



## Brain-Computer Interfaces: Novel Technologies and Applications

Guest Editor:

**Prof. Dr. Banghua Yang**

School of Mechatronic  
Engineering and Automation,  
Shanghai University, Shanghai  
200444, China

Deadline for manuscript  
submissions:

**closed (30 September 2024)**

### Message from the Guest Editor

Dear Colleagues,

With advances in brain science and computer science, the brain-computer interface (BCI) has become a top research area in applied science. A BCI can provide humans with capabilities to communicate and control through brain activities instead of peripheral nerves and muscles. BCIs are a multidisciplinary emerging technology that integrates neuroscience, information science, computer science, robot technology, etc. It can establish a direct connection between brain activity and external devices by decoding so that humans have the ability to control external devices. In recent years, BCIs have been applied in many fields, especially in clinical and rehabilitation fields. In addition, its achievements in various aspects such as brain-controlled prosthetics, disease diagnosis, and motor rehabilitation are outstanding.

This Special Issue is opening for submission now. Topics include but are not limited to the following: The brain-computer interface; Human-machine interaction; Rehabilitation robotics; Brain signal decoding; Neuroregulation and the brain-computer interface.

Prof. Dr. Banghua Yang  
Guest Editor





an Open Access Journal by MDPI

## Editor-in-Chief

**Prof. Dr. Giulio Nicola Cerullo**  
Dipartimento di Fisica,  
Politecnico di Milano, Piazza L.  
da Vinci 32, 20133 Milano, Italy

## 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.

## 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, Embase, CAPlus / SciFinder, and other databases.

**Journal Rank:** JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)

## Contact Us

---

*Applied Sciences* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/applsci](http://mdpi.com/journal/applsci)  
[applsci@mdpi.com](mailto:applsci@mdpi.com)  
[X@Applsci](https://twitter.com/AtApplsci)