



## Nanophotonics and Integrated Optics Devices

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### Message from the Guest Editors

Since the visionary article of Miller in 1969 introduced the notion of Integrated Optics to the scientific community, this field has experienced an astonishing development. Although photonic integrated circuits do not rely on one single technological platform, what LiNbO<sub>3</sub>, Silicon, III-V, polymer, and glass photonic devices have in common is their extensive use of nanotechnologies either for their manufacturing or functionalization.

In this Special Issue, we aim to cover these two aspects: on one hand, the nanostructuration of waveguides and its impact on propagation (dispersion management, roughness management and its impact on propagation losses, photonic crystals and materials, plasmonics, etc.); on the other hand, the development and integration of nanomaterials in integrated photonic devices like 2D materials (Graphene and its derivatives), nanocrystals, nanotubes or nanorods. The emphasis will be placed on their optical properties and the way they are managed and integrated on a photonic chip to implement new functions. Both original research and reviews will be considered for publication.





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## Editor-in-Chief

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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.

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