

Special Issue

Advanced Image Analysis and Processing Technologies and Applications

Message from the Guest Editors

Image analysis and processing have far-reaching applications, and data-driven technologies have sought to explore their use across various domains. From medical imaging for disease diagnosis to autonomous vehicles relying on vision systems, we have entered a new era where digital images play a pivotal role in diverse domains. This also poses new challenges due to the limited amount of data in some real cases where there is a scarcity of training data available. Therefore, this Special Issue aims to present new ideas and experimental results on pattern recognition, machine learning, computer vision, and image analysis. Potential topics include, but are not limited to, the following:

- computational imaging technology and applications;
- bio-medical image processing and applications;
- aerial image processing and applications;
- hyperspectral and multispectral image processing and applications;
- infrared and visible image processing and applications;
- model-driven methods in image processing;
- data-driven methods in image processing;
- knowledge-driven methods in image processing.

Guest Editors

Dr. Guoxia Xu

Department of Computer Science, Norwegian University of Science and Technology, 2815 Gjøvik, Norway

Prof. Dr. Hu Zhu

School of Communication and Information Engineering, Nanjing University of Post and Tele Communications, Nanjing, China

Deadline for manuscript submissions

closed (30 September 2025)



Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 6.1



mdpi.com/si/188768

Applied Sciences
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
applsci@mdpi.com

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





Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 6.1



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



About the Journal

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.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32,
20133 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, SCIE (Web of Science), Ei Compendex, Inspec, Embase, CAPIus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (Fluid Flow and Transfer Processes)