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

Guest Editor:

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Message from the Guest Editor

Dear Colleagues,

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 molecularlevel cellular interactions and tissue formation.
- Computational modeling and simulations to predict molecular interactions within 3D-printed constructions













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Editor-in-Chief

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Message from the Editor-in-Chief

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