Special Issue

Application and Properties of Metal and Metal Oxides in Catalysts

Message from the Guest Editors

In recent years, with the aggravation of environmental pollution and energy shortages, the use of catalytic technology to solve the related problems has attracted more and more attention. For example, with the help of metal or metal oxide catalysts, CO2 reduction is carried out in the way of photocatalysis, thermocatalysis or electrocatalysis to achieve the goal of carbon neutrality, and the splitting of water to produce hydrogen is carried out in the way of electrocatalysis or photocatalysis to promote the development of hydrogen economy. However, at present, the catalytic mechanism still needs to be further explored and revealed, the catalytic activity of the materials needs to be further improved and optimized, and the development and application of new catalytic materials need a lot of exploration work. In this Special Issue, we welcome articles focused on the applications and properties of metals and metal oxides in catalysts.

Guest Editors

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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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