



Graphene-Based Metasurfaces

Guest Editors:

Dr. Anna Tasolamprou

Institute of Electronic Structure
and Laser, Foundation for
Research and Technology-Hellas,
N. Plastira 100, 70013 Heraklion,
Greece

Dr. George Kenanakis

Institute of Electronic Structure
and Laser, Foundation for
Research and Technology-Hellas,
N. Plastira 100, 70013 Heraklion,
Greece

Dr. Xuchen Wang

Department of Electronics and
Nanoengineering, Aalto
University, FI-00076 Aalto,
Finland

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Message from the Guest Editors

Dear Colleagues,

Graphene is a two-dimensional material made of carbon atoms arranged in a honeycomb lattice. Due to its unique band structure, graphene's optical properties can be dynamically modified by external sources, which provide strong tunability for electromagnetic surfaces. Graphene has been examined and employed as a constituent element in a variety of metamaterials and metasurfaces configurations. In the design of metasurfaces, graphene has been patterned into specific structures or hybridized with metallic and dielectric metasurfaces, which realizes strong field localization. The high localization enhances the wave-matter interactions in graphene and leads to evident reconfigurability of the overall response via external sources. This may lead to a variety of tunable electromagnetic functionalities, placing graphene at the center of the research attention in metasurface technologies.

Dr. Anna Tasolamprou

Dr. George Kenanakis

Dr. Xuchen Wang

Guest Editors





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Editor-in-Chief

Prof. Dr. Alessandra Toncelli

Department of Physics, University of Pisa, 56126 Pisa, Italy

Message from the Editor-in-Chief

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Crystals Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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