

**2013 The International Conference on
Technological Advances in Electrical,
Electronics and Computer Engineering
(TAECE 2013)**

**Konya, Turkey
9-11 May 2013**



IEEE Catalog Number: CFP1357U-POD
ISBN: 978-1-4673-5612-1

TABLE OF CONTENTS

MIMO TECHNIQUES FOR HIGH DATA RATE FREE SPACE OPTICAL COMMUNICATION SYSTEM IN LOG-NORMAL CHANNEL	1
<i>Mohamed R. Abaza, Raed Mesleh, Ali Mansour, Ayman Alfalou</i>	
SIMULATION STUDY OF PACKET LENGTH FOR IMPROVING THROUGHPUT OF IEEE 802.15.4 FOR IMAGE TRANSMISSION IN WSNS.....	6
<i>Mohamad Baseri, Seyed Ahmad Motamedi</i>	
A COMPARATIVE STUDY BASED ON POWER USAGE PERFORMANCE FOR ROUTING PROTO-COLS IN WIRELESS SENSOR NETWORK.....	10
<i>Ali Norouzi, A. Halim Zaim, Ahmet Sertbas</i>	
AN INTERFERENCE-AWARE COGNITIVE RADIO UWB (IA-CR-UWB) SYSTEM USING EIGEN PULSE SHAPING	16
<i>Rasha El-Khamy, Shawky Shaaban, Ibrahim Ghaleb, Hassan Nadir Kheirallah</i>	
PERFORMANCE OF A PSO ASSISTED PPIC FOR SDMA/OFDM OVERLOADED SYSTEM.....	22
<i>Khairy A. Elbarbary, Islam E. Shaalan</i>	
PERFORMANCE TEST OF 4G (LTE) NETWORKS IN SAUDI ARABIA	28
<i>Mahdi H. A. Ahmed</i>	
TRAFFIC DIFFERENTIATION AND SCHEDULING FOR QOS SUPPORT IN VEHICULAR SENSOR NETWORKS.....	34
<i>Thamer M. Alanazi, Ridha Ouni</i>	
WSN GOODPUT AND ENERGY CONSUMPTION FOR VARIOUS WIRELESS COMMUNICATION STANDARDS	40
<i>Ahmed Kenawy, Ghada Badawi, Michael Makar, Mark Onsy, Ramy Hanna, Hassan H. Halawa, Tarek K. Refaat, Hany M. Elsayed, Ramez M. Daoud, Hassanein H. Amer</i>	
A NOVEL APPROACH ON ROUTING PROTOCOL DEFENSE IN AD-HOC NETWORKS	46
<i>I. Zagli, G. Yilmaz, A. C. Sonmez</i>	
REALIZATION OF BIQUADRATIC FILTER BY USING MEMRISTOR.....	52
<i>Sakar Jameel, Celal Korasli, Arif Nacaroglu</i>	
A LOW FREQUENCY LOW PASS FILTER BASED ON R2R DIFFERENCE TERM-COMBINED-APPROACH	57
<i>Yaqub Mahnashi, Hussain Alzaher, Noman Tasadduq</i>	
DESIGN AND DEVELOP AUTOMATIC BATTERY CYCLIC TESTER.....	61
<i>R. Ramdan, Mortaza B. Mohamed, Ahmed N Abdalla, Muhammad Rauf</i>	
RESPONSE SURFACE METHOD IN-COOPERATING EMBEDDED SYSTEM FOR BUS ROUTE OPTIMIZATION	66
<i>Ahmed N. Abdalla, Mortaza B. Mohamed, R. Ramdan, Muhammad Rauf</i>	
IMPROVING RELIABILITY THROUGH TASK RECOMPUTATION IN HETEROGENEOUS MULTI-CORE EMBEDDED SYSTEMS.....	72
<i>Bayan Nimer, Hakduran Koc</i>	
DESIGN AND IMPLEMENTATION OF A WIRELESS TEMPERATURE SENSOR NETWORK NODE BASED ON AT86RF212.....	78
<i>Zhiling Liu, Huaqiu Deng</i>	
BIT-INDEX SORT: A FAST NON-COMPARISON INTEGER SORTING ALGORITHM FOR PERMUTATIONS.....	83
<i>L. F. Curi-Quintal, J. O. Cadenas, G. M. Megson</i>	
AUTOMATIC LIVER TISSUE SEGMENTATION IN MICROSCOPIC IMAGES USING FUSION COLOR SPACE AND MULTISCALE MORPHOLOGICAL RECONSTRUCTION.....	88
