# Special Issue

# Therapeutic Applications of Magnetotactic Bacteria and Magnetosomes: State of the Art and Perspectives

## Message from the Guest Editor

We are glad to invite you to participate in the following new topics:Magnetotactic bacteria biomineralize magnetosomes, which are defined as intracellular nanocrystals of the magnetic minerals, magnetite ($Fe_3O_4$) or greigite ($Fe_3S_4$) enveloped by a phospholipid bilayer membrane. The synthesis of magnetosomes is controlled by a specific set of genes that encode proteins, some of which are exclusively found in the magnetosome membrane.Over the past decade, interest in nanotechnology and biotechnology of the magnetotatic bacteria has increased significantly, and their advantages in biomedical sciences has developed rapidly.We wanted to encourage the submission of any article that describe magnetite-producing MTB, magnetite magnetosomes and/or magnetosome magnetite crystals, include and/or involve bioremediation, cell separation, DNA/antigen recovery or detection, drug delivery, enzyme immobilization, magnetic hyperthermia and contrast enhancement of magnetic resonance imaging for biomedical usages.

## Guest Editor

Dr. Patrice X. Petit

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## Deadline for manuscript submissions

closed (31 July 2025)

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# About the Journal

## Message from the Editorial Board

*Cells* has become a solid international scientific journal that is now indexed on SCIE and in other databases. We have successfully introduced a special issues format so that these issues serve as mini-forums in specific areas of cell science. *Cells* encourages researchers to suggest new special issues, serve as special issues editors, and volunteer to be reviewers. Our main focus will remain on cell anatomy and physiology, the structure and function of organelles, cell adhesion and motility, and the regulation of intracellular signaling, growth, differentiation, and aging. We are open to both original research papers and reviews.

## Editors-in-Chief

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manuscripts are peer-reviewed and a first decision is provided to authors approximately 16 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the first half of 2025).