhou 310018, China	756
#08_02_02	The Improvement of the Performance of DS-UWB System Based on a Switched Chaotic Sequence <i>Liping Yuan , Guangyi Wang and Qinqin Wu</i> School of Electronics Information, Hangzhou Dianzi University, Hangzhou, China	760
#08_03_01	A Novel Multi-address Chaotic Sequence for TH-PPM-UWB System <i>Chunyan Han</i> Department of Physics and Electronic Science Binzhou University, Binzhou, Shandong, China	764
#08_03_02	Fractional order Liu-system Synchronization and its Application in Multimedia Security <i>Yan-Song Deng, Kai-Yu Qin</i> Institute of Electrical and Information Engineering, Southwest University for Nationalities of China, Chengdu, 610041,China.	769
#08_03_04	Chaotic Synchronization of a Fractional Neurons Network System with Two Neurons <i>Shangbo Zhou, Xiaoran Lin, Limin Zhang, Yong Li</i> Department of Computer Science and Engineering, Chongqing University,Chongqing, P.R. China 400044	773
#08_03_05	Full State Hybrid Projective Synchronization in Fractional Chen-Lee Hyperchaotic System <i>Hongwei Songa, Xiaoran Linb, Hao Yangc, Ran Zheng , Yi Chie, Xiuyan Feng</i> Department of Computer Science, Shijiazhuang Institute, Shijiazhuang, P.R. China	777
#08_01_01	A Generalized Chaos Synchronization-based Pseudorandom Number Generator and Performance Analysis <i>Pei Li, Lequan Min, Hongyan Zang, and Li Cao</i> School of Applied Science, University of Science and Technology Beijing, Beijing 100083, PR China	781
#08_08_02	Generalized Synchronization of Non-autonomously Discrete Time Chaotic System <i>Ting Liu, Lequan Min and Li Cao</i> School of Information Engineer, University of Science and Technology Beijing, Beijing, China, 100083	786
#08_08_04	Impulsive Control of Chua's Oscillators with Exponential Decay Rate <i>Ju Jin, Yongbin Yu, Xiaorong Pu and Juebang Yu</i> School of Life Science and Technology, University of Electronic Science and Technology of China, Chengdu, Sichuan, 610054, P.R.China	791
#08_10_01	An Approach of Fault Diagnosis in Nonlinear Circuits <i>Yong Deng, Yibing Shi and Longfu Zhou</i> School of Automation Engineering, University of Electronic Science and Technology, Chengdu 610054, China	796
#08_10_02	An Efficient Algebraic Predistorter for Compensating the Nonlinearity of Memory Amplifiers <i>Ying Wang, Lei Xie, Zhe Wang, Huifang Chen, Kuang Wang</i>	800

Department of Information Science and Electronic Engineering, Zhejiang University,
Hangzhou 310027, Zhejiang, P.R. China

Track 09. Memristor and Memristive Systems Symposium

TPC Co-Chairs: *Nobuhiko P.KOBAYASHI* (UCSC,USA)

Qin YU (UESTC,China)

- #09_01_01 Memristor System Properties and Its Design Applications to Circuits Such as Nonvolatile Memristor Memories 805**
Garng M. Huang, Senior Member, IEEE, Yenpo Ho, and Peng Li, Senior Member, IEEE
Department of Electrical and Computer Engineering Texas A&M University,
College Station, TX, U.S.A
- #09_01_02 Spintronic Devices: from Memory to Memristor 811**
Yiran Chen, Member, IEEE, Hai (Helen) Li and Xiaobin Wang
Alternative Technology Group, Seagate Technology, 1280 Disc Dr., Shakopee, MN 55379, USA
- #09_02_01 Chaos Generator Based on A Memristive Circuit with Time-delay Feedback 817**
Wenshu Zhang, Yongbin Yu
School of Computer Science and Technology, UESTC, Chengdu, China,610054
- #09_02_02 Chaotic Oscillator Based on Current-Controlled Meminductor 820**
Zhiheng Hu, Yingxiang Li, Li Jia and Juebang Yu
Chengdu University of Information Technology (CUIT)
- #09_02_03 Chaotic Oscillator Based on Voltage-Controlled Memcapacitor 824**
Zhiheng Hu, Yingxiang Li, Li Jia and Juebang Yu
Chengdu University of Information Technology (CUIT)
- #09_02_04 Chaos in a Charge-Controlled Memcapacitor Circuit 828**
Zhiheng Hu, Yingxiang Li, Li Jia and Juebang Yu
Chengdu University of Information Technology (CUIT)
- #09_02_05 Chaos in the Fractional Order Memristor Based MLC System with Cubic Nonlinearity 832**
Dongping Wang, Hui Zhao, Juebang Yu
Sichuan University, China, University of Electronic Science and Technology of China (UESTC)
- #09_04_01 Impulsive Modeling of Memristor Oscillator and Its Control 837**
Yongbin Yu, Ju Jin, Fengli Zhang, Qishui Zhong, Sheng Su and Juebang Yu
Faculty of School of Computer Science and Engineering, University of Electronic Science and Technology of China, Chengdu, Sichuan, 610054, P.R.China

