WSEAS Transactions on Systems and Control

Print ISSN: 1991-8763
E-ISSN: 2224-2856
Contents: 2011

Impact factor according to the citations in Thomson Reuters (ISI Web of Knowledge) for 2014: 0,207
Impact Factor = A/B where: A = the number of citations by Thomson Reuters (ISI Web of Knowledge) in 2014 for the published papers in this journal in 2012 and 2013. B = the total number of papers published by this journal in 2012 and 2013.
Acceptance Rate (for the years 2013 and 2014): 20.03%
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 Withdrawn Papers are not considered for the numbers C and D.

Editor-in-Chief
Prof. Sorinel Adrian Oprisan, College of Charleston, SC, USA
URL, Email: oprisans@cofc.edu

Associate Editors:
Prof. Daniel Kammen, University of California, Berkeley, USA
URL, Email: kammen@berkeley.edu
Prof. David A. Johnson, University of Waterloo, Canada
URL, Email: da3johns@uwaterloo.ca

Prof. D. Subbaram Naidu, IEEE Fellow, Idaho State University, USA
URL, Email: naiduds@isu.edu

Prof. Tadeusz Kaczorek, IEEE Fellow, Warsaw University of Technology, Poland
URL, Email: kaczorek@ee.pw.edu.pl

Prof. Wasfy B. Mikhael, IEEE Fellow, Vice President IEEE Circuits and Systems
University of Central Florida, Orlando, USA
URL and URL, Email: Wasfy.Mikhael@ucf.edu

Prof. Pierre Borne, IEEE France Section Chair, IEEE Fellow
IEEE/SMC Past President, Ecole Centrale de Lille, France
URL, Email: p.borne@ec-lille.fr

Prof. George Vachtsevanos, Georgia Institute of Technology, Atlanta, Georgia, USA
URL, Email: gjv@ece.gatech.edu

Prof. Yuriy S. Shmaliy (IEEE Fellow), Universidad de Guanajuato, MEXICO.
URL, Email: shmaliy@ugto.mx

Prof. Jan Awrejcewicz, Technical University of Lodz, Lodz, Poland
URL, Email: jan.awrejcewicz@p.lodz.pl

Prof. Imre J. Rudas, Óbuda University, Budapest, Hungary
URL, Email: rudas@uni-obuda.hu

Prof. Carla Pinto, Polytechnic of Porto, Porto, Portugal
URL, Email: cap@isep.ipp.pt

Prof. Ottavia Corbi, University of Naples Federico II, Italy
URL, Email: ottavia.corbi@unina.it

Prof. Hamid Reza Karimi, University of Agder, Grimstad, Norway
URL, Email: hamid.r.karimi@uia.no

Prof. Hung-Yuan Chung, National Central University, Taiwan
URL, Email: hychung@ee.ncu.edu.tw

Prof. Alexander Gegov, University of Portsmouth, UK
URL, Email: alexander.gegov@port.ac.uk

Prof. Elbrous M. Jafarov, Istanbul Technical University, Istanbul, Turkey
URL, Email: cafer@itu.edu.tr

Prof. Bosukonda Murali Mohan, Indian Institute of Technology Kharagpur, Kharagpur, India
URL, Email: mohan@ee.iitkgp.ernet.in

Prof. Dimitrios A. Karras, Sterea Hellas Institute of Technology, Greece
URL, Email: dakarras@teihal.gr

Topics

a) Systems Dynamical systems, Differential Equations: Ordinary Differential Equations Functional Differential Equations Partial Differential Equations Numerical Methods, Simulation Nonlinear analysis, Stability, Nonlinear oscillations, Bifurcations, Singular perturbations Fractals, Ergodic theory, Mathematical Systems Theory, Computational Intelligence (Neural Nets, Fuzzy Systems, Evolutionary Computing, Ant Colony Optimization etc...) Artificial Intelligence Knowledge Modelling, Decision Support Systems Hierarchical Control Systems Stochastic Systems, Non-linear Systems Multidimensional Systems, Multivariable systems Hybrid Systems, Multirate Systems Speech and Image Processing Systems Discrete Event Dynamic Systems Manufacturing Systems, Decentralised Systems Remote Sensing, Microelectromechanical Systems Human-Machine Systems, Image compression Scientific visualization. Applications and Special Topics

