Topical Collection

Advances in Sensors, Big Data and Machine Learning in Intelligent Animal Farming

Message from the Collection Editors

In recent years, there has been a growing interest in animal welfare. At present, sensors, big data, machine learning, and artificial intelligence are used to improve management efficiency, reduce production costs, and enhance animal welfare. Although these technologies still have challenges and limitations, the application and exploration of these technologies in animal farms will greatly promote the intelligent management of farms. This Special Issue will focus on (but is not limited to) the following topics:

- Automatic animal detection and identification
- Animal welfare and health monitoring
- Sensors and sensing techniques for animal behavior recognition and detection
- Sensors for automated animal and environmental management
- Quantification of individual animal behavioral and physiological variations
- Big data and machine learning for group behavior monitoring and evaluation
- Real-time modeling of animal responses and decision-making
- Sensors application in precision livestock farming
- Application of robots in animal farming

Collection Editors

Dr. Yongliang Qiao

Dr. Lilong Chai

Prof. Dr. Dongjian He

Dr. Daobilige Su



Sensors

an Open Access Journal by MDPI

Impact Factor 3.5 CiteScore 8.2 Indexed in PubMed



mdpi.com/si/72119

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



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)

