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New-Generation Advanced Materials for Next-Generation Supercapacitors

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Deadline for manuscript submissions:
closed (10 June 2023)

Message from the Guest Editors

Energy plays a significant role in human development. Energy demand consumption is increasing exponentially daily; hence, environmentally friendly and efficient energy storage devices are needed. In this regard, electrochemical energy storage systems such as the battery, supercapacitors, etc., have gained much attention because of their environmentally friendly nature. The supercapacitor is one of the most helpful technologies due to its extraordinary features, high power, long cycle life, low maintenance, and simple geometry. A supercapacitor's device performance and durability are governed by the selected electrodes' physical, chemical, and electrical properties. In this perspective, many materials such as carbon, metal oxides, and polymers and their combination have been utilized as electrodes in supercapacitors.

This *Materials* MDPI Special Issue provides an excellent opportunity to explore the unexplored advanced functional nanomaterials' properties/applications for advanced next-generation supercapacitors.



mdpi.com/si/143416

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Message from the Editor-in-Chief

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