



sensors



an Open Access Journal by MDPI

Proximal Soil Sensing

Guest Editors:

Dr. Raphael Viscarra Rossel

Professor of Digital Soil Science & Agriculture, School of Molecular and Life Sciences, Curtin University, Kent St, Bentley, WA 6102, Australia

Dr. Craig R. Lobsey

The University of Southern Queensland, Toowoomba, QLD, Australia

Deadline for manuscript submissions:

closed (31 December 2018)

Message from the Guest Editors

The development of proximal soil sensing is essential for the dynamic characterisation of soil to help advance our current understanding of such processes and for monitoring them. Recent technological advances in miniaturised, low-power, sensors that are also wireless show considerable promise. Thus, for this special issue we welcome reviews and original research articles on the following topics:

1. New soil sensor technologies for sensing biological, physical, and chemical soil properties;
2. Development of integrated multi-sensor systems for monitoring soil condition and function (or soil health);
3. Subterranean wireless sensor systems used for monitoring biological, physical, and chemical soil properties;
4. Sensor data analytics, including signal processing, sampling, multivariate calibration, machine learning, Bayesian modelling, multi-sensor data fusion;
5. Novel applications of proximal soil sensing in environmental, agronomic, engineering, robotic, archaeologic, remote sensing and space applications;
6. Use of proximal soil sensing data in processed-based models at different spatial and temporal scales.



mdpi.com/si/14691

Special Issue



sensors



an Open Access Journal by MDPI

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

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.

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)

Contact Us

Sensors Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/sensors
sensors@mdpi.com
[X@Sensors_MDPI](#)