Journal Editorial Board

ISSN: 2327-4077 (Print)  ISSN: 2327-4085 (Online)
https://www.scirp.org/journal/jmmce

Editor-in-Chief

Prof. Jiann-Yang (Jim) Hwang  Michigan Technological University, USA

Editorial Board

Prof. Chenguang Bai  Chongqing University, China
Prof. Jinxian Chen  Southeast University, China
Dr. Mohan B. Dangi  California State University, USA
Dr. Govindhan Dhanaraj  Stony Brook University, USA
Prof. Wenfeng Ding  Nanjing University of Aeronautics and Astronautics, China
Dr. Jaroslow W. Drellich  Michigan Technological University, USA
Prof. Donato Firrao  Politecnico di Torino, Italy
Dr. Yi Huang  Bournemouth University, UK
Dr. Bowen Li  Michigan Technological University, USA
Prof. Hsing K. Lin  University of Alaska Fairbanks, USA
Prof. Xuewei Lv  Chongqing University, China
Dr. Ali Merati  University of Ottawa, Canada
Dr. Miguel Miranda  National Laboratory of Engineering and Geology, Portugal
Dr. Zhiwei Peng  Michigan Technological University, USA
Dr. Dolores Eliche Quesada  University of Jaén, Spain
Prof. Veena Sahajwalla  University of New South Wales, Australia
Prof. Gehad Mohamed Saleh  Nuclear Materials Authority (NMA), Egypt
Dr. Ramesh S. Sharma  Visvesvaraya Technological University, India
# Table of Contents

**Volume 8  Number 2  March 2020**

**Experimental Investigation of Laser Surface Hardening of AISI 4340 Steel Using Different Laser Scanning Patterns**  
B. Tarchoun, A. El Ouafi, A. Chebak……………………………………………………………………………………9

**Effect of Cu-Ni and Cu-Ni-Mn on the Microstructural and Mechanical Behaviour of As-Cast Non-Inoculated Hypereutectic Grey Iron**  
S. Ojo, A. Sumaila, O. Adetunji………………………………………………………………………………………….27

**Influence of Nanocrystalline Structure on Wear and Corrosion Behavior of Al-SiCₚ Composite**  
J. Venumurali, G. B. Reddy…………………………………………………………………………………………………47
Journal of Minerals and Materials Characterization and Engineering (JMMCE)

Journal Information

SUBSCRIPTIONS


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)
E-mail: sub@scirp.org

COPYRIGHT

Copyright and reuse rights for the front matter of the journal:
Copyright © 2020 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 © 2020 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: jmmce@scirp.org
Call for Papers

Journal of Minerals and Materials Characterization and Engineering

ISSN: 2327-4077 (Print)  ISSN: 2327-4085 (Online)
https://www.scirp.org/journal/jmmce

The Journal of Minerals and Materials Characterization and Engineering is an international peer-reviewed journal for the publication of original research in the fields of characterization of the minerals, metals and materials and its applications to the processing of them. Characterization has become the foundation for the discovery of new materials, the determination of their properties, understanding the occurrences and structures of materials, investigating on the performances, trouble shooting of feedstock, processes and products, and providing solutions for the industrial operations. The goal of this journal is to provide a platform for people to publish their findings in these subjects. In addition, the journal can be quite interdisciplinary for people researching in different fields being able to learn from each other and to broaden their perspectives and applications based on a common theme of characterization.

Subject Coverage

The journal publishes original research and review papers related to characterization in the areas of minerals, ceramics, metals, refractories, metallurgy, materials, energy, fillers, recycling and environmental issues. Specifics may include but not limited to the following fields:

- Aerosols
- Bio and Medical Minerals and Materials
- Ceramics
- Characterization Technologies
- Chemical and Physical Processing of Minerals, Energy and Resources
- Crystal Growth
- Electrochemical Processing
- Electromagnetic Field Interactions with Materials
- Emission Particulate Matters
- Environment
- Fillers and Polymers
- Fine Particulates
- Hydrometallurgical Processing
- Light and Wave Interactions with Materials
- Materials
- Metals
- Microscopic Investigations
- Microwave and Infrared Interactions with Materials
- Minerals, Energy and Natural Resources
- Mining
- Nanostructures
- Pyrometallurgical Processing
- Recycling
- Refractories
- Salt and Brines
- Separation and Extractive Processes
- Slag
- Sound Interactions with Materials
- Spectrometry
- Synthesis of Materials
- Thermal Characterizations
- Waste Processing

All manuscripts must be prepared in English, and are subject to a rigorous peer-review process. Accepted papers will immediately appear online followed by printed in hard copy.

Website and E-Mail

https://www.scirp.org/journal/jmmce  E-mail: jmmce@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: https://www.scirp.org
Subscription: sub@scirp.org
Advertisement: service@scirp.org