<i>Consuelo Cruz-Gomez, Petra Wiederhold, Marco Gudino-Zayas</i>	
CIRCULAR CHAIN VM PROTECTION IN ADJOINTVM.....	93
<i>Ucman Oktay, Muhammed Ali Aydin, Ozgur Koray Sahingoz</i>	
PROXY NETWORK INTRUSION DETECTION SYSTEM FOR CLOUD COMPUTING	98
<i>Ucman Oktay, Ozgur Koray Sahingoz</i>	
USING THE COMBINATORIAL OPTIMIZATION APPROACH FOR DVS IN HIGH PERFORMANCE PROCESSORS	105
<i>Diary R. Sulaiman, Bestoun S. Ahmed</i>	
APPLICATIONS OF LIDAR IN PATROLLING ELECTRIC-POWER LINES	110
<i>Anqing You, Xiaoping Wang, Xiaoyan Han, Dan Tang</i>	

FUZZY CONTROL OF CONFIGURATION OF WEB ANONYMIZATION USING TOR	115
<i>Tomas Sochor</i>	
MID-LONG TERM ALGERIAN ELECTRIC LOAD FORECASTING USING REGRESSION APPROACH	121
<i>Mohamed Reda Nezzar, Nadir Farah, Tarek Khadir</i>	
A LOCALIZATION AND AN IDENTIFICATION SYSTEM OF PERSONNEL IN AREAS AT RISK USING A WIRELESS SENSOR NETWORK	127
<i>Cheriet Mohammed El Amine, Ouslim Mohamed</i>	
WINDOWS REGISTRY ANALYSIS FOR FORENSIC INVESTIGATION	132
<i>Raihana Md Saidi, Siti Arpah Ahmad, Noorhayati Mohamed Noor, Rozita Yunos</i>	
USING TLM METHOD FOR SIMULATION A NEW MINE DETECTION TECHNIQUE	137
<i>M. H. Abd El-Azeem, A. M. Elbakly</i>	
DESIGN OF 60 GHZ PULSE RECEIVER BUILDING BLOCKS IN CMOS	142
<i>Berk Omuz, Ahmet Oncu</i>	
ENHANCING LOW FREQUENCY OPERATION OF ACTIVE- RC FILTERS EMPLOYINGR-2R NETWORKS	147
<i>Hussain Alzaher, Noman Tasadduq, Yaqub Mahmashi</i>	
THE DESIGN AND IMPLEMENTATION OF ACOUSTIC ECHO CANCELLATION SUBSYSTEM FOR MULTI-PARTY VIDEOCONFERENCING SYSTEMS	152
<i>Xu Deng, Congxiao Bao, Xing Li</i>	
GENERAL THEORY ON ONLINE WAVELETS DENOISING BASED ON MOVING WINDOW	157
<i>Jin Qibing, Sajid Khursheed</i>	
ADAPTIVE FILTERING FOR INCIDENT PLANE WAVE ESTIMATION	162
<i>Mohammad Shukri Salmann, Mehmet Fatih Yilmaz</i>	
MEASUREMENT OF POWER COMPONENTS IN BALANCED AND UNBALANCED THREE-PHASE SYSTEMS UNDER NONSINUSOIDAL OPERATING CONDITIONS BY USING IEEE STANDARD 1459-2010 AND FOURIER ANALYSIS	166
<i>A. Mansour, Zhang Chengning, Hany Nasry</i>	
STUDY ON SUPPRESSING NONLINEAR CHAOS OF ELECTRIC SUBMERSIBLE MOTOR FOR IDENTIFYING TEMPERATURE	172
<i>Wang Liguu, Wu Songlin, An Tianqi, Xu Dianguo</i>	
A HYBRID PARTICLE FILTER-CAMSHIFT MODEL BASED SOLUTION FOR AERIAL MARITIME SURVIVOR SEARCH	178
<i>Kin Hong Wong, Yibo Gong, Hung Kwan Fung</i>	
NON-NEGATIVE MATRIX FACTORIZATION FOR EEG	183
<i>Ibrahim Salem Jahan, Vaclav Snasel</i>	
A COMPUTER VISION BASED SEA SEARCH METHOD USING KALMAN FILTER AND CAMSHIFT	188
<i>Zhe Zhang, Kin Hong Wong</i>	
ANALYSIS OF REAL TIME VIDEO TRAFFIC FOR ENHANCED DISTRIBUTED CHANNEL ACCESS OVER WLAN	194
