

WSEAS Transactions on Power Systems

Contents: 2014

Print ISSN: 1790-5060

E-ISSN: 2224-350X

Acceptance Rate (for the years 2013 and 2014): 26.75%

Acceptance Rate = C/D where: C = the number of accepted papers, D= the number of submitted papers. Withdrawn Papers are not considered for the numbers C and D.

Editorial Board:

Editor-in-Chief

Professor Eduardo Mario Dias
Electrical Energy and Automation
Engineering Department / Escola Politecnica da Universidade de Sao Paulo
BRAZIL

Associate Editors:

Prof. Germano Lambert-Torres, Itajuba, MG, Brazil

Prof. Edoardo Fiorucci, University of LAquila, LAquila, Italy

Prof. Cornelia Aida Bulucea, University of Craiova, Craiova, Romania

Prof. Lambros Ekonomou, City University London, UK

Prof. Frangiskos V. Topalis, National Technical University of Athens, Greece

Prof. George J. Tsekouras, Hellenic Naval Academy, Greece

Prof. Jiri Klima, Technical faculty of CZU in Prague, Czech Republic

Prof. Ioannis F. Gonos, National Technical University of Athens, Greece

Prof. Igor Kuzle, Faculty of electrical engineering and computing, Zagreb, Croatia

Prof. Mario Luiso, Second University of Naples, Naples, Italy

Prof. Valeri Mladenov, Technical University of Sofia, Sofia, Bulgaria

Dr. Fabrizio Ciancetta, University of L'Aquila, L'Aquila, Italy

Topics:

Generation, transmission & distribution planning Reliability and security Dynamic transient stability and voltage stability Electromagnetic transient evaluations Insulation co-ordination Transmission & distribution equipment Generator Protection and Control Parallel Operation of Generators Protection Portable Power Systems Corporate planning and management Alternative energy systems Environmental issues Energy Management Systems Deregulation and Electric Power Market Impacts of deregulation Electricity pricing and transactions Open access IPP and Co-generation Power market Reliability Optimization Techniques Electricity Demand Management Load Management FACTS and Custom Power Devices for Power Quality, Power Switching, Uninterrupted Power Supplies, Power Factor Compensation and Conditioning, Capacitor Switching Techniques

Articles:

- [The Dynamic Relationship between Volatility, Volume and Open Interest in CSI 300 Futures Market](#) 11
Authors: Wang Susheng, Yu Zhen
- [A Matrix Transition Oriented Net for Modeling Distributed Complex Computer and Communication Systems](#) 22
Authors: Anthony Spiteri Staines, Filippo Neri
- [Asymptotic Properties of Zero Dynamics of Multivariable Sampled-Data Models with Time Delay](#) 32
Authors: Cheng Zeng, Shan Liang, Shaojun Gan, Xueli Hu
- [Automatic Regulating Time Series for Multivariable Processes with Specifications on Rise Times](#) 42
Authors: Tain-Sou Tsay
- [Stability Analysis of Second-Order RTD-Based CNN](#) 53
Authors: Yunquan Ke, Chunfang Miao
- [Stability Analysis of a Clamped-Pinned Pipeline Conveying Fluid](#) 64
Authors: B. Mediano-Valiente, M. I. Garcia-Planas
- [The Study on the 3E System Coordination Evaluation: Evidence from China](#) 75
Authors: Zhanglan Wu, Jie Tang, Dong Wang

