

## Special Issue

# Bacteriophages in Therapy and Biosensor Devices

### Message from the Guest Editors

The search for more specific, robust and novel recognition probes is one of the major problems of innovative biosensor and therapy devices. In these applications, the bio-probes represent a new frontier to obtaining a specific and high affinity system to detect the analyte. Recent studies have employed bacteriophages as a valid alternative to standard bio-probes. In this perspective, wild-type and engineered phage have been used with success as new recognition probes on the sensor substrates and/or in phage therapy to overcome the constant increase in microbial resistance to antibiotics. Moreover, phage derivatives have been applied in the development of simple and economic systems that are able to detect several abiotic components. The aim of this Special Issue is to provide an overview of the last generation of phage-based proof of concept, point of care and complete devices applied in the diagnostic and therapy field. As of this Special Issue, we invite you to submit research articles, review articles, and short communications related to Bacteriophages in Therapy and Biosensor Devices.

---

### Guest Editors

Dr. Domenico Franco

Dr. Laura Maria De Plano

Prof. Dr. Salvatore P.P. Guglielmino

---

### Deadline for manuscript submissions

closed (25 September 2022)



## Applied Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 5.5



[mdpi.com/si/86146](https://mdpi.com/si/86146)

*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 )