<i>Abdirisq Mohammed Jama, Othman O. Khalifa, Moussa Ali Hamdan</i>	
EEG SPECTROGRAM CLASSIFICATION EMPLOYING ANN FOR IQ APPLICATION	199
<i>Mahfuzah Mustafa, Mohd Nasir Taib, Sahrim Lias, Zunairah Hj Murat, Norizam Sulaiman</i>	
A SURVEY OF DIFFERENT SPEECH SYNTHESIS TECHNIQUES	204
<i>Madiha Jalil, Faran Awais Butt, Ahmed Malik</i>	
SHORT-TIME ENERGY, MAGNITUDE, ZERO CROSSING RATE AND AUTOCORRELATION MEASUREMENT FOR DISCRIMINATING VOICED AND UNVOICED SEGMENTS OF SPEECH SIGNALS	208
<i>Madiha Jalil, Faran Awais Butt, Ahmed Malik</i>	
AN OVERVIEW OF ELECTRONIC WARFARE IN RADAR SYSTEMS	213
<i>Faran Awais Butt, Madiha Jalil</i>	
UTILIZING CONTRAST ENHANCEMENT ALGORITHMS (CEAS) IN IDENTIFICATION OF DENTAL ABNORMALITIES	218
<i>Siti Arpah Bt Ahmad, Mohd Nasir Taib, Noor Elaiza A. Khalid, Haslina Taib</i>	
EFFICIENT FILTER IMPLEMENTATION USING QRD-RLS ALGORITHM FOR PHASED ARRAY RADAR APPLICATIONS	224
<i>Aalhad P. Deshpande, N. S. Murthy, D. Govind Rao, A. Vengadarajan</i>	
IDENTIFICATION OF DISK DRIVE SYSTEMS USING THE MULTIFEEDBACK-LAYER NEURAL NETWORK AND THE PARTICLE SWARM OPTIMIZATION ALGORITHM	230
<i>Inayet Ozge Aksu, Ramazan Coban</i>	

AN APPROACH FOR MAXIMIZING CONTAINER LOADING AND MINIMIZING THE WASTE OF SPACE USING Q-LEARNING	235
<i>Sani Tijjani, Ihsan Omur Bucak</i>	
AN IMPROVED Q-LEARNING ALGORITHM FOR AN AUTONOMOUS MOBILE ROBOT NAVIGATION PROBLEM.....	239
<i>Jawad Muhammad, Ihsan Ömür Bucak</i>	
AMBULATORY MONITORING - AN IMPORTANT CONTRIBUTION OF ELECTRICAL AND COMPUTER ENGINEERING TO HEALTH CARE.....	244
<i>Bahattin Karagozoglu</i>	
EXAMPLES OF BUSINESS FLOW MANAGEMENT USING THE CELLULAR DATA SYSTEM	250
<i>Toshio Kodama, Yoichi Seki</i>	
AN ALGORITHM FOR QUESTION PAPER TEMPLATE GENERATION IN QUESTION PAPER GENERATION SYSTEM.....	256
<i>Vaibhav M. Kale, Arvind W. Kiwelekar</i>	
A NEW APPROACH TO AN EXACT INVERSION OF TSK FUZZY SYSTEMS.....	262
<i>Çenk Ulu, Mijde Güzelkaya, Ibrahim Eksin</i>	
ON THE USE OF THE INCREMENTAL SUPPORT VECTOR MACHINES FOR MONITORING SYSTEMS IN INTENSIVE CARE UNIT	266
<i>Fahmi Ben Rejab, Kaouther Nouira, Abdelwahed Trabelsi</i>	
PERFORMANCE IMPROVEMENT FOR DIAGNOSIS OF COLON CANCER BY USING ENSEMBLE CLASSIFICATION METHODS.....	271
<i>Ugur Turhal, Sebahattin Babur, Cafer Avci, Ahmet Akbas</i>	
DIAGNOSIS OF PATHOLOGY ON THE VERTEBRAL COLUMN WITH BACKPROPAGATION AND NAIVE BAYES CLASSIFIER.....	276
<i>Yavuz Unal, H. Erdinc Kocer</i>	
DISCRETE WAVELET TRANSFORM-BASED ANT COLONY OPTIMIZATION FOR EDGE DETECTION	280
<i>Aminu Muhammad, Ibrahim Bala, Mohammad Shukri Salman, Alaa Eleyan</i>	
