Special Issue

Advances in Metallic Nanoparticles for Antibacterial and Antibiofilm Control

Message from the Guest Editors

The formation of microbial biofilms is associated with challenges across various sectors, including medical devices, food processing equipment, and water distribution systems, among others. These biofilms represent a significant health risk due to their potential to cause infections. Microbial biofilms are communities of microorganisms that can develop on both living and inert surfaces. The methods traditionally employed to prevent microbial growth often prove ineffective at eradicating biofilms, potentially contributing to the development of resistance to antibiotics and antimicrobial agents. One promising strategy for controlling biofilm formation involves the use of metallic nanoparticles, which offer advantages due to their unique properties, including shape, size and surface area. This Special Issue aims to highlight recent advances in the field of metallic nanoparticles, focusing on their applications in antibacterial and antibiofilm strategies. We welcome contributions in the form of original research articles and concise critical reviews.

Guest Editors

Dr. Eduardo Padilla-Camberos

Medical and Pharmaceutical Biotechnology Unit, Center for Research and Assistance in Technology and Design of the State of Jalisco, A.C. (CIATEJ), Av. Normalistas No. 800 Col. Colinas de la Normal, Guadalajara C.P. 44270, Jalisco, Mexico

Dr. Angélica Sofía González-Garibay

Medical and Pharmaceutical Biotechnology Unit, Center for Research and Assistance in Technology and Design of the State of Jalisco, A.C. (CIATEJ), Av. Normalistas No. 800 Col. Colinas de la Normal, Guadalajara C.P. 44270, Jalisco, Mexico

Deadline for manuscript submissions

31 December 2025

Inorganics

an Open Access Journal by MDPI

Impact Factor 3.0
CiteScore 4.1

mdpi.com/si/224492

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

mdpi.com/journal/inorganics

Inorganics

an Open Access Journal by MDPI

Impact Factor 3.0
CiteScore 4.1

mdpi.com/journal/inorganics

About the Journal

Message from the Editor-in-Chief

Inorganic chemistry remains a lynchpin of modern chemistry, not only embracing the function and reactivity of combinations of most elements of the periodic table, but also providing a footing for studies of materials, catalysts, drugs, fuels and industrial chemicals. Arguably, the role and reach of inorganics in society have never been as great as today. Adventurous research at the heart and at the extremes of inorganic chemistry is vital to further advances and Inorganics offers authors the opportunity to publish exciting new research in an open access format.

Editor-in-Chief

Prof. Dr. Duncan H. Gregory
School of Chemistry, University of Glasgow, University Avenue, Glasgow G12 8QQ, UK

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Chemistry, Inorganic and Nuclear) / CiteScore - Q2 (Inorganic Chemistry)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.6 days after submission; acceptance to publication is undertaken in 2.5 days (median values for papers published in this journal in the first half of 2025).