

Special Issue

3D Printing for Orthopaedics

Message from the Guest Editors

3D printing technologies have recently evolved to treat different musculoskeletal diseases and tissue damages for orthopedic patients worldwide. Unlike in conventional processing routes, varying the design from one 3D-printed specimen to the next does not result in substantial cost increase, rendering tailor-made designs feasible. Typically, state-of-the-art permanent implants provide mechanical support but lack biological adaptive properties, while resorbable implants have improved biological properties but typically lack mechanical stability. To extend our current knowledge, important issues such as advances and challenges in 3D printing techniques, emerging bio-fabrication technologies, porous and biodegradable implants, and applications of 3D printing in in vitro predictive models still need to be deeply investigated.

This Special Issue aims to highlight recent strategies in 3D printing for orthopedic biomaterials, and we cordially invite researchers to contribute with original research article, communication or review papers accordingly.

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Deadline for manuscript submissions

closed (30 June 2021)



Applied Sciences

an Open Access Journal
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Impact Factor 2.5
CiteScore 5.5



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mdpi.com/journal/

[applsci](https://doi.org/10.3390/applsci)





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As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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