

Special Issue

Synthesis, Properties, and Applications of Perovskite Nanocrystals and Their Composites

Message from the Guest Editors

Perovskite nanocrystals (PNCs) are revolutionary optoelectronic materials due to their high photoluminescence, tunable bandgaps, and solution processability. These properties make them ideal for LEDs, solar cells, photodetectors, and quantum technologies. However, challenges remain in synthesis control, surface chemistry, and stability. Integrating PNCs into composite materials can improve durability and unlock new functionalities. This **Special Issue** in *Molecules* focuses on overcoming these challenges, highlighting PNCs' role in sustainable energy and next-generation optoelectronics. We invite contributions on **PNC synthesis, properties, and applications**. Topics include:

- Novel PNC and composite synthesis
- Stability and structure-property relationships
- Advanced characterization (e.g., in situ spectroscopy, modeling)
- Applications in LEDs, photovoltaics, lasing, and sensing
- Eco-friendly synthesis and scalability

We welcome **original research and reviews** that bridge fundamental science with practical innovations, fostering interdisciplinary progress in PNC technology.

Guest Editors

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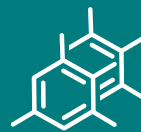
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About the Journal

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.

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