PERFORMANCE EVALUATION FOR FACE RECOGNITION USING WAVELET-BASED IMAGE DE-NOISING	284
<i>Vepa Atamuradov, Alaa Eleyan, Bekir Karlik</i>	
IMPLEMENTING HOG & AMDF BASED SHAPE DETECTION ALGORITHM FOR COMPUTER VISION & ROBOTICS EDUCATION USING LEGO MINDSTORMS NXT.....	288
<i>Berkan Demirci, Osman Arslan, Niyazi Serdar Tunaboylu, Halis Altun</i>	
MOVING DIM-TARGET TRACKING ALGORITHM USING TEMPLATE MATCHING	294
<i>Eunyoung Lee, Eunhye Gu, Hyun-Jung Yoo, Kil-Houm Park</i>	
STATE FEEDBACK AND LQR CONTROLLERS FOR AN INVERTED PENDULUM SYSTEM.....	298
<i>Bakhtyar Abdullah Sharif, Ahmet Ucar</i>	
COMPARISON FOR THE DETECTION OF VIRUS AND SPAM USING PATTERN MATCHING TOOLS	304
<i>Mourad Elloumi, Jalil Asghar Mirza, Pedram Hayati, Solon P. Pissis, Costas S. Iliopoulos, Arfaat Shah</i>	
IMAGE DEMOSAICING BY AN IMPROVED ALTERNATING PROJECTIONS ALGORITHM BASED ON DUAL-TREE COMPLEX WAVELET TRANSFORM.....	312
<i>Mahmoud Nazzal, Huseyin Ozkaramanli</i>	
TOOLS FOR COLLECTING VOLATILE DATA: A SURVEY STUDY	318
<i>Leonardo Carvajal, Cihan Varol, Lei Chen</i>	
A UNIQUE TECHNIQUE FOR REDUCING THE EFFECTS OF HOT-CARRIER INDUCED DEGRADATIONS IN CMOS BISTABLE CIRCUITS FOR FAULT TOLERANT VLSI DESIGN	323
<i>A. G. M. Das</i>	
ECONOMIC STUDY ON BATTERIES AND CAES FOR A LEBANESE HYBRID WIND/DIESEL SYSTEM.....	329
<i>Haydar Raya, Nazih Moubayed</i>	
OPTIMIZATION OF HYBRID POWER SOURCES SUPPLYING A LEBANESE HOUSE LOAD DURING SHORTAGE PERIODS.....	334
<i>Majd Fayyad, Nazih Moubayed</i>	
IMPACT OF THE CURRENT AND THE TEMPERATURE VARIATION ON THE NI-CD BATTERY FUNCTIONING	339
<i>Hind Chit Dirani, Eliane Semaan, Nazih Moubayed</i>	
HAMILTONIAN CYCLE WITHIN EXTENDED OTIS-ARRANGEMENT NETWORK	344
<i>Awwad Ahmad</i>	
SIFT-BASED IRIS RECOGNITION USING SUB-SEGMENTS	350
<i>Ibrahim Mesecan, Alaa Eleyan, Bekir Karlik</i>	

A CONCEPTUAL STUDY FOR THE DEVELOPMENT OF A LEISURE BOAT SIMULATOR	354
<i>Nam Seon Kang, Il Sik Shin, Hyeon Hyu Yoon</i>	
IMPROVING BUG FIX-TIME PREDICTION MODEL BY FILTERING OUT OUTLIERS	359
<i>W. Abdelmoez, Mohamed Kholief, Fayrouz M. Elsalmy</i>	
A HYBRID DEPLOYMENT MODEL FOR FINANCIAL SYSTEMS WITH SERVICE ORIENTED ARCHITECTURE (SOA): RUNNING FROM CLIENT VIA BRANCH SERVER	365
<i>Mucahit Gundebahar, Merve Can Kus Khalilov</i>	
PERIODIC TRANSACTION PROCESSING ARCHITECTURE WITH HIGH PERFORMANCE IN FINANCIAL SYSTEMS	371
<i>Mucahit Gundebahar, Sinem Zeynep Bastas</i>	
ZERO DOWNTIME ARCHIVING MODEL FOR FINANCIAL APPLICATIONS.....	375
<i>Mucahit Gundebahar, Merve Can Kus Khalilov</i>	
AN AGILE APPROACH FOR CONVERTING ENTERPRISE ARCHITECTURES	380
<i>Okkes Emin Balci cek, Mucahit Gundebahar, Sinan Cekerekli</i>	
