

Special Issue on
Nanophotonics on Waveguides

CALL FOR PAPERS

Current demands on ultra-high capacity of integrated photonic devices pave a new way to investigate materials engineering and optical design to simultaneously provide multiple functions. However, the major bottleneck in the progress of integrated optics is the complexity of the fabrication processes and the compatibility of the materials. Seeking for high integration of photonic components together with the choice of the materials is one of the main challenges of optics. Nanostructured waveguides are at the edge of being the new technology for everyday life applications. The emergence of flat and 2D optics and the interest for evanescent and surface waves at surfaces of waveguides raised in the past decades prove the importance of studying what happens not only inside a waveguide but also around it. This is the key for future photonic devices.

The scope of this special issue is the study, understanding, and applications of nanomaterials and nanostructures on waveguides. It ranges from the study of optical material properties, to advanced fabrication techniques, and their applications in generating, modulating, shaping, and harvesting waves at the surface of nanostructured waveguide surfaces. In this special issue, we encourage you to submit original articles as well as review articles. We especially welcome experimental works demonstrating phenomena at surface.

Potential topics include but are not limited to the following:

- ▶ Nanowire waveguides and slot waveguides
- ▶ Photonic nanostructures on waveguides
- ▶ 2D nanomaterials integration in waveguides
- ▶ Waveguide- and nanostructure-based surface waves and surface plasmon polariton mechanisms
- ▶ Micro- and nanofabrication techniques of integrated optical nanostructures on waveguides
- ▶ Nanostructured waveguides for lab-on-a-chip applications

Authors can submit their manuscripts through the Manuscript Tracking System at <https://mts.hindawi.com/submit/journals/jnm/nphws/>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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Submission Deadline

Friday, 28 December 2018

Publication Date

May 2019