

## Special Issue

# Smart Nanodevices in Therapeutic Applications: Present and Future Perspectives

### Message from the Guest Editor

This special issue explores the cutting-edge advancements of nanotechnology in medicine. Key topics covered in this special issue include the design and functionalization of nanodevices for targeted drug delivery, innovations in materials used for the production of nanoparticle-based drug carriers in the form of liposomes, dendrimers, micelles, nanotubes, nanorods, polymeric nanoparticles and stimuli-responsive nanodevices that can release therapeutic agents in response to specific conditions, ensuring on-demand drug release and enhanced therapeutic efficacy.

Emerging trends and future perspectives in the field will be also covered, emphasizing the potential of nanodevices in personalized medicine. The ability to tailor nanodevices to individual patient profiles can revolutionize treatment approaches, making them more effective and reducing adverse effects. In this Special Issue, original research articles, reviews and case studies that highlight the role of smart nanodevices in diagnosing, treating, and monitoring various diseases are welcome.

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### Guest Editor

Dr. Raffaele Conte

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### Deadline for manuscript submissions

closed (20 March 2025)



## Nanomaterials

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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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### Editor-in-Chief

Prof. Dr. Eugenia Valsami-Jones

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