





an Open Access Journal by MDPI

# Artificial Intelligence in Screening Mammography: Recent Advances and Tools in Cancer Detection and Diagnosis

Guest Editors:

**Dr. Athanasios Koutras** 

Dr. Ioanna Christoyianni

**Dr. George Apostolopoulos** 

**Dr. Dermatas Evangelos** 

Deadline for manuscript submissions:

closed (28 February 2023)

# **Message from the Guest Editors**

Breast cancer is a major health issue and still a leading cause of fatality among women worldwide. Mammography remains the foremost effective procedure for the early detection and diagnosis of breast cancer. The aim of this Special Issue is to present the recent advances in the detection and diagnosis of cancerous regions in mammograms using machine learning and deep learning algorithms. We particularly welcome submissions that will utilize different mammography modalities (separately or in combination) such as digital mammography (DM), tomosynthesis, ultrasound or MRI in developing systems to assist the diagnosis (CADx) and/or the detection (CADe) of regions of suspicion in mammograms. Submissions can also include but are not limited to novel feature extraction. techniques for breast cancer detection and diagnosis, transfer learning and deep learning architectures, open access databases for breast cancer research, generative adversarial network (GAN) architectures that overcome the problem of small data sets etc.











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**