

Optical Sensors, Measurements, and Metrology

Guest Editor:

Prof. Dr. Yuri Filatov

Laser Measurement and
Navigation Systems Department,
Saint Petersburg Electrotechnical
University, 197376 St. Petersburg,
Russia

Deadline for manuscript
submissions:

closed (30 June 2023)

Message from the Guest Editor

Dear Colleagues,

This Special Issue focuses on optical sensors, the measurements of various values and parameters that can be made by using these sensors, their metrological characteristics, and the methods of obtaining them. This research, development, calibration, and characterization of optical sensors can be applied in metrology in order to achieve the highest accuracy and, thus, the lowest uncertainty.

Results of research on classical technologies, such as Fizeau interferometers, displacement laser interferometers, and angle measurement interferometers, are welcome, as well as those based on more recent innovative techniques, such as fiber optical sensors, waveguide sensors with a Mach–Zehnder modulator, and waveguide resonator gyros, and that cover the latest developments based on surface profiling, multi-wavelength digital holography, wavefront sensors, laser distance sensors, etc. Papers that focus on overcoming challenges, i.e., those related to grating interferometers used in photolithography scanner position measurement systems to measure the positions of the wafer stages, will also be appreciated.

