

ISSN: 2169-9623 Volume 9, Number 4, August 2020



# Open Journal of Earthquake Research



ISSN: 2169-9623



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

# Journal Editorial Board

ISSN Print: 2169-9623

ISSN Online: 2169-9631

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

---

## Editor-in-Chief

**Prof. Masashi Hayakawa**

Hayakawa Institute of Seismo Electromagnetics Co., Ltd., Japan

## Editorial Board

**Dr. Jalal Akbari**

Malayer University, Iran

**Prof. Carlos Chastre**

NOVA University of Lisbon, Portugal

**Prof. M. T. A. Chaudhary**

Imam Muhammad bin Saud University, Saudi Arabia

**Prof. Salvatore De Lorenzo**

University of Bari, Italy

**Dr. Vincenzo Gattulli**

Università dell'Aquila, Italy

**Dr. Dragomir K. Gospodinov**

Plovdiv University, Bulgaria

**Dr. Raja R. Hussain**

King Saud University, Saudi Arabia

**Dr. Arzu Kocabas**

Mimar Sinan Fine Arts University, Turkey

**Dr. Fabrizio Mollaioli**

Sapienza University of Rome, Italy

**Dr. Abbas Moustafa**

Minia University, Egypt

**Prof. Junwon Seo**

Iowa State University, USA

**Prof. Halil Sezen**

The Ohio State University, USA

**Dr. Gloria Terenzi**

University of Florence, Italy

**Prof. Theodoros M. Tsapanos**

Aristotle University of Thessaloniki, Greece

**Prof. R. B. S. Yadav**

Kurukshetra University, India

# Table of Contents

**Volume 9    Number 4**

**August 2020**

## **South Atlantic Anomaly Seasonal Seismicity during Two Solar Cycles**

M. Hagen, A. Azevedo.....307

## **Strong Earthquake Sequences in Greece during 2008-2014: Moment Tensor Inversions and Fault Plane Discrimination**

A. Moshou.....323

## **Seismic Risk Perception in Al-Marj, Libya: A Case Study after the 1963 Earthquake**

S. S. Suwihli, T. R. Paradise.....349

## **Creating a Libyan Earthquake Archive: From Classical Times to the Present**

S. S. Suwihli, T. R. Paradise.....367

# Open Journal of Earthquake Research (OJER)

## Journal Information

### SUBSCRIPTIONS

The *Open Journal of Earthquake Research* (Online at Scientific Research Publishing, <https://www.scirp.org/>) is published quarterly by Scientific Research Publishing, Inc., USA.

#### Subscription rates:

Print: \$59 per issue.

To subscribe, please contact Journals Subscriptions Department, E-mail: [sub@scirp.org](mailto:sub@scirp.org)

### SERVICES

#### Advertisements

Advertisement Sales Department, E-mail: [service@scirp.org](mailto:service@scirp.org)

#### Reprints (minimum quantity 100 copies)

Reprints Co-ordinator, Scientific Research Publishing, Inc., USA.

E-mail: [sub@scirp.org](mailto: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: [ojer@scirp.org](mailto:ojer@scirp.org)



# Open Journal of Earthquake Research

ISSN Print: 2169-9623

ISSN Online: 2169-9631

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

**Open Journal of Earthquake Research (OJER)** is an open access journal published quarterly. 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 all aspects of earthquake research.

## Subject Coverage

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 hard copy. The journal publishes original papers including but not limited to the following fields:

- Earthquake Engineering
  - Base isolation and vibration control
  - Dynamic properties of soil
  - Earthquake-resistant design
  - Infrastructure risk assessment
  - Lifeline earthquake engineering
  - Nonstructural components
  - Seismic analysis of structures
  - Seismic code development
  - Seismic site effects
  - Seismic soil-structure interaction
- Earthquake Risk Management
  - Casualty and loss estimation
  - Emergency planning and disaster relief
  - Insurance and financial risk
  - Lessons from past earthquakes
  - Partnership model for risk reduction
  - Policymaking and land use planning
  - Precautionary measures
  - Preparedness for earthquakes
  - Public education and awareness
  - Recovery and reconstruction
- Seismology
  - Earthquake early warning
  - Earthquake ground motions
  - Earthquake prediction
  - Earthquake-induced tsunami
  - Historical seismicity
  - Intensity measures
  - Measuring and locating earthquakes
  - Plate tectonics and faulting
  - Seismic hazard
  - Source characterization

## Notes for Intending Authors

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.

## Website and E-mail

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

E-mail: [ojer@scirp.org](mailto:ojer@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](mailto:sub@scirp.org)**

**Advertisement: [service@scirp.org](mailto:service@scirp.org)**