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## Innovative Advanced Materials for Energy Storage and Beyond: Synthesis, Characterization and Applications

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### Message from the Guest Editor

Dear Colleagues,

Recently, advanced materials have attracted considerable interest owing to their possible applications in different fields such as in supercapacitors, capacitors, batteries and other energy storage systems. Many of the 21st century's advancing technologies, e.g., electric vehicles (and hybrids), portable electronic devices, and renewable energy systems, drive the demand for high-performance energy storage systems. In fact, the increasing demand for processable, lightweight, flexible energy storage materials has motivated researchers from both academia and industry to develop and manufacture new materials that offer excellent properties depending on the targeted applications.

This Special Issue is aimed at presenting the current state-of-the-art in new advanced materials to address the various challenging issues researchers have been confronted with in this field for a number of applications, especially for energy storage.

Dr. Vijay Kumar Thakur  
*Guest Editor*



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# Special Issue



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## Editor-in-Chief

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## Message from the Editor-in-Chief

Nanoscience and nanotechnology are exciting fields of research and development, with wide applications to electronic, optical, and magnetic devices, biology, medicine, energy, and defense. At the heart of these fields are the synthesis, characterization, modeling, and applications of new materials with lower nanometer-scale dimensions, which we call “nanomaterials”. These materials can exhibit unusual mesoscopic properties and include nanoparticles, coatings and thin films, metal-organic frameworks, membranes, nano-alloys, quantum dots, self-assemblies, 2D materials such as graphene, and nanotubes. Our journal, *Nanomaterials*, has the goal of publishing the highest quality papers on all aspects of nanomaterial science to an interdisciplinary scientific audience. All of our articles are published with rigorous refereeing and open access.

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