

2018 6th International Conference on Control Engineering & Information Technology (CEIT 2018)

**Istanbul, Turkey
25 – 27 October 2018**

Pages 1-567



**IEEE Catalog Number: CFP18A33-POD
ISBN: 978-1-5386-7642-4**

**Copyright © 2018 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 republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

****** This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.***

IEEE Catalog Number:	CFP18A33-POD
ISBN (Print-On-Demand):	978-1-5386-7642-4
ISBN (Online):	978-1-5386-7641-7

Additional Copies of This Publication Are Available From:

Curran Associates, Inc
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: (845) 758-0400
Fax: (845) 758-2633
E-mail: curran@proceedings.com
Web: www.proceedings.com

CURRAN ASSOCIATES INC.
proceedings
.com

TABLE OF CONTENTS

CONTROL OF TWIN ROTOR MIMO SYSTEM USING ROBUST GENERALIZED DYNAMIC INVERSION	1
<i>Uzair Ansari ; Abdulrahman H. Bajodah ; Belkacem Kada ; Saqib Alam</i>	
ONLINE FRACTIONAL-ORDER PIA CONTROLLER TUNING SCHEME	7
<i>Bouziane. Keziz ; Abdelbaki Djouambi ; Samir Ladaci</i>	
PERFORMANCE ANALYSIS AND CPU VS GPU COMPARISON FOR DEEP LEARNING	13
<i>Ebubekir Buber ; Banu Diri</i>	
A DISTRIBUTED MESSAGE QUEUING MECHANISM FOR A MAILING SYSTEM WITH HIGH PERFORMANCE AND HIGH AVAILABILITY	19
<i>Ayberk Cansever ; Umut Özel ; Önsel Akin ; Ali Özmez ; Fahrettin Firat Gönen ; Goksen Altuntas Sen ; Serdar Kalayci ; Utku Çolak</i>	
A NEW NO-REFERENCE COLOR IMAGE QUALITY ASSESSMENT METRIC IN WAVELET AND GRADIENT DOMAINS	24
<i>Besma Sadou ; Atidel Lahoulou ; Toufik Bouden</i>	
DETERMINATION OF RAIL VOLTAGE DEPENDING ON OPERATIONAL DATAS IN A 1500 V DC SUBWAY LINE WITH ARTIFICIAL INTELLIGENCE METHODS.....	30
<i>Mehmet Taciddin Akcay ; İlhan Kocaarslan ; Emrah Bal</i>	
PETRI NETS MODELING FOR TWO-CELL CHOPPER CONTROL USING DSPACE 1104.....	36
<i>Hakim Denoun ; Mohamed Lamine Hamida ; Arezki Fekik ; Dyhia Kais ; Malek Ghanes</i>	
A LOW COST MANIPULATOR TRAINING SET	42
<i>Saygin Ay ; Mahir Kutay ; Tuncay Ercan</i>	
SLOT HARMONIC FREQUENCY DETECTION AS A TECHNIQUE TO IMPROVE STATOR CURRENT SPECTRUM APPROACH FOR ECCENTRICITY FAULT DIAGNOSIS	48
<i>Noureddine Benouzza ; Ahmed Hamida Boudinar ; Azzeddine Bendiabdellah</i>	
DEMAND FORECASTING FOR DOMESTIC AIR TRANSPORTATION IN TURKEY USING ARTIFICIAL NEURAL NETWORKS	54
<i>Ismail Koç ; Emel Arslan</i>	
DIAGNOSIS OF STATOR INTER-TURN FAULT AND SUPPLY VOLTAGE UNBALANCE USING PHASE-ANGLE AND MAGNITUDE OF THE LINE CURRENTS SPECTRA	60
<i>Ahmed Hamida Boudinar ; Mohammed Khodja ; Azeddine Bendiabdellah ; Noureddine Benouzza</i>	
AUTONOMOUS VEHICLE CONTROL FOR LANE AND VEHICLE TRACKING BY USING DEEP LEARNING VIA VISION	66
<i>Masum Celil Olgun ; Zakir Baytar ; Kadir Metin Akpolat ; Ozgur Koray Sahingoz</i>	
360 INTEGRATION GATEWAY APPROACH APPLIED IN A MULTI-LAYER CLOUD MANAGEMENT PLATFORM FOR INTERNET TV APPLICATIONS	73
<i>Mustafa Yildiz ; Zülfü Gökhan Asar ; Mustafa Yildiz</i>	
PREDICTING CRYPTOCURRENCIES PRICES WITH NEURAL NETWORKS	79
<i>Emad Almasri ; Emel Arslan</i>	
SLIDING MODE CONTROL OF A TWO-LINK ROBOT MANIPULATOR USING ADAMS & MATLAB SOFTWARE	84
<i>Sinan Ilgen ; Akif Durdu ; Erdi Gülbahçe ; Abdullah Çakan</i>	
A SYSTEMATIC MAPPING STUDY OF USABILITY VS SECURITY	88
<i>Nur Merdanoglu ; Pinar Onay Durdu</i>	
INTELLIGENT MIXED H2/H8 FOPID CONTROLLER OPTIMIZED FOR RADAR GUIDED MISSILE	94
<i>Murad Yaghi ; Mehmet Önder Efe</i>	
ROBUST DYNAMIC OUTPUT FEEDBACK CONTROLLER DESIGN FOR SYSTEMS WITH UNCERTAIN TIME-DELAYS	99
<i>Sana Elmuhanes ; Altug Iftar</i>	
DOUBLE-TALK DETECTION BASED ON ENHANCED GEIGEL ALGORITHM FOR ACOUSTIC ECHO CANCELLATION	105
<i>Mourad Benziane ; Mohamed Bouamar ; Mouldi Makdir</i>	
NEUTRAL POINT VOLTAGE BALANCING CONTROL AND QUALITY POWER IMPROVEMENT OF PV SYSTEM BASED ON DUAL THREE-LEVEL STAGE CONVERSION	110
<i>Abdelmalik Zorig ; Mohammed Belkheiri ; Said Barkat ; Abdelhamid Rabhi ; Frede Blaabjerg</i>	

