

Special Issue

Single-Molecule Sensing for Biomedical Applications

Message from the Guest Editor

The development of single-molecule sensing is one of the challenges in the field of applied science. Until now, single-molecule sensing has become available for various biomedical application and it is an ideal medical technique for the realization of precision-medicine systems. This Special Issue will focus on single-molecule sensing for biomedical applications, including electrical, optical, and/or magnetic measurements and nano/micro fabrication technologies for devices using nanostructures such as nanopores, nanogaps, nanochannels, MEMS, NEMS, etc. It will also welcome pretreatment studies for biomedical sensing, single-molecule detection, integrating purification, extraction, molecular control, as well as for non-invasive, biocompatible, and wearable functional devices. In addition, studies on artificial intelligence, such as multivariate analysis, machine learning, and deep learning, and molecular simulation methods are also of interest.

Guest Editor

Prof. Dr. Takahito Ohshiro

Institute of Science and Industrial Research, Osaka University, 8-1 Mihogaoka, Osaka 567-0047, Japan

Deadline for manuscript submissions

closed (31 October 2022)



Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.5



mdpi.com/si/85580

Applied Sciences
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
appls@mdpi.com

mdpi.com/journal/appls





Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.5



[mdpi.com/journal/
applsci](https://mdpi.com/journal/applsci)



About the Journal

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32,
20133 Milano, 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), Ei Compendex, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)