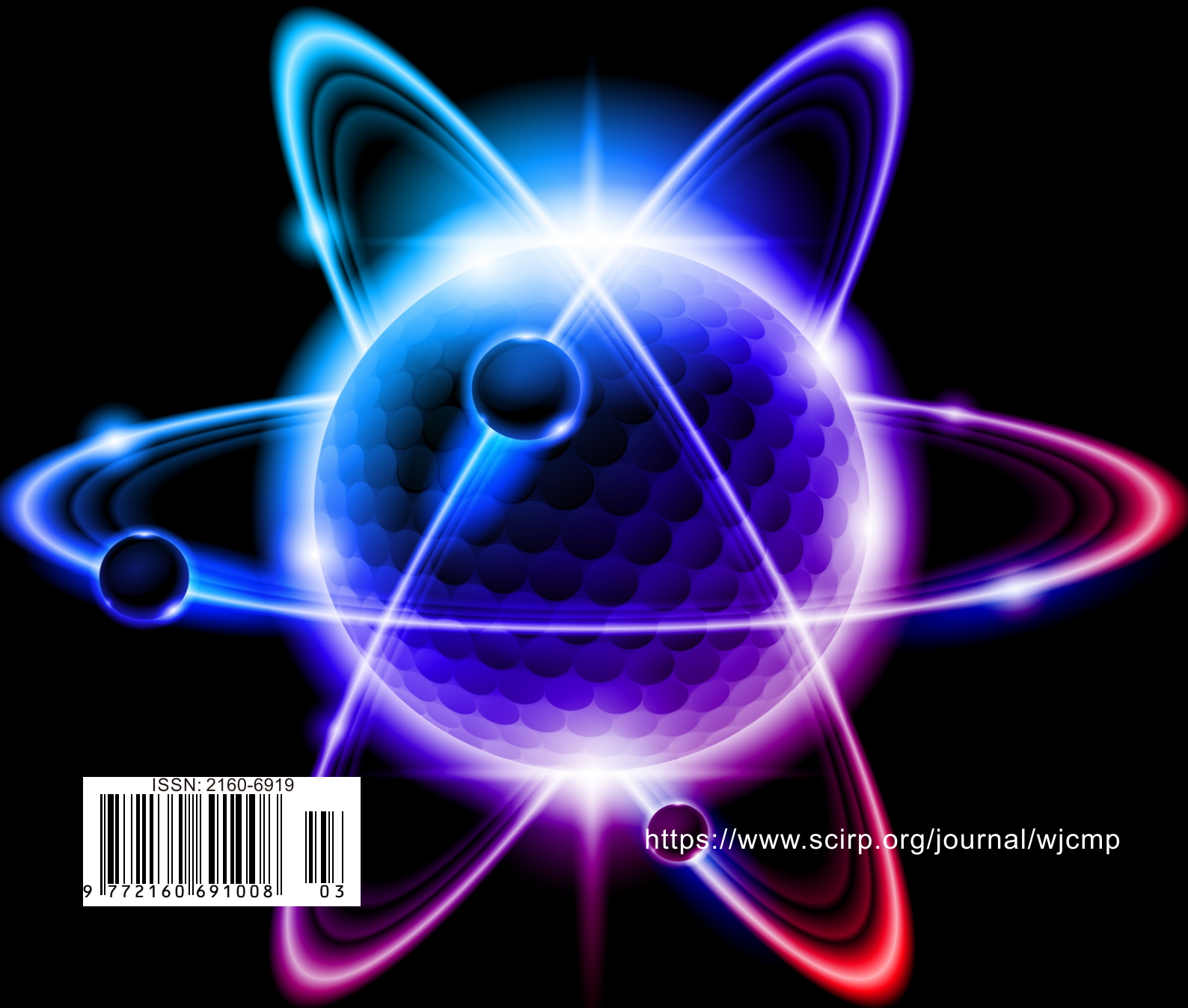


ISSN: 2160-6919 Volume 13, Number 3, August 2023



World Journal of Condensed Matter Physics



<https://www.scirp.org/journal/wjcmp>

Journal Editorial Board

ISSN: 2160-6919 (Print) ISSN: 2160-6927 (Online)