A PRELIMINARY STUDY FOR REMOTE HEALTHCARE SYSTEM: ACTIVITY CLASSIFICATION FOR ELDER PEOPLE WITH ON BODY SENSORS.....	116
<i>Samet Koçak ; Tugrul Artug ; Gökalp Tulum</i>	
A DETAILED STUDY OF THE SPECTRAL CONTENT IN THE STATOR CURRENT OF ASYNCHRONOUS MACHINES UNDER BROKEN ROTOR BAR FAULTS USING MCSA TECHNIQUE.....	119
<i>Noureddine Bessous ; Salim Sbaa ; Abida Toumi</i>	
STUDY AND SIMULATION OF A PHOTOVOLTAIC SYSTEM CONNECTED TO THE THREE-PHASE ELECTRICITY NETWORK.....	127
<i>Younes Dris ; Sidi Mohammed Meliani ; Mohamed Choukri Benhabib</i>	
QUALITY AND QUANTITY ASSESSMENT IN HOME-BASED THERAPY FOR HEMIPLEGIC CHILDREN.....	132
<i>M. Elsaeh ; M. Djemai ; P. Pudlo ; M. Bouri ; A. Thevenon ; I. Heymann</i>	
ROBUST FAULT RECONSTRUCTION WITH INTEGRAL BACKSTEPPING CONTROL DESIGN FOR IM DRIVES.....	139
<i>H. Mekki ; O. Benzineb ; L. Chrifi-Alaoui ; D. Boukhetala ; M. Tadjine</i>	
SDN-ENABLED WIRELESS BODY AREA NETWORKS.....	145
<i>Murtaza Cicioglu ; Ali Çalhan</i>	
PERFORMANCE EVALUATION OF DYNAMIC HUB SELECTION ALGORITHM FOR WBAN.....	150
<i>Murtaza Cicioglu ; Ali Çalhan</i>	
POLAR CODES ANALYSIS OF 5G SYSTEMS.....	155
<i>Marwan Dhuheir ; Sitki Öztürk</i>	
DESIGN AND CONTROL OF A TENNIS BALL COLLECTOR ROBOT.....	161
<i>Vehbi Umur Çabuk ; Ahmet Kubilay Savkan ; Ramazan Kahraman ; Ferdi Karaduman ; Okan Kiril ; Volkan Sezer</i>	
COOPERATIVE SPECTRUM SENSING METHOD FOR MC-CDMA SYSTEMS IN COGNITIVE RADIO NETWORKS.....	167
<i>Rüstem Yilmazel ; Muhammet Nuri Seyman</i>	
PARAMETRIC ANALYSIS OF THREE LAYER FREQUENCY SELECTIVE SURFACE FOR CURVED STRUCTURES.....	172
<i>Cumhur Topcuoglu ; Cihan Dogusgen Erbas ; Nurhan Turker Tokan</i>	
EXPERIMENTAL INVESTIGATION ON BROKEN ROTOR BAR FAULTS IN THREE PHASE INDUCTION MOTORS USING MVSA-FFT METHOD.....	177
<i>Noureddine Bessous ; Salim Sbaa ; Abida Toumi</i>	
DESIGNING AN UNDAMPED OSCILLATOR USING FRACTIONAL ORDER DELAYED SYSTEMS.....	184
<i>Moein Allahdininian Hasaruyeh ; Mohammad Haeri</i>	
HAND GESTURE RECOGNITION SYSTEMS WITH THE WEARABLE MYO ARMBAND.....	189
<i>Engin Kaya ; Tufan Kumbasar</i>	
DIAGNOSIS OF AN INVERTER BY CLARK TRANSFORM TECHNIQUE BASED ON NEURAL NETWORK.....	195
<i>Azeddine Bendiabdellah ; Bilal Djamel Eddine Cherif ; Ahmed Hamida Boudinar</i>	
A DEEP LEARNING-CNN BASED SYSTEM FOR MEDICAL DIAGNOSIS: AN APPLICATION ON PARKINSON'S DISEASE HANDWRITING DRAWINGS.....	200
<i>Pedram Khatamino ; Ismail Cantürk ; Lale Özyilmaz</i>	
PID CONTROL OF DC SERVO MOTOR USING A SINGLE MEMORY NEURON.....	206
<i>Ladjouzi Samir ; Grouni Said ; Soufi Youcef</i>	
REACTIVE POWER DISPATCHING FOR MICROGRID'S VOLTAGE STABILITY WITH HIGH PENETRATION OF RENEWABLE ENERGY RESOURCES.....	211
<i>Shahr A Alshahr ; Bilal M Eid ; Johnson A Asumadu</i>	
PERSONAL SPACE CALCULATION AND PATH PLANNING FOR MOBILE ROBOTS BASED ON THE TURKISH SOCIAL AND CULTURAL STRUCTURE AND THE GENDER.....	217
<i>Canberk Tolunbüke ; Metin Toz</i>	
MODELLING AND HIERARCHICAL CONTROL OF CBTC.....	223
<i>Cem Atilgan ; Özgür Turay Kaymakçı</i>	
ONLINE TUNING OF DERIVATIVE ORDER TERM IN FRACTIONAL CONTROLLERS.....	229
<i>Mert Can Kurucu ; Erhan Yumuk ; Müjde Güzelkaya ; Ibrahim Eksin</i>	
PERFORMANCE ANALYSIS OF A DC-MOTOR CONTROL SYSTEM WITH TIME-DELAY: SMITH PREDICTOR VS OPTIMIZATION-BASED CONTROLLER DESIGN.....	234
<i>S. Mert Özer ; Senem Yildiz ; Altug Iftar</i>	
STOCHASTIC MODEL PREDICTIVE CONTROL-BASED REAL-TIME OPERATION OF A TRANSMISSION CONSTRAINED JOINT WIND-PHS SYSTEM.....	240
<i>Ismail Kayahan ; Ugur Yildiran</i>	

