

## Special Issue

# Artificial Intelligence in Medical Imaging: Progress, Challenges and Perspectives

### Message from the Guest Editor

This Special Issue aims to provide a comprehensive and forward-looking perspective on Artificial Intelligence in Medical Imaging, with a particular focus on bridging methodological innovation, theoretical foundations, and real-world clinical translation. It seeks to highlight recent progress while critically examining key challenges, including data heterogeneity across institutions and populations, robustness under distribution shifts, AI interpretability, the integration of domain knowledge into learning frameworks, and theoretical analysis of generalization and uncertainty in medical AI systems.

We welcome original research articles and reviews that advance both theoretical understanding and practical deployment. Topics of interest include, but are not limited to: multimodal learning, foundation models, physics-informed framework, uncertainty-aware modeling, generative and agentic AI systems.

This Special Issue seeks to foster a deeper understanding of the next-generation AI systems that are not only accurate but also robust, explainable, and clinically impactful, ultimately shaping the future of medical imaging.

---

### Guest Editor

Dr. Zi Wang

Bioengineering, Translation and Innovation Hub (I-HUB), White City Campus, Imperial College London, London W12 0BZ, UK

---

### Deadline for manuscript submissions

31 March 2027



## Journal of Imaging

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.8  
CiteScore 7.3  
Indexed in PubMed



[mdpi.com/si/279218](https://mdpi.com/si/279218)

*Journal of Imaging*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[jimaging@mdpi.com](mailto:jimaging@mdpi.com)

[mdpi.com/journal/  
jimaging](https://mdpi.com/journal/jimaging)





# Journal of Imaging

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.8  
CiteScore 7.3  
Indexed in PubMed



[mdpi.com/journal/  
jimaging](https://mdpi.com/journal/jimaging)



## About the Journal

### Message from the Editor-in-Chief

The imaging term, specific with journal, is to be considered in its broadest sense. Image processing, image understanding and computer vision are all terms related to imaging acquisition, its processing and the extraction of relevant information from the scene to obtain the underlying knowledge. All tasks related to the above items are oriented toward specific applications in a broad range of areas and topics. The *Journal of Imaging* is conceived as an efficient vehicle in the scientific community for the communication and transmission of the progress and research results in the topics covered.

---

### Editor-in-Chief

Prof. Dr. Raimondo Schettini

Department of Informatics, Systems and Communication, University of Milano-Bicocca, viale Sarca, 336, 20126 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, ESCI (Web of Science), PubMed, PMC, dblp, Inspec, Ei Compendex, and other databases.

#### Journal Rank:

JCR - Q2 (Imaging Science and Photographic Technology)  
/ CiteScore - Q1 (Radiology, Nuclear Medicine and Imaging)