Special Issue

Laser Optical Feedback Turns 60: Results, Frontiers and Perspectives

Message from the Guest Editors

As soon as the laser shot, some of its light was scattered backward. At first, it was an annoyance. Very early on, however, D. A. Kleinman and P. P. Kisliuk suggested that controlled back reflection from an external mirror could actually help the stabilization of the fundamental cavity mode by suppressing the higher-order ones. This was in March 1962. In 1963, P. G. R. King and G. J. Steward proposed to exploit optical feedback for metrology, and self-mixing eventually became research. The idea of using coherent laser feedback to extract information (e.g., position, composition, morphology, dynamical state) from the external target(s) providing back reflection has taken up many names: Laser Self-Mixing, Laser Diode Feedback Interferometry, Optical Feedback Interferometry and Optical Feedback Interference. It has rooted itself as a major player in many branches of laser optics and photonics moving, from laboratory tables to embedded technology, and recently began to beat the hot tracks of silicon photonics, unconventional imaging and Artificial-Intelligence-aided signal processing.

Guest Editors

Prof. Dr. Maurizio Dabbicco

Dr. Lorenzo L. Columbo

Dr. Julien Perchoux

Deadline for manuscript submissions

closed (15 November 2022)

Sensors

an Open Access Journal by MDPI

Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed

mdpi.com/si/112705

Sensors
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
sensors@mdpi.com

mdpi.com/journal/sensors

Sensors

an Open Access Journal by MDPI

Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed

mdpi.com/journal/sensors

MDPI

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

Prof. Dr. Vittorio M. N. Passaro
Dipartimento di Ingegneria Elettrica e dell'Informazione (Department of Electrical and Information Engineering), Politecnico di Bari, Via Edoardo Orabona n. 4, 70125 Bari, Italy

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, MEDLINE, PMC, Ei Compendex, Inspec, Astrophysics Data System, and other databases.

Journal Rank:

JCR - Q2 (Instruments and Instrumentation) / CiteScore - Q1 (Instrumentation)