A STUDY ON OBJECT CLASSIFICATION USING DEEP CONVOLUTIONAL NEURAL NETWORKS AND COMPARISON WITH SHALLOW NETWORKS.....	246
<i>Ali Erdas ; Erhan Arslan ; Berkay Öztürkcan ; Ugur Yildiran</i>	
ROBUST GENERALIZED DYNAMIC INVERSION CONTROL FOR STABILIZING ROTARY DOUBLE INVERTED PENDULUM.....	250
<i>Uzair Ansari ; Ibrahim Mustafa Mehedi ; Abdulrahman H. Bajodah ; Ubaid M. Al-Saggaf</i>	
SMART SENSOR FOR HOME APPLIANCES.....	256
<i>Emrah Haydar ; Umut Engin Ayten ; Nihan Kahraman</i>	
DESIGN AND ANALYSIS OF A SINGLE PHASE FLYBACK MICRO INVERTER.....	260
<i>Ersan Kabalci ; Aydin Boyar</i>	
TOWARDS AN E-GOVERNMENT PORTALS QUALITY FRAMEWORK BASED ON ISO 25010	266
<i>Abdoullah Fath-Allah ; Laila Cheikhi ; Ali Idri ; Rafa E. Al-Qutaish</i>	
PERFORMANCE OF DEEP NEURAL NETWORKS IN AUDIO SURVEILLANCE	272
<i>Yüksel Arslan ; Hüseyin Canbolat</i>	
INVESTIGATION OF BONE AGE ASSESSMENT WITH CONVOLUTIONAL NEURAL NETWORK BY USING DOG FILTERING AND À TROUS WAVELET AS PREPROCESSING TECHNIQUES.....	277
<i>Mahdi Nezhad Asad ; Ismail Cantürk ; Fatih Z. Genç ; Lale Özyilmaz</i>	
A BEST PRACTICE BASED E-GOVERNMENT E-PORTALS QUALITY MODEL: A DETAILED VIEW.....	284
<i>Abdoullah Fath-Allah ; Laila Cheikhi ; Ali Idri ; Rafa E. Al-Qutaish</i>	
SPEED CONTROL METHOD USING GENETIC ALGORITHM FOR PERMANENT MAGNET SYNCHRONOUS MOTORS.....	290
<i>Gamze Demir ; Revna A. Vural</i>	
OPTIMUM ANALYTICAL TUNING OF I-PD CONTROLLERS FOR UNSTABLE TIME DELAY SYSTEMS	296
<i>Ibrahim Kaya</i>	
LAGUERRE MPC FORMULATION FOR AUTOMOTIVE ADAPTIVE CRUISE CONTROL APPLICATION AND PERFORMANCE ANALYSIS.....	302
<i>Umut Karapinar ; Leyla Gören-Sümer</i>	
TRAFFIC SIGN DETECTION AND RECOGNITION SYSTEM FOR AUTONOMOUS RC CARS	308
<i>Aysegul Sari ; Mertcan Ciboglu</i>	
MICRO-FLOW SENSOR DESIGN AND IMPLEMENTATION BASED ON DIAMAGNETIC LEVITATION.....	313
<i>Gizem Aydemir ; Can Erözer ; Hüseyin Üvet</i>	
AN IMPROVEMENT ON SA-MCL ALGORITHM: ELLIPSE BASED ENERGY GRIDS.....	319
<i>Abdurrahman Yilmaz ; Hakan Temeltas</i>	
DEVELOPMENT OF A WIRELESS COMMUNICATION PLATFORM FOR MULTIPLE-MOBILE ROBOTS USING ROS.....	325
<i>P. Anggraeni ; M. Mrabet ; M. Defoort ; M. Djemai</i>	
LOW VOLTAGE POWER QUALITY ASSESSMENT USING SMART METERS.....	331
<i>Jacques Wattel ; Ulrich Minnaar ; Pieter Uys ; Johan Beukes</i>	
DECENTRALIZED TIME-DELAY COMPENSATOR DESIGN.....	337
<i>H. Ersin Erol ; Altug Iftar</i>	
FUZZY LOGIC BASED SELF-DRIVING RACING CAR CONTROL SYSTEM.....	343
<i>Berk Korkmaz ; Ugur Bugra Etlik ; Aykut Beke ; Tufan Kumbasar</i>	
DISCRETE-TIME BACKSTEPPING CONTROL FOR UNDERACTUATED MECHANICAL SYSTEM WITH A NOVEL COORDINATE TRANSFORMATION	349
<i>Fatih Adigüzel ; Yaprak Yalçın</i>	
YAFT: A FUZZY LOGIC BASED REAL TIME TWO-WHEELED INVERTED PENDULUM ROBOT.....	355
<i>Salih Ertug Over ; Fethi Candan ; Aykut Beke ; Tufan Kumbasar</i>	
BATTERY MANAGEMENT MODULE WITH ACTIVE BALANCING AND CELL SWITCHING.....	361
<i>Omer Faruk Goksu ; Revna Acar Vural</i>	
AN APPROACH FOR MOVING BLOCK SIGNALLING SYSTEM AND SAFE DISTANCE CALCULATION	367
<i>Ertugrul Ates ; Ilker Ustoglu</i>	
STABILITY BOUNDARY LOCUS FOR UNSTABLE PROCESSES WITH TIME DELAY UNDER FRACTIONAL-ORDER PI CONTROLLERS.....	371
<i>Erdal Cokmez ; Ibrahim Kaya</i>	
WIND WATER PUMPING SYSTEM BASED ON ANN	377
<i>Fethia Hamidia ; Amel Abbadi ; Mohamed Seghir Boucherit</i>	

