

TENCON 2006

2006 IEEE Region 10

Conference

Hong Kong, China
14-17 November 2006

Volume 1 of 4



IEEE Catalog Number:
ISBN:

06CH37830
1-4244-0548-3

**Copyright © 2006 by The Institute of Electrical and Electronics Engineers, Inc.
All Rights Reserved**

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

For other copying, reprint or republications permission, write to IEEE Copyrights Manager, IEEE Operations Center, 445 Hoes Lane, Piscataway, New Jersey USA 08854. All rights reserved.

IEEE Catalog Number: 06CH37830
ISBN: 1-4244-0548-3
LOC: 2006930154

Additional Copies of This Publication Are Available from:

IEEE Service Center
445 Hoes Lane
Piscataway, NJ 08854
IEEE Service Center
445 Hoes Lane
Piscataway, NJ 08854
Phone: (800) 678-IEEE
 (732) 981-1393
Fax: (732) 981-9667
E-mail: customer-service@ieee.org

Table of Contents

All-Optical Delay Circuit using Optical Phase Conjugation and Distributed Raman Amplification	1
<i>Pasu Kaewplung and Poonpong Pichitkul</i>	
Non-Dispersion-Managed Soliton Amplification Using Distributed Raman Amplification	5
<i>Pasu Kaewplung, Ekachai Kongboonsod, and Preeda Jarupoom</i>	
Application of MOSFET Solid State High Frequency Power Supply in Pipe Welding.....	9
<i>Zhijuan Zhang, Heming Li and Yonglong Peng</i>	
Designing an Integrated Voice, Video, and Instant Message Service System in SIP-Based IP Networks	12
<i>Sheng-Cheng Yeh, Kai-Fu Chan, Wen-JyiHwang</i>	
A Novel Gray-Level Registration Algorithm for DSA Image Based on Subtraction Histogram.....	16
<i>Y. Chu, Z. Ji, S.P. Chen, X.Q. Mou</i>	
An Optimized and Adaptive Error-Resilient Coding for H.264 Video	19
<i>Yuk Ying Chung, Leo Li Fan Chen, Zeng Zheng, Xiaoming Chen, Faith Choy</i>	
Development of Video Watermarking for MPEG2 video	24
<i>Yuk Ying Chung, Fang Fei Xu, Faith Choy</i>	
Scale-Domain Equalizer for Wavelet-Based ADSL.....	28
<i>Q. Tuan Nguyen and D. Thong Nguyen</i>	
A Novel Differentiated Marking Strategy based on Explicit Congestion Notification for Wireless TCP.....	32
<i>Zhi Li. and Guanglie Zhang</i>	
Transmission Network Planning Using Genetic Algorithm.....	36
<i>M. T. A. P. Wickramarathna and Nalin Wickramaarachchi</i>	
A Survey: MAC Protocols For Applications Of Wireless Sensor Networks	40
<i>Pawel Piotr Czapski</i>	
A New Symbol Timing Synchronization Method for Wireless OFDM Systems	44
<i>Wang Yong, Ge Jian-hua, Ai Bo</i>	
A Novel Maneuvering Target Tracking Algorithm with Extended Measurement and State Vector.....	50
<i>Qi Tang, Jianguo Huang, Xudong Yang, Xian Feng</i>	
Remote Neighborhood.....	54
<i>Achuth Sankar .S Nair and Vinod Chandra</i>	
Energy-efficient Sensor Scheduling to Accommodate Real-time Surveillance Orders.....	58
<i>Tat Wing Chim</i>	
Block Motion Estimation Using Directional Adaptive Search Window	62
<i>Nor Farhana Fadly Chew and Nasreen Badruddin</i>	
Gain-Guided And Dispersion-Managed Soliton Fiber Lasers.....	66
<i>L. M. Zhao, D. Y. Tang, T. H. Cheng, and C. Lu</i>	
Rough Set Theory for Data Mining for Fault Diagnosis on Power Transformer	70
<i>Wenqing Zhao and Yongli Zhu</i>	
Nanosecond Square Pulse Generation In Normal Dispersion Fiber Ring Lasers.....	74
<i>L. M. Zhao, D. Y. Tang, T. H. Cheng, and C. Lu</i>	
Innovative Use Of Building Reinforced Steel Bars To Transmit Signals Within A Building	78
<i>Jason Kam-tong Chan, Martin H. L. Chow and P. K. A. Wai</i>	
Power Signal Forecasting by Neural Model with Different Layer Structures	82
<i>Rey-Chue Hwang, Yu-Ju Chen, Shang-Jen Chuang, Huang-Chu Huang, Chuo-Yean Chang</i>	
Importance Sampling Simulation of Orthogonal Space-Time Block Coded Systems	86
<i>Kim Chi Nguyen, Robert Philipsz, Upul Gunawardana and Ranjith Liyana-Pathirana</i>	
Evaluating the Performance of Integrated Voice and Data Mobile Networks.....	90
<i>Young C. Park, Joong S. Lim, and Gyoo S. Chae</i>	

Table of Contents

Knowledge Representation and Simulation of Nucleophilic Substitution Reaction using Qualitative Reasoning Approach	94
<i>Y. C. Alicia Tang, S. M. Zain and N. Abdul Rahman</i>	
A Study of the Performance of Serially-Concatenated Turbo Codes under Good Satellite Channel Conditions.....	98
<i>Shu-xin Chen and Hong-bo Li</i>	
The ZVS Condition Analysis of a Novel Soft Switching Bidirectional DC/DC Converter.....	102
<i>Liu Yuanyuan, Qu Wenlong and Ma Gang</i>	
A Novel Soft Switching Bidirectional DC/DC Converter and Its Output Characteristic.....	106
<i>Ma Gang, Liu Yuanyuan and Qu Wenlong</i>	
Development of a Spatial Decision Support System (DSS) for the Point-Source Pollution.....	110
<i>I.W. Taweeprawadej, W. Kanarkard, R.G. Adams, N. Davey and D. Hormdee</i>	
Wideband Circularly-Polarized Microstrip Antenna.....	113
<i>Y.X. Guo, K.W. Khoo and L. C. Ong</i>	
A Study on the Effects of the Structure of Passive Devices on the Performance of CMOS Low-Noise Amplifiers.....	116
<i>Maria Theresa, A. Gusad and Louis P. Alarcon</i>	
Development of Intelligent Visual Inspection System (IVIS) for Bottling Machine	120
<i>Anton Satria Prabuwono, Riza Sulaiman, Abdul Razak Hamdan, Hasniaty A.</i>	
Impact of OTA's Parasitic Elements and Finite Open-Loop Bandwidth to the Passive Equivalent Circuit of the OTA Based Floating Inductor.....	124
<i>R. Banchuin, B. Chipipop and B. Sirinaovakul</i>	
A Fork-like Feeding Slot Antenna.....	128
<i>Su-Wei Chang, Jin-Jei Lee and Chien-Jen Wang</i>	
Block Mode Decision Based on Motion Vectors for H.264/AVC.....	132
<i>Izyan Musfirah Juahir and Nasreen Badruddin</i>	
PAPR Reduction of the OFDM Signal by the SLM-based WHT and DSI Method.....	136
<i>Sang-Woo Kim, Jin-Kook Chung and Heung-Gyoon Ryu</i>	
Performance Analysis of the Event-Reliability Approach for a Lattice Wireless Sensor Network with Radio Irregularities	140
<i>Tao Yang, Giuseppe De Marco, Makoto Ikeda, Leonard Barolli</i>	
Efficient Frequency Offset Estimation and Tracking for Reuse-1 OFDMA Systems	144
<i>Y. Bhargava and K. Giridhar</i>	
A Study of Power Trade-offs in Translation Lookaside Buffer Structures.....	148
<i>Anastacia P. Ballestil, Luis M. Alarilla and Louis P. Alarcon</i>	
General Separate Electric and Magnetic Coupling Paths for Realization of the Quasi-elliptical Band Pass Filters.....	152
<i>Kaixue Ma and Kien Teck Chan</i>	
Knowledge-based Flexible Business Process Management.....	156
<i>Yaxiong Tao, Jian Wang, Xin Wang, Datong He and Shuxin Yang</i>	
Modeling of Multiple path Fading and Analysis of Signal Spectral Properties in Digital Signal Transmission	159
<i>Horace L. King</i>	
Performance Analysis and Formulation of Turbo codes on Additive White Gaussian Noise (AWGN) and Rayleigh fading channels.....	163
<i>Horace L. King</i>	
Image Mosaicking with Optimized Matching of Global and Local Contents	167
<i>Simon T.Y. Suen, Edmund Y. Lam, Kenneth K.Y. Wong</i>	

Table of Contents

A Syllable-Phoneme Solution for Efficient Farsi Text-to-Speech Systems	171
<i>Ehsan Rasekh, Mohammad Eshghi</i>	
An Efficient Network for Farsi Text to Speech Conversion Using Vowel State	176
<i>Ehsan Rasekh, Mohammad Eshghi</i>	
Resource Allocation for Cellular Systems with Nonlinear Bandwidth Quantization Scheme	180
<i>Chen-Nien Tsai, Kai-Wei Ke, Ho-Ting Wu</i>	
A New Scheduling in An Iterative Receiver for a Turbo-coded MIMO-BICM	184
<i>Tao Yang and Jinhong Yuan</i>	
A Transformation Algorithm of Ladder Diagram into Instruction List Based on AOV Digraph and Binary Tree	188
<i>Ge Fen, Wu Ning</i>	
A High Performance Induction Motor Drive System Using Fuzzy Logic Controller	192
<i>N.B. Muthuselvan, Subharansu Sekhar Dash and P.Somasundaram</i>	
Determination of Initial Parameters with Noise Robustness for Coplanar Calibration	196
<i>Kaset Sirisantisamrid, Takenobu Matsuura and Kitti Tirasesth</i>	
Risk Management For Chemical Emergency System based on GIS and Decision Support System (DSS)	200
<i>ID. Hormdee, W. Kanarkard, R.G. Adams, N. Davey and W. Taweepworadej</i>	
Characterizing Hand Written Devanagari Characters using Evolved Regular Expressions	203
<i>P. S. Deshpande, Latesh Malik and Sandhya Arora</i>	
Bagging.LMS: A Bagging-based Linear Fusion with Least-Mean-Square Error Update for Regression	207
<i>Yunfeng Wu, Cong Wang, and S.C. Ng</i>	
Management Framework of GMPLS Protocol Stack	211
<i>Chen Dafeng, Lei Lei, Huang Yongqing, Ren Xiaomin</i>	
Functional Unit Selection in Superscalar Microprocessors for Low Power	215
<i>Pan Yan and Tay Teng Tiow</i>	
An Obfuscation for Binary Trees	220
<i>Stephen Drape</i>	
Reduced Ground-Plane Effect UWB Antenna and Application for Laptop Computers (Invited)	224
<i>Zhi Ning Chen and Terence S. P. See</i>	
Direct Frequency Estimation Based Kalman Adaptive IIR Notch Filter:State-Space Approach	228
<i>Rachu Punchalard , Jeerasuda Koseeyaporn , and Paramote Wardkein</i>	
Inverse Tangent Based Algorithm for Constrained Adaptive IIR Notch Filter	232
<i>Rachu Punchalard , Jeerasuda Koseeyaporn , and Paramote Wardkein</i>	
Link Level Modeling For High Speed Wireless Communication System Simulations	236
<i>Yi Zhang, Jian Gu, and Dacheng Yang</i>	
A Study of Closing Adaptive Control in Electronically Controlled Intelligent Contactor	240
<i>C. T. Chi</i>	
Comparative Performance of Nonlinear Distortion Effects in an OFDM-RoF Link	244
<i>AHM Razibul Islam, Rishad Ahmed Shafik, Shawkat Ali</i>	
A Pipelined Architecture for a 20-point PFA	248
<i>Nima Aghaee and Mohammad Eshghi</i>	
Gene Extraction and Identification Tumor/Cancer for Microarray Data of Ovarian Cancer	252
<i>Zne-Jung Lee, Shih-Wei Lin, Cheng-Chic Veritas Hsu, and Yen-Po Huang</i>	
Remarks on Simple Gesture Recognition of Bio-Potential Signals and Its Application to Hands-Free Manipulation System	255
<i>Kazuhiko Takahashi, Takashi Nakauke and Masafumi Hashimoto</i>	
Compact Bit-Parallel Systolic Montgomery Multiplication Over GF(2^m) Generated by Trinomials	259
<i>Chiou-Yng Lee, Chin-Chin Chen and Erl-Huei Lu</i>	

