Special Issue

Nanomanufacturing of Photoactive Materials: From Synthesis to Applications

Message from the Guest Editor

Photoactive materials are capable of activating various responses when they interact with light. The fields of light-driven research have been broadened to various directions, such as photovoltaics, photocatalysts, optoelectronics, light-emitting diodes, phototransistors, photoacoustics, photochemical reactions, photoluminescence, optomechanics, opto-spintronics, photodynamic therapies, biophotosensors, etc. Nanomanufacturing uses a wide variety of novel methods to fabricate nanosized photoactive materials and miniaturized opto-devices, striving for eventual scalability to industry production. The nanoscale materials production includes nanoparticle powders and fluids, quantum dots, nanorods, nanotubes, nanowires, nanopatterns, ultra-thin films, and metal-organic-frameworks. This Special Issue aims to collate research reports on advanced nanoscale approaches of photoactive nanomaterials and small-scale devices throughout the processing from synthesis to application —we are especially interested in research with potential leading to transferability of commercialization.

Guest Editor

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Deadline for manuscript submissions

closed (15 September 2023)

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About the Journal

Message from the Editor-in-Chief

The capability to manipulate, assemble, and fabricate nano-objects have given rise to nanoscience, one of the most rich and interdisciplinary fields of research. In fact, mechanics, optics, magnetism, or electronics at the nanoscale strongly differ from their macroscopic counterparts, and thus several disciplines are necessary to study nanomaterials. This field's development parallels the technical advances that have made it possible to control matter at the nanoscale. Our journal, *Nanomanufacturing*, seeks to provide a forum for discussion and a platform to publish the latest results regarding the fabrication, manipulation, scalability, and eventual industrial production of miniaturized devices or objects. All of our articles are published with rigorous refereeing and open access.

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