

2019 International Conference on Control, Automation and Diagnosis (ICCAD 2019)

**Grenoble, France
2 – 4 July 2019**



**IEEE Catalog Number: CFP19J27-POD
ISBN: 978-1-7281-2293-9**

**Copyright © 2019 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:	CFP19J27-POD
ISBN (Print-On-Demand):	978-1-7281-2293-9
ISBN (Online):	978-1-7281-2292-2

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

Papers, Sessions and Sessions Chairs

Session Code: S1 / Session Title: Artificial Intelligence and computer applications
Paper **Session Chair(s) : Dr. Maria Di Mascolo**

- 174** Breast Cancer recognition using Kernel Extreme Learning Machine (KELM) Based on local binary pattern features
BACHA Sawcen , TAOUALI Okba and LIOUANE Noureeddine
- 162** Review of Machine Learning Approaches In Fault Diagnosis applied to IoT Systems.....1
Ndeye Gueye Lo, Jean-Marie Flaus and Olivier Adrot
- 99** Training Function Stability in Anomaly Intrusion Detection based Deep Learning.....7
Khadidja BENNACEUR , Zakaria Sahraoui , Abdenour Labed and Mohamed Ahmed-Nacer
- 13** Two-Axis Mechanical Stabilizer for Omnidirectional Antenna Mounted on a 1.8 Meter Buoy for Polarization Loss Factor Reduction.....12
Ian Mosquera, Mar Francis De Guzman and Calvin Artemies Hilario

47	Improvement of DV-Hop Localization Algorithm in Multi-hop Wireless Sensor Networks.....N/A <i>Sana Messous, Noureddine Liouane and Alain Pegatoquet</i>
103	The neural multi-model approach for nonlinear systems identification.....23 <i>Amira Slimani, Ayachi Errachdi and Mohamed Benrejeb</i>

Session Code: S2 / Session Title: Robotics

Paper **Session Chair(s) : Prof. Hassani Messaoud**

82	Experimental Real-Time Setup for Vision Driven Hand-Over with a Collaborative Robot.....28 <i>Leonardo Sabatino Scimmi, Matteo Melchiorre, Stefano Mauro and Stefano Pastorelli</i>
158	Implementation of start-up tests for system health assessment: Application to a telepresence robot « RobAIR ».....N/A <i>ZINEB SIMEU-ABAZI , ERIC GASCARD and MOHAMED AMINE HAJ KACEM</i>
171	Detection & isolation of sensor and actuator additive faults in a 4-mecanum wheeled mobile robot (4-MWMMR).....39 <i>Samia MELLAH, Guillaume GRATON, El Mostafa EL ADEL, Mustapha OULADSINE and Alain PLANCHAIS</i>
205	Human machine interface based on virtual reality for programming industrial robots.....45 <i>Vladimir Filaretov, Dmitry Yukhimets, Eduard Mursalimov, Anton Gubankov, Alexander Zuev and Sergey Anisimov</i>
41	On robustness of PD control with gravity compensation of torque-driven robot manipulators.....51 <i>Rafael Kelly and Carmen Monroy</i>

Session Code: S3 / Session Title: New Challenges on Speech Separation and Emotion Sensing

Paper **Session Chair(s) : Prof. Emmanuel Simeu**

240	Automatic Lip segmentation with level set method.....56 <i>M. MILED, M.A. BEN MESSAOUD, and A. BOUZID</i>
241	Audio-Visual Fusion for Aggression Detection Using Deep Neural Networks.....60 <i>Noussaiba Jaafar and Zied Lachiri</i>
242	DNN-Based Laughter Synthesis.....65 <i>Nadia Mansouri and Zied Lachiri</i>
243	Monaural speech separation based on linear regression optimized using gradient descent.....71 <i>Belhedi Wiem , Ben Messaoud Mohamed anouar and Bouzid Aicha</i>
244	Comparative study of face detection methods in spontaneous videos.....76 <i>Amal Adouani , Wiem Mimoun Ben Henia and Zied Lachiri</i>

Session Code: S4 / Session Title: Artificial Intelligence for Navigation and Control of Mobile Robots**Paper****Session Chair(s) : Prof. Dr. Imre J. Rudas**

