

## Topical Collection

# Machine Learning for Biomedical Application

### Message from the Collection Editors

The Special Issue will include applications of machine learning in processing, analysis, and recognition of biomedical data. Specific attention will be given to recently developed deep learning techniques and their application in extracting essential information from large biomedical databases. Hence, proposed topics include but are not limited to the following applications of machine learning:

- Genomic sequence determinations and analysis of gene expression patterns;
- Processing and analysis of biomedical signals and images;
- Modifying living organisms according to human purposes;
- Improving cell and tissue culture technologies;
- Development of deep learning architectures in analysis of biomedical data.

**Keywords:** machine learning; biotechnology; signal and image analysis; pattern recognition; genomics

---

### Collection Editors

**Prof. Dr. Michał Strzelecki**

Institute of Electronics, Lodz University of Technology, Wolczanska 211/215, 90-924 Łódź, Poland

**Dr. Paweł Badura**

Faculty of Biomedical Engineering, Silesian University of Technology, Roosevelta 40, 41-800 Zabrze, Poland

---



## Applied Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 5.5



[mdpi.com/si/79898](https://mdpi.com/si/79898)

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

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

[appls](https://appls.mdpi.com)





# 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 )