

## Special Issue

# Advances in Hearing Simulations and Hearing Aids

### Message from the Guest Editors

We are inviting submissions to this Special Issue entitled *Advances in Hearing Simulations and Hearing Aids*. In recent years, hearing aids have been developed in terms of the devices used and the way signals are processed. Conventionally, hearing aids have worked by presenting air-conducted sound using an earphone; however, some recently developed devices present bone- or cartilage-conducted sounds for patients who cannot use the existing hearing aids on the market, and these devices are implanted into the skull bone and inner ear after operative treatments. In terms of the effectivity of these devices, it is difficult to simulate or evaluate the output sound or objective response. Therefore, this Special Issue will collect studies concerning simulation techniques or psychoacoustical tests used to evaluate outputs from various types of hearing aids. In addition to such hearing simulations, we welcome research that considers the hot topic of signal processing being mounted in hearing aids (i.e., noise cancellation, Bluetooth, and AI adapting to situations).

---

### Guest Editors

**Dr. Ryota Shimokura**

Graduate School of Engineering Science, Osaka University, Toyonaka 560-8531, Japan

**Dr. Tadashi Nishimura**

Department of Otolaryngology-Head & Neck Surgery, Nara Medical University, Nara 634-8521, Japan

---

### Deadline for manuscript submissions

closed (31 March 2023)



## Applied Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 5.5



[mdpi.com/si/118559](https://mdpi.com/si/118559)

*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 )