

ISSN: 2151-481X Volume 16, Number 5, May 2025



Smart Grid and Renewable Energy



ISSN: 2151-481X



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

Journal Editorial Board

ISSN Print: 2151-481X ISSN Online: 2151-4844

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

Editor-in-Chief

Prof. Yuanzhang Sun

Wuhan University, China

Editorial Advisory Board

Prof. Ching Chuen Chan

University of Hong Kong, China

Prof. Yusheng Xue

State Grid Electric Power Research Institute, China

Prof. Ryuichi Yokoyama

Tokyo Metropolitan University, Japan

Dr. Xiaoxin Zhou

Chinese Society of Electrical Engineering, China

Editorial Board

Prof. Gholam Hossein Bordbar

Shiraz University, Iran

Prof. Emanuele Calabrò

Institute of Industrial Technology, Italy

Prof. Ho Chang

National Taipei University of Technology, Chinese Taipei

Dr. Seokheun Choi

Binghamton University, USA

Prof. Kalyanmoy Deb

Indian Institute of Technology, India

Prof. Volkmar Dierolf

Lehigh University, USA

Dr. Daniel Garraín

Spanish Ministry of Science and Innovation, Spain

Dr. Herbert Iu

University of Western Australia, Australia

Dr. Maatouk Khoukhi

United Arab Emirates University, UAE

Prof. Chunxiang Li

Shanghai University, China

Dr. Dylan Dah-Chuan Lu

University of Sydney, Australia

Prof. D. Subbaram Naidu

University of Minnesota, USA

Prof. Maged Naguib Fahmy Nashed

Power Electronic and Energy Conversion Department, Egypt

Dr. Zafar Said

Department of Sustainable Renewable Energy Engineering, University of Sharjah, UAE

Dr. Surender Reddy Salkuti

Department of Railroad & Electrical Engineering, Woosong University, South Korea

Dr. Federico Scarpa

University of Genoa, Italy

Dr. Yahya Sheikhejad

University of Aveiro, Portugal

Dr. Yang Shi

University of Victoria, Australia

Prof. Igor I. Strakovsky

The George Washington University, USA

Dr. Salahadin Vaisi

University of Kurdistan, Iran

Prof. Huiming Wee

Chung Yuan Christian University, Chinese Taipei

Prof. Daniele De Wrachien

State University of Milan, Italy

Prof. Weiping Zhang

Shanghai Jiao Tong University, China

Table of Contents

Volume 16 Number 5

May 2025

Experimental Evaluation of Solar Power Plant Performances for the Choice of a Suitable Photovoltaic System

B. Andre, Kitmo, K. Ernest.....97

Smart Grid and Renewable Energy (SGRE)

Journal Information

SUBSCRIPTIONS

The *Smart Grid and Renewable Energy* (Online at Scientific Research Publishing, <https://www.scirp.org/>) is published monthly by Scientific Research Publishing, Inc., USA.

Subscription rates:

Print: \$79 per copy.

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 © 2025 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 © 2025 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.

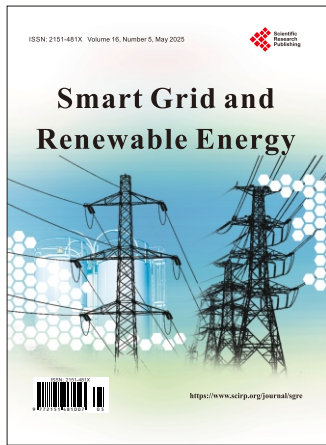
Disclaimer of liability

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: sgre@scirp.org



Smart Grid and Renewable Energy

ISSN Print: 2151-481X ISSN Online: 2151-4844

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

Smart Grid and Renewable Energy (SGRE) is an international journal dedicated to the latest advancement of smart grid and renewable energy. 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 smart grid and renewable energy.

Editor-in-Chief

Prof. Yuanzhang Sun

Wuhan University, China

Editorial Advisory Board

Prof. Ching Chuen Chan

University of Hong Kong, China

Prof. Yusheng Xue

State Grid Electric Power Research Institute, China

Prof. Ryuichi Yokoyama

Tokyo Metropolitan University, Japan

Dr. Xiaoxin Zhou

Chinese Society of Electrical Engineering, China

Subject Coverage

All manuscripts submitted to SGRE must be previously unpublished and may not be considered for publication elsewhere at any time during SGRE's review period. Additionally, accepted ones will immediately appear online followed by printed hard copy. The topics to be covered by Smart Grid and Renewable Energy include, but are not limited to:

- Bio-Energy Technologies, Process and Utilization
- Concept and Structure of Smart Grid
- Decision Making under Uncertainty in the Integration of Renewable Energy Systems
- Design of Sustainable Product-Service Business Models
- Development of Smart Grid
- Environmental-Friendly Technologies for Power Generation
- Geothermal and Tidal Wave Energy
- Hydropower Technologies and Applications
- Information and Smart Meter Reading
- Integrated Energy and Communications
- MEMS & NEMS and Their Applications for Power Generation
- New Technologies and Design for Energy Efficiency
- New Technologies for Minimizing CO₂ Generation
- Operations Research for Green Logistics
- Photovoltaic for Solar Power Applications
- Power System Analysis and Optimization
- Power System Planning and Operation
- Service Optimization for Renewable Energy Supply
- Solar Energy Utilization—Heat and Mass Transfer Technology
- Wind Power Generation and Utilization

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 SGRE.

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

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

E-mail: sgre@scirp.org