57	3D Simulator for Navigation of a Mobile Robot Using Simscape-SIMULINK.....	82
	<i>Khaled Khnissi, Chiraz Ben Jabeur and Hassene Seddik</i>	
109	Implementation of SNNPID optimized Neural Networks Controller for a two-wheeled mobile robot.....	88
	<i>Chiraz Ben Jabeur and Hassene Seddik</i>	
182	Balancing Control of Bipedal Robot Using Deep Reinforcement Learning.....	N/A
	<i>Ki Beom Kim and Jong Hyeon Park</i>	
215	Mobile Robot Obstacle Avoidance in labyrinth Environment Using Fuzzy Logic Approach.....	100
	<i>Habiba Batti, Chiraz Ben Jabeur and Hassene Seddik</i>	
102	Fuzzy Logic Controller for Autonomous Mobile Robot Navigation.....	105
	<i>Habiba Batti, Chiraz Ben Jabeur and Hassene Seddik</i>	
131	Open-loop Tracking Control of an Android Guided Two Degrees of Freedom (DoF) Articulated Writing Robotic Arm.....	N/A
	<i>Shahriar Rahman Fahim, Sanjay Dey, Md. Rashiduzzaman, Subroto K. Sarkar and Sajal K. Das</i>	

Session Code: S5 / Session Title: Transportation, Logistics and Manufacturing (Part 1)**Paper****Session Chair(s) : Prof. Zied Lachiri**

67	Study of Road Traffic Noise in Monastir-Tunisia.....	N/A
	<i>Jalel Chebil, Mohamed A. Fekih, Chakib B. Njima and Mohamed Hadi Habaebi</i>	
183	Numerical simulation of second-order macroscopic traffic model Aw-Rascle-Zhang	
	<i>Leila Heni, Asma Khelifi, Habib Haj-Salem and Khalifa Slimi</i>	
214	Root causes analysis and fault prediction in intelligent transportation systems: coupling unsupervised and supervised learning techniques.....	120
	<i>John Mbuli, Maroua Nouiri, Damien Trentesaux and Damien Baert</i>	
235	LQ Optimal Multi-Loop Control of Goods Distribution Systems with Multi-Modal Transportation Solutions.....	126
	<i>Przemysław Ignaciuk</i>	
62	Defining urban logistics profile zones in South American metropolis by combining functional and spatial clustering techniques.....	132
	<i>Andrés Regal-Ludowieg, Michelle Rodriguez-Serra and Jesus Gonzalez-Feliu</i>	
132	Cashflow forecasting with linear models.....	138
	<i>Kishore Chalakkal Varghese and Anna Maria Perdon</i>	
233	Production of the future to support circular economy - development of a dedicated platform by means of a multidisciplinary approach.....	N/A
	<i>Fabien Dubois, Akash Basia, Asiye Kurt, Mickaël Bettinelli, Pu Zheng, Vincent Jourdain and Kevin Guelle</i>	

Session Code: S6 / Session Title: Power systems (Part 1)**Paper****Session Chair(s) : Dr. Hassen Fourati**

223	New online three phases stator resistances estimation for stator Induction Machine fault diagnosis.....	149
	<i>Idriss Benlaloui, Abderrahmane Khemis, Dalila Khamari, Said Drid, Larbi Chrifi-Alaoui and Mohammed Ouriagli</i>	
234	A method to system parameters using the average inductor current of a modular power converter.....	155
	<i>Luiz Fernando Lavado Villa , Romain Perriniaux , Clement Foucher and Germain Garcia</i>	
28	Switching Mechanism and Analysis of Memristor Model Parameters.....	161
	<i>Sami Ghedira, Faten Rziga Ouaja, Khaoula Mbarek and Kamel Besbes</i>	
227	A Self Tuning Fuzzy-Fractional-Order P-I Controller for Speed Control of DC Motor.....	N/A
	<i>Arezki Fekik ,Hakim Denoun , Ahmad Taher Azar , Khaled Mohamad Almustafa , Dhafer Almakhles , Mustapha Zaouia , Mohamed Lamine Hamida and Nacira Yassa</i>	
218	MRAS type-2 fuzzy logic observer and controller for robust speed sensorless induction motor.....	173
	<i>Idriss Benlaloui, Dalila Khamari, Abderrahmane Khemis, Said Drid, Larbi Chrifi-Alaoui and Mohammed Ouriagli</i>	
3	Wind MPPT for a PMSG SWT in a GridConnected DC Microgrid.....	N/A
	<i>Daniel Zammit, Cyril Spiteri Staines, Alexander Micallef and Maurice Apap</i>	
230	A Hybrid Bayesian Network Based Method to Assess and Predict Electrical Power Network Reliability	
	<i>Abdelaziz Lakehal, Zoubir Chelli and Yacine Djeghader</i>	