Track 10. Electronic Design Automation Symposium

TPC Co-Chairs: *Yoji Kajitani* (U Kitakyushu, Japan)

Masahiro FUJITA (TokuoU,Japan)

- #10_02_01 An Assertion-Based Verification Method for SystemC TLM 842**
Zhaorong Xiong, Jinian Bian, Yanni Zhao

	Department of Computer Science and Technology, Tsinghua University, Beijing, 100084, China	
#10_02_02	Simultaneous Functional Units and Register Allocation Based Power Management for High-level Synthesis of Data-intensive Applications <i>Feng Wu, Ning Xu, Fei Zheng and Fubing Mao</i> School of Computer Science and Technology, Wuhan University of Technology, Wuhan 430070, P.R.China	847
#10_03_02	A Novel Hardware Method to Implement a Routing Algorithm onto Network on Chip <i>Yiping Dong, Hua Zhang, Zhen Lin, and Takahiro Watanabe</i> Graduate School of Information, Production and Systems, Waseda University, 2-7 Hibikino, Wakamatsu-ku, Kitakyushu, Fukuoka, Japan.	852
#10_03_03	Deadlock-Free Dynamic Routing in Wormhole-Switched Network-on-Chip <i>Li-Wei Wang</i> National Key Lab of Science and Technology on Reliability Physics and Application of Electronic Component the 5th Electronics Research Institute of the Ministry of Industry and Information Technology Guangzhou, Guangdong 510610, P.R. China	857
#10_03_04	Thermal Effect on Interconnect Current Density Estimation <i>Chaoyang Zhao, Xuliang Zhang, Ming Yao</i> School of E.E., University of Electronic Science and Technology of China, Chengdu, China	862
#10_04_01	Incremental I/O Planning with White Space Redistribution for Flip-chip Design <i>Zeng Wang, Yuchun Ma, Sheqin Dong, Yu Wang, and Xianlong Hong</i> Department of Computer Science and Technology, Tsinghua University, Beijing, 100084, China	866
#10_04_02	A Parasitic Extraction Method of VLSI Interconnects for Pre-Route Timing Analysis <i>Weibing Gong, Wenjian Yu, Yongqiang Lv, Qiming Tang, Qiang Zhou, Yici Cai</i> School of Mathematics and Statistics, Lanzhou University, Lanzhou, China	871
#10_04_03	On Handling Fixed Blocks in Incremental Fixed-outline Floorplanning <i>Zhigang He, Yuchun Ma, Ning Xu, Yu Wang, Xianlong Hong</i> School of Computer Science and Technology, Wuhan University of Technology, Wuhan, China	876
#10_04_04	Multi-stage Analog Placement with Various Constraints <i>Lingyi Zhang, Sheqin Dong, Yuchun Ma and Xianlong Hong</i> Dept. of Computer Science & Technology, Tsinghua University, Beijing, China	881
#10_05_01	Networks-on-Chip Emulator Design with FPGA Array <i>Tingting Huang, Yiou Chen, Jianhao Hu and Xiang Ling</i> National Science and Technology key Lab. of Communications, University of Electronic Science and Technology of China, Chengdu, Sichuan, P.R.China, 610054	886
#10_08_02	A Run-Time RTL Debugging Methodology for FPGA-based Co-Simulation <i>X. Cheng, A.W. Ruan, Y.B. Liao, P. Li, H.C. Huang</i> State key Laboratory of Electronic Thin Films and Integrated Devices, University of Electronic Science & Technology of China, Chengdu 610054, P.R.China	891
#10_06_01	A Non-iterative Effective Capacitance Model for CMOS Gate Delay Computing <i>Minglu Jiang, Qiang Li, Zhangcai Huang and Yasuaki Inoue</i> Graduate School of Information, Production and Systems, Waseda University, Kitakyushu, 808-0135 Japan	896
#10_07_01	The Self-biased Based PLL with Fast Lock Circuit <i>Wei Xueming, Li Ping</i> State Key Laboratory of Electronic Thin Films and Integrated Devices, University of Electronic Science & Technology of China, Chengdu, 610054, P.R. China	901