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Harvesting Electromagnetic Fields with Nanomaterials from Microwaves to Ultraviolet

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Message from the Guest Editors

This Special Issue is dedicated to showcasing the implications of nanomaterials in harvesting electromagnetic waves in various ranges, i.e., from microwaves to ultraviolet waves.

Depending on the electromagnetic bandwidth, there is a wealth of nanomaterials that can be used to accomplish this target, e.g., oxides and ferroelectrics with a thickness of a few nanometers, carbon nanotubes, graphene, and molybdenum disulphide, as well as many other 2D materials thanks to their unique physical properties.

In the future, these tiny objects could produce a revolution in the harvesting of energy originating from the ambient electromagnetic fields which surround us, namely the Sun, heat, or the Earth itself. Therefore, this Special Issue is of great importance, and your contributions are expected to showcase the state of the art of this field.



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Special Issue



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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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