

Special Issue

Metasurfaces for Photonic Devices: Theory and Applications

Message from the Guest Editors

The advancement of modern electromagnetic technologies relies on the development of original theoretical approaches and new artificial materials. Artificially structured composites, known as metamaterials, exhibit novel properties that do not exist in natural materials, broadening human abilities in manipulating electromagnetic waves. Metamaterials provide a unique pathway to generate, guide, modulate, and detect electromagnetic waves by having structural features that are significantly smaller than the operation wavelength. This Special Issue aims to offer a collection of the recent developments in electromagnetic metamaterials, metasurfaces, and surface plasmonics and explore their potential usefulness in various aspects, both experimentally and theoretically. Research areas of interest include but are not limited to: (1) Novel designs for metamaterials/metasurfaces; (2) Microphotonics, nanophotonics, plasmonics, and novel optical devices; (3) Optical imaging and sensing; (4) Plasmon-enhanced light–matter interaction at the nanoscale; (5) Graphene metamaterials and devices; (6) Metamaterials/metasurfaces for antennas and RF devices.

Guest Editors

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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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