INTERACTIVE REPORTING ARCHITECTURE: A WYSIWYG APPROACH TO ENTERPRISE REPORTING	387
<i>Omer Yanar, Okkes Emin Balci cek</i>	
SOFTWARE TESTING PRACTICES IN CRITICAL FINANCIAL SYSTEMS TRANSFORMATION	394
<i>Fatma Molu</i>	
USER EXPERIENCE APPROACH IN FINANCIAL SERVICES.....	400
<i>Tenzile Gul Apari, Fatma Molu, Nur Findik, Mustafa Dalci</i>	
SOURCE CODE GENERATION FOR LARGE SCALE APPLICATIONS.....	404
<i>Havva Cetiner Altiparmak, Busra Tokgoz, Okkes Emin Balci cek, Ashhan Ozkaya</i>	
DESIGN AND EVALUATION OF AUTOMATIC HEALTH SCREENING SYSTEM FOR UNIVERSITY	411
<i>Yoshiro Imai, Eiichi Miyazaki, Hiroshi Kamano</i>	
SENSITIVITY ANALYSIS OF X-RAY DETECTORS BASED ON BFE AND MEH-PPV ORGANIC SENSOR.....	419
<i>Mina Raouf, Farhad A. Borumand, Marzyeh Advand, Amir Hassani</i>	
ROBOT PATH PLANNING USING LAPLACIAN BEHAVIOUR-BASED CONTROL (LBBC) VIA HALF-SWEEP SOR.....	424
<i>Azali Saudi, Jumat Sulaiman</i>	
BIOMEDICAL ENGINEERING: EDUCATION, RESEARCH AND CHALLENGES.....	430
<i>Bahattin Karagoz oglu</i>	
TRIAL EVALUATION OF VISUAL EDUCATIONAL TOOL ON DISTRIBUTED MULTIPLE SERVER SYSTEM.....	437
<i>Yoshio Moritoh, Masatoshi Imai, Yoshiro Imai</i>	
FPGA BASED IMPLEMENTATION OF CORDIC USING DIFFERENT NUMBER FORMAT	444
<i>Burcu Kir, Mehmet Ali Altuncu, Suhap Sahin</i>	
A NEW MODIFIED CRYPTOSYSTEM BASED ON MENEZES VANSTONE ELLIPTIC CURVE CRYPTOGRAPHY ALGORITHM THAT USES CHARACTERS' HEXADECIMAL VALUES	449
<i>Meltem Kurt, Tar k Yerlikaya</i>	
THE COMPUTER SIMULATION ON WIND TURBINE GEARBOX DESIGN.....	454
<i>Zheng Li, Yang Chen</i>	
USING GRAPH TRANSFORMATION AND MAUDE TO SIMULATE AND VERIFY UML MODELS.....	459
<i>Wafa Chama, Raida Elmansouri, Allaoua Chaoui</i>	
EVALUATION OF THE SHAPD2 ALGORITHM EFFICIENCY IN PLAGIARISM DETECTION TASKS.....	465
<i>Dariusz Ceglarek</i>	
A NEW SEQUENTIAL VB-VB APPROACH FOR ECONOMIC DISPATCH OF THERMAL GENERATION UNITS WITH CONVEX/NON-CONVEX COST CHARACTERISTICS	471
<i>Intisar A. Sajjad, Gianfranco Chicco, Roberto Napoli, Tahir Nadeem Malik</i>	
INTEGRATION OF DISTRIBUTED GENERATION INTO A RADIAL DISTRIBUTION FEEDER FOR REDUCTION OF LINE LOSSES	477
<i>Shafaat Ullah, Muhammad Naeem Arbab, Abdul Fattah</i>	
ANALYSIS OF SAG VULEARABILITY AREA OF A LARGE POWER SYSTEM BASED ON INFORMATION FUSION OF CIM.....	483
<i>Jiajia Xue, Shun Tao, Shuangya Zhou, Xiangning Xiao</i>	
DESIGNING A CAN BUS BASED MEASUREMENT SYSTEM FOR FORKLIFT SIMULATOR	488
<i>Huseyin Ulvi Aydogmus, Ahmet Akbas, Ibrahim Delibasoglu</i>	

A CLOSED-FORM DELAY ESTIMATION MODEL FOR CURRENT-MODE HIGH SPEED VLSI INTERCONNECTS	492
<i>M. Kavicharan, N. S. Murthy, N. Bheema Rao</i>	
A NEW DRIVER CIRCUIT DESIGN FOR DUAL MODE CONTROL OF TRAVELLING WAVE TYPE ULTRASONIC	497