Table of Contents

Anomaly Detection Model Based on Bio-Inspired Algorithm and Independent Component Analysis.....	263
<i>Surat Srinoy and Werasak Kurutach</i>	
A Suboptimal Filter for Continuous-Discrete Linear Systems with Parametric Uncertainties.....	267
<i>Vladimir Shin ,Du Yong Kim , Georgy Shevlyakov , Kiseon Kim</i>	
Heel Crack and Lead-Free Soldering Issues Affecting Power Electronics Packages	271
<i>Lunwen He, Shaohui Pan, LK Wang, David Wei Zhang</i>	
PIndex Scheme for Performance Evaluation in Open Electricity Market Environment.....	275
<i>Wang Jianhui and H.W.Ngan</i>	
The Reliability Modeling in Performance Based Regulation of the Electricity Supply Industry in Hong Kong.....	279
<i>Wang Jianhui, Liu Wei, H.W.Ngan</i>	
An Image Quality Estimation Model Based on HVS.....	283
<i>Wei Xuehui, Li Junli, Chen Gang</i>	
Encryption of MPEG Video Streams.....	287
<i>Habib Mir M. Hosseini, Pong Mee Tan</i>	
Design of a dynamic bandwidth reallocation scheme for hot-spot video stream transmission over the IEEE 802.11 WLAN.....	291
<i>Junghonn Lee, Mikyung Kang</i>	
Reliable Hierarchical Peer-to-Peer File Sharing Systems.....	295
<i>Jenn-Wei Lin, Ming-Feng Yang, Chin-Yu Huang, and Chu-Ti Lin</i>	
A SAT-Based Arithmetic Circuit Bug-Hunting Method.....	299
<i>Yunji Chen and Zhuo Huang</i>	
A New Analysis Method of Inter-harmonic in Power System Using Orthogonal Basis Neural Network Algorithm	303
<i>Yuan Pei, Zhe-Zhao Zeng</i>	
Design and Implementation of a Fully-digital Lithium-Ion Battery Charger.....	307
<i>Yi-Hwa Liu and Jen-Hao Teng</i>	
An FPGA-based dimmable CCFL driving system for LCD backlight	311
<i>Yi-Hwa Liu and Shun-Chung Wang</i>	
An Improved Approximation Algorithm for Minimum Multicast Time Problem in Wireless Sensor Networks.....	315
<i>Jianming Zhu, Xujing Chen, Xiaodong Hu</i>	
A Signal Based Clocking Scheme for A/D Converters in Body Sensor Networks.....	319
<i>Robert Rieger, Shinyu Chen</i>	
An Embedded Lens Controller for Passive Auto-Focusing Camera Device Based on SOM Neural Network.....	323
<i>Chih-Yung Chen and Rey-Chue Hwang</i>	
Maximum Likelihood DOA Estimator Based On Importance Sampling.....	327
<i>Jianguo Huang, Da Xie, Xiong Li and Qunfei Zhang</i>	
Packet Based Echo Cancellation For Voice Over Internet Protocol Simulated With Variable Amount Of Network Delay Time.....	331
<i>Ganesan Periakarruppan, Andy L.Y.Low, Hairul Azhar, Abdul Rashid</i>	
Reusing Data During Speech Pauses in an NLMS-based Acoustic Echo Canceller	335
<i>Fredric Lindstrom, Christian Schuldt, Ingvar Claesson</i>	
Software and Hardware co-design for MP3 Decoder.....	339
<i>Chang-Hung Yang, Chin-Yu Huang, Tsui-Ying Hung, Tung-Ju Chiang, and Yung-Ruei Chang</i>	
Robust Design for Network-based Control System with Random Time Delay.....	343
<i>Lichun Li, Zhufeng Wang, Jingping Jiang, Xiaoming Yu</i>	

Table of Contents

Performance of Spectral-Amplitude-Coding Optical CDMA with Non-Ideal Source Spectrum	347
<i>T. Demeechai</i>	
Co-Existence Study of Mobile WiMAX and GSM	351
<i>Yi Zhang, Jianyang Zhang, Tiezhu Zhao, Chengxiao Xue, SeungYong Ham</i>	
Performances of Serial Concatenated Zigzag Codes for High Rate Application	355
<i>M. J. Syed, A. K. Samingan, S. Abdul Rahman</i>	
Particle Swarm Optimisation for Economic Dispatch with Cubic Fuel Cost Function	359
<i>T. Adhinarayanan, Maheswarapu Sydulu</i>	
Transient Signal Detection Using Wigner-Ville Distribution and Wavelet Denoising	363
<i>Nawal Kishor Mishra and G.V. Anand</i>	
Improvement of the Unloading Transient Response for the PFM-controlled Buck-type Converter	367
<i>K. I. Hwu and Y. T. Yau</i>	
Phase Randomization-A new concept in Perceptual Audio Coding	371
<i>Muhammad Tayyab Ali, Muhammad Saleem Mian</i>	
Polynomial Fitting Approach for Wireless Signal Field under Power Lines in Taiwan Railway	375
<i>Whei-Min Lin and Ting-Chia Ou</i>	
Design and Implementation of an Intelligent Fuzzy VLSI Chip for Traffic Control Application	379
<i>Md. Shabiul Islam, Md. Anwarul Azim, M.S. Bhuyan, M. Saikat Jahan, H.R. Siddiquei and Masuri Othman</i>	
An Adaptive TCP Algorithm to Support Handoffs in Heterogeneous Overlay Networks	383
<i>Fanglei Sun and Victor O.K. Li</i>	
Neural Network based Minutiae Extraction from Skeletonized Fingerprints	387
<i>Josef Strom Bartuek, Mikael Nilsson, Jorgen Nordberg, and Ingvar Claesson</i>	
The Accurate and Robust Estimation of Phase Error and its Uncertainty of 50GHz Bandwidth Sampling Circuit	391
<i>Maoliu Lin, Zhe Zhang, Qinghua Xu</i>	
Estimate the Frequency Response and Uncertainty of a 50GHz Sampling Oscilloscope Using NTN Method	394
<i>Zhe Zhang, Maoliu Lin, Qinghua Xu</i>	
Generalized Discrete Multiwavelet Transform with Embedded Prefilter Bank for VQ-Based Image Coding	397
<i>Yu-Hing Shum, Daniel Pak-Kong Lun, and Tai-Chiu Hsung</i>	
Applying a Counter-based PFM Control Strategy to an FPGA-based SR Forward Converter	401
<i>K. I. Hwu and Y. T. Yau</i>	
Combine Adaptive Modulation and Adaptive Coding for Space-time Block Coded Systems	405
<i>YingRao Wei and M.Z. Wang</i>	
A Novel Low-Power and High-Speed Master-Slave D Flip-Flop	409
<i>Hongli Gao, Fei Qiao, Dingli Wei and Huazhong Yang</i>	
Adaptive Modulation and Coding Schemes for a Spacetime Coded System with Transmit Antenna Selection	413
<i>YingRao Wei and M.Z. Wang</i>	
An Improved RPCL Algorithm for Determining Clustering Number Automatically	417
<i>Jun Yang, Lianwen Jin</i>	
Optimal Filtering for Systems with Unknown Inputs Via Unbiased Minimum-Variance Estimation	420
<i>Chien-Shu Hsieh</i>	
SNP Data Consulting Program	424
<i>Toshiko Matsumoto, Yasuyuki Nozaki, Ryo Nakashige</i>	
Texture Discrimination by Local Morphological Multifractal Signatures	428
<i>Yong Xia, Rongchun Zhao, (David) Dagan Feng, Jian Sun and Yanning Zhang</i>	

Table of Contents

Effects of Temperature Control on Combined Cycle Unit Output Response	432
<i>C. N. Ning, and C. N. Lu</i>	
Simulation of a New Type of Oxide Confined 850 nm VCSEL	436
<i>S. M. Mitani, M. S. Alias, and P. K. Choudhury</i>	
Optimal Mode Selection of Disparity-Compensated Wavelet Lifting for Multi-View Image Coding	440
<i>Pongsak Lasang, Wuttipong Kumwilaisak, and Amares Kaewpunya</i>	
A Novel Distributed Multi-Access Platform (D-MAP)	444
<i>A. Aris, S. Ramli, T. Yeap and K. Dimiyati</i>	
Scale Invariants of Three-Dimensional Legendre Moments.....	448
<i>Lee-Yeng Ong, Chee-Way Chong, Rosli Besar</i>	
A Comparison of ΔV_{10} and Pst at Industrial Sites with Wind Turbine and Arc Furnace	452
<i>Y. J. Hsu and C. N. Lu</i>	
Energy Efficient Geographic Anycast in Wireless Sensor Networks	456
<i>Hongwei Du, Xiaohua Jia and Xiaodong Hu</i>	
Three-Phase Two-Leg Inverter for Stand-Alone and Grid-Connected Renewable Energy Systems.....	460
<i>Bor-Ren Lin and Jyun-Ji Chen</i>	
Theory, Analysis, and Design of Differentially-Driven Microstrip Antennas	464
<i>Y. P. Zhang</i>	
The Application of Parallel Optical Transmitter and Receiver Modules in Communication Subsystems	468
<i>Xiongbin Chen, Hongda Chen, Jun Tang, Weihua Pei, Yi Zhou</i>	
Design of Sliding Mode Autopilot with Steady-State Error Elimination for Autonomous Underwater Vehicles	471
<i>Juan Shi</i>	
Analysis of Nonlinear Effective Absorption Coefficient of Double Cladding Fiber.....	475
<i>X. P. Cheng, P. Shum, J. Zhang and M. Tang</i>	
Limit Cycles in a Ternary Structure	478
<i>Amin Z. Sadik and Zahir M. Hussain</i>	
Patch Antenna of Dual Polarization with Complementary Feeds	482
<i>Mike W.K. Lee and Y. Leonard Chow</i>	
Dipole Antenna in DNA Strands for Circular Polarization	485
<i>Y. Leonard Chow, Liang Zhao, Mike W.K. Lee and D.G. Fang</i>	
Transformed-Domain Intra Mode Decision in H.264/AVC Encoder.....	488
<i>Yung-Chiang Wei and Jar-Ferr Yang</i>	
MPEG-2 to H.264 Video Transform-Domain Downscaling Transcoder	492
<i>Ke-Ying Liao, Jar-Ferr Yang, Yu-Kuang Tu, and Shau-Yin Tseng</i>	
Improving Active Magnetic Bearing system Performance using Recursive Least Square Method	496
<i>Esref Turker, Alan Harvey</i>	
Distribute Coordinated Wide Area Current Differential Protection Based on IEC61850.....	500
<i>Su Sheng, K.K.Li, Zeng Xiangjun</i>	
Complete Camera Calibration Using Line-Shape Objects	504
<i>Xiangjian He, Huaifeng Zhang, Namho Hur, Jinwoong Kim, Taeone Kim, and Qiang Wu</i>	
“Edge-Steganography” for Secure Communication.....	508
<i>Mrs. ShantalaSuresh and Dr. Vishvanath</i>	
A High-Performance Memory-Efficient Pattern Matching Algorithm and Its Implementation	512
<i>Tsern-Huei Lee and Chia-Chi Liang</i>	
A Lorentzian Stochastic Estimation for a Robust and Iterative Multiframe Super-Resolution Reconstruction	516
<i>V. Patanavijit and S. Jitapunkul</i>	

