

Special Issue

Synthesis and Applications of Nanoscale Materials for Renewable Energy

Message from the Guest Editor

The development of advanced functional materials is one of the current challenges to the efficient production and storage of renewable energy. Solar energy could be used to produce electrical energy or fuels, such as hydrogen and hydrocarbon from water and carbon dioxide, respectively. Hydrogen is also the key to energy transition and achieving decarbonization goals. This Special Issue is open to original research articles, as well as review papers, helping researchers worldwide understand the latest trends and progress in nanomaterials for different applications, such as solar cell, hydrogen production, fuel cells, batteries, supercapacitors, photo-electrochemical water splitting, etc.

Guest Editor

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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. We are proud of our increasing impact factor and ability to provide rapid decisions to authors.

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