Special Issue

Recent Developments on Catalysts for CO_2 Reduction

Message from the Guest Editors

Excessive emission of CO2 has caused many environmental issues and is severely threatening the ecosystem. One of the most promising methods to cut-down CO2 emissions and alleviate the global challenge of climate change is CO2 reduction reaction (CO2RR). Developing robust catalysts that have high reaction activity and selectivity under mild reaction conditions for CO2RR is key to achieving energy and environmental sustainability. Therefore, carrying out CO2RR using renewable energy is a promising strategy to end the anthropogenic chemical carbon cycle and simultaneously increase carbon feedstock production. This Special Issue is dedicated to novel research and discussions on CO2RR, with a focus on, but not limited to, the following: (1) Fundamental research on mechanisms of CO2RR; (2) CO2 photocatalytic/electrocatalytic reduction; (3) Theoretical simulation research for CO2RR; (4) Carbon dioxide recycling; (5) Related catalytic materials. Original research papers and reviews providing new insights into these areas are welcome.

Guest Editors

Dr. Yuanhui Zuo

Research Institute of Fudan University in Ningbo, Zhejiang 315327, China

Dr. Huancong Shi

School of Energy and Power Engineering, Department of Environmental Science and Engineering, University of Shanghai for Science and Technology, Shanghai 200093, China

Deadline for manuscript submissions

closed (29 February 2024)

Catalysts

an Open Access Journal by MDPI

Impact Factor 4.0
CiteScore 7.6

mdpi.com/si/182031

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

mdpi.com/journal/catalysts

MDPI

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).