

## Special Issue

# Metamaterials: A Roadmap from the Perspectives of the Fascinating Properties and Applications

### Message from the Guest Editor

Metamaterials are recently embedding new quantum materials such as graphene, dielectric nanostructures, and, as metasurfaces, surface geometries and surface waves, while also embracing new functionalities such as nonlinearity, quantum gain, and strong light–matter coupling. This Special Issue is devoted to exhibiting the current state of the art of the dynamic and vibrant field of photonic metamaterials, reaching across various disciplines, suggesting exciting applications in chemistry, material science, biology, medicine, and engineering. It will illuminate recent advances in the wider photonic metamaterials field, such as (to mention a few) active metamaterials and metasurfaces, self-organized nanoplasmonic metamaterials, graphene metamaterials, metamaterials with negative or vanishing refractive index and topological metamaterials facilitating ultraslow broadband waves on the nanoscale, and novel applications, such as stopped-light lasing.

### Keywords

- metamaterial
- nanowires
- metasurfaces
- graphene
- medicine
- refractive index

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### Guest Editor

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### Deadline for manuscript submissions

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## Materials

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### Message from the Editorial Board

*Materials* (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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