Special Issue

Transformation Optics in Nanophotonics

Message from the Guest Editor

Transformation optics (TO) has revolutionized our understanding of electromagnetism, endowing the optical design toolbox with an unprecedented flexibility and intuitive character. This technique allows us to find the medium properties required to mold the spatiotemporal distribution of electromagnetic fields in almost any desired manner.

Throughout the last few years, the extension of the original TO theory to curved geometries, more general transformation schemes (including spacetime, nonlocal, complex, nontensorial, and supersymmetric transformations), and more general media (e.g., hyperbolic, epsilon-near-zero, and PT-symmetric media), has added new knowledge and achievable effects to the TO repertoire. Likewise, novel techniques and materials with improved properties have enhanced the potential capabilities of nanophotonic technology.

With this updated arena in mind, the aim of the Special Issue is to attract novel research at the intersection of transformation optics and nanophotonics, from theoretical insight and technological advances beyond the current state of the art, to the use of nanophotonics as a proof-of-concept platform for TO-related phenomena.

Guest Editor

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

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