



State-of-the-Art Research in Advanced Materials for Energy Storage Applications

Guest Editors:

Prof. Dr. Ding Chen

Dr. Zeyan Zhou

Dr. Shuaiming He

Dr. Guozhi Ma

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Message from the Guest Editors

The need for the development of alternative energy conversion and storage systems has increased dramatically due to rapid global economic growth, environmental issues, and the depletion of fossil fuels. As two kinds of pollution-free clean energy, light and electricity have attracted increasing interest from the scientific community.

Advanced materials are of interest from the perspectives of both scientific research and mechanical manufacturing fields, especially for energy storage applications. Their suitability for such applications is attributed to their unique properties, such as their composition and large surface area, as well as their tunable porous structure, particle size, and surface chemistry. Depending on the methodology used for their synthesis, advanced materials will continue to play a critical role in dealing with global challenges.

The articles presented in this Special Issue will cover various topics, including, but not limited to, photoelectrocatalysis materials, solar cells, solar photoelectrocatalysis degradation, energy storage devices (batteries and electrochemical supercapacitors), and these materials' synthesis, properties, and applications.





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Editor-in-Chief

Prof. Dr. Enrico Sciubba

Department of Mechanical and
Aerospace Engineering,
University of Roma Sapienza, Via
Eudossiana 18, 00184 Roma, Italy

Message from the Editor-in-Chief

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MDPI, St. Alban-Anlage 66
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