nanomaterials

IMPACT FACTOR 5.3

Indexed in: PubMed

CITESCORE 7.4

an Open Access Journal by MDPI

Harvesting Electromagnetic Fields with Nanomaterials from Microwaves to Ultraviolet

Guest Editors:

Prof. Dr. Mircea Dragoman
National Institute for Research and Development in Microtechnology (IMT), Str. Erou Iancu Nicolae 126A, 077190 Voluntari, Romania

Dr. Martino Aldrigo
National Institute for Research and Development in Microtechnologies (IMT-Bucharest), Voluntari (Ilfov), Romania

Deadline for manuscript submissions:
30 October 2024

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.

nanomaterials

IMPACT FACTOR 5.3 | Indexed in: PubMed | CITESCORE 7.4

an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Shirley Chiang
Department of Physics, University of California Davis, One Shields Avenue, Davis, CA 95616-5270, USA

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.
High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, PMC, CAPlus / SciFinder, Inspec, and other databases.
Journal Rank: JCR - Q1 (*Physics, Applied*) / CiteScore - Q1 (*General Chemical Engineering*)

Contact Us

Nanomaterials Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/nanomaterials
nanomaterials@mdpi.com
𝕏@nano_mdpi