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Synthesis of Nanostructures in Gas-Discharge Plasma

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Message from the Guest Editors

Gas-discharge plasma is a universal tool that makes it possible to obtain nanostructured materials of various morphologies and compositions. The wide range of applications of nanometers in various areas of human life makes the study of plasma processes of nanomaterial synthesis a very urgent task. This Special Issue welcomes works devoted to topical issues and problems of physical processes in the plasma synthesis of nanomaterials.

Potential topics include, but are not limited to:

- Plasma sputtering and deposition.
- Modeling of the physical properties of nanomaterials.
- Physics of gas-discharge plasma.
- Physics of dusty and non-ideal plasmas.
- Interaction of plasma with matter.
- Diagnostics of gas-discharge plasma.
- Plasma chemistry.

In December 2022, we are holding the third international conference "Gas-discharge plasma and synthesis of nanostructures" GDP-NANO 2022. This Special Issue will promote the latest research work related to the fundamental and applied problems of gas-discharge plasma physics and synthesis of nanostructures, as part of the GDP-NANO 2022 conference (<https://gdp-nano.com/en>).

Look forward to receiving your contributions.

Special Issue



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Message from the Editor-in-Chief

Nanoscience and nanotechnology are exciting fields of research and development, with wide applications to electronic, optical, and magnetic devices, biology, medicine, energy, and defense. At the heart of these fields are the synthesis, characterization, modeling, and applications of new materials with lower nanometer-scale dimensions, which we call “nanomaterials”. These materials can exhibit unusual mesoscopic properties and include nanoparticles, coatings and thin films, metal-organic frameworks, membranes, nano-alloys, quantum dots, self-assemblies, 2D materials such as graphene, and nanotubes. Our journal, *Nanomaterials*, has the goal of publishing the highest quality papers on all aspects of nanomaterial science to an interdisciplinary scientific audience. All of our articles are published with rigorous refereeing and open access.

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