



Opportunities and Challenges in Organic Optoelectronic Materials and Devices

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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.





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Message from the Editor-in-Chief

As the premier open access journal dedicated to molecular chemistry, now in its 30th 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 all major fields of molecular chemistry and multidisciplinary topics bridging chemistry with biology, physics, and materials science, as well as timely reviews and topical issues on cutting-edge fields in all of these areas.

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