

Special Issue

Mechanical, Cellular and Molecular Mechanisms on Heart Valve Disease

Message from the Guest Editors

Heart valve disease affects about 2.5% of the population, with increasing prevalence at older age. The cardiac valves consist of a heterogeneous cell population which resides in a highly organized extracellular matrix. The positioning of the valves in the heart and their specific configuration exposes each part of the leaflet to unique mechanical stresses during the cardiac cycle. Insight into the interaction between the valvular cells, extracellular matrix, and its mechanical environment is crucial for the understanding of the pathophysiology of heart valve disease. In this Special Issue, we welcome original research papers and review articles on the mechanical, cellular, and molecular mechanisms involved in heart valve disease with an emphasis on the interactions between valvular cells and their environment, new model systems, and new targets for pharmacological therapies.

Guest Editors

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Deadline for manuscript submissions

closed (20 February 2022)



Applied Sciences

an Open Access Journal
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Impact Factor 2.5
CiteScore 6.1



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





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Message from the Editor-in-Chief

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.

Editor-in-Chief

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