



fluids



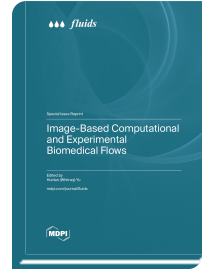
Special Issue Reprint

Image-Based Computational and Experimental Biomedical Flows

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This reprint aims to engage readers with the latest advancements in computational modeling and experimental measurement for quantifying hemodynamics in human vascular systems, derived from medical imaging data. The key topics include patient-specific blood flow modeling in arteries, intracranial aneurysms, and coronary stents. Cutting-edge techniques such as computational fluid dynamics (CFD), the lattice Boltzmann method, and innovative experimental setups such as mock circulation loops are highlighted, providing valuable insights into enhancing diagnostic accuracy and advancing personalized treatment strategies for cardiovascular diseases. A significant portion of this Special Issue is devoted to aneurysm studies, examining flow behaviors, wall stresses, and the impact of flow diverters on patient outcomes. Additionally, the reprint addresses cardiac function, myocardial ischemia, and coronary interventions, offering notable advancements in both computational modeling and experimental validation. Together, the research presented in this collection represents a major step forward in cardiovascular disease management, driven by precise simulations and patient-specific approaches.



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