Special Issue

Metamaterials and Surfaces: Theoretical and Experimental Research

Message from the Guest Editor

Among the novel trends in modern materials science, the development of meta-materials is prominent. Meta-materials are recently developed artificial materials demonstrating properties that are not found in naturally occurring materials, such as negative refraction or negative Poisson ratio. The domain of metamaterials covers a broad diversity of fields in physics and engineering, including: electromagnetics, acoustics, mechanics and thermodynamics. The special issue is devoted to the synthesis of theoretical and experimental approaches coming from the metamaterials- and interface sciences. Periodic micro- and nano-reliefs created on the surface of metals, polymers, and ceramic materials give rise to novel meta-materials and materials with the prescribed interfacial properties, such as those inherent for the “lotus”, “rose petal”, and “shark skin” effects. Experimental and theoretical papers devoted to metamaterials demonstrating promising interfacial properties, such as omniphobicity, and metamaterials exploiting their surfaces for achievement of the desirable engineering effect are invited.

Guest Editor

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Deadline for manuscript submissions

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Message from the Editor-in-Chief

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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