

Special Issue

Novel Photo(electro)catalysts for Energy and Environmental Applications

Message from the Guest Editors

Photo(electro)catalysis is an appealing approach to addressing energy and environmental issues to achieve the sustainable development of human society, which could provide cost-effective strategies for energy supply with solar fuel, chemical synthesis with energy-saving processes, and environmental purification with limited emissions. Therefore, developing novel photo(electro)catalysts plays a critical role in this specific research field and is becoming a hot research topic. This Special Issue on “Novel Photo(electro)catalysts for Energy and Environmental Applications” will cover the most recent progress in design, synthesis, advanced characterization, mechanism investigation, and theoretical analysis of novel photo(electro)catalysts and photocatalytic systems, which includes but is not limited to their energy and environmental application in water splitting, CO₂ reduction, biomass conversion, and pollutant degradation. Review and original research papers within the scope of this Special Issue are welcomed, aiming to inspire more work for further development of this growing and prospering research field.

Guest Editors

Dr. Xiangjiu Guan

International Research Center for Renewable Energy (IRCIRE), State Key Laboratory of Multiphase Flow in Power Engineering (MFPE), Xi'an Jiaotong University (XJTU), 28 West Xianning Road, Xi'an 710049, China

Dr. Shichao Zong

Department of Chemical Engineering, School of Water and Environment, Chang'an University, Xi'an 710064, China

Deadline for manuscript submissions

closed (31 December 2022)



Catalysts

an Open Access Journal
by MDPI

Impact Factor 4.0
CiteScore 7.6



mdpi.com/si/125930

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).