Special Issue

Nanophotonics in Optical Communications

Message from the Guest Editors

Designing integrated photonic systems presents a significant challenge, encompassing not only the precise solution of electromagnetic equations but also the integration of material and quantum physics equations to facilitate the examination and assessment of near-field interactions. These investigations must seamlessly align with the processes of device fabrication and characterization, with the purposes of validating device concepts and enhancing device designs. Optical communication networks have become a vital component of both national and international telecommunications infrastructure. Researchers have explored and developed intelligent and advanced optical signal processing methods to mitigate transmission distortions in optical links and transceivers. This Special Issue is dedicated to collecting original research and review articles that focus on recent advancements, technologies, and innovative applications in the field of nanophotonic techniques within optical communication systems, networks, and signal processing. You can submit your paper at the following link: https://www.mdpi.com/si/188986

Guest Editors

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Deadline for manuscript submissions

closed (30 June 2024)

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Message from the Editor-in-Chief

Nanoscience and nanotechnology are exciting fields of research and development, with wide applications to electronic, optical, and magnetic devices, biology, medicine, energy, and defense. At the heart of these fields are the synthesis, characterization, modeling, and applications of new materials with lower nanometer-scale dimensions, which we call “nanomaterials”. These materials can exhibit unusual mesoscopic properties and include nanoparticles, coatings and thin films, metal–organic frameworks, membranes, nano-alloys, quantum dots, self-assemblies, 2D materials such as graphene, and nanotubes. Our journal, *Nanomaterials*, has the goal of publishing the highest quality papers on all aspects of nanomaterial science to an interdisciplinary scientific audience. All of our articles are published with rigorous refereeing and open access.

Editor-in-Chief

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