Special Issue

Machine Learning-Assisted Advanced Sensing Technologies for Modern Power Converters

Message from the Guest Editor

Power-converter design is moving toward a new era, utilizing advanced sensors, computing techniques, optimization approaches, and machine learning. Such techniques have led to modern power converters that are more compact, lighter, and more efficient than ever before. Furthermore, with the high proliferation of converters in modern applications, the improvement of reliability and health management among power electronics has come to the forefront in research focus in recent years. Machine learning techniques play a vital role in this aspect. This Special Issue aims to collect the latest technical advancements and knowledge in research areas related to the subject. We invite researchers to submit original research and survey articles related to power-converter design and health management assisted by modern sensors and machine learning techniques. This Special Issue also accepts related topics in power electronics, including, but not limited to, health analytics, reliability prediction, fault identification, prevention, and diagnosis, the Internet of Things (IoT), and energy harvesting.

Guest Editor

Dr. Harish S. Krishnamoorthy
ECE Department, University of Houston, Houston, TX 77204, USA

Deadline for manuscript submissions

closed (15 February 2025)

Sensors

an Open Access Journal by MDPI

Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed

mdpi.com/si/139276

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

mdpi.com/journal/sensors

Sensors

an Open Access Journal by MDPI

Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed

mdpi.com/journal/sensors

About the Journal

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.

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

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 (Instruments and Instrumentation) / CiteScore - Q1 (Instrumentation)