# **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.

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### Deadline for manuscript submissions

closed (20 April 2022)



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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.

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