<https://www.scirp.org/journal/wjcmp>

Editor-in-Chief

Prof. Wen-Jeng Hsueh

National Taiwan University, Chinese Taipei

Editorial Board

Dr. Gulmurza Abdurakhmanov

Academy of Sciences of Uzbekistan, Uzbekistan

Prof. Maksimenko Sergey Afanasievich

Belarus State University, Belarus

Prof. Serdar Altin

Inonu University, Türkiye

Prof. S. Balamurugan

Noorul Islam Centre for Higher Education (NICHE), India

Prof. Achim Bittner

Vienna University of Technology, Austria

Prof. Zakaria Bומרزoug

University of Biskra, Algeria

Prof. Christian Brosseau

Université de Bretagne Occidentale, France

Prof. Luigi Maxmilian Caligiuri

University of Calabria, Italy

Prof. Laurie E. Calvet

Université de Paris-Sud, France

Prof. Dinko Vassilev Chakarov

Chalmers University of Technology, Sweden

Dr. Kah-Yoong Chan

Multimedia University, Malaysia

Prof. Jian Chen

Sun Yat-sen University, China

Dr. Carmelo Corsaro

University of Messina, Italy

Dr. Nishad G. Deshpande

Shivaji University, India

Prof. Bishwajyoti Dey

University of Pune, India

Prof. Fayçal Djéffal

University of Batna, Algeria

Prof. Aswini Ghosh

Indian Association for the Cultivation of Science, India

Prof. Pimo He

Zhejiang University, China

Dr. Joseph Horvat

University of Wollongong, Australia

Prof. Prafulla Kumar Jha

The M.S University of Baroda, Vadodara, India

Prof. Rakesh Kumar Joshi

Jawaharlal Nehru University, India

Prof. Vassilios Karavolas

University of Indianapolis, Athens Campus, Greece

Prof. Olga Korostynska

Dublin Institute of Technology, Ireland

Dr. Aleksander Krupski

University of Warwick, UK

Prof. Tankeshwar Kumar

Panjab University, India

Prof. Feng-Ming Li

Harbin Institute of Technology, China

Dr. K. Maaz

Sungkyunkwan University, South Korea

Prof. Biswanath Mallik

Indian Association for the Cultivation of Science, India

Prof. Li-Jian Meng

Instituto Superior de Engenharia do Porto, Portugal

Prof. Thanos Mitrelias

University of Cambridge, UK

Prof. Alexander M. Panich

Ben-Gurion University of the Negev, Israel

Dr. Aswini K. Pradhan

Norfolk State University, USA

Prof. Dachepalli Ravinder

Department of Physics, Osmania University, Hyderabad, India

Prof. Sergo Sh. Rekhviashvili

Institute of Applied Mathematics and Automation KBSC RAS, Russia

Prof. Samar K. Saha

Santa Clara University, USA

Prof. Dsc Oleg Shevaleevskiy

Russian Academy of Sciences, Russia

Dr. Nikolai A. Sobolev

University of Aveiro, Portugal

Prof. Bibhu Prasad Swain

National Institute of Advanced Industrial Science and Technology, Japan

Prof. Roland H. Tarkhanyan

National AcSci of Armenia, Armenia

Prof. Ajay Singh Verma

Panjab University, India

Prof. Jiagang Wu

Sichuan University, China

Prof. Fahrettin Yakuphanoglu

Firat University, Türkiye

Prof. Renyun Zhang

Mid Sweden University, Sweden

Prof. Zhiyong Zhong

University of Electronic Science and Technology of China, China

Table of Contents

Volume 13 Number 3

August 2023

**A Dynamical Approach to the Explanation of the Upper Critical Field Data
of Compressed H₃S**

G. Malik, V. S. Varma.....79

A Study on the Efficiency Gain of CsSnGeI₃ Solar Cells with Graphene Doping

M. M. Shabat, G. Zoppi.....90

**Mössbauer Spectroscopic Characterization of Fe Occupation of Columns
in the Nb₂₈O₇₀ Structure**

O. F. Schilling.....105

World Journal of Condensed Matter Physics (WJCMP)

Journal Information

SUBSCRIPTIONS

The *World Journal of Condensed Matter Physics* (Online at Scientific Research Publishing, <https://www.scirp.org/>) is published quarterly 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 © 2023 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 © 2023 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.

