



Transition Metal-Based Nanostructures for Energy Storage and Conversion

Guest Editor:

Dr. Liang Huang

National Laboratory for
Optoelectronics, School of
Optical and Electronic
Information, Huazhong University
of Science and Technology,
Wuhan 430074, China

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Message from the Guest Editor

Dear Colleagues,

The development of powerful electrochemical energy conversion and storage devices is considered one of the greatest challenges for our society in terms of advancing science and technology today. Rechargeable lithium-ion batteries, supercapacitors, and fuel cells are the three most promising candidates in terms of energy densities and power densities. Transition metal-based nanomaterials (TMNs), including metal oxides, metal carbide, metal nitride, and metal sulfide, are currently of interest in the development of these devices because of their eco-friendly, novel size effects, their significantly enhanced kinetics, and so on. Therefore, the rational design of earth-abundant transition metal-based nanomaterials, as well as an understanding of their electrochemical behavior, are of great importance for developing next-generation electrocatalysts or electrode materials for electrochemical energy devices. We believe that this research topic has both academic and technological importance, and could offer exciting new scientific breakthroughs in cross-disciplinary areas.

Dr. Liang Huang

Guest Editor





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Editor-in-Chief

Prof. Dr. Shirley Chiang

Department of Physics, University
of California Davis, One Shields
Avenue, Davis, CA 95616-5270,
USA

Message from the Editor-in-Chief

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MDPI, St. Alban-Anlage 66
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