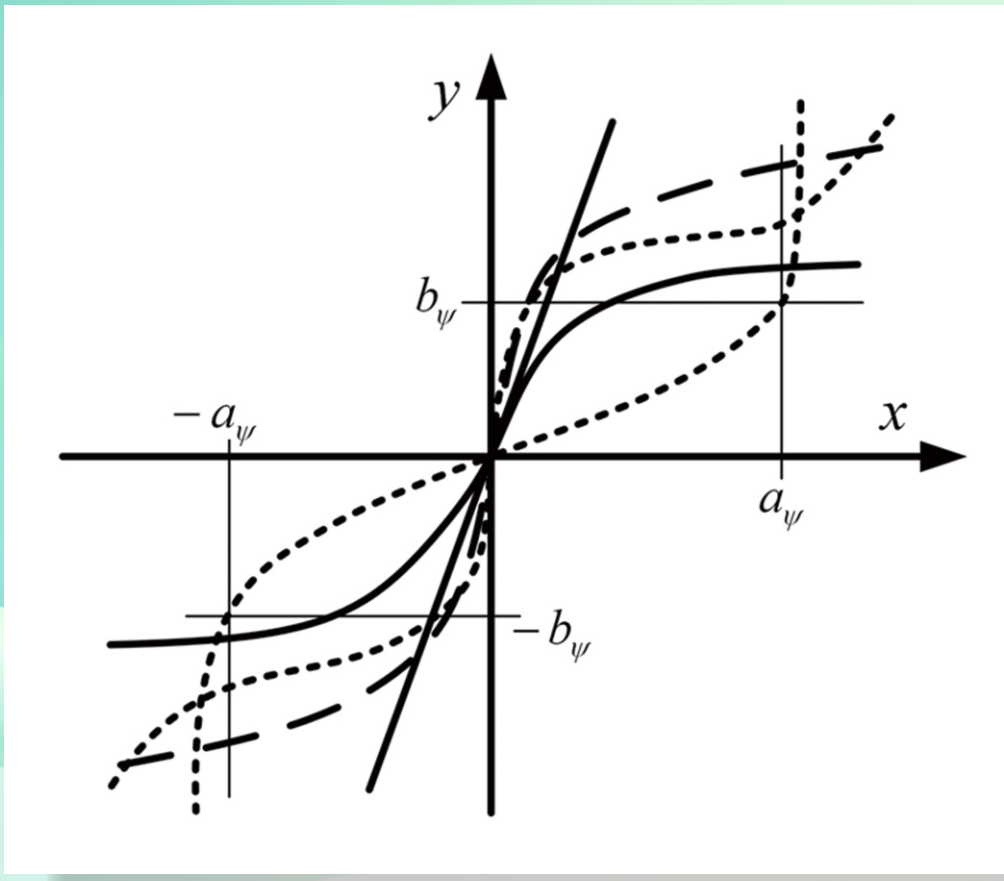
ISSN: 2153-0653 Volume 5, Number 3, August 2014

