nanomaterials

IMPACT FACTOR 4.3

Indexed in: PubMed

CITESCORE 9.2

an Open Access Journal by MDPI

Nanoparticles for Photovoltaics

Guest Editor:

Prof. Marcel Di Vece
Department of Physics, Milano University, Milano, Italy

Deadline for manuscript submissions:
closed (15 November 2020)

Message from the Guest Editor

Over the past several decades, photovoltaic (PV) technologies have demonstrated continuous progress and cost reduction. Nevertheless, PV technologies currently only provide for approximately 1% of the global energy consumption, and considerable gains can be achieved when the solar panels become more efficient and much cheaper. Therefore, producing highly efficient solar cells with low-cost materials and techniques is highly desirable. Novel methods should be able to increase the efficiency of solar cells made of conventional and new materials in a realistic manner. This makes bottom-up methods such as the use of nanoparticles realistic and important. Nanoparticles can be used as constituent, such as quantum dots, for light management structures, such as plasmonic and Mie scatterers, and light budgeting with up/down converters. With this Special Issue, we aim to cover all of these promising topics related to the use of nanoparticles to increase solar cell performance.

nanomaterials

IMPACT FACTOR 4.3 | Indexed in: PubMed | CITESCORE 9.2

an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Eugenia Valsami-Jones
School of Geography, Earth and Environmental Science, University of Birmingham, Birmingham B15 2TT, UK

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 - Q2 (Physics, Applied) / CiteScore - Q1 (General Chemical Engineering)

Contact Us

Nanomaterials Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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

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