



Virtual Reality, Augmented Reality, Extended Reality and 3D Printing in Medical Applications

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Deadline for manuscript
submissions:

20 August 2024

Message from the Guest Editor

Recent developments in 3D technologies have transformed our perception of how 3D visualizations contribute to the medical domain. Virtual reality (VR), mixed reality (MR) and extended reality (XR) are increasingly used in medical education and clinical practice by providing an immersive environment with applications ranging from medical education and training to surgical guidance and preoperative planning of surgical procedures. Further, 3D printing is also a rapidly developed technology showing great potential in medical education and clinical practice. Three-dimensional printed personalized models accurately replicate anatomy and pathology, and thus enhance learning and understanding of complex anatomy and disease conditions, assist surgical planning and simulation, and improve doctor–patient/with colleagues communication.

This Special Issue will highlight the current advances in VR/AR/XR and 3D printing technologies in medical applications. Technological advancements including 3D printing materials (including bioprinting) and printing technologies, 3D printing integrated with VR/AR/XR are also included in the Special Issue contents.





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Message from the Editor-in-Chief

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