Table of Contents

Series and Shunt Compensators for Power Quality Compensation	520
<i>Bor-Ren Lin, Cheng-Chang Yang and Chien-Lan Huang</i>	
Investigation of Design and Vibration Modes of Low-Voltage Driven RF MEME Capacitive Switch for Millimeter Distributed Phase Shifter	524
<i>Xun-jun He, Qun Wu, Bo-shi Jin, Ming-xin Song, Jing-hua Yin</i>	
The Influence of Reverse Rotating Field on the Vibration of Separated Phase Induction Motor	527
<i>Rong-Ching Wu, Ying-Yu Lin, Ying-Chun Lin and Ching-Tai Chiang</i>	
Wired Vs Wireless Deployment Support For Wireless Sensor Networks	531
<i>Ashar Ahmed, Junaid Ali, Ahsan Raza, Ghazanfar Abbas</i>	
Detailed Analysis of Load Voltage Compensation for Dynamic Voltage Restorers	534
<i>Paisan Boonchiam, Promsak Apiratikul, Nadarajah Mithulananthan</i>	
Derivation of Novel Estimation Formulas for Distribution Feeder Reconfiguration	538
<i>Jen-Hao Teng, Yi-Hwa Liu, Chia-Yen Chen and Chi-Fa Chen</i>	
Phase Characteristics of Musical Instrument Sounds and Their Applications	542
<i>Yoshiaki Tadokoro, Masahiro Ito and Masanori Natsui</i>	
Design for Absorptive Coaxial Transmission Line Coaxial Cavity Resonator Microwave Amplitude Equalizer	546
<i>Yang Mingshan, Zhang Yufeng, Niu zhongxia</i>	
A Delay Curve with Markovian Recursion for Deadline Calculation in SCED	549
<i>Lain-Chyr Hwang, Chia-Hsu Kuo, San-Yuan Wang</i>	
Fast Source Location Method Using Anti-reverberant Searching Space Pre-estimation	553
<i>Weiwei Cui, Zhigang Cao, Jianqiang Wei and Koichiro Mizushima</i>	
Hierarchical Point Simplification Using Coplanar Criterion	557
<i>Bin-Shyan Jong, Pai-Feng Lee, Juin-Ling Tseng and Yi-Chen Yang</i>	
Electric-Load Intelligence (E-LI): Concept and Applications	561
<i>John W. M. Cheng, Gail Kendall, and Joseph S. K. Leung</i>	
A Suprathreshold Stochastic Resonance Based Pre-Processor For Direction-Of-Arrival Estimation	565
<i>Vijayendra Mohan Roy and G.V.Anand</i>	
Proactive Handover Scheme for a Location Aware Mobile IP	569
<i>Veena Tyagi, K. Garg</i>	
Movement Epenthesis Generation for Sign Language Synthesis Using NURBS Function	573
<i>Ze-Jing Chuang, Chung-Hsien Wu, Wei-Sheng Chen</i>	
Comparison and Analysis of the Uncoded and Coded Multi-user TH-BPAM UWB System	577
<i>Zhiquan Bai, Shaoyi Xu and Kyungsup Kwak</i>	
Receiving Mutual Impedance between Two Parallel Dipole Antennas	582
<i>H. T. Hui and Shiyang Lu</i>	
Study on the Reverse Conduction of Synchronous Rectifiers	586
<i>Masahito Jinno, Po-Yuan Chen, Yu-Min Shie</i>	
Analysis on Interference Rejection of DS/SS Systems Using a Complex FIR Filter	590
<i>Yuki Shimizu and Yukitoshi Sanada</i>	
High efficiency and PF capability of Single Phase Power Factor Corrector	594
<i>Shu-Kong Ki, David Ki-Wai Cheng and Dylan Dah-Chuan Lu</i>	
An Enhanced Wireless LAN Positioning Algorithm based on the Fingerprint Approach	598
<i>Wilson M. Yeung, Joseph K. Ng</i>	
Vehicle Detection and Tracking for Traffic Monitoring System	602
<i>Kantip Kiratiratanapruk and Supakorn Siddhichai</i>	

Table of Contents

Video Streaming over Mobile Ad Hoc Networks: Multipoint-to-Point Transmission with Multiple Description Coding	606
<i>CheeOnn Chow and Hiroshi Ishii</i>	
Interference-Aware Routing in UWB Wireless Networks	610
<i>M. H. Cheung, Tat M. Lok</i>	
A Cross-Layer Fair Resource Scheduling Algorithm for OFDMA System.....	614
<i>Liang Zheng, Gao Youjun, Tian Hui, Zhang Ping</i>	
Restoration of Binary Images Using Positive Semidefinite Programming	617
<i>Yijiang Shen, Edmund Y. Lam, Ngai Wong</i>	
Capacitor Placement and Replacement for Reactive Power Control in Radial Distribution System	621
<i>M.S. Nagaraja, T. Ananthapadmanabha, B.Kantharaj and R. Prakash</i>	
Bayesian Network Based Fault Section Estimation in Power Systems	625
<i>Wang Yan and Geng Lanqin</i>	
Transformer Fault Diagnosis Based on Naive Bayesian Classifier and SVR.....	629
<i>Zhu Yong-li, Wang fang and Geng Lan-qin</i>	
Toward Assessing Semantic Similarity of Geospatial Services.....	633
<i>Manoj Paul and S. K. Ghosh</i>	
Robust Nose Localization by Using Fitting of Ellipse from 2.5D Image	637
<i>Charoenpong Theekapun, Hiroyuki Hase, Shogo Tokai</i>	
A Novel Prototype Of Analog Dual Bandpass Filter Based On The Composite Right/Left-Handed Ladder Network	641
<i>Guoan Zheng and Mingwu Gao</i>	
A Novel Mobility Model of Diverse Average Speed and Uniform Node Distribution in Mobile Ad Hoc Networks.....	644
<i>Chun-Hung Chen, Ho-Ting Wu, Kai-Wei Ke</i>	
An Efficient Implementation of Constrained Partitioned Processor for Broadband Antenna Array Without Steering Delays.....	648
<i>M. R. Sayyah Jahromi and Lal C. Godara</i>	
Information-theoretic Heterogeneity Analysis for Evaluating the Performances of SAR Image Fusion Techniques.....	652
<i>Jing Zhu and Jie Chen</i>	
Source Camera Identification by JPEG Compression Statistics for Image Forensics.....	656
<i>Kai San Choi, Edmund Y. Lam, Kenneth K.Y. Wong</i>	
Texture Classification using Convolutional Neural Networks.....	660
<i>Fok Hing Chi Tivive. and Abdesselam Bouzerdoum,</i>	
Effect of Stimulated Raman Scattering and Optical Parametric Amplification on Wavelength Exchange.....	664
<i>Henry K. Y. Cheung, Rebecca W. L. Fung, P. P. Kuo, C. H. Kwok and Kenneth K. Y. Wong</i>	
A Speech Sectioning Tool For Corpus Development.....	668
<i>Patcharika Cotsomrong, Nattanun Thatphithakkul, Kwanchiva Saykham,</i>	
Grid Security Through Delegation of Roles	672
<i>G Geethakumari, Atul Negi and V N Sastry</i>	
A Semi-Blind Multiuser Detection Based on Chebyshev Approximation and Subspace Tracking for MC-CDMA Uplink.....	676
<i>Yan Meng, Jinkuan Wang, Xin Song, Jun Zhu</i>	
Distributive JPDAF for Multi-Target Tracking in Wireless Sensor Networks.....	680
<i>Hui Ma, Brian W.-H. Ng</i>	
Ad hoc and Ubiquitous Communication Environment supported by Data-Driven Networking Processor	684
<i>Hiroshi Ishii, Chee Onn Chow, Masahiro Yamamoto, Hiroaki Nishikawa</i>	

Table of Contents

A Simple and Economic PWM and E^Λ Modulator Circuit Based on Modified Source-Couple Oscillator	688
<i>Panwit Tuwanut, Jeerasuda Koseeyaporn, Paramote Wardkein</i>	
Exponential Stability Assignment of Systems with Time-Varying Delay via the Optimal Memoryless Feedback	692
<i>Tsuyoshhi Matsuki, Tomohiro Kubo</i>	
A Multiyear Transmission Planning Under a Deregulated Market	695
<i>Rong-Ceng Leou and Shun-Yu Chan</i>	
A Design of a Control Method for Changing Yaw Direction of an Underactuated Unicycle Robot	699
<i>S. Majima, T. Kasai and T. Kadohara</i>	
The Destination Coordinates Arrival Time Improvement Used Neural Network	703
<i>Jun-Hyeok Son and Bo-Hyeok Seo</i>	
Design and Implementation of a Mobile SSH Protocol	707
<i>I-Hsuan Huang, Wei-Jin Tzeng, Szu-Wei Wang, and Cheng-Zen Yang</i>	
Frequency Synchronization for Interleaved OFDMA Uplink Based on Adaptive Beamformer	711
<i>Da Fan, Zhigang Cao</i>	
Transmit Beamforming Optimization for Multiuser MIMO Uplink Using Successive Interference Cancellation	715
<i>Gan Zheng, Kai-Kit Wong and Tung-Sang Ng</i>	
Deficit Round Robin favors longer documents	719
<i>Teck Peow Lee and Guven Mercankosk</i>	
Mimicking Round-Robin Behavior with a Combined Input/Output Queued Switch and Speedup of Two	723
<i>Andreas Schweizer and Guven Mercankosk</i>	
Total Transfer Capability Analysis in Power System including Large-scale Wind Farms	727
<i>Wang Xinggang, Sun Wei , Wang Chengshan</i>	
New Prefetch Technique Design for L2 Cache	731
<i>Wenxin Qu, Xiaoya Fan, Ying Hu, Yong Xia, Fuyuan Hu</i>	
Application of Hunting-free Codes to Digital Interconnect	735
<i>Hai Feng Zhou and Yoshitaka Takasaki</i>	
An Efficient Natural-Looking Color Fusion Method of Infrared and Visible Images	739
<i>Guangxin Li, Ke Wang</i>	
Application of Preconditioned RBFN to Temperature Forecasting for Short-term Load Forecasting	743
<i>HiroYuki Mori, Daisuke Kanaoka</i>	
A Hierarchical Fuzzy Inference Network for Estimating the Minimum Voltage Magnitude in Radial Distribution Systems	747
<i>HiroYuki Mori and Kojiro Shimomugi</i>	
Modeling and Tracking Control of a Magnetostrictive Actuator	751
<i>Yanhua Ma, Jianqin Mao</i>	
Genetic Algorithm based Scan Chain Optimization and Test Power Reduction using Physical Information	755
<i>Barun Bikash Paul, Rajdeep Mukhopadhyay and Indranil Sen Gupta</i>	
An Efficient Reformation Approach for Survivable Bluetooth Piconets with Master Mobility	759
<i>Chorng-Horng Yang and Yen-Chun Chin</i>	
A 0.25 μm CMOS Downconverter Mixer for 1.6GHz	763
<i>F. J. Antunes, T. C. Pimenta and R. L. Moreno</i>	
Semitransparent Organic Light Emitting Device with Ag Electrodes	767
<i>X. Li, W. B. Chen, H. Lin</i>	
The Design of FIR Digital Filter Using Orthonormal Expansion	770
<i>Rumin Yang and Zheng Zhou</i>	

