# Special Issue

# Non-CRM Nanocatalysts for Electrochemical/Photoelectroche Water Splitting

## Message from the Guest Editor

The primary objectives of this Special Issue are as follows:

- The development of non-critical raw material (CRM)
  nanocatalysts—Our focus will be on the synthesis and
  characterization of nanocatalysts that do not rely on
  critical raw materials, with the aim of ensuring a
  sustainable and economically viable solution for largescale implementation.
- Enhanced efficiency and durability—We will strive to develop catalysts with improved efficiency, stability, and durability under the harsh operating conditions associated with electrochemical and photoelectrochemical water splitting.
- Technological Integration—This Special Issue will also explore methods for seamlessly integrating these nanocatalysts into existing water-splitting systems, ensuring compatibility with current industrial processes.

This Special Issue will involve a multi-disciplinary approach, combining expertise in materials science, electrochemistry, nanotechnology, and catalysis. The experimental work will encompass the synthesis, characterization, and testing of non-CRM nanocatalysts, while computational modeling will provide valuable insights into the catalytic mechanisms.

#### **Guest Editor**

Dr. Stefano Trocino

Istituto di Tecnologie Avanzate per l'Energia "Nicola Giordano" (CNR-ITAE), Via Salita S. Lucia sopra Contesse 5, 98126 Messina, Italy

### **Deadline for manuscript submissions**

closed (15 May 2024)



# **Catalysts**

an Open Access Journal by MDPI

Impact Factor 4.0 CiteScore 7.6



mdpi.com/si/188242

Catalysts
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
catalysts@mdpi.com

mdpi.com/journal/catalysts





# **Catalysts**

an Open Access Journal by MDPI

Impact Factor 4.0 CiteScore 7.6



## **About the Journal**

## Message from the Editor-in-Chief

### **Editor-in-Chief**

Prof. Dr. Keith Hohn

Carl R. Ice College of Engineering, Kansas State University, Manhattan, KS, USA

### **Author Benefits**

### **High Visibility:**

indexed within Scopus, SCIE (Web of Science), Inspec, Ei Compendex, CAPlus / SciFinder, CAB Abstracts, and other databases.

#### Journal Rank:

JCR - Q2 (Chemistry, Physical) / CiteScore - Q1 (General Environmental Science)

## **Rapid Publication:**

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.6 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the first half of 2025).

