

Special Issue

Nanocatalysis for Green and Sustainable Chemical Processes

Message from the Guest Editors

Versatile chemical processes, including photocatalysis, electrochemistry, hydrocarbon conversions, environmental remediation, and chemical synthesis, have significantly secured and driven the rapid development of human society in the last few decades.

More recently, green chemistry and engineering, composed of a wide array of environmentally-friendly catalytic processes, have merged as a cohesive field in the scientific community. The development and utilization of functionalized nanomaterials, with characteristic crystalline, morphology, structure, and physicochemical properties, further empower heterogeneous catalytic reactions and open up a new avenue to the green chemical processes. This Special Issue aims to cover recent progress and advances the design and functionalization of novel nanostructured metal, nonmetal (carbon) and hybrid materials, characterization, and evaluation of the performances in nanoscaled chemical reactions, as well as promoting mechanistic innovations in heterogeneous catalysis, environmental science, energy storage and conversion, and green chemical production processes.

Guest Editors

Prof. Dr. Shaobin Wang

School of Chemical Engineering and Advanced Materials, University of Adelaide, Adelaide, SA 5005, Australia

Dr. Xiaoguang Duan

School of Chemical Engineering and Advanced Materials, The University of Adelaide, Adelaide, SA 5005, Australia

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Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

Editor-in-Chief

Prof. Dr. Enrico Sciubba

Department of Mechanical and Industrial Engineering, University
Niccolò Cusano, 00166 Roma, Italy

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