Table of Contents

FPGA-based High-speed True Random Number Generator for Cryptographic Applications	774
<i>Sammy H. M. Kwok, Edmund Y. Lam</i>	
The Modified Particle Swarm Optimization for Phase Balancing	778
<i>Yutthapong Tuppadung and Werusak Kurutach</i>	
A Simple Rail-to-Rail CMOS Voltage Follower.....	782
<i>Surat Wongfoo, Weerachai Naklo, Apirak Suadet and Varakorn Kasemsuwan</i>	
A 1 Volt CMOS Pseudo Differential Amplifier.....	786
<i>Apirak Suadet, Varakorn Kasemsuwan</i>	
Model Identification of Cart-plus-Pendulum System Using Genetic Algorithm.....	790
<i>Deacha Puangdownreong</i>	
Visual Guidance for a Mobile Robot with a Camera.....	794
<i>Kanako Kameoka, Shigeru Uchikado, Sun Lili</i>	
Robust Adaptive Beamforming Using a Bayesian Approach	798
<i>Xin Song, Jinkuan Wang, Yinghua Han and Yan Meng</i>	
DiffServ Supporting Scheduling Algorithm for CICQ Switches.....	802
<i>Hongchao Hu, Peng Yi, Yunfei Guo</i>	
Creating Dual-Frequency on Simple-Structured Slot Antennas for IEEE 802.11 a/b/g/h/j Applications	806
<i>P. Wiriyacosol, N. Anantrasirichai, C. Benjangkprasert and T. Wakabayashi</i>	
An Adaptive Palette Reordering Method For Compressing Color-Indexed Image.....	810
<i>Ka-Chun Lui and Yuk-Hee Chan</i>	
Reducing the Complexity of Multiscale Error Diffusion.....	814
<i>Ka-Chun Lui and Yuk-Hee Chan</i>	
ServiceCreationTrial based on Wireless Ubiquitous Network	818
<i>Moo Wan Kim</i>	
New Fusion Rule For Censored Decisions In Wireless Sensor Networks.....	822
<i>Xiangyang Liu and Yingning Peng</i>	
An Effect of Anchor Nodes Placement on a Target Location Estimation Performance.....	825
<i>Radim Zemek, Masahiro Takashima, Shinsuke Hara, Kentaro Yanagihara, Kiyoshi Fukui, Shigeru Fukunaga, Ken-ichi Kitayama</i>	
A Pulsed Discharge Control of Battery.....	829
<i>Rihito Mino, Shinsuke Hara</i>	
A Novel Harmonics Elimination Method of Cascaded Multilevel Inverter.....	833
<i>Liu QingFeng, Wang HuaMin and Leng ZhaoXia</i>	
Adaptive Scalable Wavelet Difference Reduction Method for Efficient Medical Image Transmission.....	837
<i>Bindulal T.S., M. R. Kaimal</i>	
DWT based FFT in Practical OFDM Systems	841
<i>Andre Ken Lee, Ooi, Micheal Drieberg, Varun Jeoti</i>	
A Tele-cognitive Rehabilitation Platform for Persons with Brain Injuries	845
<i>Yuen Leung Wallace Soong, Wai Kong David Man</i>	
Background-based Objective Measure for Predicting Subjective Visual Quality of Distorted Image	849
<i>Chin-Ann Yang, Jar-Ferr Yang, Pau-Choo Chung</i>	
Efficient Inverse Halftoning of Ordered Dither Images utilizing Matrix Addresses and Flat Area Detection	853
<i>Makoto Kitamura, Fumitaka Ono</i>	
Joint Entropy Criterion For Training Time Domain Equalizer Of ofdm System Without Cp.....	857
<i>Parsaeefard Saeedeh, Amindavar Hamidreza</i>	
Searching for Costas Arrays Using General Particle Swarm Optimization.....	861
<i>Xinchun Yin, Tao Liu</i>	

Table of Contents

Geometry Modulation in Optic Communication	864
<i>Mingwu Gao, Guoan Zheng, Ruopeng Liu</i>	
A Novel Approach For Segmentation of Good, Normal and Bad Quality Fingerprint Image	867
<i>S. S. Jambhorkar, R. R. Manza, S. S. Gornale, K. V. Kale</i>	
Novel SLM Based Techniques for PAPR Reduction of OFDM.....	871
<i>Ibrahim M. Hussain, Imran A. Tasadduq</i>	
Collective Search and Exploration with a Robot Swarm	875
<i>M. Fikret Ercan, Lius Partawijaya, Yu-Fai Fung</i>	
Robust Three Axes Autopilot for a Tactical Aerospace Vehicle.....	879
<i>Abhijit Das, Ranajit Das, Siddhartha Mukhopadhyay, Amit Patra</i>	
Frequency Domain Probabilistic Data Association Equalizer For Ofdm Systems Without Cyclic-Prefix.....	883
<i>Saeedeh Parsaeefard , Hamidreza Amindavar</i>	
Study of Ground Defect PBG Structure in Cylindrical Mricostrip Patch antennas.....	887
<i>Zhao-wei Yin, Xiang-yu Cao, Tao Liu, Jian-jun Qin</i>	
Seamless Handover for Hotspot Network Using Dual Receiver Switching Method	890
<i>Fumihiro Yamagata, Gakushi Kanazawa, Hiroshi Oguma, Suguru Kameda, Hiroyuki Nakase, Tadashi Takagi and Kazuo Tsubouchi</i>	
De-embedding Techniques on a 0.25 μm Digital CMOS Process	894
<i>Marc D. Rosales, Louis P. Alarcon and Delfin Jay Sabido</i>	
An Analytical Model for DNS Performance with TTL Value 0 in Mobile Internet	898
<i>Yi Wu, Janne Tuononen, Mikael Latvala</i>	
Anomaly Identification Based on Flow Analysis.....	902
<i>The Quyen Le, Marat Zhanikeev, and Yoshiaki Tanaka</i>	
A Word Based Self-Embedding Scheme For Document Watermark	906
<i>Thien Vui Khen, Anamitra Makur</i>	
Certi.cateless Convertible Limited Verifier Signature Scheme	910
<i>Chenhuang Wu, Zhenjie Huang</i>	
Average Probability of Bit Error of MPSK in Combined Flat Ionospheric Scintillation and Flat Fading Channels	914
<i>W. Wongtrairat and P. Supnithi</i>	
A Filtering Based Approach to Adaptive Steganography	918
<i>N Santosh Arjun and Atul Negi</i>	
A Memory Management Technique for Remote Sensing Data	922
<i>K.Akkrarajitsakul and T.Achalakul</i>	
Practical Wireless LAN Systems with Simple Tracking Algorithm for Fast Fading Environment	926
<i>Nari Tanabe., Kuniaki Abe, Minoru Miyashita, Hideaki Matsue</i>	
An Ultra Low Power Gm-C Complex Filter for Low-IF Wireless PAN Applications.....	930
<i>Ramin Zanbaghi, Mojtaba Atarodi and Armin Tajalli</i>	
Area Based Approach to Registration of SAR Images with Sub Pixel Accuracy.....	934
<i>Suvesh Kumar, Vinay Rishiwal and P.N. Joglekar</i>	
Reconfigurable Monocycle Pulse Generation for Impulse Radio Based UWB Transceiver.....	938
<i>Sharif Muhammad Salahuddin, Salahuddin Raju, Md. Shahidul Islam and Pran Kanai Saha</i>	
The Secure Field Bus (SecFB) Protocol - Network Communication Security for secure Industrial Process Control.....	941
<i>Swaminathan P, Padmanabhan K, Ananthi S, Pradeep R</i>	
A Wide Band Proximity Coupled Antenna with Slot in the Microstrip Feed and the Ground Plane.....	945
<i>T Balakrishnan, G Ravikanth, A Vengadarajan, and Bhaskar Gupta</i>	

Table of Contents

Multilevel Modulation Based Differentiated Data Aggregation for Wireless LANs.....	949
<i>Yi Wu</i>	
A study on an active noise canceller by using decomposed narrow-band signals	953
<i>Norimasa Kudoh , Shun Numahata and Yoshiaki Tadokoro</i>	
Power Allocation and Multiuser Scheduling with Outage Capacity Constraints	957
<i>Kai-Kit Wong and King-Sun Chan</i>	
A Novel Passive Filter for Industry and Commercial Power Systems	961
<i>Chen Bo, Zeng Xiangjun, Wang Yuanyuan, Tang Xin</i>	
taTHP: A Transaction-Aware Protocol for Web Services Transaction Coordination	965
<i>Wei Xu, Zongkai Yang, Wei Liu, Ling Xu</i>	
Discuss on the Application of Multilevel Inverter in High Frequency Induction Heating Power Supply	969
<i>Liu QingFeng, Wang HuaMin, Leng ZhaoXia</i>	
CARATS: A Computer-Aided Reliability Assessment Tool for Software Based on Object-Oriented Design	973
<i>Chien-Chia Chen, Chu-Ti Lin, Hen-Hsen Huang, Shih-Wei Huang, and Chin-Yu Huang</i>	
Application-Specific RISC Architecture for ITU-T G.729 Decoding Processing.....	977
<i>Chien-Hsuan Wu, Chin-Yu Huang, and Jun-Ru Chang</i>	
Object Categorization Using Multimodal Information	981
<i>Takayuki Nagai and Naoto Iwahashi</i>	
A Low Power Pipeline A/D Converter by Using Double Sampling and Averaging Techniques.....	985
<i>Ramin Zambaghi, Mojtaba Atarodi, Saeed Mehrmanesh</i>	
A New PWM Strategy to Reduce the Common-Mode Voltage.....	989
<i>Haifeng Lu, Xiaomeng Cheng, Wenlong Qu, Xing Zhang and Yang Fan</i>	
Novel Hybrid Flying-Capacitor-Half-Bridge 9-Level Inverter.....	993
<i>Anees Abu Sneineh, Ming-yan Wang</i>	
Improved Direct Torque Control Induction Motor Drive	997
<i>M.V. Aware, S. G. Tarneka and Jagdish G. Chaudhari</i>	
Learning of Object Concept Through Function and Shape.....	1001
<i>Yosuke Sato, Takayuki Nagai</i>	
Analysis Of Surge Voltage Distribution In A Model Transformer For Different Types Of Surges With Turn Resolution And Its Validation.....	1005
<i>B.V.Sumangala and G.R.Nagabhushana</i>	
A Simple Broadband Planar Quasi-Yagi Antenna	1009
<i>H. K. Kan, R. B. Waterhouse, A. M. Abbosh, M. E. Bialkowski and K. L. Chung</i>	
Precise Velocity Control of the Air Floating Gantry Type Precision Stage with the Acceleration Feedback Compensation.....	1012
<i>Ichiro Karikita, Hirokazu Mayeda</i>	
Web Page Classification using Modified Naïve Bayesian Approach.....	1016
<i>G.S. Tomar, Shekhar Verma, Ashish Jha</i>	
Synthetic Asymptote Formulas of Equivalent Circuit Components of Square Spiral Inductors on Lossy Substrate of Two Layers	1020
<i>Wanchun Tang, Baozheng Jiang and Y. Leonard Chow</i>	
Skin Inner Tissue Surface Reconstruction from Confocal Microscope Images	1024
<i>Jiahui Wang, Hideo Saito, Shinji Ozawa, Tomohiro Kawahara, Toyonobu Yamashita, Motoji Takahashi</i>	
Fully Utilized and Low Memory-bandwidth Architecture Design of Variable Block-size Motion Estimation for H.264/AVC.....	1028
<i>Liang-Bin Chen, Yi-Zhen Zhang, and Chao Xu</i>	
Low Energy Partial Tag Comparison Cache Using Valid-bit Pre-decision.....	1032
<i>Manman Peng, Yi Pan and Bin Liu</i>	

