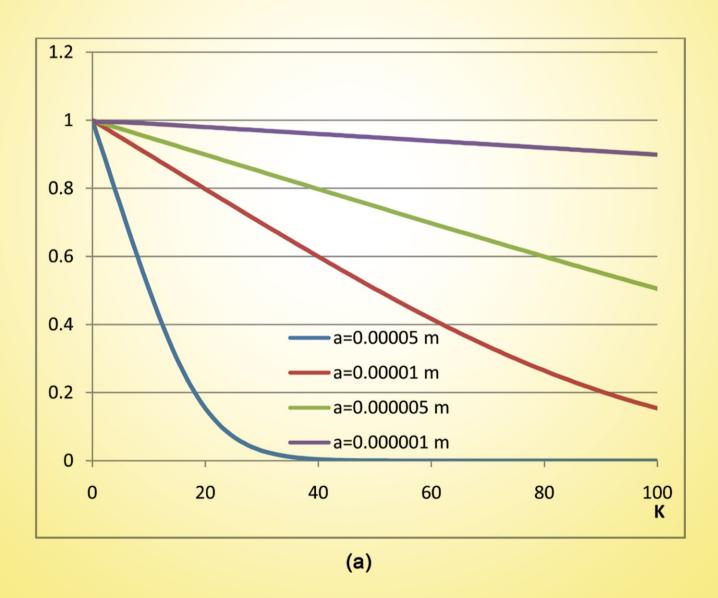




Journal of **Modern Physics**





Journal Editorial Board

ISSN: 2153-1196 (Print) ISSN: 2153-120X (Online)

http://www.scirp.org/journal/jmp

Editor-in-Chief

Prof. Yang-Hui He City University, UK

Executive Editor-in-Chief

Prof. Marko Markov Research International, Buffalo Office, USA

Managing Executive Editor

Prof. Chang Liu Wuhan University, China

Editorial Board

Prof. Nikolai A. SobolevUniversidade de Aveiro, PortugalProf. Yohannes AbateCalifornia State University, USADr. Mohamed Abu-ShadyMenoufia University, Egypt

Dr. Hamid Alemohammad Advanced Test and Automation Inc., Canada

Prof. Emad K. Al-Shakarchi Al-Nahrain University, Iraq

Prof. Changle Chen University of Science and Technology of China, China

Prof. Stephen Robert Cotanch NC State University, USA

Prof. Ju Gao
The University of Hong Kong, China
Prof. Sachin Goyal
University of California, USA
Prof. Alioscia Hamma
Tsinghua University, China

Prof. Cosmin Ilie Los Alamos National Laboratory, USA

Prof. Haikel Jelassi National Center for Nuclear Science and Technology, Tunisia

Prof. Preston B. LandonThe University of California, USAProf. Chunlei LiuCarnegie Mellon University, USAProf. Christophe J. MullerUniversity of Provence, France

Prof. Ambarish Nag National Renewable Energy Laboratory, USA

Dr. Rada Novakovic National Research Council, Italy

Prof. Valery Obukhov Tomsk State Pedagogical University, Russia

Prof. Tongfei QiUniversity of Kentucky, USAProf. Mohammad Mehdi RashidiUniversity of Birmingham, UKProf. Richard SaurelUniversity of Aix Marseille I, France

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

Prof. Bo Sun
Oregon State University, USA
Prof. Mingzhai Sun
Ohio State University, USA
Dr. Sergei K. Suslov
Arizona State University, USA
Dr. A. L. Roy Vellaisamy
City University of Hong Kong, China
Prof. Yuan Wang
University of California, Berkeley, USA
Prof. Fan Yang
Fermi National Accelerator Laboratory, USA

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

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



ISSN Online: 2153-120X ISSN Print: 2153-1196

Table of Contents

Volume 8	Number 11	October 2017
-	tate Properties Revisited: An Effect of Extra C	-
•	d Anisotropic Compact Star Model in Genera	•
Quantitative E	valuation of the Lifshitz-Type Temperature E	Effect on the Casimir Force
F. Schuller, R.	Savalle	1779
	cepts and Basic Laws Relating to Matter and	•
Carnot Factor	of a Vapour Power Cycle with Regenerative I	Extraction
D. Alain		1795
Brownian Mot and First-Pass	ion of Decaying Particles: Transition Probabi	ility, Computer Simulation,
M. P. Silverma	an	1809
Photon and El	ementary Particles Theory	
X. Y. Wu, B. S.	. Wu, S. Q. Zhang, X. J. Liu, Y. H. Wu, J. P. Liu,	
X. R. Zhang, H	I. Liu, J. Ma, H. Li, L. Xiao, Y. T. Fang	1850
-	on of the Michelson-Morley Experiment Resu versal Frame of Reference	ılts
K. Szostek, R	. Szostek	1868
	ssure Effects in Cold-Atom Absorption Specti gnetically Induced Transparency	roscopy
S. Y. Bai, X. X.	. Han, Y. C. Jiao, L. P. Hao, J. M. Zhao, S. T. Jia	
Accurate Solut	tion to the Gravitational Bending of Starlight	by a Massive Object
F. Y. Huang		1894
Cold Plasma Jo	et Construction to Use in Medical, Biology an	d Polymer Applications
K. Lotfy		1901

Journal of Modern Physics (JMP) Journal Information

SUBSCRIPTIONS

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

Subscription rates:

Print: \$89 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 © 2017 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 © 2017 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: 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. Yang-Hui He City University, UK

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
High Energy/Accelerator Physics
Instrumentation and Measurement
Interdisciplinary Physics
Materials Sciences and Technology
Mathematical Physics

New Materials: Micro and Nano-Mechanics and Homogeneization Non-Equilibrium Thermodynamics and Statistical Mechanics Nuclear Science and Engineering Optics

Physics of Nanostructures Plasma Physics

Quantum Mechanical Developments

Quantum Mechanical Developme Quantum Theory Relativistic Astrophysics String Theory Superconducting Physics Theoretical High Energy Physics

Thermology

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

Mechanical Response of Solids and Structures

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

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