energies

an Open Access Journal by MDPI

IMPACT FACTOR 3.2

CITESCORE 7.3

State-of-the-Art Materials toward Efficient Solar Energy Harvesting

Guest Editors:

Dr. Salh Alhammadi
School of Chemical Engineering, Yeungnam University, Gyeongsan, Republic of Korea

Dr. Amr Hussein Mady Hussein
School of Chemical Engineering, Yeungnam University, Gyeongsan, Republic of Korea

Deadline for manuscript submissions:
closed (31 October 2024)

Message from the Guest Editors

Dear Colleagues,

Solar energy applications continue to be studied, particularly as the sun provides one of the most bountiful energy sources via its utilization as sunlight. The abundance of energy in sunlight allows many types of semiconductors to be employed as energy harvesters, spanning a wide range of solar radiation wavelengths to be exploited. Sunlight can be applied in numerous ways, as the cost-free energy source can be utilized by semiconductors to generate electricity in photovoltaic cells, to split water molecules to generate hydrogen and degrade pollutants via photocatalytic reactions. This Special Issue will focus on state-of-the-art materials that generate further variations of materials that may be employed in solar energy applications. Contributions to this Special Issue may attend to topics that include, but are not limited to, the following:

- Semiconductors for solar energy application
- Synthesis
- Nanoparticles
- Nanostructured thin films
- Nanocomposites
- Characterization and applications
- Photovoltaic materials
- Photodegradation
- Hydrogen generation

energies

an Open Access Journal by MDPI

IMPACT FACTOR 3.2

CITESCORE 7.3

Editor-in-Chief

Prof. Dr. Enrico Sciubba
Department of Mechanical and Industrial Engineering, University Niccolò Cusano, 00166 Roma, Italy

Message from the Editor-in-Chief

Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.
High Visibility: indexed within Scopus, SCIE (Web of Science), Ei Compendex, RePEc, Inspec, CAPlus / SciFinder, and other databases.
Journal Rank: CiteScore - Q1 (Control and Optimization)

Contact Us

Energies Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/energies
energies@mdpi.com
𝕏@energies_mdpi