IMPROVEMENTS OF SHIRI EXTRACTION AND ALIGNMENT PROCESSES ON SEMI STRUCTURED DOCUMENTS	382
<i>Mouhamadou Thiam ; Mouhamadou Diante</i>	
INCREASING THE EFFICIENCY OF MISSILE TELEMETRY TESTS BY USING DATA COMPRESSION TECHNIQUES	388
<i>Asli Saglam ; Derya Yilmaz</i>	
INVESTIGATING THE EFFECT OF LOOK-AHEAD DISTANCE ON AUTOMATED STEERING PERFORMANCE.....	394
<i>Mert Sever ; Namik Zengin ; Ahmet Kirli ; M. Selçuk Arslan</i>	
REALIZATION OF HUMAN-ROBOT COLLABORATION IN HYBRID ASSEMBLY SYSTEMS BY USING WEARABLE TECHNOLOGY	400
<i>Mustafa Çoban ; Gökhan Gelen</i>	
ADAPTIVE JOINT FRICTION ESTIMATION MODEL FOR LABORATORY 2 DOF DOUBLE DUAL TWIN ROTOR AERODYNAMICAL HELICOPTER SYSTEM	406
<i>Mohammad Javad Fotuhi ; Zied Ben Hazem ; Zafer Bingül</i>	
PARAMETER ESTIMATION AND CONTROL OF NONHOLONOMIC MOBILE ROBOTS: A MODEL-BASED APPROACH	412
<i>Yongki Yoon ; Berke Gur</i>	
APPROXIMATION ALGORITHM FOR 3-DIMENSIONAL VEHICLE ROUTING PROBLEM FOR FLEET OF MULTI-AGENTS	418
<i>Setyawan Ajie Sukarno ; Rabie Ben Atitallah ; Mohamed Djemai</i>	
HIGH GAIN AND SLIDING MODE ADAPTIVE OBSERVERS COMPARISON: ESTIMATION OF TIRE ROLLING RESISTANCE	424
<i>Anshul Kumar Sharma ; Mohamed Bouteldja ; Véronique Cerezo</i>	
LATERAL SLIDING MODE CONTROL OF AN ELECTRIC VEHICLE	431
<i>H. Benariba ; A. Boumediene</i>	
HARDWARE-IN-THE-LOOP SIMULATION FOR SEMI-ACTIVE SUSPENSION SYSTEM WITH USING ADAPTIVE BACKSTEPPING APPROACH	436
<i>Gokhan Kararsiz ; Mahmut Paksoy ; Muzaffer Metin ; Halil Ibrahim Basturk</i>	
STABILIZATION CONTROL OF TRIPLE PENDULUM ON A CART	442
<i>Tugce Yaren ; Selcuk Kizir</i>	
PARAMETERS IDENTIFICATION AND DYNAMICAL MODELING OF EXCITATION SYSTEM AND GENERATOR IN A STEAM POWER PLANT	448
<i>A. Khodadadi ; M. Nakhaee Pishkesh ; B. Zaker ; M. Karrari</i>	
TRAJECTORY TRACKING OF A QUADCOPTER USING FUZZY LOGIC AND NEURAL NETWORK CONTROLLERS.....	453
<i>Burak Celen ; Yesim Oniz</i>	
DEVELOPEMENT OF PREDICTION IN CLIENTS' CONSENT TO A BANK TERM DEPOSIT USING FEATURE SELECTION	459
<i>Kinan Morani ; Esra Kaya Ayana ; Seref Naci Engin</i>	
LINEAR AND EXTENDED KALMAN FILTER ESTIMATION OF PITCH AND YAW ANGLES FOR 2 DOF DOUBLE DUAL TWIN ROTOR AERO-DYNAMICAL SYSTEM	464
<i>Fazal E Nasir ; Mohammad Javad Fotuhi ; Zafer Bingul</i>	
ANALYZE AND COMPARISON OF DIFFERENT PID TUNING METHODS ON A BRUSHLESS DC MOTOR USING ATMEGA328 BASED MICROCONTROLLER UNIT.....	470
<i>Ali Egemen Tasören ; Halit Örenbas ; Savas Sahin</i>	
ANOMALY DETECTION FOR AUTONOMOUS TRANSFER VEHICLES IN SMART FACTORIES.....	474
<i>Özlem Örnek ; Seval Vatan ; Serpil Sarioglu ; Ahmet Yazici</i>	
FOLLY: A SELF FOLDABLE AND SELF DEPLOYABLE AUTONOMOUS QUADCOPTER.....	479
<i>Turcan Tuna ; Salih Ertug Ovur ; Etki Gokbel ; Tufan Kumbasar</i>	
HOSIDF-BASED CHEBYSHEV STRUCTURED COMPENSATOR DESIGN FOR DISTURBANCE ATTENUATION PROBLEM	485
<i>Muhammed Ali Oz ; Bilal Erol ; Levent Ucu</i>	
SMART THERMOSTATS FOR HOME AUTOMATION SYSTEMS AND ENERGY SAVINGS FROM SMART THERMOSTATS	491
<i>Onur Ayan ; Belgin Turkay</i>	
UPDATING HD-MAPS FOR AUTONOMOUS TRANSFER VEHICLES IN SMART FACTORIES.....	497
<i>Muhammed Oguz Tas ; Hasan Serhan Yavuz ; Ahmet Yazici</i>	
EXACT KALMAN FILTERING OF RESPIRATORY MOTION.....	502
<i>Mehmet Çetinkaya ; Sami Alperen Akgün ; Aydan M. Erkmen ; Ismet Erkmen</i>	

