Special Issue

Micromachined Flow Sensors

Message from the Guest Editors

Since the publication of the first micromachined flow sensors in the 1970s, there has been a tremendous development. Whereas the first sensors were mostly based on thermal sensing principles, we now see a large range of different operating principles: Thermal, anemometric, calorimetric, time-of-flight, measuring pressure drop along a channel or over an orifice, measuring drag force at a channel wall or on an obstacle in the flow, and, more recently, also sensors based on Coriolis forces and ultrasonic measurements. Combining different sensor principles on a single chip allows the measurement of fluid parameters, such as density and viscosity. With increasingly smaller flow levels, the characterization and calibration of sensors also becomes a challenge. This Special Issue covers the recent advances in all aspects of micro flow sensor research, including design and fabrication of the sensor chips, physical working principles, modeling and simulation, and the measurement setups for their characterization and calibration.

Guest Editors

Dr. Remco J. Wiegerink

Integrated Devices and Systems (IDS), University of Twente, P.O. Box 217, 7500 AE Enschede, The Netherlands

Prof. Dr. Joost Lötters

Integrated Devices and Systems (IDS), University of Twente, 7500 AE Enschede, The Netherlands

Deadline for manuscript submissions

closed (1 September 2019)

Sensors

an Open Access Journal by MDPI

Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed

mdpi.com/si/15036

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)