Special Issue

Recent Progress in Terahertz Nano-Metamaterials

Message from the Guest Editors

The field of terahertz (THz) nano-metamaterials has witnessed remarkable advancements in recent years, driven by their potential to revolutionize applications in sensing, imaging, and communication. These engineered materials, with sub-wavelength structural features, enable precise control over THz wave propagation, overcoming the challenges posed by conventional materials. Researchers have developed novel designs, such as tunable and active metamaterials, leveraging cutting-edge fabrication techniques like 3D nano-printing and lithography. This Special Issue invites original contributions exploring the latest developments in THz nano-metamaterials. We welcome theoretical and experimental studies, including advances in design methodologies, material synthesis. and device integration. Topics of interest include, but are not limited to, tunable metamaterials, nonlinear and quantum-enhanced devices, and their applications in security, biomedical diagnostics, and wireless communication.

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Deadline for manuscript submissions

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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 nanometerscale 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

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