Session Code: S7 / Session Title: Control applications**Paper****Session Chair(s) : Prof. Hassene Seddik**

61	A Fault Tolerant Control Approach for the Solar-Powered HALE UAV.....	187
	<i>WANG Peng, JIA Gaowei, CHEN Qingyang, Yujie WANG and WANG Jianfeng</i>	
63	Adaptive super-twisting sliding mode controller for 2-DOF Helicopter.....	192
	<i>Rihab Bkekri, Anouar Benamor and Hassani Messaoud</i>	
78	Benchmark for analysis, modeling and control of ventilation systems in small-scale mines.....	198
	<i>Oscar-O. Rodriguez-Diaz, David-F. Novella-Rodriguez</i>	
101	Model Predictive Control of a Variable Speed Wind Turbine Using A Two-mass Model.....	N/A
	<i>Boubekeur Boukhezzar</i>	
128	Towards a simple but energy-efficient HVAC control synthesis for data centers.....	209
	<i>Michel Fliess, Cedric Join, Maria Bekcheva, Alireza Moradi and Hugues Mounier</i>	
129	Grey Forecasting Model and Particle Swarm based Control of a Phosphorite Sinter Process.....	215
	<i>Nigina Toktassynova, Hassen Fourati and Batyrbek Suleimenov</i>	

Session Code: S8/ Session Title: Adaptive, Robust and predictive Control**Paper****Session Chair(s) : Prof. Said Drid**

133	Robust adaptive control for uncertain systems with unknown time varying state delay.....	221
	<i>Benamor Anouar, Ben Njima Chakib and Messaoud Hassani</i>	
134	Robust control of hydraulic system with delay input.....	227
	<i>Benamor Anouar, Ben Njima Chakib and Messaoud Hassani</i>	
219	Discrete second order sliding mode control for robust tracking and model following of linear uncertain systems.....	N/A
	<i>Wafa Boukadida , Anouar Benamor and Hassani Messaoud</i>	
193	Predictive control of the heating system in smart building	
	<i>Sondes GHARSELLAOUI and Hassani MESSAOUD</i>	
172	Optimal Fuzzy Adaptive Backstepping Controller for Attitude Control of a Quadrotor Helicopter.....	238
	<i>Hossam-Eddine GLIDA , Latifa ABDOU and Abdelghani CHELIHI</i>	
144	LMI-based H2 Control of Nonlinear Coupled Tank System.....	244
	<i>Jaffar Seyyed Esmaeili and Abdullah Başçi</i>	

Session Code: S9 / Session Title: Optimization and Simulation**Paper****Session Chair(s) : Prof. Zineb Simeu-Abazi**

14	Optimization of Distributed CFAR Detection using Grey Wolf Algorithm	
	<i>Houcine Oudira ,Amel Gouri and Amar Mezache</i>	
20	A Verilog-A based RRAM Switching Model for Simulation and Analysis.....	251
	<i>Faten OUAJA RZIGA ,Khaoula MBAREK,Sami GHEDIRA and Kamel BESBES</i>	
21	Implementation of 1T1R-based OxRRAM Memristor Model for Circuit Design and Simulation.....	257
	<i>Khaoula MBAREK, Faten OUAJA RZIGA ,Sami GHEDIRA and Kamel BESBES</i>	
123	EE-SE trade-off's Optimization for NOMA Systems	
	<i>Naziha GLEI and Rhaimi Belgacem CHIBANI</i>	
60	Terminal Guidance Simulation and Flight Test for Small UCAV.....	263
	<i>Hongbo Xin, Qingyang Chen, Yujie Wang, Gaowei Jia and Zhongxi Hou</i>	
208	Dynamic optimization of a continuous Lactide ring-opening polymerization process.....	269
	<i>Nawel Afsi, Sami Othman , Toufik Bakir, Liborio I. Costa , Anis Sakly and Nida Sheibat-Othman</i>	
29	Optimal Multi-Type DG Integration and Distribution System Reconfiguration for Active Power Loss Minimization using CPSO Algorithm.....	275
	<i>Sirine Essallah and Adel Khedher</i>	
9	Analysis of orthotropic materials using numerical finite element method models, Application to a hip prosthesis biomechanical body.....	N/A
	<i>Brahim Necib and Ali Benhaoua</i>	

