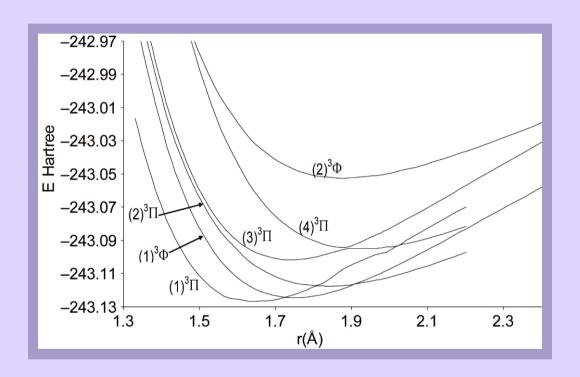


Journal of Modern Physics





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

Prof. Sadhan Kumar Adhikari Universidade Estadual Paulista, Brazil

Prof. Kerim R. Allakhverdiev Institute of Physics Azerbaijan Academy of Sciences, Azerbaijan

California State university, USA Dr. Yohannes Abate

Moscow Engineering Physics Institute, Russia Dr. Ksenofontov Alexandre Prof. Sami M. AL-Jaber An-Najah National University, Palestine Prof. Roberto Oscar Aquilano Universidad Nacional de Rosario, Argentina Prof. Xinhua Bai South Dakota School of Mines & Tech, USA Dr. Simon Bott University of California San Diego, USA

Dr. Salvatore Capozziello University of Naples Federico II, Italy Dr. Riccardo Cerulli Gran Sasso National Laboratory, INFN, Italy

Dr. Changle Chen Celanese Corporation, USA Prof. Stephen Robert Cotanch NC State University, USA

Prof. Papadopoulos Demetrios Aristotle University of Thessaloniki, Greece

Zhejiang Sci-Tech University, China Dr. Hua-Shu Dou

Prof. Constantin Fetecau Gheorghe Asachi Technical University of Iasi, Romania

Dr. Antonino Flachi Instituto Superior Tecnico, Portugal Dr. Moshe Gai University of Connecticut, USA Prof. Ju Gao The University of Hong Kong, China

Yale University, UK Dr. Wei Guo University of Michigan, USA Dr. Sachin Goyal City University, UK

Dr. Yang-Hui He

Dr. Johnny C. Ho City University of Hong Kong, China Dr. Guangjin Hou University of Delaware, USA Dr. Cosmin Ilie Los Alamos National Laboratory, USA Dr. Preston B. Landon The University of California, USA Dr. Chunlei Liu Carnegie Mellon University, USA Dr. Ray Luo University of California, USA

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 National Renewable Energy Laboratory, USA Dr. Ambarish Nag Prof. Luciano Nunziante University of Naples Federico II, Italy Tomsk State Pedagogical University, Russia Prof. Valery Obukhov

Dr. Jorge Pereira The University of Notre Dame, USA Dr. Tongfei Qi University of Kentucky, USA Prof. Richard Saurel University of Aix Marseille I, France

Prof. Alejandro Crespo Sosa Universidad Nacional Autónoma de México, Mexico

Dr. Bo Sun Princeton University, USA Dr. Mingzhai Sun Ohio State University, USA Dr. Sergei K. Suslov Arizona State University, USA City University of Hong Kong, China Dr. A. L. Roy Vellaisamy Prof. Magnus Willander LinköpingUniversity, Sweden

Dr. Yiming Xu Lawrence Berkeley National Laboratory, USA Dr. Fan Yang Fermi National Accelerator Laboratory, USA

Dr. Peter H. Yoon University of Maryland, USA Dr. S. Zerbini University of Trento, Italy