b) Control Mathematical Theory of Control Stability, Observability, Controlability, Factorizability, Reachability Linear Control, Non-Linear Control Optimal Control, Robust Control Computational Intelligence Neural Control, Fuzzy Control, Genetic Control Hybrid (Neural-Fuzzy-Evolutionary) Methodologies Intelligent Control, Stochastic Control, Discrete Control Hierarchical Control, Large Scale Systems, Adaptive Control Predictive Control, Process Control, H-infinity Control Multivariable Control, Multidimensional Control Multivariable Systems, Discrete Event Systems Re-configurable Systems, Real-Time Control Industrial Control, Control for Electric Machines Control for Power Systems, Fault Detection Simulation, Optimization, Identification Estimation, Kalman Filtering, Robotics Robotic Networks, Mechatronics Artificial Intelligence, Circuits, Devices and Systems for Automation and Control Electronics for Control, Electrical and Electronic Measurement Signal Processing for Control, Human-Machine Systems and Cybernetics Modeling and Simulation, Computer Networks for Control Internet Control, Microprocessors, Computer Architecture for Control Software tools for Control, CAD/CAM systems Applications and Special Topics

Articles:

Control Design for Uncertain Singularly Perturbed Systems with Discrete Time Delay
Authors: Bahador Makki, Baharak Makki

Gain Scheduled Automatic Flight Control Systems Design for a Light Commercial Helicopter Model
Authors: Erkan Abdulhamitbilal, Elbrous M. Jafarov

Wind Driven Induction Generator Regulation Using Ant system Approach to Takagi Sugeno Fuzzy PID Control
Authors: A. H. Besheer

Stability Condition for Discrete Systems with Multiple State Delays
Authors: Sara Pakzad, Mohammad Ali Pakzad

On-Line Adaptive Fuzzy Switching Controller for SCARA Robot
Authors: Marwan A., Farrukh Nagi, Ksm Sahari, Hanim S., Fadi. I.

Fuzzy Tracking Control Based on H? Performance for Nonlinear Systems
Authors: Trihastuti Agustinah, Achmad Jazidie, Mohammad Nuh

Robust Stability of Linear Fractional Systems with Non Linear Uncertainties
Authors: Ouadia El Figuigui, Nourreddine El Alami

Hysteresis Model Parameters Identification for the SAS Rotational MR Damper
Authors: Yousef Iskandarani, Hamid Reza Karimi

The Torque Control with Multi-Objective Performance for E-Bike Systems with Human Power Assistance
Authors: Pang-Chia Chen, Chih-Ching Hsiao, Sun-Li Wu, Shyue-Bin Chang

Techniques for Predictor Design in Multivariable Predictive Control
Authors: Marek Kubalcik, Vladimir Bobal

Reliability and Quality Improvement of Robotic Manipulation Systems
Authors: Yaser Maddahi, Ali Maddahi

SCG Stability Enhancement Using STATCOM Based-ANN Controller
Authors: R. A. Amer, G. A. Morsy, H. A. Yassin

DC Characteristic Analysis of Three-Phase LC Filter- Uncontrollable Rectifier Using Circuit DQ Transformation
Authors: Xin Geng, Xi-Jun Yang, Zhe-Min Zhang, Hou-Jun Tang, Liang-Yu Bai

Morphing Motion in Modular Robots
Authors: Fei Yanqiong, Wang Yong

Stability Enhancement for a Superconducting Generator in Multimachine Power System Using STATCOM
Authors: R. A. Amer, G. A. Morsy, H. A. Yassin

Effective Optimization of the Control System for the Cement Raw Meal Mixing Process: II. Optimizing Robust PID Controllers Using Real Process Simulators
Authors: Dimitris Tsamatsoulis