Session Code: S10 / Session Title: Transportation, Logistics and Manufacturing (Part 2)**Paper** **Session Chair(s) : Prof. Hassani Messaoud**

232	An Extended Circular Supply Chain Model Including Repurposing Activities.....287 <i>Asiye Kurt, Van-Dat Cung, Fabien Mangione, Mario Cortes-Cornax and Agnès Front</i>	287
189	Multidimensional Matrix Approach to Material Requirements Planning.....N/A <i>Kishore Chalakkal Varghese and Annamaria Perdon</i>	N/A
159	Model based rules generation for Intrusion Detection System for industrial systems.....298 <i>Mohamad Houssein Monzer, Kamal Beydoun and d Jean-Marie FLAUS</i>	298
160	Conceptual specifications of a cooperative intermachines dialogue.....304 <i>Fathia Azzouzi, Adam Bouras and Nizar Jebli</i>	304
24	Using Multi-layer Coding Genetic Algorithm to Solve Time-Critical Task Assignment of Heterogeneous UAV Teaming.....309 <i>Gaowei Jia, Jianfeng Wang, Peng Wang, Qingyang Chen and Wang Yujie</i>	309

Session Code: S11 / Session Title: Diagnosis and Fault Detection (Part 1)**Paper** **Session Chair(s) : Prof. Zied Lachiri**

104	Application of Predictive Maintenance for Detection of Gearing Faults in Rotating Machines <i>Abdelkader Slimane, Slimane Sid Ahmed, Said Kebdani, Chaib Mohammed, Sidahmed Dahmane, Bouchouicha Benattou and Nouredine Sardi</i>	
228	Overcoming the Barriers in Diagnostics and Prognostics of the Circular Industrial System by Hidden Markov Model.....314 <i>Akash Basia, Eric Gascard, Zineb Simeu-Abazi and Peggy Zwolinski</i>	314
59	An Improved Bayesian Integrated ICA Approach for Control Loop Diagnosis with Small Sample Size.....320 <i>Wenbing Zhu, Zijiang Yang, Xuesong Xiao, Yuanhaowei Ji, Shuchao Li, Xue Yan and Guoli Ji</i>	320
84	An Automatic Fault Detection and Localization Strategy for Switched Reluctance Machine Open-Circuit Fault in EVs Applications.....326 <i>Yakoub SAADI, Rabia SEHAB, Ahmed CHAIBET, Mousaa BOUKHNIFER and Demba DIALLO</i>	326
151	Kernel PCA-based GLRT for nonlinear fault detection and isolation of chemical process.....N/A <i>Radhia Fezai, Majdi Mansouri, Kamaleldin Abodayeh, Hazem Nounou and Mohamed Nounou</i>	N/A
179	Data-Based Desing of Robust Fault Isolation Residuals Using LASSO Optimization.....338 <i>Silvia Cascianelli, Francesco Crocetti, Gabriele Costante, Paolo Valigi and Mario Luca Fravolini</i>	338
207	Rapid Detection of Incipient Faults Using Radial Basis Function Networks <i>Walid Abid, Abdelkader Krifa and Nouredine Liouane</i>	

Session Code: S12 / Session Title: Image processing**Paper****Session Chair(s) : Prof. Said Amari**

173	Robust heart activity measurement using webcam.....344 <i>Djamaledine DJELDJI , Choubeila MAAOUI and Fethi BEREKSI REGUIG</i>
187	Studying Multifractality in C.elegans sequences based on multi order FCGR Images.....350 <i>Zeineb chebbi babchia and Afef Elloumi Oueslati</i>
231	Self-Healing Image Sensor Using Defective Pixel Correction Loop.....357 <i>Ghislain Takam Tchendjou and Emmanuel Simeu</i>
27	Fuzzy Aggregation of Medical Image based on Average Operator <i>Habiba KHEMILA and Belgacem CHIBANI Rhaimi</i>
58	Agent-Based Modeling Approach for 2D/ 3D medical image segmentation system <i>Hannae ALLIOUI , Mohamed SADGAL and AZIZ EL FAZZIKI</i>
226	DNA Microarray Analysis Using Machine Learning to Recognize Cell Cycle Regulated Genes.....363 <i>Hiba Lahmer , Afef Elloumi Oueslati and Zied Lachiri</i>

