

Special Issue

Optical Sensors, Pushing the Limits

Message from the Guest Editor

This Special Issue aims to highlight recent advances in laser technology that can be applied to the sensing of fields, magnetic and electric, position (down to femtometer), gas pressure, flow, rotation, and acceleration. Of particular interest is the use of frequency combs applied to sensing, and active laser sensing where the measurement is performed inside a laser cavity. Theoretical and experimental papers are invited that cover basic aspects of classical and quantum signal enhancement and/or noise reduction. This includes, for instance, response enhancement near “exceptional points”. Another aspect to cover is noise reduction by squeezing techniques. Desirable improvements include (1) enhanced sensitivity, dynamic range, and shorter response time; (2) reduced noise; (3) compactness, reduced weight, and power consumption; and (4) no dead band. Compactness and reduced weight call for the development of fiber laser and microresonator implementation. For further information regarding the topics, please visit: mdpi.com/journal/sensors/special_issues/ospl.

Guest Editor

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Deadline for manuscript submissions

closed (30 November 2022)



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About the Journal

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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