Special Issue

Sensor-Enhanced Medical Imaging for Clinical Diagnostics

Message from the Guest Editors

In recent years, medical imaging has been transformed by advances in imaging modalities, artificial intelligence (AI), and sensing technologies. Modern practice increasingly integrates multimodal data from MRI, CT, PET, ultrasound, and optical sensors to deliver precise diagnostics. Combining complementary sources provides a comprehensive view of disease, improves accuracy, and supports personalized treatment. Intelligent methods such as deep learning, radiomics, reconstruction algorithms, and optical sensors enable automated detection, segmentation, and prognostic assessment, advancing image interpretation and realtime decision support. Non-intrusive sensing, including infrared imaging, depth cameras, and environmental sensors, further optimizes workflows and enhances patient comfort. Translating these innovations into practice brings opportunities and challenges, including data standardization, interoperability, and ethics. This Special Issue invites original research, reviews, and case studies on next-generation medical imaging, highlighting multimodal fusion, intelligent analysis, and clinical integration.

For more information, please visit here.

Guest Editors

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Sensors is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. Sensors organizes Special Issues devoted to specific sensing areas and applications each year.

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