H_∞ CONTROLLER DESIGN FOR MAGNETICALLY LEVITATED STEEL PLATE CONVEYANCE SYSTEM: EXPERIMENTAL VERIFICATION	508
<i>Omer Faruk Guney ; Mert Sever ; Ahmet Fevzi Bozkurt ; Kadir Erkan</i>	
A NOVEL POSITION MEASURING METHOD FOR ROS-DRILL© DEVICES IN BIOMEDICAL APPLICATIONS	514
<i>Handan Nak ; Ali Fuat Ergenc</i>	
DESIGN AND ANALYSIS OF A BREADTH FIRST SEARCH BASED CONNECTIVITY ROBUSTNESS ESTIMATION APPROACH IN WIRELESS SENSOR NETWORKS.....	520
<i>Vahid Khalilpour Akram ; Mustafa Asci ; Orhan Dagdeviren</i>	
DYNAMIC ECONOMIC DISPATCH WITH VALVE POINT EFFECT BY USING GA AND PSO ALGORITHM	526
<i>Mikail Pürlü ; Belgin Emre Türkay</i>	
ADAPTIVE UKF BASED STATE ESTIMATION OF HIV, HEPATITIS-B AND CANCER MATHEMATICAL MODELS.....	532
<i>Batuhan Bilgi ; Meriç Çetin ; Selami Beyhan</i>	
ADAPTIVE PI AND SMC FOR CONTROL OF UNCERTAIN AND VARYING TIME-DELAY CHAOTIC CORONARY ARTERY VESSEL	538
<i>Batuhan Bilgi ; Meriç Çetin ; Selami Beyhan</i>	
FLEXIBLE AND EFFICIENT MODEL-BASED CONGESTION DETECTION APPROACH.....	544
<i>Zeroual Abdelhafid ; Fouzi Harrou ; Ying Sun</i>	
STOCHASTIC OPTIMIZATION OF PID PARAMETERS FOR TWIN ROTOR SYSTEM WITH MULTIPLE NONLINEAR REGRESSION	549
<i>Barkın Büyüçakır ; Furkan Elmaz ; Savas Sahin ; Levent Aydın</i>	
DESIGN AND IMPLEMENTATION OF AUTONOMOUS PARALLEL AND VERTICAL PARKING MOBILE VEHICLE.....	554
<i>Abdullah Kizil ; Arzuman Can Kutlucan ; Cihad Dogan ; Sena Koçak ; Volkan Sezer</i>	
PARAMETRIZED END-TO-END SCENARIO GENERATION ARCHITECTURE FOR AUTONOMOUS VEHICLES	562
<i>Ahmetcan Erdogan ; Emre Kaplan ; Andrea Leitner ; Markus Nager</i>	
HIGH PERFORMANCE PID CONTROL DESIGN BASED ON TIME-SCALE SEPARATION - A CASE STUDY	568
<i>Marian Blachuta ; Robert Bieda ; Rafal Grygiel</i>	
WAVELET-BASED FACIAL RECOGNITION	574
<i>Bendjillali Ridha Ilyas ; Beladgham Mohammed ; Merit Khaled ; Abdelmalik Taleb Ahmed</i>	
WAVE ENERGY CONVERTER CONTROL USING OBSERVED MODEL PREDICTIVE CONTROL	580
<i>Houssem E. M. Triki ; Mouna S. Lagoun ; El Khansa Bdirina</i>	
LQR BASED OPTIMAL CONTROL FOR SINGLE-JOINT FLEXIBLE LINK ROBOT	585
<i>Sertaç İkizoglu ; Onur Gürisik</i>	
IMPROVEMENT OF HOME ENERGY AWARENESS THROUGH THE DESIGNED GRAPHICAL USER INTERFACE	591
<i>Onur Ayan ; Belgin Turkey</i>	
GEOMETRIC OPTIMIZATION OF ASYMMETRIC 3-DOF PLANAR PARALLEL ROBOT MECHANISM WITH ALO ALGORITHM	597
<i>N/A</i>	
ANALYSIS OF MPPT METHODS: P & O, INC AND FUZZY LOGIC (CLF) FOR A PV SYSTEM.....	601
<i>Aicha Djalab ; Mohamed Mounir Rezaoui ; Ali Teta ; Mohamed Boudiaf</i>	
ENERGY MANAGEMENT OF WATER TRANSFER STATIONS BY USING DEMAND RESPONSE PROGRAMS.....	607
<i>Yavuz Yalcin ; Kenan Yigit ; Bora Acarkan</i>	
INTERSECTION NAVIGATION UNDER DYNAMIC CONSTRAINTS USING DEEP REINFORCEMENT LEARNING	612
<i>Ali Demir ; Volkan Sezer</i>	
SLIDING MODE OBSERVER DESIGN BASED LINEAR MATRIX INEQUALITY APPROACH FOR A THREE-CELL CONVERTER.....	617
<i>Samir Khelouat ; Atallah Benalia ; Taous Meriem Laleg-Kirati ; Djamel Boukhetala</i>	
A NEW PSEUDO RANDOM NUMBER GENERATOR BASED ON CHEBYSHEV MAPS AND PARAMETER SWITCHING.....	623
<i>Ismail Öztürk ; Recai Kiliç</i>	
AN ADAPTIVE STATE FEEDBACK CONTROLLER BASED ON SVR FOR NONLINEAR SYSTEMS	626
<i>Kemal Uçak ; Gülay Öke Günel</i>	

ADAPTIVE OPTIMAL CONTROL OF MAGLEV SYSTEMS: : AN AUGMENTED ERROR CORRECTION TECHNIQUE.....	631
<i>Yucel Aydin ; Fuat Gurleyen</i>	
BLACK-BOX IDENTIFICATION AND ITERATIVE LEARNING CONTROL FOR QUADCOPTER.....	639
<i>Yasin Abdolahi ; Amin Rezaeizadeh</i>	
ANALYZING MOTION SICKNESS LEVEL IN AUTONOMOUS VEHICLES ACCORDING TO LOOK-AHEAD DISTANCE	644
<i>Namik Zengin ; Mert Sever ; Ahmet Kirli ; M. Selçuk Arslan</i>	
ACTIVE FRONT STEERING CONTROLLER DESIGN WITH SIDE SLIP ANGLE FREE MODEL MATCHING APPROACH.....	651
<i>Mert Sever ; M. Selcuk Arslan</i>	
DESIGN AND IMPLEMENTATION OF PREDICTIVE ENERGY MANAGEMENT FOR RANGE EXTENDED ELECTRIC VEHICLES	657
<i>Can Palaz ; Emre Yönel</i>	
FORWARD KINEMATICS OF A 6X6 UPU PARALLEL MECHANISM BY ANFIS METHOD.....	663
<i>Leila Ghorbani ; Vasfi Emre Omurlu</i>	
MODELING AND CONTROL OF A HEAVY-LIFT HELICOPTER CONSISTING OF LARGE AND SMALL TILTING ROTORS.....	669
<i>Gökhan Özdoğan ; Kemal Leblebicioglu</i>	
COMPARISON OF INDUCTION COOKER POWER CONVERTERS	675
<i>Metin Ozturk ; Sezer Aslan ; Nihan Altintas ; Sercan Sinirlioglu</i>	
DESIGN AND SIMULATION OF AN OPTIMAL ENERGY MANAGEMENT STRATEGY FOR PLUG-IN ELECTRIC VEHICLES	681
<i>Mehmet Ali Gozukucuk ; Taylan Akdoğan ; Waqas Hussain ; Tohid Kargar Tasooji ; Mert Sahin ; Mert Celik ; H. Fatih Ugurdag</i>	
COMPUTER AIDED BRAIN TUMOR DETECTION VIA RULE BASED ELIMINATED WATERSHED SEGMENTATION	687
<i>Pelin Görgel ; Nursah Dincer</i>	
ROOT-LOCUS ANALYSIS OF FRACTIONAL ORDER TRANSFER FUNCTIONS USING LABVIEW: AN INTERACTIVE APPLICATION	693
<i>Ali Yüce ; Nusret Tan ; Tufan Dogruer</i>	
GUIDED MOTION CONTROL METHODOLOGY FOR MICROROBOTS.....	699
<i>Nail Akçura ; Levent Çetin ; Aytaç Kahveci ; Abdul Kareem Alasli ; Fatih Cemal Can ; Özgür Tamer</i>	
TORQUE RIPPLE REDUCTION OF SYNRM USING MACHAON TYPE LAMINATION	703
<i>Ahmet Suat Kafadar ; Alper Tap ; Lale T. Ergene</i>	
COMPARISON OF THE TRADITIONAL CONVERTERS WITH Z-SOURCE CONVERTERS FOR PMSG BASED SMALL SCALE WIND TURBINES	708
<i>Ardavan Maghsadgh ; Abdullah Polat ; Lale T. Ergene</i>	
THE ANALYSIS OF DIFFERENT STATOR DESIGNS OF A PMSM FOR ELEVATOR APPLICATION	714
<i>Hosein Bakhtiarzadeh ; Abdullah Polat ; Lale T. Ergene</i>	
A COMPARATIVE STUDY OF THE FRICTION MODELS WITH ADAPTIVE COEFFICIENTS FOR A ROTARY TRIPLE INVERTED PENDULUM	719
<i>Zied Ben Hazem ; Mohammad Javad Fotuhi ; Zafer Bingöl</i>	
DETECTING ROAD LANES UNDER EXTREME CONDITIONS: A QUANTITATIVE PERFORMANCE EVALUATION	725
<i>Erkan Adali ; Haydar A. Seker ; Ahmetcan Erdogan ; Kadir Haspalamutgil ; Furkan Turan ; Elif Aksu ; Umut Karapinar</i>	
EXPERIMENTAL VALIDATION OF QUATERNION BASED INTEGRAL BACKSTEPPING DESIGN FOR ATTITUDE TRACKING	732
<i>Ismat Meslouli ; Mouad Kahouadji ; Amal Choukchou-Braham ; Choukri Bensalah ; M. Rida Mokhtari ; Brahim Cherki</i>	
A COMPARISON OF CONTROLLER PERFORMANCES ON THE RIDE COMFORT OF THE ACTIVE SUSPENSION SYSTEM	738
<i>Berkay Sekerci ; Mehmet Canevi ; M. Turan Söylemez</i>	
MODELING DIESEL OXIDATION CATALYST UPSTREAM AND DOWNSTREAM EXHAUST GAS TEMPERATURES USING LSTM RNN.....	744
<i>Mahdi A. A. Elhag ; Mehmet Selçuk Arslan</i>	
OPTIMAL DECOUPLED CONTROL OF TWO-INPUT TWO-OUTPUT SYSTEMS.....	749
<i>Sedanur Sen ; Ilker Üstoglu ; Levent Uzun</i>	

