



materials



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Metamaterials and Surfaces: Theoretical and Experimental Research

Guest Editor:

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Deadline for manuscript
submissions:

closed (28 February 2022)

Message from the Guest Editor

Dear Colleagues,

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.



mdpi.com/si/77455

Special Issue



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Message from the Editor-in-Chief

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