<u>A Dimension-Oriented Theory of Requirements Space in Business Information Systems</u>	95
Authors: Arbi Ghazarian	
<u>High-Order Sliding Mode Design Based on Geometric Homogeneity and Fast Terminal Sliding Mode</u>	104
Authors: Weiqiang Tang, Zhiyuan Rui, Jinghua Zhang	
<u>An Experimental Study of a Lane Departure Warning System Based on the Optical Flow and Hough Transform Methods</u>	115
Authors: Gregory Taubel, Rohit Sharma, Jiann-Shiou Yang	
<u>Convenience Yields and Options Value of Exchanging Different-Maturity Futures Contracts Implied from Emissions Allowances Futures Market</u>	129
Authors: Kai Chang	
<u>Hindi Vowel Classification using GFCC and Formant Analysis in Sensor Mismatch Condition</u>	143
Authors: Astik Biswas, P. K. Sahu, Anirban Bhowmick, Mahesh Chandra	
<u>Price Discount of Private Equity Placement and Interests Transferring Subscribed by Larger Shareholders in China</u>	153
Authors: Su-Sheng Wang, Min-Cheng Xu	
<u>Analytic Local Linearization Particle Filter for Bayesian State Estimation in Nonlinear Continuous Process</u>	163
Authors: D. Jayaprasanth, Jovitha Jerome	
<u>Study on Properties of Traffic Flow on Bus Transport Networks</u>	176
Authors: Xu-Hua Yang, Jiu-Qiang Zhao, Guang Chen, You-Yu Dong	
<u>Optimal Placement of Sensor Network Hosted in Public Transport Vehicles for Environmental Monitoring</u>	186
Authors: Alessandro S .Santos, Leopoldo R. Yoshioka, Claudio L. Marte, Jorge P. Cintra, Caio Fontana	
<u>Current Sensorless Model Predictive Torque Control Based on Adaptive Backstepping Observer for PMSM Drives</u>	202
Authors: Qingfang Teng, Jianyong Bai, Jianguo Zhu, Youguang Guo	
<u>An Algorithmic Approach to Parameter Selection in Machine Learning using Meta-Optimization Techniques</u>	212
Authors: Michel Camilleri, Filippo Neri, Michalis Papoutsidakis	
<u>Assembly Variation Analysis of Three Dimensional Compliant Sheet Metal Parts Under an Over-located Condition</u>	222
Authors: Yu Kui-Gang, Yang Zhi-Hong	

<u>Sequential Use of Ordinal Multicriteria Methods to Obtain a Ranking for the 2012 Summer Olympic Games</u>	230
Authors: Silvio Figueiredo Gomes Júnior, João Carlos Correia Baptista Soares De Mello, Lidia Angulo Meza	
<u>Almost Periodic Solution of Neutral-Type Neural Networks with Time Delay in the Leakage Term on Time Scales</u>	241
Authors: Meng Hu, Lili Wang	
<u>Intelligent Algorithms Based on Data Processing for Modular Robotic Vehicles Control</u>	251
Authors: Michail Papoutsidakis, Dimitrios Piromalis, Filippo Neri, Michel Camilleri	
<u>A Bus Transport Network Model based on Directed Random Walk</u>	262
Authors: Xu-Hua Yang, Yong-Zhen Zhang	
<u>A New Case-Based Reasoning Method Based on Dissimilar Relations</u>	271
Authors: Ning Xiong	
<u>Open Research Issues on Advanced Control Methods: Theory and Application</u>	273
Authors: F. Neri	
<u>Classification of Faults in Nuclear Power Plant</u>	284
Authors: M. Awadalla, A. K. Abdien, S. M. Rashad, A. Ahmed, D. Al Abri	
<u>Robust Feedback Control Analysis of Magnetic Levitation System</u>	291
Authors: Santosh Kr. Choudhary	
<u>Adaptive Control of Nonlinear Processes Using Two Methods of Parameter Estimation</u>	301
Authors: Petr Dostál, Vladimír Bobál, Jiří Vojtěšek, Bronislav Chramcov	
<u>Study on Online Active Balancing System of Rotating Machinery and Target Control Method</u>	311
Authors: Pan Xin, Wu Hai-Qi, Gao Jin-Ji, Mu Yu-Zhe	
<u>An Hybrid Simulation Model to Support Decision Making in a Manufacturing Plant</u>	321
Authors: Elpidio Romano, Clemente Cesarano, Domenico Iuliano	
<u>The Unit Commitment Model for the Smart Grid</u>	331
Authors: Tsetsgee Bayasgalan, Zagdkhorol Bayasgalan, Fabrizio Granelli, Francesco Muzi	
<u>Open Research Issues on Modeling, Simulation and Optimization in Electrical Systems</u>	334
Authors: M. Panoiu, F. Neri	