MATHEMATICAL MODELING OF A GENERIC STEAM TURBINE DURING POWER GRID DYNAMICAL STUDIES	755
<i>R. Khalili ; H. Rabieyan ; B. Zaker ; M. Karrari ; M. Nakhaee Pishkesh</i>	
MAPPING OF PRE-SAHARAN VEGETAL FORMATION USING LANDSAT TM IMAGES	760
<i>Samir L'Haddad ; Akila Kemmouche</i>	
QUADROPTER TRAJECTORY TRACKING AND ATTITUDE CONTROL BASED ON EULER ANGLE LIMITATION	764
<i>Billie Pratama ; Abdul Muis ; Aries Subiantoro ; Mohamed Djemai ; Rabie Ben Atitallah</i>	
PROPOSAL OF A FLEXIBLE AND UNIVERSAL SURVEY GENERATOR FOR A BUSINESS INTELLIGENCE	770
<i>Aitouche Samia ; Mouss Mohamed Djamel ; Brahmi Samira</i>	
A VISION BASED POSITIONING GAS LEAKAGE TEST AUTOMATION SYSTEM	776
<i>Akin Ilker Savran ; Tufan Kumbasar</i>	
HYPERBOLIC TANGENT ADAPTIVE LQR+PID CONTROL OF A QUADROTOR	782
<i>Hayrettin Yavuz ; Serhat Ikizoglu</i>	
IMPEDANCE-BASED CONTROL OF A CABLE DRIVEN REHABILITATION ROBOT	788
<i>E. Levent Oyman ; M. Selçuk Arslan</i>	
POWER QUALITY ON WIND TURBINE ENERGY OUTPUT	794
<i>Ahmet Furkan Uslu ; Kadir Dogansahin ; Bedri Kekezoglu</i>	
COPING WITH UNCERTAINTIES IN ESTIMATING REQUIREMENTS DEVELOPMENT EFFORT	799
<i>Fadoua Fellir ; Grace Eunjung Park ; Khalid Nafil ; Lawrence Chung</i>	
PARAMETRIC OPTIMIZATION OF PERMANENT MAGNET SYNCHRONOUS MACHINES	806
<i>Murat Ayaz ; Murat Tezcan ; Erkan Mese ; Kadir Yilmaz</i>	
FIREFLY ALGORITHM AND PARTICLE SWARM OPTIMIZATION FOR OPTIMAL IIR SYSTEM IDENTIFICATION	812
<i>Zeynep Garip ; Murat Erhan Çimen ; Ali Fuat Boz ; Durmus Karayel</i>	
ADAPTIVE FOURIER LINEAR COMBINER BASED ON MODIFIED LEAST MEAN KURTOSIS ALGORITHM	818
<i>Engin Cemal Mengüç</i>	
DESIGN AND CONTROL OF ARTIFICIAL NEURAL NETWORK BASED LOW-COST AUTONOMOUS QUADROTOR SYSTEM	823
<i>Tolga Bodrumlu ; Adil Bek ; Mehmet Ali Akbulut ; Fikret Çaliskan</i>	
IMPROVING CASE BASED SOFTWARE EFFORT ESTIMATION BY AN ANT COLONY ALGORITHM	829
<i>Fadoua Fellir ; Khalid Nafil ; Lawrence Chung</i>	
DETECTION OF LEAK SITE IN SLOPED TRANSMISSION LINES	835
<i>Masoud Derakhshan ; Mohammad Haeri</i>	
DESIGN AND IMPLEMENTATION OF REAL TIME FACE TRACKING HUMANOID ROBOT	841
<i>Berke Cilmi ; Muharrem Mercimek</i>	
DYNAMIC CONSTRAINT SATISFACTION ALGORITHM FOR ONLINE FEATURE MODEL RECONFIGURATION	847
<i>Sina Entekhabi ; Ahmet Serkan Karatas ; Halit Oguztüzün</i>	
BACKSTEPPING CONTROL OF ELECTRO-HYDRAULIC ARM	854
<i>Alper Bayrak ; Enver Tatlicioglu ; Erkan Zengeroglu</i>	
REAL-TIME CONTROL BASED ON NARX NEURAL NETWORK OF HEXAROTOR UAV WITH LOAD TRANSPORTING SYSTEM FOR PATH TRACKING	858
<i>Aytaç Altan ; Özgür Aslan ; Rifat Hacıoglu</i>	
MAXIMUM-SPEED SEARCH ALGORITHM	864
<i>Abo Bakr Almostafa</i>	
MODEL REFERENCE ADAPTIVE CONTROL OF LOAD TRANSPORTING SYSTEM ON UNMANNED AERIAL VEHICLE	870
<i>Aytaç Altan ; Özgür Aslan ; Rifat Hacıoglu</i>	
DISCRETE-TIME NEURAL SLIDING MODE INDIRECT POWER CONTROL FOR A DFIG IN PRESENCE OF GRID DISTURBANCES	875
<i>Larbi Djilali ; Edgar N. Sanchez ; Mohammed Belkheiri</i>	
ROBUST ATTITUDE CONTROL BASED ON CONTINUOUS DIFFERENTIATOR AND ADAPTIVE SUPER TWISTING FOR 3 DOF QUADROTOR	881
<i>Mouad Kahouadji ; Amal Choukchou Braham ; Ismat Meslouli ; M. Rida Mokhtari ; Brahim Cherki</i>	
STABILIZATION OF HIV INFECTION USING DEEP RECURRENT SVM BASED GENERALIZED PREDICTIVE CONTROL	887
<i>Erdem Dilmen ; Selami Beyhan</i>	

