



*sensors*



an Open Access Journal by MDPI

## Image Denoising and Image Super-resolution for Sensing Application

Guest Editors:

**Dr. Kai Zhang**

Department of Information  
Technology and Electrical  
Engineering, ETH Zurich, ETH  
Zentrum, 8092 Zurich,  
Switzerland

**Dr. Dongwei Ren**

School of Computer Science and  
Technology, Harbin Institute of  
Technology, Harbin 150001,  
China

Deadline for manuscript  
submissions:

**closed (15 June 2023)**

### Message from the Guest Editors

Due to the various factors during the image acquisition and transmission process, such as the poor imaging system, storage and bandwidth limitation, and insufficient computational power, the RAW sensor data and the processed images are often corrupted by noise and have low spatial resolution. Image denoising and image super-resolution, as two classical and yet active low-level vision research topics, can be applied on the RAW sensor data and the processed images to improve the image quality and the accuracy of subsequent high-level vision tasks. This Special Issue will present recent advances of image denoising and image super-resolution in sensing applications. Specifically, novel model-based methods, learning-based methods, or hybrid methods such as plug-and-play methods and deep unfolding methods for image denoising and image super-resolution will be of special attention.



[mdpi.com/si/120603](https://mdpi.com/si/120603)

# Special Issue



*sensors*



an Open Access Journal by MDPI

## Editor-in-Chief

### **Prof. Dr. Vittorio M. N. Passaro**

Dipartimento di Ingegneria  
Elettrica e dell'Informazione  
(Department of Electrical and  
Information Engineering),  
Politecnico di Bari, Via Edoardo  
Orabona n. 4, 70125 Bari, Italy

## Message from the Editor-in-Chief

*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.

## Author Benefits

**Open Access :** free for readers, with [article processing charges \(APC\)](#) paid by authors or their institutions.

**High Visibility:** indexed within [Scopus](#), [SCIE \(Web of Science\)](#), [PubMed](#), [MEDLINE](#), [PMC](#), [Ei Compendex](#), [Inspec](#), [Astrophysics Data System](#), and [other databases](#).

**Journal Rank:** JCR - Q2 (*Chemistry, Analytical*) / CiteScore - Q1 (Instrumentation)

## Contact Us

*Sensors* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/sensors](http://mdpi.com/journal/sensors)  
[sensors@mdpi.com](mailto:sensors@mdpi.com)  
[X@Sensors\\_MDPI](#)