



## Opportunities and Challenges in Organic Optoelectronic Materials and Devices

Guest Editors:

**Dr. Guohua Xie**

The Institute of Flexible Electronics (Future Technologies), Xiamen University, Xiamen 361005, China

**Prof. Dr. Chien-Jung Huang**

Department of Applied Physics, National University of Kaohsiung, Kaohsiung 81148, Taiwan

**Prof. Dr. Kuan-Wei Lee**

Department of Electronic Engineering, I-Shou University, Kaohsiung 84001, Taiwan

Deadline for manuscript submissions:

**closed (30 November 2021)**

### Message from the Guest Editors

In recent years, new organic semiconducting materials and devices have been rapidly developed in practical applications, e.g., light-emitting devices, solar cells, transistors, and detectors.

The present Special Issue intends to highlight the results of experimental and theoretical investigations on the emerging organic optoelectronic materials and devices, with the extension to organic/inorganic hybrid ones, particularly related to the state-of-the-art quantum dots and perovskite families. This issue mainly covers light/electricity generation or harvesting mechanisms, based on the structure-property relationships. Broad aspects of this topic will be compiled, such as synthesis of new materials, morphological control, photophysical characterization, defect passivation, thin-film growth, optical manipulation, and device engineering.

Original manuscripts (full-length articles, short communications, highlights, or mini reviews), pointing out results from experimental and theoretical investigations, with reference to emerging materials and devices for light-to-electricity or electricity-to-light conversion, are all welcome.





an Open Access Journal by MDPI

## Editor-in-Chief

**Prof. Dr. Thomas J. Schmidt**

Institute of Pharmaceutical  
Biology and Phytochemistry,  
University of Münster,  
Corrensstrasse 48, D-48149  
Münster, Germany

## Message from the Editor-in-Chief

As the premier open access journal dedicated to experimental organic chemistry, and now in its 25th year of publication, the papers published in *Molecules* span from classical synthetic methodology to natural product isolation and characterization, as well as physicochemical studies and the applications of these molecules as pharmaceuticals, catalysts and novel materials. Pushing the boundaries of the discipline, we invite papers on multidisciplinary topics bridging biochemistry, biophysics and materials science, as well as timely reviews and topical issues on cutting edge fields in all these areas.

## 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](#), [MEDLINE](#), [PMC](#), [Reaxys](#), [CaPlus / SciFinder](#), [MarinLit](#), [AGRIS](#), and [other databases](#).

**Journal Rank:** JCR - Q2 (Chemistry, Multidisciplinary) / CiteScore - Q1 (Chemistry (miscellaneous))

## Contact Us

---

*Molecules* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/molecules](http://mdpi.com/journal/molecules)  
[molecules@mdpi.com](mailto:molecules@mdpi.com)  
[X@Molecules\\_MDPI](#)