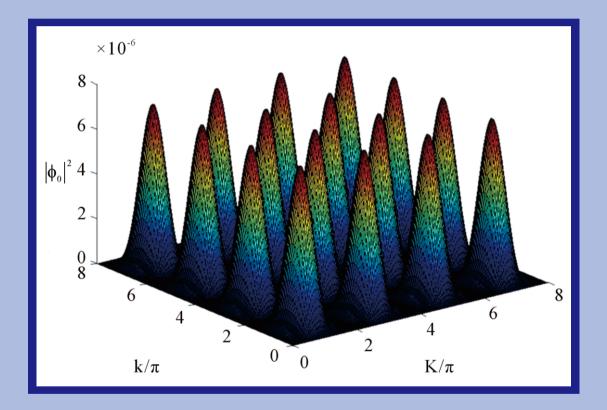


Journal of Modern Physics





www.scirp.org/journal/jmp

Journal Editorial Board

ISSN: 2153-1196 (Print) ISSN: 2153-120X (Online) http://www.scirp.org/journal/jmp

Editor-in-Chief	
Prof. Victor Yashnikov	Russian Academy of Sciences, Russia
Executive-Editor-in-Chief	
Prof. Marko Markov	Research International, Buffalo Office, USA
Editorial Board	
Dr. Ksenofontov Alexandre	Moscow Engineering Physics Institute, Russia
Prof. Sadhan Kumar Adhikari	Universidade Estadual Paulista, Brazil
Prof. Kerim R. Allakhverdiev	Institute of Physics Azerbaijan Academy of Sciences, Azerbaijan
Prof. Sami M. AL-Jaber	An-Najah National University, Palestine
Prof. Roberto Oscar Aquilano	Universidad Nacional de Rosario, Argentina
Dr. Salvatore Capozziello	University of Naples Federico II, Italy
Dr. Riccardo Cerulli	Gran Sasso National Laboratory, INFN, Italy
Prof. Papadopoulos Demetrios	Aristotle University of Thessaloniki, Greece
Dr. Hua-Shu Dou	Zhejiang Sci-Tech University, China
Prof. Constantin Fetecau	"Gh. Asachi" Technical University of Iasi, Romania
Prof. Karo Michaelian	National Autonomous University of Mexico, Mexico
Prof. Christophe J. Muller	University of Provence, France
Prof. Zdzislaw E. Musielak	University of Texas at Arlington, USA
Prof. Luciano Nunziante	University of Naples Federico II, Italy
Prof. Valery Obukhov	Tomsk State Pedagogical University, Russia
Prof. Avinash Chandra Pandey	University of Allahabad, India
Prof. Richard Saurel	University of Aix Marseille I, France
Prof. Magnus Willander	Linköping University, Sweden
Dr. S. Zerbini	University of Trento, Italy

Managing Executive Editor

Prof. Chang Liu

Wuhan University, China

Email: cliu@acc-lab.whu.edu.cn



TABLE OF CONTENTS

Volume 3 Number 6	June 2012
Nonextensivity and Tsallis Entropy in DNA Fragmentation Patterns by Ionizin	g Radiation
C. A. M. Valdés, F. A. C. Smirnov, O. R. Hoyos, J. D. de T. Arruda-Neto	
Dissipative Discrete System with Nearest-Neighbor Interaction for the Nonline	ar Electrical Lattice
S. Abdoulkary, T. Beda, S. Y. Doka, F. II Ndzana, L. Kavitha, A. Mohamadou	
Positive Magnetoresistance in Hydrogenated Amorphous Alloys Silicon Nickel Low Temperature with Magnetic Field	a-Si _{1-y} Niy:H at Very
A. Narjis, A. El Kaaouachi, J. Hemine, A. Sybous, L. Limouny, S. Dlimi, R. Abdia, G. Buskij	oski447
The Definition of Universal Momentum Operator of Quantum Mechanics and Micro-Particle's Spin	the Essence of
X. C. Mei, P. Yu	
Excitation Transfer in Vertically Stacked in (Ga)As/GaAs Quantum Rings	
R. Naouari, W. Ouerghui, J. Martinez-Pastor, J. G. Brescó, M. A. Maaref, D. Granados, J. M. G	G. Martinez471
Zero Sound Propagation in Femto-Scale Quantum Liquids	
Y. Iwata	
χ_c and χ_b States in Hot Quark-Gluon Plasma	
B. K. Patra, L. Devi, U. Kakade, V. Agotiya, V. Chandra	
Investigation and Study of the Effects of Hyperfine Interaction on the Mass of I	Baryons N and Δ
A. Heidari, S. Vedad, M. Ghorbani	
Control Chaos in System with Fractional Order	
Y. M. Wang, X. Z. Yin, Y. Liu	
Unrelaxed State in Epitaxial Heterostructures Based on Lead Selenide	
A. Pashaev, O. Davarashvili, Z. Akhvlediani, M. Enukashvili, R. Gulyaev, V. Zlomanov	
A New Narrowband Phase Modulation Mathematical Identity	
S. M. Saadeh	

