

Special Issue

Advances in Molecular Physics and Optical Materials

Message from the Guest Editor

Molecular materials constitute the basis and are the cornerstone for the development of materials with a plethora of applications (e.g., drug design, optoelectronics, and energy storage). The aim of this Special Issue is to highlight recent advances in the physics underlying various phenomena governed by the interaction of light with matter on a molecular basis and how tailoring of the interaction could lead to the development of state-of-the-art molecular materials.

- Development of hybrid organic–inorganic materials (e.g., MOFS and COFS) as non-linear optical materials.
- Physics and chemistry of molecular materials.
- Novel approaches for the simulation of the interaction of light with molecular materials.
- Molecular inorganic conductors and superconductors.
- Theory and simulation of non-linear optics.
- Quantum chemistry and non-linear optics.
- Quantum dots.
- Rigorous theories for the description of the polarization effects in matter.

Guest Editor

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Deadline for manuscript submissions

closed (20 April 2025)



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About the Journal

Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

Editor-in-Chief

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