Scientific Research

Intelligent Control and Automation



ISSN: 2153-0653

www.scirp.org/journal/ica

www.scirp.org/journal/ica

Journal Editorial Board

ISSN Print: 2153-0653 ISSN Online: 2153-0661
http://www.scirp.org/journal/ica

Editor-in-Chief

Prof. Theodore B. Trafalis University of Oklahoma, USA

Editorial Board

Prof. Pablo Cortés Achedad University of Seville, Spain
Prof. Jan Awrejcewicz The Lodz University of Technology, Poland
Prof. Celal Batur University of Akron, USA
Dr. Mohammed Chadli University of Picardie Jules Verne, France
Dr. Naoufel Cheikhrouhou Swiss Federal Institute of Technology, Switzerland
Prof. Zoran Gajic Rutgers University, USA
Prof. Vic Grout Glyndwr University, UK
Prof. Yanxiang He Wuhan University, China
Dr. Carlos C. Insaurralde Heriot-Watt University, UK
Prof. Piotr Kulczycki Polish Academy of Sciences, Poland
Prof. Akihiko Kumagai California State University, USA
Prof. Guay Martin Queen's University, Canada
Prof. Amalendu Mukherjee Indian Institute of Technology, India
Dr. Chang-Woo Park Korea Electronics Technology Institute, South Korea
Prof. Dilip Kumar Pratihar Indian Institute of Technology, India
Dr. Jianbin Qiu Harbin Institute of Technology, China
Dr. Peter Simon Sapaty National Academy of Sciences of Ukraine, Ukraine
Prof. Yung C. Shin Purdue University, USA
Dr. José Reinaldo Silva University of São Paulo, Brazil
Dr. Jue Wang Chinese Academy of Sciences, China
Dr. Ronglong Wang University of Fukui, Japan
Prof. Wai-Keung Wong Hong Kong Polytechnic University, China
Prof. Lei Xie Northwestern Polytechnical University, China
Prof. Ruey-Fang Yu National United University, Chinese Taipei

Intelligent Control and Automation, 2014, 5, 91-181
Published Online August 2014 in SciRes. http://www.scirp.org/journal/ica

Table of Contents

Volume 5 Number 3 August 2014

Regulation of the Reacted Layer Thickness in a Gas-Solid Reacting System

M. A. Barron, D. Y. Medina, G. Plascencia.....91

Mathematical Models of Receptivity of a Robot and a Human to Education

O. G. Pensky, V. O. Michailov, K. V. Chernikov.....97

A Study on Autotuning Controller for Servo System

N. H. Giap, J.-H. Shin, W.-H. Kim.....102

A Reference-Pulse Generator for Motion Control System

N. H. Giap, J.-H. Shin, W.-H. Kim.....111

About a Method of Recognition of Race and Ethnicity of Individuals Based on Portrait Photographs

T. Kazimov, S. Mahmudova.....120

Evaluation of Replacement Policies in Sow Farms Using Arena™ Simulation Software

M. A. M. Benítez, L. M. P. Aragones, M. A. S. Garcia, O. M. Arango, J. R. C. Armenta.....126

Opportunities and Challenges of Robotics and Automation in Offshore Oil & Gas Industry

H. P. Chen, S. Stavinoha, M. Walker, B. Zhang, T. Fuhlbrigge.....136

Constructive General Bounded Integral Control

B. S. Liu.....146

A Parameter Varying PD Control for Fuzzy Servo Mechanism

N. J. Soufi, M. K. Moghaddam, S. S. Boroujeni, A. Vahidifar.....156

Gradient Observability for Semilinear Hyperbolic Systems: Sectorial Approach

A. Khazari, A. Boutoulout.....170

The figure on the front cover is from the article published in Intelligent Control and Automation, 2014, Vol. 5, No. 3, pp. 146-155 by Baishun Liu.

Intelligent Control and Automation (ICA)

Journal Information

SUBSCRIPTIONS

The *Intelligent Control and Automation* (Online at Scientific Research Publishing, www.SciRP.org) is published quarterly by Scientific Research Publishing, Inc., USA.

Subscription rates:

Print: $79 per issue.
To subscribe, please contact Journals Subscriptions Department, E-mail: sub@scirp.org

SERVICES

Advertisements
Advertisement Sales Department, E-mail: service@scirp.org

Reprints (minimum quantity 100 copies)
Reprints Co-ordinator, Scientific Research Publishing, Inc., USA.
E-mail: sub@scirp.org

COPYRIGHT

COPYRIGHT AND REUSE RIGHTS FOR THE FRONT MATTER OF THE JOURNAL:

Copyright © 2014 by Scientific Research Publishing Inc.

