

IMPACT FACTOR 3.2



an Open Access Journal by MDPI

Electrocatalytic Energy and Resource Conversion

Guest Editors:

Dr. Xiao Zhang

Department of Mechanical Engineering, The Hong Kong Polytechnic University, Hung Hom, Kowloon, Hong Kong SAR, China

Dr. Zhenyu Shi

Department of Chemistry, City University of Hong Kong, Hong Kong, China

Deadline for manuscript submissions:

20 October 2024

Message from the Guest Editors

The use of electricity powered by renewable energy is a promising method to produce fuels and chemicals of global importance while reducing carbon dioxide emissions. For example, the electrochemical conversion of atmospheric molecules (e.g., oxygen, water, carbon dioxide, and nitrogen) into higher-value fuels/chemicals (e.g., hydrogen peroxide, hydrogen, hydrocarbons, oxygenates, and ammonia) by coupling renewable energy is now an appealing concept; it will possibly revolutionize traditional chemical production processes. Electricity conversion is a highly interdisciplinary research area, from materials science, chemical engineering, and equipment technology to theoretical modeling, etc.

Therefore, this Special Issue aims to present and disseminate the most recent advancements related to the title, "Electrocatalytic Energy and Resource Conversion".

Topics of interest for publication include, but are not limited to:

- Electrocatalysis;
- Electrosynthesis;
- Electrochemical reactor design;
- Catalysts;
- Electrochemical interface;
- Fuel cell;
- Flow cell;
- Characterization techniques for energy materials;
- Computational simulations of electrochemical reaction mechanism.









an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Enrico Sciubba

Department of Mechanical and Aerospace Engineering, University of Roma Sapienza, Via Eudossiana 18, 00184 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 (*Engineering (miscellaneous)*)

Contact Us