# Special Issue

# Sensing Technologies and Applications in Digital Soil Mapping

## Message from the Guest Editor

Digital soil mapping (DSM) in soil science is the creation and the population of a geographically referenced soil database generated at a given resolution by using field- and laboratory-observed data coupled with environmental data through quantitative relationships. The development of digital soil mapping is closely related to the availability of spatially exhaustive and relatively low-cost data in the form of spatial imagery and digital elevation models, also derived from remote sensing, proximal sensing and areal sensing, that can effectively represent various soil forming factors and process. This Special Issue aims to use digital mapping techniques to characterize soils in space and time based on data collected by sensors; design, develop, and validate sensors for the fast, inexpensive, and accurate characterization of soil properties; optimize sampling designs to capture high spatiotemporal variations and in changing soil environments; and to develop modeling and decision-support systems and quantify underlying soil processes to develop better and more sustainable management plans.

## Guest Editor

Prof. Dr. Asim Biswas

School of Environmental Sciences, University of Guelph, Guelph, ON N1G 2W1, Canada

## Deadline for manuscript submissions

closed (20 April 2023)

**Sensors**

**an Open Access Journal by MDPI**

**Impact Factor 3.5**
**CiteScore 8.2**
**Indexed in PubMed**

mdpi.com/si/113461

*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)