Special Issue

Surface and Interface Engineering of Catalyst Nanostructures for Electrochemical Energy Conversion

Message from the Guest Editors

Due to the emergence of an energy crisis and the proliferation of environmental pollution, the development of advanced energy conversion technologies has attracted considerable and persistent attention in recent years. The core component of these energy conversion systems is the electrocatalytic material, which largely determines their practical performance and service life. Therefore, many efforts have been devoted to the exploration of rationally designed electrocatalysts with well-defined nanostructures and enhanced electrochemical activity. Considering the rapid progress made in this emerging field, this Special Issue aims to collect recent scientific advancements related to novel electrocatalytic materials; this particularly includes the engineering of catalyst nanostructures for various energy conversion applications, such as the hydrogen evolution reaction (HER), oxygen evolution reaction (OER), oxygen reduction reaction (ORR), alcohol oxidation reaction (AOR), carbon dioxide reduction reaction, nitrogen reduction reaction, and so on. We welcome the submission of original research articles, reviews and short communications.

Guest Editors

Prof. Dr. Xiaofei Yang

Center for Forest Chemicals and Materials, College of Science, Nanjing Forestry University, Nanjing 210037, China

Dr. Huajie Huang

College of Materials Science and Engineering, Hohai University, Nanjing 210098, China

Deadline for manuscript submissions

closed (30 June 2025)



Catalysts

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Impact Factor 4.0 CiteScore 7.6



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

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Prof. Dr. Keith Hohn

Carl R. Ice College of Engineering, Kansas State University, Manhattan, KS, USA

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