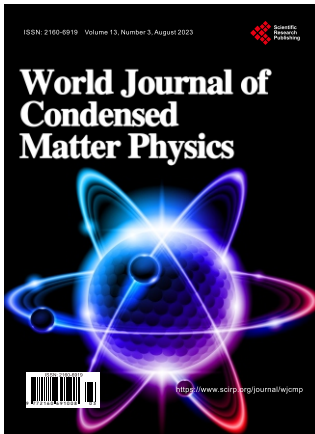
Disclaimer of liability

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: wjcmp@scirp.org



World Journal of Condensed Matter Physics (WJCMP)

ISSN 2160-6919 (print) ISSN 2160-6927 (online)
<https://www.scirp.org/journal/wjcmp>

World Journal of Condensed Matter Physics (WJCMP) covers the whole of condensed matter physics including soft condensed matter and nanostructures. Papers may report experimental, theoretical and simulation studies. Note that papers must contain fundamental condensed matter science: papers reporting methods of materials preparation or properties of materials without novel condensed matter content will not be accepted.

Editor-in-Chief

Prof. Wen-Jeng Hsueh

National Taiwan University, Chinese Taipei

Editorial Board

Dr. Gulmurza Abdurakhmanov
Prof. Maksimenko Sergey Afanasievich
Prof. Serdar Altin
Prof. S. Balamurugan
Prof. Achim Bittner
Prof. Zakaria Boumerzoug
Prof. Christian Brosseau
Prof. Luigi Maxmilian Caligiuri
Prof. Laurie E. Calvet
Prof. Dinko Vassilev Chakarov
Dr. Kah-Yoong Chan
Prof. Jian Chen
Dr. Carmelo Corsaro
Dr. Nishad G. Deshpande
Prof. Bishwajyoti Dey

Prof. Fayçal Djeflal
Prof. Aswini Ghosh
Prof. Pimo He
Dr. Joseph Horvat
Prof. Prafulla Kumar Jha
Prof. Rakesh Kumar Joshi
Prof. Vassilios Karavolas
Prof. Olga Korostynska
Dr. Aleksander Krupski
Prof. Tankeshwar Kumar
Prof. Feng-Ming Li
Dr. K. Maaz
Prof. Biswanath Mallik
Prof. Li-Jian Meng
Prof. Thanos Mitrelias

Prof. Alexander M. Panich
Dr. Aswini K. Pradhan
Prof. Dachevall Ravinder
Prof. Sergo Sh. Rekhviashvili
Prof. Samar K. Saha
Prof. Dsc Oleg Shevaleevskiy
Dr. Nikolai A. Sobolev
Prof. Bibhu Prasad Swain
Prof. Roland H. Tarkhanyan
Prof. Ajay Singh Verma
Prof. Jiagang Wu
Prof. Fahrettin Yakuphanoglu
Prof. Renyun Zhang
Prof. Zhiyong Zhong

All the manuscripts must be prepared in English, and are subject to a rigorous and fair peer-review process. Accepted papers will immediately appear online followed by printed hard copies. The journal publishes original papers including but not limited to the following fields:

Correlated Electrons
Dielectrics and Ferroelectrics
Electronic Structure
Liquids, Soft Matter and Biological Physics
Magnetism and Magnetic Materials
Nanostructures and Nanoelectronics
Semiconductors
Solid Structure and Lattice Dynamics
Superconductors and Metals
Surface, Interface and Atomic-Scale Science

We are also interested in short papers (letters) that clearly address a specific problem, and short survey or position papers that sketch the results or problems on a specific topic. Authors of selected short papers would be invited to write a regular paper on the same topic for future issues of the WJCMP.

Website and E-Mail

<https://www.scirp.org/journal/wjcmp>

E-Mail: wjcmp@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: <https://www.scirp.org>

Subscription: sub@scirp.org

Advertisement: service@scirp.org