

Special Issue

Novel Metal-Based Catalysts in Hydrogen Production

Message from the Guest Editors

In recent years, environmental issues such as air pollution, the greenhouse effect, and global warming resulting from the overuse of traditional fossil fuels have dramatically increased. Therefore, developing alternative energies is definitely important for releasing greenhouse gas emissions and solving the fossil fuel crisis. Among the existing energies, hydrogen is very promising, which can also be applied for chemical production in many reactions. For this reason, effective methods for producing hydrogen through various technologies such as thermal catalysis, electrocatalysis, and photocatalysis deserve to be investigated. In particular, a novel catalyst is crucial to realize efficient hydrogen production. In this Special Issue, the main aim is to report advanced metal-based catalysts which are beneficial to hydrogen production during the aforementioned technologies. We invite original research, reviews, and perspectives involving experimental/simulation investigation, recent developments, and future direction in the field of hydrogen production using metal-based catalysts.

Guest Editors

Dr. Jie Ren

Prof. Dr. Feng Zeng

Dr. Xin Huang

Deadline for manuscript submissions

closed (31 May 2023)



Catalysts

an Open Access Journal
by MDPI

Impact Factor 4.0
CiteScore 7.6



mdpi.com/si/127245

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

[mdpi.com/journal/
catalysts](https://mdpi.com/journal/catalysts)





Catalysts

an Open Access Journal
by MDPI

Impact Factor 4.0
CiteScore 7.6



[mdpi.com/journal/
catalysts](https://mdpi.com/journal/catalysts)



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).