Session Code: S13 / Session Title: Diagnosis and Fault Detection (Part 2)**Paper****Session Chair(s) : Dr. Maria Di Mascolo**

126	Diagnosis in buildings: new trends illustrated by an application.....368 <i>Houda Najeh, Mahendra Pratap Singh, Stéphane Ploix, Karim Chabir and Mohamed Naceur Abdelkrim</i>
142	Fault diagnosis method for timed discrete-event systems : Application to autonomous electric vehicle.....374 <i>Zineb Simeu-Abazi and Eric Gascard</i>
186	Fault Diagnosis Approach for Pedelec Drive Units Based on Support Vector Machines.....380 <i>Ivan Melendez Vazquez , Rolando Doelling and Oliver Bringmann</i>
188	Checking Diagnosability on Centralized Model of the System.....386 <i>M. CHANKATE, A. PHILIPPOT ,V. CARRE-MENETRIER and P. MARANGE</i>
192	Synthesis Method of Diagnostic Observer for Fault Identification in Mechatronic Systems.....392 <i>Alexey Zhirabok, Alexey Shumsky , Aleksandr Zuev and Vladimir Filaretov</i>
201	Estimation of Permittivity Models for Holdup Measurement of Viscous-Oil for different patterns.....398 <i>Marlon Mauricio Hernandez Cely, Arthur F. De A. Teixeira, Rodrigo H. Ruschel, Oscar Mauricio Rodriguez and Marcelo S de Castro</i>

Session Code: S14 / Session Title: Neural network and Fuzzy logic**Paper****Session Chair(s) : Dr. Eric Gascard**

48	Comparative Study of PI and Fuzzy logic controllers for three-phases parallel multi-cell converter.....	404
	<i>Kais dyhia, Denoun hakim , hamida Mohamed lamine , Fekik arezki and Benamrouche Nacereddine</i>	
143	Multilayer Perceptron Neural Networks Adaptive Control of Building HVAC Systems.....	N/A
	<i>OUARET Ahmed, LEHOUCHE Hocine, MENDIL Boubekeur and GUEGUEN Hervé</i>	
108	Genetic algorithm for RBF multi-model optimization for nonlinear system identification.....	415
	<i>Amira Slimani , Ayachi Errachdi and Mohamed Benrejeb</i>	
217	Remaining Useful Life Estimation Using Principal Component Analysis with Bidirectional LSTM Neural Network.....	N/A
	<i>Ikram Remadna, Sadek Labib Terrissa, Soheyb Ayad , Nouredine Zerhouni and Ryad Zemouri</i>	
140	Design of an Optimized Fuzzy Energy Management Strategy for a Fuel Cell/Battery System Based on Particle Swarm and Advisor.....	N/A
	<i>Benali Tifour , Moussa Boukhnifer , Ahmed Hafaiifa and Camel Tanougast</i>	
213	Robust Control based on Backstepping and adaptive neural network for the DFIG based WECS.....	433
	<i>Sami Labdai, Naamane Bounar, Larbi Chrifi-Alaoui, Abdesselem Boulkroune, Hemicci Boualem and Lazhari Nezli</i>	

Session Code: S15/ Session Title: Control Theory**Paper****Session Chair(s) : Prof. Said Amari**

65	Toward a codesign task model for stochastic real-time control sensitivity analysis.....	439
	<i>Zakaria Sahraoui , Abdenour Labeled and Mohamed Ahmed-Nacer</i>	
85	Observer design for Takagi-Sugeno Lipschitz systems affected by disturbances using quadratic boundedness.....	445
	<i>Ruicong Yang, Damiano Rotondo and Vicenç Puig</i>	
87	H2 Norm Principle in State-Feedback Synthesis for Discrete-time Linear Systems under Positivity Constraints.....	451
	<i>Dusan Krokavec and Anna Filasova</i>	
112	An H-infinity approach to nonlinear optimal control of DC microgrids.....	N/A
	<i>G. Rigatos & N. Zervos, P. Siano , M. Abbaszadeh , P. Wira and B. Onose</i>	
152	Hybrid Observer for parameter estimation and Control in a polymerization process.....	463
	<i>M.A. Hussain and Jarinah Mohd Ali</i>	
212	Control of a DFIG Based WECS with Optimized PI controllers via a duplicate PSO algorithm.....	466
	<i>S. Labdai, B. Hemicci , L. Nezli , N. Bounar , A. Boulkroune and L. Chrifi-Alaoui</i>	