A VISUAL SERVOING STRATEGY ON MULTIPLE TRIANGLES USING THE IMAGE MOMENT APPROACH.....	894
<i>Yasser Derrar ; Abed Malti</i>	
STATISTICAL DETECTION OF FAULTS IN SWARM ROBOTS UNDER NOISY CONDITIONS	901
<i>Fouzi Harrou ; Belkacem Khaldi ; Ying Sun ; Foudil Cherif</i>	
ACTIVE TOUCH STUDIES OF A FLEXIBLE-BEAM ANTENNA SENSOR WITH CONTROLLED MOVEMENTS.....	907
<i>Claudia F. Yasar ; Vicente F. Battle</i>	
ECONOMIC ANALYSIS OF ENERGY STORAGE PREVENTING ENERGY OUTAGES IN DISTRIBUTION GRID IN TURKEY	912
<i>Said Mirza Tercan ; Erdin Gökalp ; Bedri Kekezoglu</i>	
DIGITAL HOLOGRAMS OBTAINED USING ADVANCED EVOLUTION STRATEGIES.....	916
<i>Musa Aydin ; Berna Kiraz ; Alper Kiraz ; Buket Dogan</i>	
ADAPTIVE CONTROL OF A 3 DOF HELICOPTER WITH LINEAR AND NONLINEAR REFERENCE MODELS	921
<i>Bedrettin Mahmut Kocagil ; Sinan Ozcan ; Ahmet Cagri Arican ; Umit Mufit Guzey ; Engin Hasan Copur ; Metin U. Salamci</i>	
BATTERY CHARGERS IN ELECTRIC VEHICLES	928
<i>Deniz Kaptan ; Galip Cansever</i>	
IMPROVED FUZZY C-MEANS AND K-MEANS ALGORITHMS FOR TEXTURE AND BOUNDARY SEGMENTATION	931
<i>Yunus Koç ; Tamer Ölmez</i>	
AN ADAPTIVE WIDE-AREA DAMPING CONTROL SCHEME CONSIDERING NETWORKED INDUCED TIME DELAYS.....	937
<i>Samir Baycan Yalçın ; Mahir Bülent Basel ; Ahmet Naci Mete</i>	
MODELING OF MULTIPHASE INDUCTION MOTORS UNDER OUTER RACEWAY BEARING FAULT	943
<i>Mohamed Yazid Kaikaa ; Zohra Yasmine Kecita</i>	
ENHANCEMENT OF FULL COVERAGE MARKOV MODEL FOR DIVERSE SYSTEMS WITH COMMON CAUSE FAILURES	948
<i>Ersin H. Dogrugüven ; Ilker Ustoglu</i>	
REAL TIME POSITION AND TRAJECTORY CONTROL OF BALL AND PLATE SYSTEM USING DIFFERENT CONTROL TECHNIQUES	954
<i>Fatih Köse ; Kaplan Kaplan ; H. Metin Ertunç</i>	
REDUCED OBSERVER DESIGN FOR AIRCRAFT LINEAR VELOCITY ESTIMATION	961
<i>A. Hamissi ; M. Zaouche ; M. Hamerain ; K. Busawon ; L. Dala ; M. Djemai</i>	
CONTROL OF A HOVERING QUADROTOR UAV SUBJECT TO PERIODIC DISTURBANCES	966
<i>Hammad Zaki ; Mustafa Unel</i>	
ANTI-SWAY CONTROL OF A GANTRY CRANE WITH LMI BASED ROBUST POLE PLACEMENT: EXPERIMENTAL VERIFICATION FOR ACCELERATION CONTROL APPROACH	974
<i>Ayhan Aktas ; Koert Bruggeman ; Hakan Yazici ; Mert Sever</i>	
BILATERAL CONTROL WITH CONTINUOUSLY VARIABLE SCALING	980
<i>Burak Oztoprak ; Eray A. Baran ; Asif Sabanovic</i>	
HIGHER ORDER SPECTRAL ANALYSIS OF VENTRICULAR ARRHYTHMIC ECG SIGNALS WITH MATLAB HOSA TOOLBOX	986
<i>Fatih Serdar Sayin ; Ömer Akgün</i>	
STREAMFLOW PREDICTION WITH DEEP LEARNING.....	990
<i>Caner Boyraz ; Seref Naci Engin</i>	
ROBUST MOTION MODIFICATION FOR ROBOT MANIPULATORS IN CONSTRAINED ENVIRONMENTS	995
<i>Batin Muslu ; Burak Oztoprak ; Eray A. Baran ; Asif Sabanovic</i>	
AN INVESTIGATION OF REGISTRATION METHODS ON THE IMAGES DEGRADED BY ATMOSPHERIC TURBULENCE.....	1001
<i>Gulsum Gezer ; Muharrem Mercimek</i>	
AN EXPERIMENTAL TEST SET-UP DESIGN FOR ACQUIRING CREEP CURVE OF THE SPACER BETWEEN THE WINDING TURNS OF POWER TRANSFORMERS	1006
<i>Ahmet Yigit Arabul ; Fatma Keskin Arabul ; Celal Fadil Kumru ; Ibrahim Senol</i>	
DESIGN, MODELLING, PROTOTYPING AND CLOSED LOOP CONTROL OF A MECHANICAL VENTILATOR FOR NEWBORN BABIES.....	1010
<i>Fatih Serdar Sayin ; Hasan Erdal</i>	

