

Special Issue

Bacterial Synthesis of Metal Nanoparticles

Message from the Guest Editors

The bioproduction of metallic nanoparticles (MeNPs) is a sustainable method. Bacteria present an enormous potential as biofactories for MeNP production, by transforming metallic ions into MeNPs with a narrow size distribution and repetitive shapes. This Special Issue aims to publish innovative articles dealing with the following topics:

1. Molecular determinants and mechanisms involved in MeNP production: description of new molecular actors involved in MeNPs.
2. Novel bacterial chassis for MeNP production. Isolation of new biofactories for MeNPs production capable of bypassing some of the existing limitations. Synthetic biology strategies to produce robust bacteria that are more efficient in MeNP production are welcome.
3. Methods to increase the MeNP polydispersity. Protocols able to achieve stable systems for biosynthesize MeNPs in size and shape.
4. Scaling of the MeNP production. Protocols of scaling the production yields and large-scale production to decrease the actual distance with the prevailing industrial requirements.
5. Description of innovative or undiscovered applications of MeNPs produced in bacteria.

Guest Editors

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Message from the Editor-in-Chief

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