# **Special Issue**

# Biomedical Imaging Technologies for Cardiovascular Disease—3rd Edition

# Message from the Guest Editor

Biomedical imaging technologies have substantially increased in number and diversity over the past few years. Important improvements in accuracy, sensitivity, and refinement have been possible thanks to technological advances in software and hardware. In particular, cardiovascular disease assessment of anatomy, hemodynamics, and tissue biomarkers saw exceptional improvement, aiding the stratification of patient risk and therapy. The recent integration of artificial intelligence and machine learning has also supported novel approaches for personalized imagebased diagnosis. This Special Issue is dedicated to collecting recent progress in biomedical imaging technologies for cardiovascular disease:

- Advances in cardiac echocardiography:
- Advances in cardiac computed tomography:
- Advances in cardiac magnetic resonance;
- Advances in positron emission tomography;
- Advances in cardiovascular image processing;
- Advances in image-guided interventions;
- Advances in personalized cardiac imaging;
- Advances in the integration of medical imaging and computational modeling;
- Advances in biomedical imaging using machine learning and artificial intelligence...

## **Guest Editor**

Dr. Julio Garcia Flores

- 1. Department of Cardiac Sciences, University of Calgary, Calgary, AB T2N 1N4, Canada
- 2. Department of Radiology, University of Calgary, Calgary, AB T2N 1N4, Canada
- 3. Stephenson Cardiac Imaging Centre, University of Calgary, Calgary, AB T2N 1N4. Canada
- 4. Libin Cardiovascular Institute, University of Calgary, Calgary, AB T2N 1N4. Canada
- 5. Alberta Children's Hospital Research Institute, University of Calgary, Calgary, AB T2N 1N4, Canada

# Deadline for manuscript submissions

closed (30 March 2025)



# Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



# mdpi.com/si/184196

Applied Sciences
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
applisci@mdpi.com

mdpi.com/journal/applsci





# Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



# **About the Journal**

# 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 multidimensional network.

# Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo

Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy

## **Author Benefits**

# **Open Access:**

free for readers, with article processing charges (APC) paid by authors or their institutions.

## **High Visibility:**

indexed within Scopus, SCIE (Web of Science), Ei Compendex, Inspec, CAPlus / SciFinder, and other databases.

#### Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)