<u>Harmonic Analysis in Functioning of an Electrothermal Installation with Electromagnetic Induction</u>	344
Authors: Raluca Rob, Caius Panoiu, Anca Iordan	
<u>Stability Enhancement of Multimachine Power System via New Coordinated Design of PSSs and SVC</u>	356
Authors: E. S. Ali, S. M. Abd-Elazim	
<u>The Influence of Home Nonlinear Electric Equipment Operating Modes on Power Quality</u>	367
Authors: Angela Iagar, Gabriel Nicolae Popa, Corina Maria Dinis	
<u>Power Consumption Optimization Strategy of Cloud Workflow Scheduling Based on SLA</u>	377
Authors: Yonghong Luo, Shuren Zhou	
<u>Resources Optimization Handling Operations in Ports Multipurpose Terminal</u>	389
Authors: Hasnaa Elmandili, Benayad Nsiri, Brahim Aghezzaf	
<u>Open Research Issues on Computational Techniques for Financial Applications</u>	391
Authors: F. Neri	
<u>The Effects of Private Placement on Long-Term Shareholder Wealth: Empirical Evidence from Chinese Listed Firms</u>	402
Authors: Su-Sheng Wang, Min-Cheng Xu	
<u>The Environmental Kuznets Curve Effects of Energy Intensity and Emission Intensity on Optimizing Chinese Emission-reduction under the Constraint of Energy-Saving Policy</u>	412
Authors: Kai Chang	
<u>Mutual Funds Investment Strategies</u>	428
Authors: Liběna Kantnerová	
<u>Optimization of a Vendor Managed Inventory Supply Chain Based on Complex Fuzzy Control Theory</u>	439
Authors: Wenfeng Xie, Junhai Ma	
<u>Assessing the Significance of Covariates in Output Oriented Data Envelopment Analysis with Two Stage Regression Models</u>	449
Authors: Geraldo Da Silva E Souza, Eliane Gonçalves Gomes	
<u>Telematics System for Increasing the Road Safety by Predicting the Occupancy of the Parking Areas on the Highways</u>	456
Authors: Z. Lokaj, M. Srotyr, T. Zelinka, M. Jerabek, P. Kumpost	
<u>Open Research Issues on Multi-Models for Complex Technological Systems</u>	459
Authors: C. Ciufudean, F. Neri	

<u>An Approach of a Decision Support and Home Monitoring System for Patients with Neurological Disorders using Internet of Things Concepts</u>	469
Authors: Iuliana Chiuchisan, Oana Geman	
<u>Adaptive Predictive Control of Laboratory Heat Exchanger</u>	481
Authors: Vladimír Bobál, Marek Kubalčík, Petr Dostál, Jakub Novák	
<u>Specific Problems on the Operation of the Automatic Control System of Temperature into an Individual Dwelling</u>	491
Authors: Daniel Popescu	
<u>Aggregation Modeling of Large Wind Farms using an Improved K-Means Algorithm</u>	502
Authors: Jian-Ping Zhang, Hao-Zhong Cheng, Shu-Xin Tian, Ding Yan	
<u>An Approach to Developing Power Grid Control Systems with IEC 61850, IEC 61499 and Holonic Control</u>	509
Authors: Valentin Vlad, Corneliu Buzduga, Calin Ciufudean	
<u>CAM-based Digital Image Watermarking Revisited</u>	519
Authors: Mohamed Tahar Ben Othman	
<u>Open Research Issues on Deregulated Electricity Market: Investigation and Solution Methodologies</u>	522
Authors: S. Prabhakar Karthikeyan, F. Neri	
<u>Emission Controlled Profit based Unit Commitment for GENCOs using MPPD Table with ABC Algorithm under Competitive Environment</u>	542
Authors: K. Asokan, R. Ashokkumar	
<u>Determining the Optimal Location and Sizing of Distributed Generation Unit using Plant Growth Simulation Algorithm in a Radial Distribution Network</u>	550
Authors: D. Rama Prabha, T. Jayabarathi	
<u>The Analysis of the Deforming Regime Generated by AC-DC Converters using Discrete Wavelet Transform</u>	559
Authors: Viorel Apetrei, Constantin Filote, Adrian Graur	
<u>Multi Objective Combined Emission Constrained Unit Commitment Problem Using Improved Shuffled Frog Leaping Algorithm</u>	574
Authors: J. Mary Anita, I. Jacob Raglend, D. P. Kothari	
<u>Neutral Point Potential Balance of Three Phase Three Level Diode Clamped Inverter</u>	583
Authors: M. Balamurugan, M. Gnana Prakash, S. Umashankar	
<u>Generating Outlines of Generic Shapes by Mining Feature Points</u>	595
Authors: Muhammad Sarfraz	

