



materials



an Open Access Journal by MDPI

Organic Materials for Energy: From Synthesis to Application

Guest Editor:

Dr. Antonio Cardone

Institute of Chemistry of
OrganoMetallic Compounds,
National Research Council, Bari,
Italy

Deadline for manuscript
submissions:

closed (20 October 2022)

Message from the Guest Editor

Organic materials with semiconductor properties able to absorb solar energy are attracting a great deal of interest as active components of devices used to capture this energy, for a realistic, low-cost alternative to fossil fuels. Spanning from solar cells to photocatalysis, photochromism, electrochromism, and thermochromism, organic materials allow the fabrication of lightweight, flexible, and cheap devices, suitable for simple solution processing methods and large-area production. In the face of continuous advancement, some critical issues have to be overcome in order to unfold their potential and gain real applications. Key issues in the development of organic-based devices exploiting solar energy are material design, structure and properties of organic materials, interfaces, solid-state aggregation and morphology of the active layer, charge transport, device architecture, and long-term stability. Understanding the structure–properties correlation is fundamental to tailoring organic materials with the desired properties.



mdpi.com/si/63557

Special Issue



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Maryam Tabrizian

1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada

2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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, Ei Compendex, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

Journal Rank: JCR - Q2 (*Metallurgy & Metallurgical Engineering*) / CiteScore - Q2 (*Condensed Matter Physics*)

Contact Us

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

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

mdpi.com/journal/materials
materials@mdpi.com
[X@Materials_Mdpi](https://twitter.com/Materials_Mdpi)