

Special Issue

Precision Medicine Meets 3D Printing: Molecular Approaches to Personalized Implants and Medical Devices

Message from the Guest Editor

This Special Issue seeks to connect 3D printing and molecular sciences, showcasing research that leverages molecular approaches to enhance the precision, biocompatibility, and functionality of 3D-printed medical solutions.

Topics of interest include, but are not limited to:

- Molecular design and engineering of bioactive materials for 3D printing.
- Integrating molecular insights into the fabrication of patient-specific implants and prosthetics.
- Tailoring surface properties at the molecular level to improve biocompatibility and tissue integration.
- Molecularly guided strategies for drug elution and controlled release in 3D-printed medical devices.
- Advances in bioprinting with a focus on molecular-level cellular interactions and tissue formation.
- Computational modeling and simulations to predict molecular interactions within 3D-printed constructions.

Guest Editor

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Deadline for manuscript submissions

closed (20 February 2025)



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Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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