



Advances and Applications of Magneto-Optical Plasmonic Waveguides

Guest Editor:

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Message from the Guest Editor

Dear Colleagues,

Magneto-optical plasmonic waveguides (MOPW) sensors significantly enhance the resolution of intensity-interrogation-type SPR devices. This Special Issue will highlight the latest advances in the sensing performance of magneto-optical plasmonic waveguides.

An optical waveguide is a long, thin structure connecting various components or devices in an optical integrated circuit. By constructing a multilayered noble metal–ferromagnetic metal–noble metal stack, MOPW sensors significantly enhance the magneto-optical Kerr effect (MOKE), which in turn improves the sensing resolution. However, developing an MOPW sensor with high sensitivity and resolution, including the design and fabrication of MO material, a waveguide and a sensing system, presents a significant challenge.

This Special Issue aims to publish a collection of cutting-edge research articles presenting the latest achievements in the study, theory and development of magneto-optical plasmonic waveguide sensing performance. We are inviting colleagues to submit original research articles that fall within the scope of the topics listed below.

