

# Special Issue

## Neuromorphic Devices: Materials, Structures and Bionic Applications

### Message from the Guest Editors

We are pleased to invite you to contribute original and review articles regarding neuromorphic devices and their applications in an intelligent perception system. Potential topics include, but are not limited to: two terminal memristors for neuromorphic computing applications, three terminal neuromorphic transistors, nano-structure with specific neuromorphic functions, the integration of advanced nanomaterials for advanced neuromorphic computation, neuromorphic device arrays for advanced neural functions, an artificial intelligent perception platform with functional nanomaterials, etc.

- nanomaterials and nano-structures
- neuromorphic computing
- artificial synapse
- memristor
- neuromorphic transistor
- synaptic function
- perception systems
- dendrite integration
- learning activities

We look forward to receiving your contributions.

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### Guest Editors

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## Nanomaterials

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### Deadline for manuscript submissions

closed (10 June 2025)





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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. We are proud of our increasing impact factor and ability to provide rapid decisions to authors.

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### Editor-in-Chief

Prof. Dr. Eugenia Valsami-Jones  
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