Table of Contents

100MHz-650MHz, 1 Watt Distributed Power Amplifier with Discrete MOSFET devices	1036
<i>Tan TeikSiew, Mohd Fadzil Ain and Syed Idris Syed Hassan</i>	
Duty Cycle Criterion for Target Packet Delay of S-MAC Protocol.....	1040
<i>Seokjin Sung, Seok Woo and Kiseon Kim</i>	
Colorization Based on Image Manifold Learning.....	1044
<i>Beibei Liu, Min Liu, Guoli Wang</i>	
Semantic Human Action Classification Based on Energy-Action Model.....	1047
<i>Sirinporn Chinpanchana</i>	
A Note on the Channel Aware Decision Fusion in Wireless Sensor Networks.....	1051
<i>Jintae Park, Georgy Shevlyakov, Insoo Koo and Kiseon Kim</i>	
An Algorithm for Evaluating Inrush Current in Transformers Using Jiles-Atherton Theory of Ferromagnetic Hysteresis.....	1055
<i>B. Vahidi, M.R.Bank Tavakoli, G.B.Gharehpetian and S. H. Hosseinian</i>	
The Implementation and Analysis of a New Selfsampling PI Control All Digital Phase-locked Loop	1059
<i>Chunyu Zhang, Yabin Li, Heming Li</i>	
Design of Versatile Multiplexing System in Terms of Hunting-Free Framing.....	1063
<i>Ziwei Geng and Yoshitaka Takasaki</i>	
A Chaos-Based High Quality PN Sequence Generator for DSSS System.....	1067
<i>Chong Fu, Zhen-chuan Zhang, Hui-yan Jiang, and Xing-wei Wang</i>	
An Improved Algorithm for Order Detection of Multipath Channel.....	1071
<i>Yu Li, Yujie Gu and Kangsheng Chen</i>	
FPGA-Based High Area Efficient Time-To-Digital IP Design.....	1075
<i>Min-Chuan Lin, Guo-Ruey Tsai, Chun-Yi Liu, Shi-Shien Chu</i>	
Proposal of a packet-lossless handover in Mobile PPC	1079
<i>Ayako Kanemoto, Masaki Sejimo, Akira Watanabe</i>	
Image Indexing Using Weighted Color Cooccurrence Matrix and Feature Selection.....	1083
<i>Dong Liang, Edmund Y. Lam</i>	
File Type Classification for Adaptive Object File System.....	1087
<i>Phond Phunchongharn, Supart Pornnapa and Tiranee Achalakul</i>	
Segmentation of Cursive Handwritten Words using Hypergraph	1091
<i>P. Samrajya Lakshmi ,M. Hanmandlu, A. Swaroop</i>	
Surface Current Extraction by Onboard High Frequency SAR	1095
<i>Wenhu Xue, Mingmin Zhang, Jinsong Tang and Shuzong Han</i>	
Simple and Efficient Soft Morphological Filter in Periodic Noise Reduction	1099
<i>Zhen Ji, Huilian Liao, Xijun Zhang, Q.H. Wu</i>	
Speaker Classification Using Support Vector Machine and Wavelets.....	1103
<i>Tsung-Ching Lin, Shi-Huang Chen, Chien-Chang Lin, and T.K.Truong</i>	
Performance Analysis of PT-MMA and PT-DDMLA and PT-DDAA for OFDM in Wireless Communication.....	1107
<i>Babak Haji, Bagher Naeeni and Hamidreza Amindavar</i>	
Efficient Spatial-Temporal Coding Scheme for Minimizing Delay in Interconnects	1111
<i>K S Sainarayanan, C Raghunandan, J V R Ravindra and M B Srinivas</i>	
A Novel Electromagnetic Method for Local Defects Inspection of Wire Rope	1115
<i>Y. N. Cao, D. L. Zhang, C. Wang, Y. Gu and D. G. Xu</i>	
An Improved Adaptive Centroid Estimation Algorithm.....	1119
<i>Chunyu Chen, Maoliu Lin</i>	

Table of Contents

Robust Beamforming Algorithm to Co-Channel Interference Cancellation in Space-Time Coded OFDM System	1123
<i>Yu Li, Xu Sun and Kangsheng Chen</i>	
Improvement of Motion Compensated Inter-Field Interpolation Method for De-Interlacing	1127
<i>Kenji Sugiyama, Yoshiyuki Yamada and Naoya Sagara</i>	
The Effect of Signal Distortion Techniques for PAPR Reduction on the BER Performance of LDPC and Turbo Coded OFDM System	1131
<i>Referendo D. Soriano and Joel S. Marciano</i>	
An Analysis the Effect of Compound Electrode Materials to Transient Recovery Voltage and Chopping Current in Low-Current Vacuum Arc.....	1135
<i>T.Sumransuk, N.Chayawanich and N.Mungkung</i>	
A Low Complexity Robust Parameter Estimator for Distributed Source.....	1139
<i>Yinghua Han, Jinkuan Wang and Xin Song</i>	
A DWT-Based Video Watermarking Algorithm Applying DS-CDMA	1143
<i>Liang Fan, Fang Yanmei</i>	
Super-Systolic Array for 2D Convolution	1147
<i>Jae-Jin Lee and Gi-Yong Song</i>	
Low Cost Mechanical Load Emulator	1151
<i>Michael Angelo, A. Pedrasa and Vincent Louie S. Delfin</i>	
MIMO Multi-Carrier CDMA for Higher Rate Transmission	1154
<i>Jia Hou, Moon Ho Lee, and Jin Gyun Chung</i>	
Simple Semipublic Hiding Scheme for IP Trace Back in Noisy Channel	1158
<i>Jia Hou and Moon Ho Lee</i>	
Digital Restoration of Color in Noh Mask.....	1162
<i>Xin Yin, Yasuo Miichi and Hiromi T. Tanaka</i>	
A Novel Code Assignment Scheme for Broadband OFCDM Systems.....	1166
<i>Yiqing Zhou, Jiangzhou Wang, and Tung-Sang Ng</i>	
An Improved Boost DC-DC Converter Based on Intrinsic Safety and Its Design	1170
<i>Shu-lin Liu, Jian Liu, Yong-bing Chen</i>	
On Parameter Estimation of Damped Sinusoids	1174
<i>Qi Cheng</i>	
A New Marker-Based Watershed Algorithm.....	1178
<i>Li Gao, Shuyuan Yang, Jie Xia, Junli Liang, Yuhua Qin</i>	
Slice-Based Memory Reduction and Management for Storing Multiple Reference Frames of H.264 Video Codec.....	1182
<i>Chih-Chang Chen and Oscal T.-C. Chen</i>	
Maximum likelihood location for identification of line-of-sight base stations.....	1186
<i>Xia Liu, Qun Wan, Wan-Lin Yang</i>	
Selection Diversity Multi-Beamformer Testbed.....	1189
<i>Paul Jason, R. Co and Joel Joseph S. Marciano</i>	
DCT/Haar/Slant Sparse Matrix Generation via Jacket Matrix	1192
<i>Jia Hou, Moon Ho Lee and Dae Chul Park</i>	
Fast and Accurate Singular Point Extraction of Fingerprint	1196
<i>Xiao Xu, Sei-ichiro Kamata</i>	
Systematic Power Minimization in Multibit Delta-Sigma Analog-to-Digital Converters	1200
<i>Siu-Hong Lui and Ngai Wong</i>	

Table of Contents

On Self-Organizing Map Based Classification of Insect Neurons.....	1204
<i>Hiroki Urata, Akitsugu Ohtsuka, Tejiro Isokawa, Yoichi Seki, Naotake Kamiura, Nobuyuki Matsui, Hidetoshi Ikeno and Ryohei Kanzaki</i>	
Small-Signal Analysis of CPC-Single Stage AC/DC Converter with PFC.....	1208
<i>Weiping Zhang, Yaai Cheng, Xiaohan Guan, Dongyan Zhang</i>	
Predictive Credit Based Dynamic Bandwidth Allocation Mechanisms in Ethernet Passive Optical Network	1212
<i>Chun-Hung Chen, Ho-Ting Wu, Kei-Wai Ke</i>	
18.2 GHz Differential Low Noise Amplifier for Onchip Ultra Wide Band Transceiver	1216
<i>Md. Ariful Haque, Mir Saddam Hossain, Shamsuddin Ahmed and A.B.M. H. Rashid</i>	
Muti-Layer Fuzzy Logic Sets for Mobile Path Loss in Forests.....	1220
<i>Supachai Phaiboon, Pisit Phokharatkul and Suripon Somkuarnpanit</i>	
Wavelets Selection for Commutation Failure Detection in HVDC System	1224
<i>Wang Yuhong, Ren Zhen and Li Qunzhan</i>	
Area Based Novel Approach For Fuzzy Edge Detection	1228
<i>M. Hanmandlu, Rohan Raj Kalra, Vamsi Krishna Madasu and Shantaram Vasikarla</i>	
Faceparts for Recognition.....	1232
<i>A. Z. Kouzani</i>	
New Technique to Reduce Bit Rate of LPC-10 Speech Coder.....	1236
<i>J. Srinonchat</i>	
250kVA Unified Power Quality Controller	1240
<i>SudeepKumar R, Ganesan P</i>	
Failure Analysis of Protective Devices in Power Distribution Systems for Reliability Purpose	1244
<i>W. Tippachon, R. Boonruang, S. Boonpun, C. Khamtang, N. Klairuang, D. Rerkpreedapong, J. Hokierti</i>	
Speech and Tone Recognition for a Mandarin e-Learning System.....	1248
<i>Wei Su and Zhenjiang Miao</i>	
A Novel Soft Switching Technique for Special Buck Converter with High Power and High Efficiency	1251
<i>Weiping Zhang, Xiaoqiang Zhang, Zhengeng Chen, Yuanchao Liu, Xuesun Zhao</i>	
High Efficiency Balanced Serially Connected Battery Charging System	1255
<i>Charnyut Karnjanapiboon and Itsda Boonyaroonate</i>	
Does a WSN MAC Based on Uniform Access without Re-attempts Have Merits?.....	1259
<i>Feng Shu, Taka Sakurai, Hai L. Vu and Moshe Zukerman</i>	
On the Use of Nullator Transformation in Oscillator Circuits.....	1263
<i>C. Fongsamut, K. Anuntahirunrat, W. Surakamponorn, and N. Fujii</i>	
Optimizing the IEEE 802.15.4 MAC.....	1268
<i>Feng Shu, Taka Sakurai, Hai L. Vu and Moshe Zukerman</i>	
A New Hybrid Routing Protocol in Ad Hoc Network	1272
<i>J. Kanjanarot, K. Sitti and C. Saivichit</i>	
Development of a Novel Power Quality Monitoring and Report-Back System.....	1276
<i>David Chang, Ming-Jieh Cheng, Shun-Yu Chan and Jen-Hao Teng</i>	
XML Based RFID Event Management Framework.....	1280
<i>Jing Xu, Wenqing Cheng, Wei Liu, Wei Xu</i>	
An Efficient Joint Source Channel Coding Scheme for MPEG-4	1284
<i>Ping Li, Kun Tang, Huijuan Cui</i>	
A High 2LO-RF Isolation SiGe BiCMOS Sub-Harmonic Gilbert Mixer Using Stacked-LO-Stage Topology.....	1288
<i>Tzung-Han Wu and Chinchun Meng</i>	
Recognition of Modulated Speech over OFDMA.....	1290
<i>Katrina Neville, Fawaz Al-Qahtani, Zahir M. Hussain, and Margaret Lech</i>	

