Compressed Sensing and MRI Reconstruction

Guest Editor:

Prof. Dr. Tie-Qiang Li
Department of Clinical Science, Intervention and Technology, Karolinska Institutet, Stockholm, Sweden

Deadline for manuscript submissions:
31 March 2025

Message from the Guest Editor

Compressed sensing (CS) is a promising approach that employs the sparsity property as a precondition for signal recovery. The sparsity as the main premise in designing CS algorithms for signal compression or reconstruction is characterized by a few nonzero coefficients in one of the transformation domains. CS-based techniques have been increasingly applied to improve the time efficiency of various biomedical imaging modalities, such as computer tomography (CT), positron emission tomography (PET), and magnetic resonance imaging (MRI). More recently, inspired by the success in the field of computer vision, deep-learning technique has emerged as one of the most prominent approaches for the reconstruction of CS-based MRI. In this special issue, the most up-to-date original research papers and reviews are invited in the areas of CS applications to biomedical signal recovery and image reconstruction, while a greater focus will be given to recent advances in deep-learning based CS-MRI reconstruction.

Special Issue

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