

ISSN: 2165-3917 Vol. 6, No. 1, January 2016



Open Journal of Applied Sciences



ISSN: 2165-3917



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
Prof. 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
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 6 Number 1

January 2016

Importance of Life Cycle Analysis of the Printed Circuit Board Computer

M. A. Cortes, M. L. D. Patiño, N. L. Ruíz, L. E. M. Vaca.....1

Propulsion for Biological Inspired Micro-Air Vehicles (MAVs)

J. M. M. Barata, F. M. S. P. Neves, P. A. R. Manquinho, T. A. J. Silva.....7

Sacadura Cabral and the Dawn of Portuguese Aviation

F. M. S. P. Neves, J. M. M. Barata, A. R. R. Silva.....16

Measurement of Gamma-Rays Using Smartphones

S. Tith, N. Chankow.....31

A Time Dependent Inventory Model for Exponential Demand Rate with Constant Production Where Shelf-Life of the Product Is Finite

M. E. Islam, S. I. Ukil, M. S. Uddin.....38

Model Associated with the Study of the Degradation Based on the Accelerated Test: A Literature Review

F. Dia, N. Mbengue, O. N. Sarr, M. Diagne, O. A. Niasse, A. Dieye, M. Niang, B. Ba, C. Sene.....49

A Spatial Evapotranspiration Tool at Grid Scale

S. Mylevaganam, C. Ray.....64

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 © 2016 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 © 2016 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