Table of Contents

Harmonic Flow Analysis of HVDC Systems for Discrete Wavelet Transform with Advanced of the Harmonic Impedances and Voltage Source Transients Model of AC-DC Converters.....	1293
<i>Chamni Jaipraditham and Vijit Kinnares</i>	
A Comparison Of Time Domain Equalizers On MIMO Frequency Selective Channels	1297
<i>Yusuke Goto, Yasunori Iwanami, and Eiji Okamoto</i>	
A Microcontroller-Based Instrument for Measuring P-Wave Speed in Impact-Echo Testing of Concrete.....	1301
<i>Slamet Riyadi, Khairul Anuar, M. Nayan and Mohd. Marzuki Mustafa</i>	
Coordinate Assigning Contention Window in Ad Hoc Network.....	1304
<i>Somkiat Pornchaiwivat and Watit Benjapolakul</i>	
ECG Arrhythmias Recognition System Based on Independent Component Analysis Feature Extraction.....	1308
<i>Xing Jiang, Liqing Zhang, Qibin Zhao, Sahin Albayrak</i>	
MOSFET Power Consumption Validation In Flyback Switching Converter Design.....	1312
<i>Watson Lee and YuBianZhang</i>	
Design of Robust Data Gathering MAC in Wireless Sensor Networks.....	1316
<i>Chuan-Ching Sue, Yong-Qing Wu, and Chi-Yu Hsu</i>	
Scene Change Detection using Edge Direction based on Intra Prediction Mode in H.264/AVC Compression Domain	1320
<i>Bohyun Hong, Minyoung Eom, Yoonsik Choe</i>	
A Multi-scale Enhancement Method to Medical Images Based on Fuzzy Logic.....	1324
<i>Wei Ping, Li Junli, Lu Dongming, Chen Gang</i>	
Soft Switching Converter with Series-Connected Transformers.....	1328
<i>Bor-Ren Lin, Huann-Keng Chiang, Chien-Chih Chen and Fang-Yu Hsieh</i>	
Voltage and Reactive-Power Control Optimization in a Distribution System	1332
<i>Allan C. Nerves and Froilan J. Savet</i>	
Information Selection based on Data Read from Multiple RFID Tags.....	1336
<i>Nobuo Katoh and Kazumasa Takami</i>	
A PRNG Circuit on PLD with Feature of Low-Power, High-Speed, and Various Generation of Random Number Sequence	1340
<i>Tomoaki Sato, Kazuhira Kikuchi, and Masa-aki Fukase</i>	
Optimization of Data Accesses in Reflective Memory Systems	1344
<i>Myung Seon Ryou, Chang Won Lee, Ki Woung Park , Seung-Whan Song and Changho Choi</i>	
A Heuristic Wavelength Assignment Optimization for Optical Packet Switching Networks.....	1348
<i>Eiji Ishikawa, Sugang Xu, and Yoshiaki Tanaka</i>	
Multiusers Detection In Ultra-Wideband System With Covariance Shaping Least-Square Estimation	1352
<i>Krissada Asvaskulkeit, Widhyakorn Asdornwised, Somchai Jitapunkul</i>	
Enhancement of retinal fundus Image to highlight the features for detection of abnormal eyes	1356
<i>Kevin Noronha, Jagadish Nayak, S.N. Bhat</i>	
High Efficiency RFID UHF Power Converter.....	1360
<i>Zhou Shenghua, Yang Zhichao, Wu Nanjian</i>	
Low-Complexity Adaptive Filtering Implementation for Acoustic Echo Cancellation.....	1363
<i>Christian Schuldt., Fredric Lindstrom, Ingvar Claesson.</i>	
Investigation of Random Rough Surface Effects in Interconnect Resistance Extraction Utilizing Effective Conductivity	1367
<i>Quan Chen and Ngai Wong</i>	
Design and Analysis of a Space Conscious Nonvolatile-RAM File Systemi.....	1371
<i>Seungjae Baek, Choulseung Hyun, Jongmoo Choi, Donghee Lee, Sam H. Noh</i>	
Analysis of Cardiac Wall Motion from Multi-Phase 3D Images	1375
<i>Zhen-hai Xu, W.-L. Wang, Qiu Guan, S. Y. Chen</i>	

Table of Contents

Cyber Security Vulnerability Assessment of Power Industry	1379
<i>Yu Jiax, Mao Anjia and Guo Zhizhong</i>	
Value-Based Utility for Jitter Management.	1383
<i>Jhoanna Rhodette I. Pedrasa and Cedric Angelo M. Festin</i>	
A cross-layer Wireless TCP enhancement Scheme in OFDM network	1388
<i>Wang Jun, Fang Xi, Cheng Na quan, Jia Min, Zhang Ping</i>	
A 1.2V Wide-Band Active-RC Filter for Wireless Communication Receivers.....	1392
<i>Sanghyun Cha, Huikwan Yang, Seungyun Lee, Sangheon Lee, Jinup Lim and Joongho Choi</i>	
A Classical Capacitor Equivalent Circuit with Dependent Values.	1396
<i>Robert W Brown, Donald Campbell Gray, Alan Harvey</i>	
An Algorithm for Rule Extraction	1400
<i>E Xu</i>	
A 1.2V Wide-Band SC Filters for Wireless Communication Receivers.....	1403
<i>Huikwan Yang, Sanghyun Cha, Seungyun Lee, Sangheon Lee, Jinup Lim and Joongho Choi</i>	
Fractal Dimension Co-occurrence Matrix Method for Texture Classification	1407
<i>Ju Hyun Kim, Soo Chang Kim, Tae Jin Kang</i>	
Static Energy Reduction in Cache Memories Using Data Compression.....	1411
<i>Kiyofumi Tanaka and Aiko Matsuda</i>	
WTN - Providing QoS for VoIP in 802.11 Networks.....	1415
<i>Justin Wyatt and Daryoush Habibi</i>	
Simulation Acceleration for Dynamic Timing Analysis with Static Timing Analysis	1419
<i>Ma Lin, Shen Haihua and Hu Weiwu</i>	
Simple Implement of Home Agent Reliability for Mobile IPv6 Network	1423
<i>Adisak Busaranun, Panita Pongpaibool and Pichaya Supanakoon</i>	
Development of Models and Methodology for the Segregation of Distribution System Losses for Regulation.....	1427
<i>Jordan Rel C. Orillaza, Rowaldo dR. Del Mundo, Jose Alfonso C. Miras</i>	
The Implementation and Performance Analysis of Netfilter to Support User Interface on FSL3/4	1431
<i>Myoungsun Kim, Sunyeop Hwang, Youngam Won, Hoon Choi</i>	
Optimal and Simplified Viterbi Receiver for MA-SOQPSK Modulation	1435
<i>Changqing Liu, Xingbo Guo, Jian Song, Changyong Pan, Zhixing Yang</i>	
Two-Dimensional Adaptive Filtering using the Kalman Algorithm	1439
<i>Mario Gonsalves, R. Dinesh and K.R. Santha</i>	
A Novel Scalable Video Coding Scheme Based On db2 Wavelet Temporal Filtering.....	1443
<i>Maoliu Lin, Zhijie Zhao, Ya Lin</i>	
Novel Realization of Some Ternary Circuits for Quantum Computing	1447
<i>A.I. Khan, N. Nusrat, S.M. Khan and M. Hasan</i>	
Design and Implementation of the communication protocol for efficient CBC mode processing in IPSec	1451
<i>Sang-Hyun Park, Yong-Duck You, Hoon Choi</i>	
Programmable Logic Array Design for H.264 Context-Based Adaptive Variable Length Coding.....	1455
<i>An-Chao Tsai, Anand Paul, Jia-Ching Wang, and Jhing-Fa Wang</i>	
An Approach to Resolve Data Model Heterogeneities in Multiple Data Sources	1459
<i>C. Chirathamjaree</i>	
Study of Band-Gap Characteristics for Curved Electromagnetic Band-Gap Structures	1463
<i>Tao Liu, Xiang-yu Cao, Zhao-wei Yin, Guang Zhang</i>	
Space-Frequency Codes for Multiband UWB Communication Systems.....	1467
<i>J. Chusing, L. Wuttisittikulkij and S. Segkhoontod</i>	

Table of Contents

Investigation of a Novel Sampling Frequency Down-Converter	1471
<i>Hailong Wang, Maoliu Lin, Qun Wu</i>	
Reconstructing a Communication Infrastructure in a Time of Disaster	1474
<i>Koji Yamazaki, Masashi Ito, Akira Watanabe</i>	
Performance Improvement of Adaptive AQM Using the Variation of Queue Length.....	1478
<i>Jeong-Hwan Seol , Ki Young Lee and Yoon Sik Hong</i>	
Modified Least-to-Most Greedy Algorithm to Search a Minimum Sentence Set.....	1482
<i>Suyanto</i>	
Design of a Novel SS (Spread Spectrum) System based on Cooperative Communications	1485
<i>Hyung Yun Kong, Ho Van Khuong, Hwi Jae Jeong, Dong-Un Lee</i>	
Available Bandwidth Measurement on any Target Link Using Prioritized Packet-Pair Probes	1489
<i>Gu Wei-Xuan, Yu Shun-Zheng</i>	
Cryptographic Watermarking & Stream Cipher Technique for Robust FPGA Intellectual Property Protection	1493
<i>Guo-Ruey Tsai, Min-Chuan Lin, Shi-Sheng Chu, Chun-Rong Wu</i>	
Cooperative Algorithm for Cognitive Radio Networks Which is Based on Adaptive Election	1497
<i>Jing Jiang, Xuezhi Tan and Hongjian Sun</i>	
Face Recognition across Poses Using Transformed Features	1501
<i>Hongzhou Zhang, Yongping Li, Chengbo Wang, Lin Wang</i>	
Design of X-band 4x4 Butler Matrix for Microstrip Patch Antenna Array	1505
<i>Osama Ullah Khan</i>	
Adaptive Hybrid ARQ schemes with bit-LLR based packet combining through MIMO-OFDM eigen-mode channels.....	1509
<i>Hirotake Ishigami, Mayumi Shimotsu, Yasunori Iwanami, Eiji Okamoto</i>	
Enhancing The Sensitivity Of Zero-Dispersion Wavelength Mapping By Optical Parametric Amplifier	1513
<i>K. W. Tse and K. K. Y. Wong</i>	
Development of a Smart Health Monitoring and Evaluation System	1517
<i>Leroy L. Chan, Branko G. Celler, Nigel H. Lovell</i>	
Vibration and Control of a Parametrically Excited Mechanical System.....	1521
<i>L.Chen</i>	
Application of MUSIC, ESPRIT and SAGE Algorithms for Narrowband Signal Detection and Localization	1525
<i>Franz A. de Leon, Joel Joseph S. Marciano</i>	
Neural Networks-Based Adaptive State Feedback Control of Robot Manipulators	1529
<i>Ghania Debbache, Abdelhak Bennia and Nouredine Goléa</i>	
A Pervasive Computing Security System Based on Human Activities Analysis	1533
<i>Yun Yuan, Zhenjiang Miao and Shaohai Hu</i>	
Communication Route Selection Based On Packet Delay Measurements In A Hierarchical Mobile Ipv6 Network	1537
<i>Hidetoshi Kobayashi and Kazumasa Takami</i>	
Adaptive Echo Cancellation Using Variable Step-Size Algorithm Lattice Filters	1541
<i>S. Sukhumalwong and C. Benjangprasert</i>	
Estimating Directions of Multiple Sound Sources Using Tetrahedral Microphone Array	1545
<i>Kohei Ozeki, Nozomu Hamada</i>	
Fast Computation of WDFT and its Application in Image Compression.....	1549
<i>Anamitra Makur</i>	
A Signal Acquisition Scheme for Noncoherent UWB System in Multipath Channel.....	1553
<i>Jaewoon Kim, Suckchel Yang, and Yoan Shin</i>	

Table of Contents

Time-Frequency Masking Method Using Wavelet Transform for BSS Problem	1557
<i>Masahiro Yashita, Nozomu Hamada</i>	
Hologram-based Interactive Video/Audio System	1561
<i>Hsi-Chun Wang and Po-Wen Yang</i>	
3D Head Pose Estimation Using Non-rigid Structure-from-motion and Point Correspondence	1565
<i>Zhenghui Gui and Chao Zhang</i>	
A Reliable Mechanism to guarantee QoS Over DiffServ using video Differentiator.....	1568
<i>Ujwal Shirwadkar and Naveen Chilamkurti</i>	
A Comparative Study on Different Probabilistic Packet Marking Schemes for IP Traceback.....	1572
<i>Shigeo Shioda and Hui Jing Wang</i>	
Effect of Humidity and Temperature on the DC Breakdown at different tip angles of Rod-Rod Gaps.....	1576
<i>S. Chotigo and T. Boonwern</i>	
On the Use of Norator Transformation in Oscillator Circuits.....	1580
<i>K. Anuntahirunrat, C. Fongsamut, W. Surakamponorn, and N. Fujii</i>	
ABshoot: A Reliable and Efficient Scheme for End-to-End Available Bandwidth Measurement	1585
<i>Wayman Tan, Marat Zhanikeev and Yoshiaki Tanaka</i>	
MyEvalvid-NT - A Simulation Tool-set for Video Transmission and Quality Evaluation.....	1589
<i>Chia-Yu Yu, Chih-Heng Ke, Ce-Kuen Shieh, Naveen Chilamkurti</i>	
Sliding Window Algorithm for Space-Time Turbo Trellis Coded Modulation	1593
<i>Kim Chi Nguyen, Upul Gunawardana and Ranjith Liyana-Pathirana</i>	
Throughput Analysis of an IEEE 802.11b Multihop Ad Hoc Network	1597
<i>Peerapon Siripongwutikorn</i>	
Frequency Dependent Network Equivalents for Harmonic and Transient Studies	1601
<i>S.H Hosseinian, B.Vahidi and J. Bieza</i>	
Ad Hoc On-demand Secure Source Routing	1605
<i>Rohie Naaz Mir and A M Wani</i>	
Design of a Common Observer for Two Linear Systems with Unknown Inputs	1609
<i>H. Trinh and T. Fernando</i>	
Software-based Packet Classification in Network Intrusion Detection System using Network Processor	1612
<i>Robin Salim, G. S. V. Radha Krishna Rao</i>	
Design and Implementation C Based Lightweight Component Framework.....	1616
<i>Su-Won Lee, Yong-Duck You and Hoon Choi</i>	
Multiplierless Polynomial-Operator-Based IIR Filters for Efficient VLSI Implementation.....	1620
<i>Chi-Un Lei and Ngai Wong</i>	
Spam Detection Proposal in Regular and Text-based Image Emails	1624
<i>Biju Issac and Valliappan Raman</i>	
Operation of a Three-phase Soft Phase Locked Loop Under Distorted Voltage Conditions Using Intelligent PI Controller	1628
<i>Guoliang Zhou, Xinchun Shi, Chao Fu, and Yi Wang</i>	
Gradual Transition Detection in Digital Videos using Area Correlation	1632
<i>Naveen Aggarwal, Nupur Prakash, Sanjeev Sofat</i>	
VLSI Implementation of a Decimation Filter for Sigma-Delta AD Converters.....	1636
<i>Xin He, Yihe Sun</i>	
Transmission Characteristics Due To Multipath Dispersion Of Indoor Wireless Optical Communication	1640
<i>Sang-Chul Moon, Ji-Do Kim, and Jae-Kyung Pan</i>	
Correction of Under-reaching in Twin circuit Parallel Overhead Lines without Residual Current input from the Parallel Line	1644
<i>Mohd Faris Bin Abdullah, R. N. Mukerjee, Vigna K. Ramachandaramurthy</i>	

