Special Issue

Precision Metrology Using Ultrashort Pulse Laser and Optical Frequency Comb

Message from the Guest Editors

This Special Issue aims to address to all types of sensors, measuring instruments, and measurement technologies based on the ultrashort pulse laser and optical frequency comb for precision measurement, including but not limited to:

- The measurement of length, thickness, distance, and strain, angle;
- The measurement of linear/angular displacement, velocity, and acceleration;
- The measurement of surface form and surface texture;
- The measurement of the external and internal 2D/3D structures of biological and nonbiological materials;
- The measurement of diffractive index and the mechanical properties of materials;
- Microscopy using an ultrashort-pulse laser source and the optical frequency comb;
- Optical frequency comb spectroscopy;
- The development of a visible/infrared ultrashort pulse laser source:
- The phase stabilization of the optical frequency comb;
- Related measurement standards and traceability.

Guest Editors

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Prof. Dr. Eberhard Manske

Deadline for manuscript submissions

closed (25 March 2025)



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Message from the Editor-in-Chief

Sensors is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. Sensors organizes Special Issues devoted to specific sensing areas and applications each year.

Editor-in-Chief

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