



an Open Access Journal by MDPI

# **Nature Inspired Engineering: Biomimetic Sensors**

Guest Editors:

## Prof. Dr. Kiyoshi Toko

Division of Taste Sensor, Research and Development Center for Five-Sense Devices, Kyushu University, Fukuoka, Japan

#### Dr. Xiao Wu

Department of Information Electronics, Faculty of Engineering, Fukuoka Institute of Technology, 3-30-1 Wajirohigashi, Higashi-ku, Fukuoka, Japan

Deadline for manuscript submissions: closed (20 May 2025)

#### Message from the Guest Editors

Nature provides a huge source of inspiration for designing sensors. Among them, electronic tongue and electronic nose are analytical devices based on a series of partially selective chemical sensors or biosensors and multivariate data processing tools. Since their design concepts are inspired by biological sensing systems, they are called biomimetic sensors. Over the past three decades, these sensors have been reported for a wide range of applications, including classification of samples bv purpose, taste quantification, and flavor assessment. Biomimetic sensors simulate the human perception system, detect various external stimuli, and surpass the level of human senses in terms of sensitivity, selectivity, and accuracy, helping people to understand the unknown world and facilitating daily life.



mdpi.com/si/130653







an Open Access Journal by MDPI

#### **Editor-in-Chief**

#### Message from the 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

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