The figure on the front cover is from the article published in Journal of Modern Physics, 2012, Vol. 3, No. 6, pp. 438-446 by Saïdou Abdoulkary, *et al.*

Journal of Modern Physics (JMP)

Journal Information

SUBSCRIPTIONS

The *Journal of Modern Physics* (Online at Scientific Research Publishing, www.SciRP.org) is published monthly by Scientific Research Publishing, Inc., USA.

Subscription rates:

Print: \$59 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©2012 Scientific Research Publishing, Inc.

All Rights Reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, scanning or otherwise, except as described below, without the permission in writing of the Publisher.

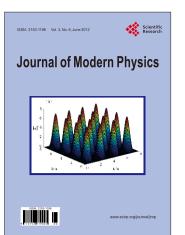
Copying of articles is not permitted except for personal and internal use, to the extent permitted by national copyright law, or under the terms of a license issued by the national Reproduction Rights Organization.

Requests for permission for other kinds of copying, such as copying for general distribution, for advertising or promotional purposes, for creating new collective works or for resale, and other enquiries should be addressed to the Publisher.

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 assumes 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: jmp@scirp.org



Journal of

Modern Physics

ISSN Print: 2153-1196 ISSN Online: 2153-120X http://www.scirp.org/journal/jmp

Journal of Modern Physics (JMP) is an international journal dedicated to the latest advancement of modern physics. 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 modern physics.

Editor-in-Chief

Prof. Victor Yashnikov

Russian Academy of Sciences, Russia

Executive-Editor-in-Chief

Prof. Marko Markov

Research International, Buffalo Office, USA

Editorial Board

Dr. Ksenofontov Alexandre Prof. Sadhan Kumar Adhikari Prof. Kerim R. Allakhverdiev Prof. Sami M. AL-Jaber Prof. Roberto Oscar Aquilano Dr. Salvatore Capozziello Dr. Riccardo Cerulli Prof. Papadopoulos Demetrios Dr. Hua-Shu Dou Prof. Constantin Fetecau Prof. Karo Michaelian Prof. Christophe J. Muller Prof. Zdzislaw E. Musielak Prof. Luciano Nunziante Prof. Valery Obukhov Prof. Avinash Chandra Pandey Prof. Richard Saurel Prof. Magnus Willander Dr. S. Zerbini

Subject Coverage

Journal of Modern Physics publishes original papers including but not limited to the following fields:

- Biophysics and Medical Physics Complex Systems Physics Computational Physics Condensed Matter Physics Cosmology and Early Universe Earth and Planetary Sciences General Relativity High Energy Astrophysics Instrumentation and Measurement Interdisciplinary Physics Materials Sciences and Technology
- Mathematical Physics Mechanical Response of Solids and Structures New Materials: Micro and Nano-Mechanics and Homogeneization Non-Equilibrium Thermodynamics and Statistical Mechanics Nuclear Science and Engineering Physics of Nanostructures Plasma Physics Quantum Mechanical Developments Quantum Theory Relativistic Astrophysics Theoretical High Energy Physics

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 submissions, please access the website.

Call for Papers