

Call for Papers  
IEEE Instrumentation and Measurement Society  
IEEE Instrumentation and Measurement Magazine  
**Special issue on “Optical Measurements”**

Optical based sensing techniques are used in a large variety of measurement applications. For instance, optical waveguide sensors and optical fiber sensors are exploited in numerous important fields, including pharmaceutical researches, medical diagnostics, environmental monitoring, structural health monitoring, physical parameters detection, industrial applications, food safety and security, whenever fast, portable, low-cost and/or rugged devices are needed for detection and identification.

The main aim of this special issue is to bring together researchers active in the innovative developments of transducer schemes, smart materials and receptors, nanostructures and applications of optical sensor systems.

Works addressing the wide aspects of this technology are sought, including but not limited to, recent developments in: New measurement schemes, novel experimental configuration to improve the performances, the miniaturization and the multiplexing capabilities, new optical sensor and biosensor systems with relative applications, new optical materials for sensing and new applications as well.

About this topic, a special emphasis will not be only devoted to cover the current state-of-the-art, but also emerging trends.

Prospective authors are invited to submit tutorial-style papers on topics related to “*Optical Measurements*”, but not limited to the following:

- Distributed sensing and Point sensing in optical fibers;
- Optical Biosensors;
- Photonic sensor systems;
- Optical chemical sensors

Papers should present to the wide audience a general overview of one scientific subject of your interest really framed in the Instrumentation and Measurement field.

Contributions dealing with Open Problems in IM are very welcome, also presenting challenging and ambitious solutions, which could be habilitated by current and advanced technology.

While drafting your paper to be submitted to IMM, you are strongly invited to take care that:

*- Papers are expected to have technical content, but primarily they should present to the wide audience a general overview of the scientific subject addressed. Contributions dealing with Open Problems in IM are very welcome, presenting challenging and ambitious solutions which could be assisted by current and advancing technology.*

*- Since the IEEE Instrumentation and Measurement Magazine has the goal of providing overviews of hot and challenging topics in instrumentation and measurement to a wide engineering audience, it is strongly recommend to revise the Introduction and the "State of the Art" sections in order to properly highlight open problems in the subject addressed by this paper and to demonstrate its right contextualization in the framework of instrumentation*

*and measurement. This could be also achieved by including more references from I&M related Journals and Conferences.*

*- The technical contribution of the paper should be reduced. It could consist in a SHORT case of study to demonstrate the methodology/technology addressed by the paper.*

*- In line with the mission of the I&MM, papers have to be written for the general IM audience.*

The paper format is compliant with the IMM's author guidelines: <http://ieeems.org/publications/im-magazine>

In general, each paper should contain 3500-5000 words, and present 4-6 figures.

When your paper is ready, please submit it completely through the When your paper is ready, please submit it completely through <https://www.editorialmanager.com/IMM/default.aspx>

We expect to receive your paper by October 15, 2020 to begin the review and production process.

With your submission, please include a cover letter where you specify that this paper is the extended version of the paper already presented and awarded at the conference.

**Guest Editors:**

Nunzio Cennamo

Pedro A.S. Jorge