Special Issue

Image Processing and Analysis for Preclinical and Clinical Applications

Message from the Guest Editors

Preclinical and clinical imaging aims to characterize and measure biological processes and diseases in animals and humans. In recent years, there has been growing interest in the quantitative analysis of clinical images using techniques such as Positron Emission Tomography, Computerized Tomography, and Magnetic Resonance Imaging, mainly applied to texture analysis and radiomics. In particular, various image processing and analysis algorithms based on pattern recognition, artificial intelligence, and computer graphics methods have been proposed to extract features from biomedical images. These quantitative approaches are expected to have a positive clinical impact on quantitatively analyzing images, reveal biological processes and diseases, and predict response to treatment. This Special Issue will present a collection of high-quality studies covering the state-of-the-art and innovative approaches focusing on image processing and analysis across a variety of imaging modalities as well as the expected clinical applicability of these innovative approaches for personalized patient-tailored medicine.

Guest Editors

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Deadline for manuscript submissions

closed (31 December 2021)



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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 multidimensional network.

Editor-in-Chief

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