Special Issue

Nanomaterials for Electromagnetic Energy Harvesting: From Microwaves to Ultraviolet

Message from the Guest Editor

This Special Issue aims to showcase the implications of nanomaterials in harvesting electromagnetic waves in various ranges, i.e., from microwaves to ultraviolet waves. Depending on the electromagnetic bandwidth, a wealth of nanomaterials can be utilised to accomplish this task, including oxides and ferroelectrics with a thickness of a few nanometres, carbon nanotubes, graphene, molybdenum disulphide, and many additional 2D materials due to their unique physical properties. In the future, these nanoscale objects could revolutionise 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; we encourage contributions to showcase the state of the art in this field.

Guest Editor

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Deadline for manuscript submissions

closed (10 March 2026)

Nanomaterials

an Open Access Journal by MDPI

Impact Factor 4.3
CiteScore 10.3
Indexed in PubMed

mdpi.com/si/249977

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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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