Special Issue

Metals and Metal Oxides for Advanced Biomedical Applications

Message from the Guest Editor

In this Special Issue, we will focus on metal nanoparticles and metal oxides and their many applications in biomedicine, from diagnostics to tissue regeneration. The use of metal nanoparticles in biomaterials provides a means to significantly improve the performance of many materials. When these nanoparticles are combined with specific polymers, the resulting nanocomposites often have unique features and properties that can be fine-tuned for particular applications. Some metal nanoparticles are known to have bactericidal effects due to their high surface-to-volume ratio and small size, which allows them to interact with bacterial cell membranes rather than the release of metal ions into solution closely. Copper, silver, and zinc nanoparticles, in particular, are crucial in many applications, but they are also known for their excellent antimicrobial properties. Other metal nanoparticles (copper, magnesium, and zinc) can enhance tissue regeneration in many tissues and are used in drug delivery and targeted drug delivery. We very much look forward to receiving a submission from you and your colleagues.

Guest Editor

Prof. Dr. David Mills
School of Biological Sciences and Biomedical Engineering, Louisiana Tech University, Ruston, LA 71272, USA

Deadline for manuscript submissions

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

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Editor-in-Chief

Prof. Dr. Thomas J. Schmidt
Institute of Pharmaceutical Biology and Phytochemistry, University of Münster, Corrensstrasse 48, D-48149 Münster, Germany

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