

## Special Issue

# The Battle against Biofilms: A Focus on Novel Antimicrobial Strategies and Their Mechanisms of Action

### Message from the Guest Editors

Biofilms are the default microbial growth mode in most environments, including both natural and human-made ones. These protect the enclosed cells from environmental perturbations, including physicochemical stresses and biocide exposure. In addition to their beneficial roles, mainly with respect to their crucial involvement in environmental sustainability issues, biofilms are known for the problems these provoke in many areas, including persistent human infections, biofouling of medical devices, food contamination, surface corrosion, and considerable increases in energy consumption. The increased recalcitrance of biofilms to current antimicrobials has led to the search for novel, cost-efficient, and eco-friendly antimicrobial strategies to combat them. These should be able to destroy the biofilm cells with the lowest possibilities for subsequent resistance development. This Special Issue seeks manuscripts dealing with novel antibiofilm strategies, especially those trying to unravel their modes of action at the sessile community and cellular levels. Both original research and review articles are welcome.

---

### Guest Editors

Dr. Efsthathios Giaouris

Department of Food Science and Nutrition, School of the Environment, University of the Aegean, 81400 Myrina, Greece

Dr. Olivier Habimana

Department of Biotechnology and Food Engineering, Guangdong Technion – Israel Institute of Technology, Shantou 515063, China

---

### Deadline for manuscript submissions

closed (31 May 2024)



## Antibiotics

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.6  
CiteScore 10.2  
Indexed in PubMed



[mdpi.com/si/145434](https://mdpi.com/si/145434)

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

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





# Antibiotics

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.6  
CiteScore 10.2  
Indexed in PubMed



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



## About the Journal

### Message from the Editor-in-Chief

There are very few fields that attract as much attention as scientific endeavor related to antibiotic discovery, use and preservation. The public, patients, scientists, clinicians, policy-makers, NGOs, governments, and supra-governmental organizations are all focusing intensively on it: all are concerned that we use our existing agents more effectively, and develop and evaluate new interventions in time to face emerging challenges for the benefit of present and future generations. We need every discipline to contribute and collaborate: molecular, microbiological, clinical, epidemiological, geographic, economic, social scientific and policy disciplines are all key. *Antibiotics* is a nimble, inclusive and rigorous indexed journal as an enabling platform for all who can contribute to solving the greatest broad concerns of the modern world.

---

### Editor-in-Chief

Prof. Dr. Nicholas Dixon  
School of Chemistry and Molecular Bioscience, University of  
Wollongong, Wollongong, NSW 2522, Australia

---

### 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), PubMed, PMC, Embase, CAPlus / SciFinder, and other databases.

#### Journal Rank:

JCR - Q1 (Infectious Diseases) / CiteScore - Q1 (General Pharmacology, Toxicology and Pharmaceutics)