Special Issue

Molecular Insights into Allicin: From Antimicrobial Action to Cellular Signaling

Message from the Guest Editor

Allicin, a reactive sulfur-containing compound derived from garlic (Allium sativum), has drawn considerable attention in recent years due to its remarkable bioactivities. From its well-established antimicrobial properties to its emerging roles in modulating cellular redox signaling, apoptosis, and inflammation, allicin represents a fascinating model compound bridging natural product chemistry and molecular medicine. We are pleased to invite you to contribute to this upcoming Special Issue of *Applied Sciences*. It aims to highlight recent advances in our understanding of allicin's molecular mechanisms, biological targets, and potential applications in biomedical and biotechnological contexts.

Guest Editor

Dr. Martin C. Gruhlke

Society for Natural Product and Drug Research, 52070 Aachen, Germany

Deadline for manuscript submissions

20 January 2026



Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



mdpi.com/si/245110

Applied Sciences Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 applsci@mdpi.com

mdpi.com/journal/applsci





Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



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)

