

Special Issue

Application of Sensor Technologies and Data-Driven Methods for Material Science and Manufacturing Processes

Message from the Guest Editors

Materials research and development as well as manufacturing processes are becoming more and more complex. Shorter product lifecycles and increasing customer requirements demand new and faster solutions. To support this, data-driven methods can help to discover new ways and efficient processes in different areas: creating new materials, visualizing processes, recognizing patterns, predicting material properties, or supporting decision-making. The application of data-driven methods such as machine learning for regression and classification play a crucial role in taking advantage of these potentials. Based on certain challenges in material sciences and manufacturing, this Special Issue shall address the development and application of data-driven methods to contribute to a solution. Understanding the field of application and its data preparation, data modeling, model evaluation, and especially its deployment, are important steps to make efficient use of data-driven methods. Hence, with this Special Issue we aim to increase the visibility of significant application-oriented research devoted to data-driven methods for various objectives in material science and manufacturing processes.

Guest Editors

Prof. Dr. Jürgen Hartmann

Institute Digital Engineering (IDEE), University of Applied Sciences
Würzburg-Schweinfurt, Ignaz-Schön-Straße 11, 97421 Schweinfurt,
Germany

Prof. Dr. Jan Schmitt

Institute Digital Engineering (IDEE), University of Applied Sciences
Würzburg-Schweinfurt, Ignaz-Schön-Straße 11, 97421 Schweinfurt,
Germany

Deadline for manuscript submissions

closed (20 April 2022)



Sensors

an Open Access Journal
by MDPI

Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed



mdpi.com/si/93700

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

[mdpi.com/journal/
sensors](https://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](https://mdpi.com/journal/sensors)



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)