

Special Issue

Highly Active Catalysts for Selective Hydrogenation

Message from the Guest Editors

Selective hydrogenation is one of catalytic transformations. The key to selective hydrogenation relies on the fabrication of efficient and selective catalysts. Unfortunately, improvements in selectivity are usually at the expense of catalytic activity; therefore, it remains a challenge to achieve high chemoselectivity without compromising activity. One prerequisite to the rational design of chemoselective catalysts is the understanding of the reaction mechanism that governs chemoselectivity. So far, largely depends on the adsorption strength and configuration of the reactants/intermediates on the surfaces of catalysts, which in turn are determined by the electronic and geometric structures of active sites. These issues should be further presented and appraised. This Special Issue will focus on the state of the art and outlooks of selective hydrogenation catalysis. Submissions in the form of original research articles and comprehensive reviews in the areas of designing excellent hydrogenation catalysts, developing new synthetic methods, and finding new mechanisms for selective hydrogenation catalysts are all welcomed.

Guest Editors

Dr. Yuxue Yue

Institute of Industrial Catalysis, Zhejiang University of Technology,
Hangzhou 310014, China

Dr. Bolin Wang

School of Chemical Engineering, Northeast Electric Power University,
Jilin 132012, China

Deadline for manuscript submissions

closed (24 December 2023)



Catalysts

an Open Access Journal
by MDPI

Impact Factor 4.0
CiteScore 7.6



mdpi.com/si/175186

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 15.9 days after submission; acceptance to publication is undertaken in 3.5 days (median values for papers published in this journal in the second half of 2025).