





an Open Access Journal by MDPI

# Recent Advances of Catalysts for Hydrogen Evolution Reaction in Water Splitting

Guest Editor:

## Dr. Zhiqiang (Andrew) Xie

Department of Mechanical, Aerospace & Biomedical Engineering, UT Space Institute, University of Tennessee, Knoxville, TN 37388, USA

Deadline for manuscript submissions:

closed (15 March 2023)

## **Message from the Guest Editor**

Dear Colleagues,

This Special Issue welcomes the submission of original research papers, reviews, and perspectives that focus on promising and novel research outcomes in the synthesis, functionalization, characterization, and application of novel catalysts for water electrolysis. Submissions may cover themes including but not limited to:

- Cost-effective synthesis approaches of novel catalysts including bi-functional catalysts for overall water electrolysis;
- Elaborate fabrication of robust electrodes with high durability;
- Catalyst degradation and electrode failure mechanisms using advanced in situ and ex situ characterization techniques;
- Performance evaluation from conventional RDE testing to device levels, such as AEM electrolyzers and PEM electrolyzers.

Dr. Zhiqiang (Andrew) Xie *Guest Editor* 











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 (Control and Optimization)

#### **Contact Us**