JOURNAL EDITORIAL BOARD

ISSN 2327-4352 (Print)  ISSN 2327-4379 (Online)
http://www.scirp.org/journal/jamp

Editor-in-Chief
Prof. Wen-Xiu Ma
University of South Florida, USA

Editorial Board

Dr. Izhah Ahmad
King Fahd University of Petroleum and Minerals, Saudi Arabia

Dr. S. Joseph Antony
University of Leeds, UK

Prof. Roberto Oscar Aquilano
Instituto de Física Rosario, Argentina

Prof. Ping-Hei Chen
National Taiwan University, Chinese Taipei

Prof. Wanyang Dai
Nanjing University, China

Dr. Steven B. Damelin
University of Michigan, USA

Prof. Beih El-Sayed El-Desouky
Mansoura University, Egypt

Prof. Chaudry Masood Khalique
North-West University, South Africa

Dr. Ki Young Kim
Samsung Advanced Institute of Technology, South Korea

Prof. Xiang Li
Beijing University of Chemical Technology, China

Prof. Xing Lü
Beijing Jiaotong University, China

Dr. Jafar Fawzi Mansi Al Omari
Al-Balqa’ Applied University, Jordan

Prof. Rosa Pardo
Complutense University of Madrid, Spain

Prof. Sanzheng Qiao
McMaster University, Canada

Dr. Daniele Ritelli
University of Bologna, Italy

Dr. Babak Daneshvar Rouyendeh
Atılım University, Turkey

Prof. Morteza Seddighin
Indiana University East, USA

Dr. Marco Spadini
University of Florence, Italy

Prof. Hari Mohan Srivastava
University of Victoria, Canada

Dr. Divine Tito Fongha Wanduku
Keiser University, USA

Prof. Ping Wang
Penn State University Schuylkill, USA

Prof. Xiaohui Yuan
Huazhong University of Science and Technology, China
# Table of Contents

**Volume 6   Number 1                                   January  2018**

- **Closed Form Exact Solutions to the Higher Dimensional Fractional Schrodinger Equation via the Modified Simple Equation Method**
  M. Nurul Islam, M. Ali Akbar.................................................................90

- **Predicting the Two-Phase Liquid-Solid Drag Model Using the Calculus of Variation**
  H. R. Nazif, A. H. Javadi, N. Fallahnezhad........................................103

- **Travelling Wave Solutions for Three Dimensional Incompressible MHD Equations**
  M. Aldhabani, S. M. Sayed.........................................................................114

- **Some Properties of Solution to Semidefinite Complementarity Problem**
  Y. Chen, C. L. Chen, C. H. Han...............................................................122

- **Global Convergence of an Extended Descent Algorithm without Line Search for Unconstrained Optimization**
  C. L. Chen, L. L. Luo, C. H. Han, Y. Chen........................................130

- **A Mean-Field Stochastic Maximum Principle for Optimal Control of Forward-Backward Stochastic Differential Equations with Jumps via Malliavin Calculus**
  Q. Zhou, Y. Ren.....................................................................................138

- **Repeated Sparks Produce Free Energy: A Rigorous Mathematical Explanation of the Authors, by the Hidden Ampere Force Law**
  P. Pappas, T. Pappas, E. Pappas..............................................................155

- **The $\mathcal{G}$-functions Series Method Adapted to the Numerical Integration of Parabolic PDE**
  M. Cortés-Molina, J. A. Reyes, F. García-Alonso.....................................161

- **Modelling and Calculation of Silicon Conduction Band Structure and Parameters with Arbitrary Uniaxial Stress**
  G. Y. Wang, M. D. Yu, C. Y. Zhou.......................................................183

- **Post Secondary Students’ Level of Proficiency in Solving Real World Problems in Mathematics**
  L. E. Pascual, A. B. San Pedro...............................................................198

- **A New Physical Interpretation of Archimedes’ Principle**
  G. Cavazzini..........................................................................................215
Some Fixed Point Theorems for Fuzzy Iterated Contraction Maps in Fuzzy Metric Spaces
L. Xia, Y. H. Tang………………………………………………………………………………………………………………………….224

Some New Fixed Point Theorems for Fuzzy Iterated Contraction Maps in Fuzzy Metric Spaces
L. Xia, Y. H. Tang………………………………………………………………………………………………………………………………228

New Oscillatory Theorems for Third-Order Nonlinear Delay Dynamic Equations on Time Scales
L. Gao, S. H. Liu, X. T. Zheng…………………………………………………………………………………………………………………………232

Some Features of Neural Networks as Nonlinearly Parameterized Models of Unknown Systems Using an Online Learning Algorithm

A Study of Flow through a Channel Bounded by a Brinkman Transition Porous Layer
M. S. Abu Zaytoon, T. L. Alderson, M. H. Hamdan……………………………………………………………………………………264

Research on Downlink Precoding for Interference Cancellation in Massive MIMO Heterogeneous UDN
H. He, J. Jiang, R. Jin………………………………………………………………………………………………………………………………283
Journal of Applied Mathematics and Physics (JAMP)

Journal Information

SUBSCRIPTIONS


Subscription rates:
Print: $39 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)
E-mail: sub@scirp.org

COPYRIGHT

Copyright and reuse rights for the front matter of the journal:
Copyright © 2018 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 © 2018 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: jamp@scirp.org
Journal of Applied Mathematics and Physics is an international journal dedicated to the latest advancement of applied mathematics and physics. The goal of this journal is to provide a platform for researchers and scientists all over the world to promote, share, and discuss various new issues and developments in different areas of applied mathematics and physics. We aim to publish high quality research articles in terms of originality, depth and relevance of content, and particularly welcome contributions of interdisciplinary research on applied mathematics, physics and engineering.

Subject Coverage

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

- Applications of Systems
- Applied Mathematics
- Applied Non-Linear Physics
- Applied Optics
- Applied Solid State Physics
- Biophysics
- Computational Physics
- Condensed Matter Physics
- Control Theory
- Cryptography
- Differentiable Dynamical Systems
- Engineering and Industrial Physics
- Experimental Mathematics
- Fluid Mechanics
- Fuzzy Optimization
- Geophysics
- Integrable Systems
- Laser Physics
- Methodological Advances
- Multi-Objective Optimization
- Nanoscale Physics
- Nonlinear Partial Differential Equations
- Non-Linear Physics
- Nuclear Physics
- Numerical Computation
- Optical Physics
- Portfolio Selection
- Riemannian Manifolds
- Scientific Computing
- Set-Valued Analysis
- Soliton Theory
- Space Physics
- Symbolic Computation
- Topological Dynamic Systems
- Variational Inequality
- Vector Optimization

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

The journal publishes the highest quality original full articles, communications, notes, reviews, special issues and books, covering both the experimental and theoretical aspects including but not limited to the above materials, techniques and studies. Papers are acceptable provided they report important findings, novel insights or useful techniques within the scope of the journal. All manuscript must be prepared in English, and are subjected to a rigorous and fair peer-review process. Accepted papers will immediately appear online followed by prints in hard copy.

Website and E-Mail

http://www.scirp.org/journal/jamp   E-mail: jmp@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

Website: http://www.scirp.org
Subscription: sub@scirp.org
Advertisement: service@scirp.org