Special Issue

Advanced Imaging Techniques for Chemical and Structural Biology

Message from the Guest Editor

Super-resolution microscopy (SRM) has become a promising tool for examining cellular biological processes, in vivo and in vitro. It has drastically evolved over the recent few years, rapidly emerging and offering new ways to resolve structures beyond the diffraction limit. Therefore, these approaches are capable of breaking the impenetrable fence and resolving complex mechanisms that exist inside biological structures that are smaller than the diffraction-limited spot and are in high demand. There is a dire need to focus on the design and development of better probes for SRM. Many fluorescent probes have been employed for SRM. Each one possesses its limitations, with fluorescent proteins undergoing fast photobleaching, organic dyes and quantum dots being known for their toxic nature, and the structure of carbon dots being unidentified. Moreover, there are a limited number of ways that can be used for optical switching, which restricts their utilization as an efficient probe for SRM. For the long-term tracking of single molecules and real-time super-resolution imaging, these techniques require the SRM probe to be further developed, requiring it to be brighter and more photostable.

Guest Editor

Dr. Aditya Yadav

Vontz Center for Molecular Studies, University of Cincinnati College of Medicine, Room No. 2216, 3125 Eden Ave, Cincinnati, OH 45267, USA

Deadline for manuscript submissions

closed (31 January 2025)

Journal of Imaging

an Open Access Journal by MDPI

Impact Factor 3.3
CiteScore 6.7
Indexed in PubMed

mdpi.com/si/209316

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

mdpi.com/journal/jimaging

Journal of Imaging

an Open Access Journal by MDPI

Impact Factor 3.3
CiteScore 6.7
Indexed in PubMed

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)