

Special Issue

Nanocatalysts for Electrochemical Reactions: Design, Synthesis, and Fundamental Understanding

Message from the Guest Editors

The concept of nanocatalysts opens up a new avenue in the field of electrochemistry research and have experienced highly productive decades since the consolidation of this topic. The featuring fine-tuned morphology and microscopic structure were elaborately exploited to access fascinating strain effects, ensemble effects and electronic structure modulations, which demonstrated great potential in diverse electrochemical transformations with distinctive reactivities. Besides, the combined experimental and theoretical studies substantially enriched fundamental understanding of molecular behaviors on surfaces, yielding a framework to understand catalytic trends that can ultimately offer rational guidance toward the development of improved catalysts.

This Special Issue is dedicated to providing a broad survey of the most recent advances in Nanocatalysts for Electrochemical Reactions. Original research articles or reviews that discuss methodologies for synthesis and functionalization of nanocatalysts, structural aspects, catalytic mechanism and properties, and profound perspectives in electrocatalysis fields are welcome.

Guest Editors

Dr. Wei Liu

Dr. Feng Hu

Dr. Danyang Wu

Deadline for manuscript submissions

closed (31 August 2024)



Molecules

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CiteScore 8.6
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Molecules
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
molecules@mdpi.com

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Message from the Editor-in-Chief

As the premier open access journal dedicated to molecular chemistry, now in its 30th year of publication, the papers published in *Molecules* span from classical synthetic methodology to natural product isolation and characterization, as well as physicochemical studies and the applications of these molecules as pharmaceuticals, catalysts, and novel materials. Pushing the boundaries of the discipline, we invite papers on all major fields of molecular chemistry and multidisciplinary topics bridging chemistry with biology, physics, and materials science, as well as timely reviews and topical issues on cutting-edge fields in all of these areas.

Editor-in-Chief

Prof. Dr. Thomas J. Schmidt

Institute of Pharmaceutical Biology and Phytochemistry, University of Münster, Corrensstrasse 48, D-48149 Münster, Germany

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