Session Code: S16 / Session Title: Power systems (Part 2)**Paper****Session Chair(s) : Dr. Larbi Chrifi-Alaoui**

- 175 Optimal Harmonic Elimination Using Particle Swarm Optimization for Diode-Clamped Multilevel Inverters.....N/A
Nour El Houda Gabour , El Ghalia Boudissa and M'hamed Bounekhla
- 6 Observers for Sensorless State Estimation of Induction Motors.....N/A
Ahmed Chouya, Kada Bourguigue and Mohamed Chenafa
- 229 Proposal of a New Design for Improving the Smart Electric Meter Performances
Zoubir Chelli , Abdelaziz Lakehal , Tarek Khoualdia and Yacine Djeghader
- 127 Design and Implementation of an Intelligent SLG Fault Locator for Power Distribution Grid...485
Abdulaziz Aljohani, Abdulaziz Fataa, Turki Sheikhoon, Md Shafiqullah and M.A. Abido
- 145 Effects of Drift Like Fault in Capacitor Banks on Self-Excited Induction Generator.....491
M. Derbal and H. Toubakh
- 7 Diagnosis of nonlinear systems using reduced kernel principal component analysis.....496
Radhia Fezai, Majdi Mansouri, Kamaleldin Abodayeh, Hazem Nounou and Mohamed Nounou

Session Code: S17/ Session Title: Energy Control**Paper****Session Chair(s) : Prof. Noureddine Zerhouni**

- 221 Modeling and simulation of the DFIG using in the wind energy conversion system for an isolated site.....502
W. Slimane , M. Benchouia , A. Golea , S. Drid and L. Chrifi-Alaou
- 220 Variable speed control of wind turbines based on the optimal discrete sliding mode control.....507
Wafa Boukadida , Anouar Benamor and Hassani Messaoud
- 125 Contribution to the Reliability and Availability Assessment Using Stochastic-Coloured Petri Nets for Photovoltaic Systems.....N/A
Ismahan MAHDI, Bouchra NADJI, Amar RAMDANE CHERIF and Zineb SIMEU-ABAZI
- 184 Experimental Prediction Intervals for Monitoring Wind Turbines: an Ensemble Approach.....520
Silvia Cascianelli, Davide Astolfi, Gabriele Costante, Francesco Castellani and Mario Luca Fravolini
- 55 T-S Fuzzy Model Based ISMC for PMSM with Disturbance Observer
Sabizhan Sumbekov and Ton Duc Do
- 124 Fuzzy Logic Controller Hardware Implementation using XSG tools Applied to a Variable Speed Wind Turbine Emulator.....N/A
Intissar Moussa and Adel Khedher

224	Expansion of the switched FIR model parameters on Laguerre bases <i>Ibtissem bengarhat, Abdelkader Mbarek and Hedi Dhouibi</i>	
83	Predictive Functional Control of Building HVAC Systems..... <i>Ahmed Ouaret, Hocine Lehouche, Nassima Ouali and Hervé Gueguen</i>	N/A
111	A nonlinear optimal control approach for hypersonic aerial vehicles..... <i>Gerasimos Rigatos, Patrice WiraPatrice Wira and Masoud Abbaszadeh</i>	N/A
141	Simultaneous stabilization for a collection of stochastic nonlinear systems based on CLFs..... <i>Abderrahman Iggidr and Mohamed Oumoun</i>	544
46	Accuracy Analysis of Harmonic Distortion Estimation Through Exponential Chirp Pulse Compression..... <i>Pietro Burrascano, Stefano Laureti and Marco Ricci</i>	548
66	A new formal method of control for Min-Plus linear systems subject to time constraints..... <i>Nesrine Ben Afia, S. Amari and Hassani Messaoud</i>	554