This work is licensed under the Creative Commons Attribution International License (CC BY).
http://creativecommons.org/licenses/by/4.0/

COPYRIGHT FOR INDIVIDUAL PAPERS OF THE JOURNAL:

Copyright © 2014 by author(s) and Scientific Research Publishing Inc.

REUSE RIGHTS FOR INDIVIDUAL PAPERS:

Note: At SCIRP authors can choose between CC BY and CC BY-NC. Please consult each paper for its reuse rights.

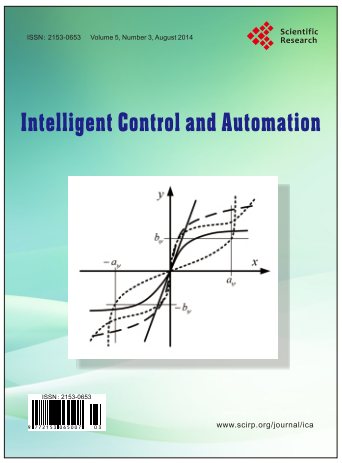
DISCLAIMER OF LIABILITY

Statements and opinions expressed in the articles and communications are those of the individual contributors and not the statements and opinion of Scientific Research Publishing, Inc. We assume no responsibility or liability for any damage or injury to persons or property arising out of the use of any materials, instructions, methods or ideas contained herein. We expressly disclaim any implied warranties of merchantability or fitness for a particular purpose. If expert assistance is required, the services of a competent professional person should be sought.

PRODUCTION INFORMATION

For manuscripts that have been accepted for publication, please contact:
E-mail: ica@scirp.org

Call for Papers



Intelligent Control and Automation (ICA)

ISSN Print: 2153-0653, ISSN Online: 2153-0661
http://www.scirp.org/journal/ica

Intelligent Control and Automation is an open access, peer-reviewed and fully refereed journal focusing on theories, methods and applications in intelligent control and automation. The goal of this journal is to provide a platform for scientists and academicians all over the world to promote, share, and discuss various new issues and developments in different areas of intelligent control and automation.

Editor-in-Chief

Prof. Theodore B. Trafalis University of Oklahoma, USA

Subject Coverage

All manuscripts must be prepared in English, and are subject to a rigorous and fair peer-review process. Accepted papers will immediately appear online followed by printed hard copy. The journal publishes original papers including but not limited to the following fields:

- Adaptive Controls
- Advanced Control Algorithms and Applications
- Artificial Intelligence and Knowledge Engineering
- Automation System
- Autonomous Systems
- Complex Systems and Intelligent Robots
- Complex Systems, Logistics, and Supply Chain
- Computational Intelligence and Applications
- Control Theory and Control Engineering
- Cooperative Controls (Agent Based Systems)
- Distributed Parameter Systems
- Dynamic Data Driven Application Systems in Intelligent Control
- Ecosystems and Control
- Electronic Commerce and Office Automation
- Hybrid Systems
- Industrial Automation and Online Monitoring
- Integrated and Complex Automation Systems
- Intelligent Automation and Manufacturing
- Intelligent Control Theory and Applications
- Intelligent Management and Decision Making
- Mechanical Engineering and Automation
- Modeling, Identification, and Fault Diagnosis
- Navigation Control Theory and Applications
- Network Intelligence and Network Control
- Optimization
- Power Systems and Automation
- Robotics, Service and Medical Robotics
- Soft Computings
- Systems and Control Theory and Applications
- Systems Engineering and Engineering Optimization
- Water and Natural Resource Management

We are also interested in short papers (letters) that clearly address a specific problem, and short survey or position papers that sketch the results or problems on a specific topic. Authors of selected short papers would be invited to write a regular paper on the same topic for future issues of the ***ICA***.

Notes for Intending Authors

Submitted papers should not be previously published nor be currently under consideration for publication elsewhere. Paper submission will be handled electronically through the website. All papers will be peer reviewed. For more derails about the submission, please access the website.

Website and E-Mail

http://www.scirp.org/journal/ica **E-mail: ica@scirp.org**