# Special Issue

# Plasma Based Nanomaterials and Their Applications

## Message from the Guest Editor

Processing materials at nanoscale requires tiny entities as atoms, molecules, electrons, ions, and photons, and plasma is a way to produce and control them. Accordingly, a large number of plasma-based procedures, techniques, and instruments have been developed, where plasma imparts reactivity, directionality, charging to species performing the processing. Plasma processing, traditionally performed in vacuum and gas phase, was extended successfully in recent decades to atmospheric pressure and liquid phase. The goal of this issue is to explore the interrelation between plasma and materials across the atomic scale (plasma species, atoms, and molecules), nanoscale (individual nano-objects like nanoparticles, nanotubes, nanowires, nanosheets, nanocrystals, etc.), microscale (assembled nanostructures in thin films, layers, composites, hybrid nanomaterials), and macroscale (nanomaterial-based devices such as sensors, micro-actuators, electronic chips, micro-supercapacitors, membranes, etc.). For further reading, please follow the link to the Special Issue website at: https://www.mdpi.com/si/41060

## Guest Editor

Prof. Dr. Gheorghe Dinescu

National Institute for Laser, Plasma and Radiation Physics, 409 Atomistilor Street, Magurele, Ilfov country, Romania

## Deadline for manuscript submissions

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*Nanomaterials*
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
nanomaterials@mdpi.com

mdpi.com/journal/nanomaterials

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# About the Journal

## 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.

## Editor-in-Chief

Prof. Dr. Eugenia Valsami-Jones
School of Geography, Earth and Environmental Science, University of Birmingham, Birmingham B15 2TT, UK

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