<i>Altan Gencer</i>	
A NEW METHOD OF REGULATION BASED ON A HYSTERISIS ERROR GAIN REGULATOR APPLIED IN THE WTGS	502
<i>M. Madaci, D. Kerdoun, K. Akkouchi</i>	
ROBUST MILLIMETER-WAVE INTEGRAL APPROACH FOR EFFICIENT MODELING OF ASYMMETRIC COPLANAR LINES	508
<i>A. Khodja, R. Touhami, M. C. E. Yagoub, H. Baudrand</i>	
ON THE PERFORMANCE OF COST 231 WALFISCH IKEGAMI MODEL IN DEPLOYED 3.5 GHZ NETWORK	514
<i>Yazan A. Alqudah</i>	
SIZE REDUCTION OF MICROSTRIP PATCH ANTENNAS USING SLOTTED COMPLEMENTARY SPLIT-RING RESONATORS	518
<i>Mohammed M. Bait-Suwailam, Hussain M. Al-Rizzo</i>	
DIGITAL BEAM FORMER ARCHITECTURE FOR SIXTEEN ELEMENTS PLANAR PHASED ARRAY RADAR	522
<i>D. Govind Rao, Aalhad P. Deshpande, N. S. Murthy, A. Vengadarajan</i>	
EFFECT OF CYCLIC PREFIX ON DATA RATES IN WIMAX SYSTEM WITH VARIATION IN DELAY VECTOR, GAIN VECTOR, SIGNAL TO NOISE RATIO AND CODING RATES FOR DIFFERENT MODULATION TECHNIQUES	528
<i>Zeyad Moh. Elkwash, Nafaa M. Shebani, Mohammed A. Mjahed, Abdulhamid M. Masoud, Rabea M. Elmareymi</i>	
SIMULATION TO EVALUATE PERFORMANCE OF TWO LAYER VEHICULAR NETWORKS	536
<i>Nikolajs Bogdanovs, Ernests Petersons, Janis Jansons</i>	
SLIDING MODE CONTROL OF QUADROTOR	542
<i>Krittaya Runcharoon, Varawan Srichatrapimuk</i>	
SELECTION DIVERSITY COMBINING ANALYSIS OF ENERGY DETECTOR OVER A-μ GENERALIZED FADING CHANNELS	548
<i>Hikmat Y. Darawsheh, Ali Jamoos</i>	
AUTOMATED RECOGNITION OF URINARY EPITHELIAL CELLS	553
<i>Mohamed D. Almadhoun</i>	
DESIGN AND IMPLEMENTATION OF COOPERATIVE LABYRINTH DISCOVERY ALGORITHMS IN MULTI-AGENT ENVIRONMENT	558
<i>Behnam Rahnama, Atilla Elci, Cankat Ozermen</i>	
COUNTERING PCIE GEN. 3 DATA TRANSFER RATE IMPERFECTION USING SERIAL DATA INTERCONNECT	564
<i>Behnam Rahnama, Arif Sari, Reza Makvandi</i>	
OPTIMIZATION OF STANDALONE STREET LIGHT SYSTEM WITH CONSIDERATION OF LIGHTING CONTROL	568
<i>Farah Ramadhani, Kamalrulnizam Abu Bakar, Muhammad Gary Shafer</i>	
INVESTIGATION OF TRANSMITTANCE SPECTRA IN SI-BASED ONE-DIMENSIONAL PHOTONIC CRYSTALS WITH DEFECT	574
<i>V. Korkmaz, A. Cetin, E. Ucgun</i>	
DESIGN OF SOBEL OPERATOR USING FIELD PROGRAMMABLE GATE ARRAYS	579
<i>Dina Alghurair, Sefwan S. Al-Rawi</i>	
SIMULATION OF LOCATION MANAGEMENT STRATEGIES OF TIMER, LOCATION AREA, AND MOVEMENT BASED UPDATE/PAGING FOR WIRELESS NETWORKS	585
<i>Sulaiman Yakhlef, Moussa Ali Hamdan</i>	
COORDINATED EV CHARGING AND ITS APPLICATION IN DISTRIBUTION NETWORKS	590
<i>Yu Liu, Qiushuo Li, Shun Tao, Xiangning Xiao</i>	
MODELING OF A MAGNETO-HYDRODYNAMIC DC PUMP	595
<i>N. Bennecib, D. Kerdoun, M. Madaci</i>	
Author Index	