NONLINEAR CONSENSUS-BASED SYNCHRONIZING TRACKING CONTROL OF NETWORKED DC MOTORS	1015
<i>Haci Mehmet Güzey ; Ahmet Dumlu</i>	
IMPLEMENTATION OF PID TYPE FUZZY LOGIC CONTROLLER WITH DIGITAL SIGNAL CONTROLLER.....	1021
<i>Ömerülfaruk Özgüven ; Mehmet Serhat Can ; Serdar Ethem Hamamci</i>	
A NONLINEAR CONTROLLER FOR SINGLE PHASE INVERTER WITH UNCERTAIN OUTPUT LC FILTER FEEDING A NONLINEAR LOAD	1027
<i>Türker Türker ; Faruk Bakan</i>	
AN ADAPTIVE BLOCK BACKSTEPPING CONTROLLER FOR A QUADROTOR.....	1031
<i>Onur Akgün ; Türker Türker</i>	
PUBLIC HEALTH SURVEILLANCE SYSTEM FOR ONLINE SOCIAL NETWORKS USING ONE-CLASS TEXT CLASSIFICATION.....	1037
<i>Bilal Tahir ; Kamran Amjad ; Samar Firdous ; Muhammad Amir Mehmood</i>	
CONSENSUS CONTROL OF MOBILE AGENTS WITH OBSTACLE AVOIDANCE USING COLLISION CONE APPROACH.....	1043
<i>Sirin Akkaya ; Onur Akbati ; Ali Fuat Ergenc</i>	
REAL TIME DRIVER FATIGUE DETECTION BASED ON SVM ALGORITHM.....	1048
<i>Burcu Kir Savas ; Yasar Becerikli</i>	
INTRUSION DETECTION SYSTEMS WITH GPU-ACCELERATED DEEP NEURAL NETWORKS AND EFFECT OF THE DEPTH	1052
<i>Buminhan Reis ; Sami Berk Kaya ; Gozde Karatas ; Ozgur Koray Sahingoz</i>	
CHAOTIC LORENZ SYNCHRONIZATION CIRCUIT DESIGN FOR SECURE COMMUNICATION	1060
<i>Halil Ibrahim Deniz ; Zehra Gulru Cam Taskiran ; Herman Sedef</i>	
DESIGN OF A ROBUST GUARANTEED COST OBSERVER-BASED CONTROLLER FOR LINEAR UNCERTAIN SYSTEMS	1066
<i>Yilmaz Seryar Arikusu ; M. N. Alpaslan Parlakçi</i>	
FAULTS DIAGNOSIS IN STAND-ALONE PHOTOVOLTAIC SYSTEM USING ARTIFICIAL NEURAL NETWORK	1072
<i>Nassim Sabri ; Abdelhalim Tlemçani ; Aissa Chouder</i>	
EFFECT OF PARTIAL SHADING ON THE PV SYSTEM PERFORMANCES.....	1078
<i>Ben Si Ali ; Nadia Benalia ; Nadia Zerzouri Nora</i>	
CONTRIBUTION TO PI CONTROL SPEED OF A DOUBLY FED INDUCTION MOTOR.....	1082
<i>Zerzouri Nora ; Benalia Nadia ; Ben Si Ali</i>	
COMPARISON OF LINE STABILITYINDEX WITH TCSC UNDER DIFFERENT CASES WITH PSAT.....	1088
<i>Benalia Nadia ; Ben Si Ali Nadia ; Zerzouri Noura</i>	
MODULAR ELECTRICAL CONTROL SYSTEM FOR SMALL SCALE UNDERWATER VEHICLES	1093
<i>Ramazan Kaan Eren ; Muhammed Emin Alan ; Eyüp Erdem Erbil ; Bugra Tufan ; Umut Engin Ayten</i>	
ANALYSIS OF LINE CURRENT HARMONICS FOR THYRISTOR BASED SMART PLUG USE IN RESIDENTIAL DEMAND RESPONSE APPLICATIONS.....	1099
<i>Ugur S. Selamogullari</i>	
OPEN DATA IN AGRICULTURE: SUSTAINABLE MODEL DEVELOPMENT FOR HAZELNUT FARMS USING SEMANTICS	1104
<i>Sahin Aydin ; Ugur Ünal ; M. Nafiz Aydin</i>	
A NOVEL STABILIZING CONTROLLER DESIGN FOR SINGULAR DELAYED SYSTEMS: AN OPTIMIZATION APPROACH	1110
<i>Mehmet Nur Alpaslan Parlakçi</i>	
ON THE DESIGN OF ROBUST ADAPTIVE FUZZY SLIDING MODE CONTROLLER FOR NONLINEAR UNCERTAIN SYSTEMS WITH HYSTERESIS INPUT	1115
<i>Aissa Rebai ; Kamel Guesmi</i>	
A STUDY OF HUMAN WALKING BIOMECHANICS FOR ANKLE-FOOT PROSTHESIS DESIGN.....	1121
<i>Selin Aydin Fandakli ; Halil Ibrahim Okumus ; Mehmet Öztürk</i>	
TUNING OF FRACTIONAL ORDER PID CONTROLLER USING CS ALGORITHM FOR TRAJECTORY TRACKING CONTROL	1126
<i>Banu Ataslar-Ayyildiz ; Oguzhan Karahan</i>	

**NEUTRAL CURRENT COMPENSATION OF THREE-PHASE FOUR-WIRE DISTRIBUTION
SYSTEM USING THREE-LEVEL FOUR-LEG DSTATCOM BASED ON SIMPLIFIED 3DSVM
ALGORITHM 1132**
 Bouafia Saber ; Benaissa Abdelkader ; Barkat Said ; Bouzidi Mansour
Author Index