Model Predictive Control Approach Based Load Frequency Controller
Authors: Ali Mohamed Yousef

On Plant Modeling for the PIM Digital Redesign of a Power System Stabilizer
Authors: G. Shabib

Effective Optimization of the Control System for the Cement Raw Meal Mixing Process: I. PID Tuning Based on Loop Shaping
Authors: Dimitris Tsamatsoulis

Identification of Coherent Generators for Large-Scale Power Systems Using Fuzzy Algorithm
Authors: Mahdi M. M. El-Arini, Ahmed Fathy

Necessary Conditions for Optimal Control Problems with and without State Constraints: A Comparative Study
Authors: Md. Haider Ali Biswas

A Novel Block Matching Algorithm Based on Particle Swarm Optimization with Mutation Operator and Simplex Method
Authors: Zhang Ping, Wei Ping, Yu Hongyang

Evolutionary Programming Versus Artificial Immune System in Evolving Neural Network for Grid-connected Photovoltaic System Output Prediction
Authors: Shahril Irwan Sulaiman, Titik Khawa Abdul Rahman, Ismail Musirin, Sulaiman Shaari

Modeling and Simulation of a New Active Vibration Control System for Flexible Structures
Authors: Alireza Tavakolpour, Musa Mailah, Intan Z. M. Darus

Geometrical Model of Plant Presented on a State Surface of a Complex Error
Authors: Oleg N. Agamalov

Contact-Bounce Control and Remote Monitoring Interface Implementation of a PM Contactor
Authors: Chih-Yu Hung

Hierarchical Control of a Complex Conveyors Belt System
Authors: Corina Maria Dinis, Gabriel Nicolae Popa, Angela Iagar

A Study on RTD-A Controller for Multiple Input Multiple Output System and an Application Example
Authors: Du Bin, Chu Jizheng, Cao Xi

Solar Cell Emulator and Solar Cell Characteristics Measurements in Dark and Illuminated Conditions
Authors: Yousry Atia, Mohamed Zahran, Abdullah Al-Hossain

Interdisciplinarity in Computer-Aided Analysis of Thermal Therapies
Authors: Daniela Carstea, Ion Carstea, Iulia Maria Carstea

Land Mine Detecting Robot Capable of Path Planning
Authors: Muhammad Zubair, Muhammad Ahmad Choudhry

Matlab & Simulink Simulation with FPGA-Based Implementation Sliding Mode Control of a Permanent Magnet Synchronous Machine Drive
Authors: Badre Bossoufi, Mohammed Karim, Silviu Ionila, Ahmed Lagrioui, Gabriel V. Iana

Root Locus Analysis of a Retarded Quasipolynomial
Authors: Libor Pekar

Unstable Systems - Tracking and Disturbance Attenuation
Authors: Roman Prokop, Natalia Volkova, Zdenka Prokopova

Hidden Oscillations in Dynamical Systems
Authors: G. A. Leonov, N. V. Kuznetsov, O. A. Kuznetsova, S. M. Seledzhi, V. I. Vagaitsev

Sliding Mode Control Law for a Variable SpeedWind Turbine
Authors: Oscar Barambones, Jose Maria Gonzalez De Durana, Patxi Alkorta, Jose Antonio Ramos, Manuel De La Sen

Subtractive Fuzzy C-means Clustering Approach with Applications to Fuzzy Predictive Control
Authors: Ji-Hang Zhu, Hong-Guang Li

Adaptive Wavelet Neural Controller Design for a DC-DC Power Converter using an FPGA Chip
Authors: Yu-Hsiung Lin, Chun-Fei Hsu

Robust Design for Etching Process Parameters of Hard Disk Drive Slider Fabrication Using Data Mining and Multi Response Optimization
Authors: Pongsak Holimchayachotikul, Komgrit Leksakul, Guido Guizzi

An Exploratory Method for Effective Deployment of Programmable Logic Controllers (PLCs)
Authors: Lucien Ngalamou, Leary Myers