



an Open Access Journal by MDPI

Organic Solar Cell and Optoelectronic Functional Materials

Guest Editors:

Prof. Dr. Masahiro Hiramoto

National Institutes of Natural Sciences - Institute for Molecular Science, Okazaki 444-8787, Japan

Assist. Prof. Seiichiro Izawa

National Institutes of Natural Sciences - Institute for Molecular Science, Okazaki, Japan

Deadline for manuscript submissions: closed (31 December 2020)

Message from the Guest Editors

The conversion efficiency of organic solar cells (OSCs) have steadily increased and reached 17% last year. Because of the variety of the absorption region of organic semiconductors, OSCs have the potential to show efficiencies beyond 20%. Recently, the two major issues are the carrier recombination mechanism determining the open-circuit voltage, and the non-fullerene acceptor materials. Moreover, the IR sensitivity has become a new challenge of OSC. In this Special Issue, we are soliciting original papers and some critical reviews, which relate the fundamental mechanism, new materials, new concepts, and so on, about OSC. We are looking for contributions on the following topics:

- Fundamental mechanisms on OSC such as carrier generation, carrier recombination, carrier transport, exciton, CT state, doping, nanostructure, and so on
- New materials, new device structure, and new concepts about OSC
- Module fabrication and durability, aimed at the practical application
- Fabrication, characterization, and properties of optoelectronic functional materials for OSC









an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Maryam Tabrizian

 Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
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 iournal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites. advanced materials characterization, porous materials, manufacturing processes and svstems. 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 - Q1 (Metallurgy and Metallurgical Engineering) / CiteScore - Q2 (*Condensed Matter Physics*)

Contact Us

Materials Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/materials materials@mdpi.com X@Materials_Mdpi