Table of Contents

Improvement of Robustness of Wavelet-based Watermarks by Restoring Image Contrasts.....	1648
<i>Takuya Kaneda and Tadahiko Kimoto</i>	
On Performance of Full-Rate Differentially Encoded Cooperative Communications:Bit Error Rate Bounds	1652
<i>Chuchat Moolkum, Chaiyod Pirak, Somchai Jitapunkul</i>	
Detecting the Number of Sources Using Modified EGM.....	1656
<i>Qunfei Zhang, Yuhong Yin, Jianguo Huang</i>	
Automatically Detecting Road Sign Text from Natural Scene Video.....	1660
<i>Wenjing Jia, Xiangjian He, and David Tien</i>	
Analysis of Gradient Adaptive Lattice Filter as a Pre-Processor in a Speech Separation System	1664
<i>Kollengode S Ananthkrishnan and Kuthuyil Dogançay</i>	
Modified Montgomery Modular Inversion with Reduced Number of Multiplications	1668
<i>R.V.Kamala, M.B.Srinivas</i>	
Fixed-Point Performance of Space-Time Turbo Trellis Coded Modulation	1672
<i>Kim Chi Nguyen, Upul Gunawardana and Ranjith Liyana-Pathirana</i>	
Low-Cost Laser-Based Wireless Optical Transceiver for 10-Mbps Ethernet Link.....	1676
<i>Phanumas Khumsat, Noppadol Wattanapisit and Karel Kulhavey</i>	
Collusive Attacks Against Software Watermarks.....	1680
<i>Jasvir Nagra</i>	
Design Methodologies for Low-Power CMOS Operational Amplifiers in a 0.25 m Digital CMOS Process	1684
<i>Alfonso Cesar B. Albason, Neil Michael L. Axalan, Maria Theresa A. Gusad, John Richard E. Hizon and Marc D. Rosales</i>	
Moving Object Velocity Estimation Using Feature Point Image.....	1688
<i>Yusuke Ejiri, Nozomu Hamada</i>	
Semantic Grid Service Discovery Approach using Clustering of Service Ontologies.....	1691
<i>Sudha Rajagopal and Thamarai Selvi S</i>	
Real-time Data Acquisition and Processing in a MiniatureWireless Monitoring System for Strawberry during Transportation.....	1695
<i>Yali Xi, Weiqiang Yang, Noriyoshi Yamauchi, Yoshitada Miyazaki, Noriko Baba, Hironobu Ikeda</i>	
Architecture of a Wavelet Packet Transform Using Parallel Filters	1699
<i>Mohsen Amiri Farahani, Mohammad Eshghi</i>	
A Novel Balun with Vertically Periodic Defected Ground Structure.....	1703
<i>Kwi-Soo Kim, Chul-Soo Kim, In-Sang Song and Dal Ahn</i>	
A Frequency Domain Method for Instantaneous Determination of Reference Current in Shunt Active Filter.....	1707
<i>S.H. Fathi, M. Pishvaei and G.B. Gharehpetian</i>	
An Analysis of Channel Utilization for the IEEE 802.11 with Aggregation	1711
<i>Cheng-Chia Sung, Yaw-Wen Kuo and Tsern-Huei Lee</i>	
A 3 3W Half-Bridge Single-Stage Grid-Connection PV Power Inverter with Direct-Source-Current-Shaping Algorithm to Improve Power Factor.....	1715
<i>C.-L. Shen and J.-Y. Wang</i>	
Pipelined Intra Prediction Using Shuffled Encoding Order for H.264/AVC	1719
<i>Wonjae Lee, Seongjoo Lee and Jaeseok Kim</i>	
Quantitative Comparison of Job-level Dynamic Scheduling Policies in Parallel Real-time Systems.....	1723
<i>Vahid Salmani, Mahmoud Naghibzadeh, Amirali Habibi and Hossein Deldari</i>	
ART2 Network Based Color Pixel Categorization and Its Application	1727
<i>Zhong Chen, Zixing Cai and Qing Ye</i>	

Table of Contents

Parameters for Wind Caused Overhead Transmission Line Swing and Fault	1731
<i>Long Lihong, Hu Yi, Li Jinglu and Zeng Xiangjun</i>	
Number-of-band Selection for Acoustic Feedback Cancellation in Multi-band Compression Hearing Aids	1735
<i>P. Chaisakul, N. Tangsangiumvisai and P. Luangpitakchumpon</i>	
Portable Compressor System Using MH Alloys, Employed as Assistive Devices	1739
<i>Mitsuru Sato, Shuichi Ino, Naoki Yoshida, Takashi Izumi and Tohru Ifukube</i>	
An Efficient Power Control Algorithm Combining Game Theory with Multiuser Detection in Wireless Networks.....	1743
<i>Guihua Kang, Lizhong Xu, Zuyi Shen</i>	
Simplified Processing for Clock Recovery with Minimal Filtering.....	1747
<i>Kazuaki Mitsumori and Yoshitaka Takasaki</i>	
Block Faded Channel Estimation for Multiuser STBC-OFDM Systems.....	1750
<i>Toufiqul Islam, Imtiaz Ahmed, Shankhanaad Mallick, Fakhurul Alam I, Md. Saifur Rahman</i>	
Modified Directional Medium Access Protocol using Bootlace Lens	1754
<i>G.S. Tomar, Shekhar Verma, M. Rai</i>	
A Network Safety-Defense Mechanism with the Linux Security Module.....	1758
<i>Jichiang Tsai, Chung-Hsin Feng, and Chuyuan Tsai</i>	
Data Hiding for Digital Halftoned Color Images	1762
<i>Lu Long, Akinori Nishihara</i>	
A Novel Fault Location Method Based on Impedance Angle Analysis.....	1766
<i>Duo Chen, Zhong Chen</i>	
A New Integrator for Voltage Model Flux Estimation in a Digital DTC System.....	1770
<i>Zhang Xing, Qu Wenlong, Lu Haifeng</i>	
An Adaptive Intra Refreshing Method for Improving Effects on Error Recovery in MPEG-4.....	1774
<i>Satoshi Sakamoto and Tadahiko Kimoto</i>	
Huffman Encoding Architecture with Self-Optimizing Performance and Multiple CAM-Match Utilization	1778
<i>M. Ishizaki, T. Kumaki, Y. Kouno, T. Koide, H. J. Mattausch, Y. Kuroda, T. Gyoten, H. Noda, K. Dosaka, K. Arimoto, K. Saito</i>	
Semantic Mediacasting and Collaborative Feed Sharing.....	1782
<i>Anand Agrawal and Narendra Kumar Shukla</i>	
Modeling & Analysis Planar Transformer for Power ICs Application	1786
<i>N. Julai, S.P. Chew, K.A. Hamid</i>	
A Method for Enhancement of Image Contrasts by Arbitrarily Shaped Wavelet Transforms.....	1790
<i>Hiroyuki Utsunomiya and Tadahiko Kimoto</i>	
A Novel Vaccine Propagation Architecture in Distributed Environment	1794
<i>Yaqin Luo, Hai Jin, Li Qi</i>	
A Route Feedback Based Routing Model for Enhanced QoS in Real Time Ad-Hoc Wireless Networks.....	1798
<i>Rahul Ghosh, Aritra Das, Pritam Som, P. Venkateswaran, S. K. Sanyal and R. Nandi</i>	
Access Queues for Multi-Bank Register Files Enabling Enhanced Performance of Highly Parallel Processors.....	1802
<i>Y. Mukuda, K. Aoyama, K. Johguchi, H. J. Mattausch, T. Koide, M. Maeda, T. Hironaka, K. Tanigawa</i>	
A Fingerprint Recognition Algorithm Based on Principal Component Analysis	1806
<i>Wang Yongxu, Ao Xinyu, Du Yuanfeng, Li Yongping</i>	
Capacity Analysis by Planar ESPAR Antenna in MIMO Transmission	1810
<i>Hiroya Tanaka, Jun-ichi Takada, Atsushi Honda, Ichirou Ida, Yasuyuki Oishi</i>	
F-shaped Shorted Patch Antenna with Dual-frequency Characteristics	1814
<i>J. Lal, H. K. Kan, W. S. T. Rowe and K. L. Chung</i>	

