





an Open Access Journal by MDPI

# Structured Sparse Signal Processing for Infrared and Terahertz Systems

Guest Editors:

#### Dr. Lu Gan

College of Engineering, Design and Physical Science, Brunel University, London, UK

#### Prof. Dr. Yaochun Shen

Department of Electrical and Electronic Engineering, University of Liverpool, Liverpool L3 5TR, UK

Deadline for manuscript submissions:

closed (31 August 2022)

# **Message from the Guest Editors**

Infrared and terahertz (THz) systems hold tremendous potential for applications in robotics, medicine, non-destructive inspection, quality control, and homeland security, etc. These sensing systems often generate high-dimensional signals with large volume. The recent explosive growth of sparse signal processing and machine learning offer new opportunities and tools to design high performance sensing systems.

The goal of the Special Issue is to collect original and high-quality research articles as well as review papers focused on recent advances of structured sparse signal processing and deep learning for the infrared and terahertz system. It aims to highlight new research accomplishments and developments in system design, theory, algorithms, and applications. This Special Issue will include high-quality novel contributions in this emerging field, including, but not limited to:

- Infrared spectroscopy and imaging systems;
- Terahertz spectroscopy and imaging systems;
- Non-destructive testing;
- Sparse signal processing;
- Structured sparsity learning;
- Compressive sensing;
- Computational imaging;
- Terahertz and infrared spectroscopic imaging.



Specialsue







an Open Access Journal by MDPI

## **Editor-in-Chief**

# **Prof. Dr. Giulio Nicola Cerullo**Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy

# **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

### **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), Inspec, CAPlus / SciFinder, and other databases.

**Journal Rank:** JCR - Q1 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)

#### **Contact Us**