

Special Issue

Ceria-Based Heterogeneous Catalysis: Experimental and Theoretical Study

Message from the Guest Editors

Cerium is the 25th most abundant element on Earth; therefore, its uses and applications should be examined due to their potential benefits. This crystalline material of ceria has attracted much attention due to its redox and acid-base properties and wide range of applications for chemical transformations and energy applications. Ceria is extensively used in heterogeneous catalytic reactions as a promoter and support material, including thermocatalysis, three-way catalysis, electrocatalysis, and photocatalysis. This Special Issue is going to be focused on “Ceria-Based Heterogeneous Catalysis: Experimental and Theoretical Study”, featuring up-to-date research findings in this field. The call includes but is not limited to heterogeneous catalysis, and also research on ceria-based biomedical materials and solid-state electrolytes. We hope that this Special Issue can put forward the development of ceria-based catalysts and novel catalytic concepts.

Guest Editors

Dr. Yaqiong Su

School of Chemistry, Xi'an Jiaotong University, Xi'an, China

Dr. Jin-Xun Liu

Department of Chemical Physics, School of Chemistry and Materials Science, University of Science and Technology of China, Hefei, China

Prof. Dr. Sen Lin

State Key Laboratory of Photocatalysis on Energy and Environment, College of Chemistry, Fuzhou University, Fuzhou 350002, China

Deadline for manuscript submissions

closed (15 April 2023)



Catalysts

an Open Access Journal
by MDPI

Impact Factor 4.0
CiteScore 8.3



mdpi.com/si/90669

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 8.3



[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).