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# Functional Micro-/Nanostructures: Advanced Fabrication and Application

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# **Message from the Guest Editors**

Micro/nanofunctional structures have shown promising applications in many fields, such as energy, catalysis, the environment, optoelectronics, and microelectromechanical systems (MEMS), due to their excellent physicochemical properties. In the past few decades, intensive efforts have been devoted to developing micro-/nanofunctional structures from 0D to 3D, which feature a superior surface-to-volume ratio, extraordinary electronic properties, and intriguing electrochemical activity.

This Special Issue aims to present recent progress in novel micro-/nanostructure design, fabrication, advanced characterization techniques, and functional device applications. The format of articles includes full papers, communications, and reviews. Potential topics include but are not limited to:

- 1. Design and processing of novel micro/nanofunctional structures;
- 2. Advanced characterization of micro/nanofunctional structures:
- 3. Electrochemical energy conversion and storage applications;
- 4. Multifunctional optoelectronic device applications;
- 5. Environmental catalysis applications;
- 6. Microelectromechanical system applications;
- 7. Highly efficient electromagnetic shielding applications.

  Specialsue







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## **Editor-in-Chief**

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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, 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, metalorganic 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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