Table of Contents

A Novel Protection for Stator Winding Grounding Faults in Multi-Generator-Systems	1817
<i>Wang Yuanyuan, Zeng Xiangjun, Xia Yunfeng, Mu Daqing</i>	
Enhanced Reactance-Domain ESPRIT Method for ESPAR Antenna.....	1821
<i>An-Min Huang, Qun Wan, Xin-Xin Chen, Wan-Lin Yang</i>	
Static Output Feedback Stabilization	1824
<i>Wei-Yong Yan</i>	
Cousin-Fair Bandwidth Allocation in Intelligent Digital Home Networks.....	1827
<i>Chuan-Ching Sue, Shih-Chang Hsu, and Chi-Yu Hsu</i>	
Identifying Malicious Nodes in Mobile Ad Hoc Networks using a Reputation Scheme based on Reinforcement Learning	1831
<i>Wipawee Usaha, Karnkamon Maneenil</i>	
A Compression Improvement Technique for Low-Power Scan Test Data.....	1835
<i>Jaehoon Song, Hyunbean Yi, Doochan Hwang, Sungju Park</i>	
A Learning Based Approach for Vehicle Detection.....	1839
<i>Fan Jiang and Xinggang Lin</i>	
An Unequal Modulation Scheme for the Transmission of Compressed Multimedia Data over Adaptive MIMO-OFDM Systems.....	1843
<i>Tasso Athanasiadis, Kevin H. Lin, and Zahir M. Hussain</i>	
Wireless/Wired Collaborative Remote Consultation Emergency Healthcare Information Systems Framework.....	1847
<i>S. L. Hsieh, Y. C. Weng, S. H. Hsieh, F. P. Lai, K. P. Hsu and W. N. Tsai</i>	
A Multi-thresholds Scheduling Algorithm for Buffered Crossbar Switches.....	1851
<i>Peng Yi, Hongchao Hu, Binqiang Wang, Yunfei Guo</i>	
A Study on WiMax Implementation at Dwesa-Cwebe Rural Areas of Eastern Cape of South Africa	1855
<i>Martin .T. Mandioma, G.S.V.R.Krishna Rao, Alfredo Terzoli and Hippolyte Muyingi</i>	
Effects of a Dynamic Reference Frame in Mental Task Classification for EEG-Based Brain-Machine Interface.....	1858
<i>M.S. Abundo and L.G. Sison</i>	
Dual Run-time Environments for Dual Data Memory Bank Architecture	1862
<i>Jeonghun Cho, Soohyun Kwon, Jinwhi Park, and Jungheung Kim</i>	
Dynamic Multidimensional Scaling Algorithm for Mobile Location.....	1866
<i>Zhang-Xin Chen, Q. Wan, B. Jiang, H. Dou, W. L. Yang</i>	
FPGA-Based All Digital Phase-Locked Loop Controlled Induction Heating Power Supply Operating at Optimized ZVS Mode.....	1870
<i>Heming Li, Yabin Li, Yonglong Peng</i>	
ERI - A framework for secure message delivery and offline viewing	1874
<i>Ezmir Mohd Razali, Ismail Ahmad, G.S.V. R. Krishna Rao, Kenneth Foo Chuan Khit</i>	
Acoustic Echo Cancellation using the DUET Algorithm Based Blind Separation in a Noisy Environment	1877
<i>K.J. Kim, C.S. Jang, J.-M. Jeong, and S.W. Nam</i>	
Tunable Delay Element for Low Power VLSI Circuit Design.....	1881
<i>Jung-Lin Yang, Chih-Wei Chao, and Sung-Min Lin</i>	
DLX Processor Enhancement for AES Rijndael Crypto Algorithm.....	1885
<i>Maman Abdurohman and Sarwono Sutikno</i>	
Enliven Photographs: A Study to Enrich User Experience.....	1889
<i>Akshay Darbari and Pragya Agrawal</i>	
Evaluation of Effectiveness of Random Variations in Signal Levels Transformed for Data Hiding	1892
<i>Shigemoto Watanabe, Takuya Kaneda, Hiroyuki Utsunomiya, Satoshi Sakamoto, Tadahiko Kimoto</i>	

Table of Contents

A Design of the Bilateral Microwave Transistor Amplifier in the CCITL System	1896
<i>R. Silapunt and D. Torrungrueng</i>	
An Algorithm for Real-Time Eye-Movement Tracking with Free Head Movement	1900
<i>Jongman Cho, Sungil Kim, Jaehong Lim</i>	
Considering Both Failure Detection and Fault Correction Activities in Software Reliability Modeling	1903
<i>Jung-Hua Lo</i>	
Adaptive-Based Hybrid Series Active Filter to Compensate Voltage Sags and Current Harmonics for Residential Equipment	1907
<i>S. Puengsungwan, P. Kumhom, K. Chamnongthai, A. Chaisawadi, R. H. Lasseter</i>	
Performance of the IEEE 802.16 MAC Protocol with Varying Request Backoff Start	1910
<i>B.N. Bhandari, Ratnam V. Raja Kumar and S.L. Maskara</i>	
EMG analysis of facial muscles exercise using oral cavity rehabilitative device	1914
<i>F. Ibrahim, J. H. Chae, N. Arifin1, N. M. Zarmani, and J. Cho</i>	
Indoor Multipath Propagation Characteristic at 60GHz	1918
<i>Tran Hao Ngoc, Jun Takagi, Hiroshi Oguma, Suguru Kameda, Hiroyuki Nakase, Tadashi Takagi, and Kazuo Tsubouchi</i>	
Development Of A Classification Algorithm For Butterflies And Ladybugs	1922
<i>Jaehong Lim, Jongman Cho, Taewoo Nam, Soohong Kim</i>	
Townscape Colour Development with the IroKage Intelligent Colour Planning Support System	1925
<i>Yuichiro Kinoshita, Eric W. Cooper, Katsuari Kamei</i>	
A New ECG Identification Method Using Bayes' Theorem	1929
<i>Zhaomin Zhang and Daming Wei</i>	
A Statistical Jitter Tolerance Estimation Applied for Clock and Data Recovery Using Oversampling	1933
<i>Jing Yin, Lie-guang Zeng</i>	
A Simple Method for Controlling Wave Impedance of Artificial Dielectrics	1937
<i>Achmad Munir and Hiroshi Kubo</i>	
A Fast Constant Modulus Algorithm for Blind Equalization	1941
<i>Kam-Tim Woo and Chi-Wah Kok</i>	
Clustering Web Traffic of Request Bursts	1945
Wei-Zhou Lu and Shun-Zheng Yu	
A Study on RF Transistor Implementations on a 0.25 μm Digital CMOS Process	1949
<i>Jose Enrico R. Mangaser , Maria Cecilia N. Gutierrez, John Richard E. Hizon and Louis P. Alarcon</i>	
PSO Algorithm for Multiuser Detector in Asynchronous CDMA Communication Systems	1953
<i>Ho- Lung Hung, Shu-hong Lee and Jyh-Horng Wen</i>	
The Performance Improvement of Constant V/f Control of Induction Motor Drive in Low Speed Range	1957
<i>Jutarat Pongpant, Sakorn Po-ngam and Mongkol Konghirun</i>	
Occurrence of Virtual Entanglement in Nano-CMOS logic	1961
<i>Mohd Abubakr</i>	
A Frequency Offset Estimation Scheme for OFDM Based UWB Systems	1963
<i>Benudhar Sahu, Debarati Sen, R.V. Raja Kumar and Saswat Chakrabarti</i>	
2-Wire 4-Duplex Transmission Signal Denoising Using Nonlinear Wavelet Thresholding	1967
<i>I Nyoman Sukadana, Shogo Nakamura, Hiroto Saito, Minoru Horie, Yukichi Horioka, Kenji Nishikido</i>	
Polymorphic Extensions to Object-Z Specifications	1971
<i>Tabinda Waheed, Muhammad Uzair Khan and Amer Nadeem</i>	
A DSP - Based Vector Control of PMSM Servo Drive Using Resolver Sensor	1975
<i>Weera Kaewjinda and Mongkol Konghirun</i>	

Table of Contents

Capturing the chaotic relation in Transmission Control Protocol (TCP).....	1979
<i>Abhishek Murthy</i>	
A Study of Effectiveness in Masquerade Detection	1983
<i>Wilson Naik Bhukya, Suresh Kumar G and Atul Negi</i>	
MEMS based vision correction using Adaptive Optics	1987
<i>Sankarananda, Usha Raghunathb, T. Srinivase, K.S. Gurumurthyb</i>	
A Robust Color Tracker Employing a Two-dimensional Color Histogram with an Anisotropic Asymmetric Gaussian Distribution Model	1991
<i>Hirofumi Uemura, Joo Kooi Tan and Seiji Ishikawa</i>	
Autonomics and Self-Management extending Advanced Device Management	1995
<i>Bernd Steinke</i>	
A Method to Compute All Fixed Points for the Iterative MUD of CDMA Systems with Chip-Level Interleavers.....	1999
<i>Mark S. K. Lau, Wuyi Yue, Li Ping and Duan Li</i>	
Radar Target Recognition Using A Modified FastICA Algorithm plus GAs.....	2003
<i>Hualin Liu and Wanlin Yang</i>	
A New Wavelet Transform Based Busbar Protection	2007
<i>Shaik Abdul Gafoor and P.V. Ramana Rao</i>	
Human Face Recognition using Soft Computing RBF	2011
<i>W. Pensuwon, R.G. Adams, and N. Davey</i>	
Wavelet Analysis of the Genome of the Model Plant <i>Arabidopsis thaliana</i>.....	2014
<i>Benjamin Y. M. Kwan, Jennifer Y. Y. Kwan, Hon Keung Kwan, Rajandeep Atwal, and On Ting Shen</i>	
IIR Variable Fractional Delay Digital Filter Design.....	2018
<i>Hon Keung Kwan, Aimin Jiang and Hui Zhao</i>	
A Session Management Method to Improve Web Applications Usability on Mobile Network	2022
<i>Satoshi Munakata and Masahiro Hiji</i>	
Feature Selection Using Rough Set in Intrusion Detection	2026
<i>Anazida Zainal, Mohd Aizaini Maarof and Siti Mariyam Shamsuddin</i>	
An Automated Segmentation Method For Iris Recognition	2030
<i>Sandipan P Narote, Abhilasha S Narote, Laxman M Waghmare, Arun N Gaikwad</i>	
Evolving the System for Remote Control, Configuration and Management.....	2034
<i>T.C.Sarma, A.Venugopal and T.Srujana</i>	
2-Line Segment Topology Aggregation Mechanism for QoS Routing.....	2038
<i>Sam Siu-Sang Li and King-Shan Lui</i>	
Fast Model-based 3D Human Face Reconstruction from Silhouettes of Multiple Views.....	2042
<i>Yat-Cheung Wong and W.H. Lau</i>	
Analysis Of Multilayered Microstrip Using Collocation Method.....	2046
<i>S. Kanthamani, S. Raju, V. Abhaikumar</i>	
Fault Classification and Ground detection using Support Vector Machine.....	2049
<i>S.R. Samantaray, P.K.Dash, G.Panda</i>	
Interpreting Opacity in the Context of Information-hiding and Obfuscation in Distributed Systems	2052
<i>Anirban Majumdar and Clark Thomborson</i>	
Fuzzy Logic Based Automatic Braking System In Trains.....	2056
<i>G.Sankar and S.Saravana Kumar</i>	
A New Modified Method for DMT in ADSL Systems in a Burst-noisy Channel.....	2060
<i>Saeed Ghazi Maghrebi, Mojtaba Lotfizad and Mohammad Ghanbari</i>	
Classifier Fusion Using Dempster-Shafer theory of evidence to Predict Breast Cancer Tumors	2064
<i>Mansoor Raza, Iqbal Gondal, David Green, Ross L. Coppel</i>	

Table of Contents

Coalesce Gene Regulatory Network Reconstruction: A Cross-Platform Transcriptional Gene Network Fusion Framework.....	2068
<i>Muhammad Shoaib B. Sehgal, Laurence Dooley, Iqbal Gondal and Ross Coppel</i>	
Minimum Singular Value Based Identification of UPFC Control Parameters.....	2072
<i>R.K. Pandey and N.K. Singh</i>	
Modeling and Design of Wideband Antennas For Body Area Networks (BANs).....	2076
<i>Raj Mittra, Jonathan Bringuier, Kyungho Yoo</i>	
Effect of the Misalignment of Antenna Elements in Phased Arrays.....	2079
<i>Ahmed A. Kishk</i>	
Service Restoration for secondary Power System with Grey Relational Analysis.....	2082
<i>Whei-Min Lin, Cong-Hui Huang, Chia-hung Lin, Chien-Ming Chen, and Long-Wei Wang</i>	
UWB Antenna with Improved Efficiency for Pulse Radiation.....	2086
<i>Yu-chun Guo, Xiao-wei Shi</i>	
An Automated Sampling Soil Reduction-Oxygenation RF Sensor Network For Cereal Crop Management.....	2090
<i>Michael Collins, Chris Holme, Keng T. Tan, Leisa Armstrong</i>	
Novel Dielectric Resonator Antenna Oscillator.....	2094
<i>E. H. Lim and K. W. Leung</i>	
A New Predictive Current Control Technique for Multilevel Converters.....	2097
<i>Firuz Zare and Gerard Ledwich</i>	
Nano-CMOS Technology for Next Fifteen Years.....	2101
<i>Hiroshi Iwai and Hei Wong</i>	
Preparation and Applications of Nanocrystalline Silicon Devices.....	2105
<i>Shunri Oda</i>	
Source/Drain Impurity Profile Engineering of Single-Halo CMOS Devices for Analog Applications.....	2109
<i>Partha Sarkar, Abhijit Mallik and Chandan Kumar Sarkar</i>	
3-Dimensional Integration for Interconnect Reduction in for Nano-CMOS Technologies.....	2113
<i>Mansun Chan, Shengdong Zhang, Xinnan Lin1, Xusheng Wu, and Philip. C.-H. Chan</i>	