



Latest Trends and Disruptions for Diagnostic Imaging and Image Guided Procedures and Therapies

Guest Editors:

Prof. Dr. Michael Friebe

1. Biomedical Engineering
Faculty, AGH University of
Science and Technology, 30-059
Krakow, Poland
2. Founding Director, Center for
Innovation, Business
Development &
Entrepreneurship, FOM University
of Applied Sciences, 45127 Essen,
Germany

Dr. Alfredo Illanes

Faculty of Medicine, SURAG,
Otto-von-Guericke-University,
39120 Magdeburg, Germany

Deadline for manuscript
submissions:
closed (31 December 2023)

Message from the Guest Editors

Dear Colleagues,

Medical Imaging (MI) modalities will further improve using advanced signal processing methods. This will affect the workflow and value of MI for diagnostic evaluation and, with that, will possibly change therapy responses. Minimally invasive therapies depend on MI for accurate tool and device guidance, but often the modalities used for the initial diagnostic assessment are not available for the subsequent therapy procedure. Preoperative-to-interoperate image fusion is needed, which additionally requires navigation and image segmentation and merging software.

There are many novel approaches suggested to combine real-time or preoperatively acquired imaging information with other signals and modalities that could not only add valuable information but also could help develop significantly cheaper and easier to use devices for a point-of-care approach.

This Special Issue focuses on some of the latest developments in computer-aided procedures for medical imaging used for diagnosis as well as for use during image-guided therapy procedures.

Prof. Dr. Michael Friebe
Dr. Alfredo Illanes
Guest Editors





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica,
Politecnico di Milano, Piazza L.
da Vinci 32, 20133 Milano, Italy

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.

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), Inspec, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q1 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)

Contact Us

Applied Sciences Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/applsci
applsci@mdpi.com
[X@Applsci](#)