Dr. Pavel Zhuravlev University of Maryland at College Park, USA

Managing Executive Editor

TABLE OF CONTENTS

Volume 3 Number 8	August 2012
Nonlinear Schroedinger Solitons in Massive Yang-Mills Theory and Partial Localization of Dirac Matter X. N. Maintas, C. E. Tsagkarakis, F. K. Diakonos, D. J. Frantzeskakis	637
Surface Morphology Dynamics in ITO Thin Films D. Raoufi, F. Hosseinpanahi	645
Deposition and Characterisation of Nitrogen-Doped Zinc Oxide Thin Films by MOCVD Using Zinc Acetate—Ammonium Acetate Precursor U. S. Mbamara, O. O. Akinwunmi, E. I. Obiajunwa, I. A. O. Ojo, E. O. B. Ajayi	652
The Quantum Oscillatory Modulated Potential—Part II W. W. Filho	660
No Anomaly and New Renormalization Scheme T. Fujita, N. Kanda	665
The Explicit Pure Vector Superfield in Gauge Theories E. B. Manoukian	682
Hidden Mass Boson M. J. Ivanov, V. K. Mamaev	686
Semiclassical Husimi Function of Simple and Chaotic Systems A. C. Oliveira	
Exact Projective Excitations of Nonautonomous Nonlinear Schrödinger System in (1 + 1)-Dimensions J. F. Ye, C. L. Zheng	
Wave Function as Geometric Entity B. I. Lev	
The Nature of Space and of Gravitation J. Schaff	
Matter Waves in a Static Gravitational Field N. Agavriloaei	
DIA Solitary and Shock Waves in Dusty Multi-Ion Dense Plasma with Arbitrary Charged Dust M. S. Zobaer, N. Roy, A. A. Mamun	
On the Absence of Carrier Drift in Two-Terminal Devices and the Origin of Their Lowest Resistance per Carrier $R_x = \hbar/q^2$ J. I. Izpura	
The Exact Similarity between the Positron and the Electron Equations in a P and the T Violations R. Boudet	
On the Quantization of One-Dimensional Conservative Systems with Variable mass G. V. López	
Relaxation of Energy and Momentum in an Carrier-Phonon System A. Rossani	
Thermal Expansion of Solids Z. Pluta, T. Hryniewicz	
Majorana Neutrino Oscillations in Vacuum Y. F. Perez, C. J. Quimbay	
On Self-Similarity of Top Production at Tevatron M. Tokarev, I. Zborovský	
Semileptonic Decay of B. Meson into S Wave Charmonium in a QCD Potential Model with Coulombic Part as Perturbation K. K. Pathak, D. K. Choudhury	
Photoluminescence Compounds ZnGa ₂ Se ₄ and ZnGa ₂ Se ₄ :Eu ²⁺ O. Tagiyev, S. Asadullayeva, G. Eyyubov, U. Gasimov, K. Tagiyev	
On the Nature of the Average Transverse Momenta of the Low- $p_{ au}$ Secondaries in Some High Energy Nuclear Collisions	
A. C. Das Ghosh, G. Sau, P. Guptaroy, S. Bhattacharyya Electronic Structure with Rovibrational and Dipole Moment Study of the NiO Molecule	
K. Badreddine, N. El-Kork, M. Korek Propagation of Electrostatic Waves in an Ultra-Relativistic Dense Dusty Electron-Positron-Ion Plasma	
N. Roy, M. S. Zobaer, A. A. Mamun Three-Photon Absorption in ZnO Film Using Ultra Short Pulse Laser	
R. K. Jamal, M. T. Hussein, A. M. Suhail A Relativistic Density Functional Study of the U,F6Molecule	
Y. G. Zhang Study of Structural and Electrical Properties of a New Type of Complex Tungsten Bronze Electroceramics; Li,Pb,Y,W,Ti,V,O	30
P. R. Das, B. Pati, B. C. Sutar, R. N. P. Choudhury 2-D Theoretical Model for Current-Voltage Characteristics in AlGaN/GaN HEMT's	
M. Charfeddine, H. Belmabrouk, M. A. Žaidi, H. Maaref	881

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@2011 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



Call for Papers

Journal of Modern Physics

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

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.

Website and E-Mail

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