<u>Application of an Interactive Genetic Algorithm in the Conceptual Design of Car Console</u>	605
Authors: Runliang Dou, Chao Zong, Minqiang Li	
<u>Hybrid System of Optimal Self Organizing Maps and Hidden Markov Model for Arabic Digits Recognition</u>	616
Authors: Zakariae En-Naimani, Mohamed Lazaar, Mohamed Ettaouil	
<u>Methods to Study the Stability of Dynamical Systems. Applications</u>	627
Authors: Dumitru Bălă	
<u>Study on Base-Core Mode Coupling Networks</u>	637
Authors: Xu-Hua Yang, Jiu-Qiang Zhao, Guang Chen	
<u>Electricity Consumption Prediction System for the Public Transportation</u>	643
Authors: Svetoslav Iliev, Silviya Popova	
<u>Open Research Issues on Nonlinear Dynamics, Dynamical Systems and Processes</u>	647
Authors: A. V. Doroshin, F. Neri	
<u>A Linear Temperature Measurement System Based on Cu100</u>	659
Authors: Jiu-Qiang Zhao, Xiao-Fen Li, Zhi Cheng, Guang Chen	
<u>Fault Detection and Diagnosis in Non-Linear Process using Multi Model Adaptive H^∞ Filter</u>	667
Authors: M. Manimozhi, R. Saravanakumar	
<u>Permanence and Asymptotically Periodic Solution for A Cyclic Predator-Prey Model with Sigmoidal Type Functional Response</u>	678
Authors: Changjin Xu, Qiming Zhang	
<u>LMI based Bounded Output Feedback Control for Uncertain Systems</u>	689
Authors: Eva Gyurkovics, Tibor Takacs	
<u>Dynamical Analysis and Synthesis of Inertia-Mass Configurations of a Spacecraft with Variable Volumes of Liquids in Jet Engine Tanks</u>	698
Authors: Anton V. Doroshin, Mikhail M. Krikunov	
<u>Information Fusion of Airborne Radar and ESM for Maneuvering Target Tracking System based on IMM-BLUE</u>	707
Authors: Bao-Bao Wang, Lian-Zheng Zhang	
<u>Adaptive Control of Pantograph-Catenary Interaction Force</u>	719
Authors: Rusu-Anghel Stela, Cristina Miklos, Iulian-Ciprian Lihaciu	
<u>Analysis of Attribute Acceptance Sampling Properties</u>	729
Authors: Sejid Tešnjak, Ivan Banovac	

<u>Towards Representation of Agents and Social Systems Using Field-Theoretical Approach</u>	744
Authors: Darius Plikynas	
<u>Development and Application of a Time Series Predictive Model to Acoustical Noise Levels</u>	756
Authors: Claudio Guarnaccia, Joseph Quartieri, Nikos E. Mastorakis, Carmine Tepedino	
<u>Basic Properties of Slow-Fast Nonlinear Dynamical System in the Atmosphere-Ocean Aggregate Modeling</u>	766
Authors: Sergei Soldatenko, Denis Chichkine	