Special Issue

High-Performance Organic Photovoltaics

Message from the Guest Editor

Organic photovoltaics (OPVs) have shown incredible promise as a next-generation thin-film technology for solar power generation. Unlike traditional inorganic photovoltaics such as silicon, OPVs can be lightweight, flexible, semi-transparent, and low-cost, suitable for applications such as building-integrated photovoltaics (BIPVs), dual-use agrivoltaics, and portable power sources. This Special Issue focuses on recent advances in the field of OPVs from all the following perspectives: (1) fundamental understanding of the device physics, (2) novel material design and discovery, (3) device engineering, including manufacturing and scale-up, and (4) various applications, including semi-transparent OPVs, tandem OPVs, photodetectors, etc. We welcome submissions that highlight the great challenges as well as exciting opportunities in the field towards the commercialization of OPV technology.

Guest Editor

Dr. Shaun Tan

Department of Chemistry, Massachusetts Institute of Technology, Cambridge, MA 02139, USA

Deadline for manuscript submissions

closed (10 July 2024)



Nanomaterials

an Open Access Journal by MDPI

Impact Factor 4.3
CiteScore 9.2
Indexed in PubMed



mdpi.com/si/189979

Nanomaterials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
nanomaterials@mdpi.com

mdpi.com/journal/nanomaterials





Nanomaterials

an Open Access Journal by MDPI

Impact Factor 4.3 CiteScore 9.2 Indexed in PubMed



About the Journal

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 nanometerscale 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.

Editor-in-Chief

Prof. Dr. Eugenia Valsami-Jones

School of Geography, Earth and Environmental Science, University of Birmingham, Birmingham B15 2TT, UK

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)

