



an Open Access Journal by MDPI

# **Plasmonics and its Applications**

Guest Editor:

#### Prof. Dr. Grégory Barbillon

EPF-Ecole d'Ingénieurs (Graduate School of Engineering), 55 Avenue du Président Wilson, 94230 Cachan, France

Deadline for manuscript submissions: closed (31 March 2019)

### Message from the Guest Editor

Nanoplasmonics is a young topic of research, and this concerns the investigation of electron oscillations, called surface plasmons, in metallic or hybrid (metallic/dielectric) nanostructures and nanoparticles. Surface plasmons have the unique capacity to confine light at the nanoscale. Moreover, these plasmonic modes are very sensitive to the surrounding medium and the materials on which they propagate. In addition to the above, the surface plasmon resonances can be controlled by adjusting the size, shape, periodicity, and materials' nature. All these optical properties can enable a great number of applications, such as biosensors, optical modulators, photocatalysis, integrated photonics and photovoltaic devices. Thus, this Special Issue is dedicated to introduce recent advances in nanoplasmonics and its applications for a wide range of topics. Therefore, it is with my great pleasure that I invite you to submit a manuscript for this Special Issue. Full papers, communications, and reviews are all welcome.









an Open Access Journal by MDPI

## **Editor-in-Chief**

#### Prof. Dr. Maryam Tabrizian

 Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

### Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The iournal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites. advanced materials characterization, porous materials, manufacturing processes and svstems. advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials. materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. Materials provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

# **Author Benefits**

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Ei Compendex, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

**Journal Rank:** JCR - Q2 (Metallurgy and Metallurgical Engineering) / CiteScore - Q1 (Condensed Matter Physics)

### **Contact Us**

*Materials* Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/materials materials@mdpi.com X@Materials\_Mdpi