



Metal Catalysts for Heterogeneous Catalytic Reactions

Guest Editors:

Dr. Chao Huang

Plasma Laboratory, City
University of Hong Kong,
Kowloon 518057, Hong Kong

Dan Li

Plasma Laboratory, City
University of Hong Kong,
Kowloon 518057, Hong Kong

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Message from the Guest Editors

Hydrogen energy is known as the next generation of secondary clean energy, but the cost of hydrogen preparation has always been a bottleneck hindering the large-scale application of hydrogen energy, especially green hydrogen production.

At present, the universal catalyst for hydrogen production in electrolyzed water is Pt/C, but its cost is high and it is difficult to apply on a large scale. Preparing high-performance, high-stability catalysts with inexpensive non-precious-metal catalysts is a challenge. Aiming at the major strategic goals of energy and the environment, it is necessary to deeply explore the relationship between the structure and performance of heterogeneous metal catalysts to develop new catalytic materials, from exploring key scientific issues to solving practical application problems. For this Special Issue of *Metals*, we welcome reviews and articles on the principles, theoretical calculation, material preparation and characterization, and applications of hydrogen metal catalysts.





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Editors-in-Chief

Prof. Dr. Hugo F. Lopez

Department of Materials Science
and Engineering, College of
Engineering & Applied Science,
University of Wisconsin-
Milwaukee, 3200 N. Cramer
Street, Milwaukee, WI 53211, USA

Prof. Dr. Yong Zhang

Beijing Advanced Innovation
Center of Materials Genome
Engineering, State Key
Laboratory for Advanced Metals
and Materials, University of
Science and Technology Beijing,
30 Xueyuan Road, Beijing 100083,
China

Message from the Editorial Board

Metallic materials play a vital role in the economic life of modern societies; contributions are sought on fresh developments that enhance our understanding of the fundamental aspects related to the relationships between processing, properties and microstructure – disciplines in the metallurgical field ranging from processing, mechanical behavior, phase transitions and microstructural evolution, nanostructures, as well as unique metallic properties – inspire general and scholarly interest among the scientific community.

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Metals Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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