

ISSN: 2165-3917 Vol. 5, No. 7, July 2015



Open Journal of Applied Sciences



ISSN: 2165-3917



9 772165 391002 07

www.scirp.org/journal/ojapps

Journal Editorial Board

ISSN Print: 2165-3917 ISSN Online: 2165-3925

<http://www.scirp.org/journal/ojapps>

Editors-in-Chief

Prof. A. C. Matin	Stanford University School of Medicine, USA
Prof. Harry E. Ruda	University of Toronto, Canada

Editorial Board

Prof. Terry L. Alford	Arizona State University, USA
Dr. Y. Bilgin Altundas	Schlumberger-Doll Research, USA
Dr. Demetrios A. Arvanitis	Academy of Athens, Greece
Prof. Idress Hamad Attitalla	Botany Department, Faculty of Science, Omar Al-Mukhtar University, Libya
Prof. Ezekiel Bahar	University of Nebraska, USA
Prof. Der-Chen Chang	Georgetown University, USA
Prof. Yong Chen	Ecole Normale Supérieure, France
Dr. Paul Crilly	The University of Tennessee, Knoxville, USA
Prof. Andrzej T. Galecki	University of Michigan Medical School, USA
Dr. Krassimir Georgiev	Bulgarian Academy of Sciences (BAS), Bulgaria
Dr. Chunlei Guo	University of Rochester, USA
Prof. Paloma R. Horche	Polytechnic University of Madrid, Spain
Dr. Sheng-He Huang	University of Southern California, USA
Prof. Deqing Liang	The Chinese Academy of Sciences, China
Prof. Rodica Luca	“Gheorghe Asachi” Technical University, Romania
Prof. Wen-Xiu Ma	University of South Florida, USA
Dr. Jukka P. Matinlinna	The University of Hong Kong, China
Prof. Richard Mu	Fisk University, USA
Prof. Valeriy Perminov	Tomsk Polytechnic University, Russia
Prof. Singiresu S. Rao	University of Miami, USA
Dr. Jie Shen	University of Michigan, USA
Dr. M. P. Srinivasan	National University of Singapore, Singapore
Dr. Tian Tang	University of Alberta, Canada
Dr. Low-Hong Tong	National University of Singapore, Singapore
Prof. Dimos A. Triantis	Technological Educational Institution of Athens, Greece
Prof. Nicholas Tsounis	Technological Educational Institute of Western Macedonia, Greece
Dr. Jan Valdman	University of South Bohemia, Czech Republic
Dr. Giovanni Valdrè	University of Bologna, Italy
Dr. Yiru Xu	University of Michigan Medical School, USA
Prof. Changying Zhao	Shanghai Jiao Tong University, China
Prof. Shufeng Zhou	University of South Florida, USA

Table of Contents

Volume 5 Number 7

July 2015

On a Non-Perturbative Quantum Relativity Theory Leading to a Casimir-Dark Energy Nanotech Reactor Proposal

M. S. El Naschie.....313

Ecohydrologically Driven Catchment Evaluation and Prioritization

S. Mylevaganam, R. Srinivasan, V. P. Singh.....325

A Simplified Thermal Modelling of Cooling Tower for Optimization of HVAC Systems to Enhance Energy Efficiency

R. Agrawal, S. C. Kaushik, T. S. Bhatti.....335

Long Term Soil and Water Assessment Tool (SWAT) Calibration from an Ecohydrology Perspective

S. Mylevaganam, R. Srinivasan, V. P. Singh.....344

Decision Theory and Analysis: An Optima Value Creation Precursor for Organizations

C. A. Gbande, P. T. Akuhwa.....355

Multiserver Multichannel Real-Time System with Limited Maintenance Facilities under Maximum Load

E. Ianovsky, J. Kreimer.....386

Biosorption of Ni^{2+} and Cd^{2+} from Aqueous Solutions Using NaOH-Treated Biomass of *Eupenicillium ludwigii*: Equilibrium and Mechanistic Studies

A. A. Al-Fakih.....376

Evaluation of Nutritional Value for Four Kinds of Wild Plants in Northern Sector of Nile Delta, Egypt

Y. A. El-Amier, T. J. Abdullah.....393

Comparison of Loading Functions in the Modelling of Automobile Aluminium Alloy Wheel under Static Radial Load

S. O. Igbudu, D. A. Fadare.....403

Open Journal of Applied Sciences (OJAppS)

Journal Information

SUBSCRIPTIONS

The *Open Journal of Applied Sciences* (Online at Scientific Research Publishing, www.SciRP.org) is published monthly 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 © 2015 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 © 2015 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: ojapps@scirp.org

Call for Papers



Open Journal of Applied Sciences

ISSN Print: 2165-3917 ISSN Online: 2165-3925

<http://www.scirp.org/journal/ojapps>

Open Journal of Applied Sciences (OJAppS) is an international peer-reviewed, open-access journal publishing in English original research studies, reviews in diverse areas of applied sciences. 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 applied sciences and to keep a record of the state-of-the-art research in related areas.

Subject Coverage

The journal publishes original papers including but not limited to the following fields:

Applied Behavioral Science
Applied Biology
Applied Chemistry
Applied Ecology
Applied Economics
Applied Engineering

Applied Genetics
Applied Geography
Applied Linguistics
Applied Mathematics
Applied Mechanics
Applied Philosophy

Applied Physics
Applied Physiology
Applied Psychology
Applied Sociology
Artificial Intelligence
Computing Technology

We are also interested in: 1) Short Reports—2-5 page papers where an author can either present an idea with theoretical background but has not yet completed the research needed for a complete paper or preliminary data; 2) Book Reviews—Comments and critiques.

Notes for Intending Authors

Submitted papers should not have been previously published nor be currently under consideration for publication elsewhere. Paper submission will be handled electronically through the website. All papers are refereed through a peer review process. For more details about the submission, please access the website.

Website and E-Mail

<http://www.scirp.org/journal/ojapps>

E-mail: ojapps@scirp.org

What is SCIRP?

Scientific Research Publishing (SCIRP) is one of the largest Open Access journal publishers. It is currently publishing more than 200 open access, online, peer-reviewed journals covering a wide range of academic disciplines. SCIRP serves the worldwide academic communities and contributes to the progress and application of science with its publication.

What is Open Access?

All original research papers published by SCIRP are made freely and permanently accessible online immediately upon publication. To be able to provide open access journals, SCIRP defrays operation costs from authors and subscription charges only for its printed version. Open access publishing allows an immediate, worldwide, barrier-free, open access to the full text of research papers, which is in the best interests of the scientific community.

- High visibility for maximum global exposure with open access publishing model
- Rigorous peer review of research papers
- Prompt faster publication with less cost
- Guaranteed targeted, multidisciplinary audience



**Scientific
Research
Publishing**

Website: <http://www.scirp.org>

Subscription: sub@scirp.org

Advertisement: service@scirp.org