

Special Issue

Smart Measurement Architectures and Autonomous Sensors: Emerging Techniques, Nonlinear Features, Future Trends

Message from the Guest Editor

The purpose of this Special Issue is to publish high-quality research articles as well as reviews that address recent developments, progresses on theories, principles, methodologies of transduction/sensing, and techniques regarding smart measurement architectures and autonomous solutions, in addition to the relevant prospects, opportunities, and challenges in this field.

We welcome submissions on a wide range of topics that include, but are not limited to:

- Self-powered and autonomous or quasi-autonomous sensors;
- Smart solutions in measurements systems;
- Novel methodologies of measurement based on nonlinear behaviors;
- Wake-up solutions and “zero-current” stand-by methods;
- Smart energy harvesting;
- Smart techniques for non-destructive analyses and non-invasive measurements;
- Linear and nonlinear mechanisms and techniques;
- Emerging technologies and methods for energy harvesting;
- Low-power conditioning circuits for sensors;
- Nonlinear electro-mechanical transducers.

Guest Editor

Prof. Dr. Carlo Trigona

Dipartimento di Ingegneria Elettrica, Elettronica e Informatica,
University of Catania, Viale Andrea Doria 6, 95125 Catania, Italy

Deadline for manuscript submissions

closed (30 October 2020)



Instruments

an Open Access Journal
by MDPI

Impact Factor 1.4
CiteScore 2.8



mdpi.com/si/19688

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

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





Instruments

an Open Access Journal
by MDPI

Impact Factor 1.4
CiteScore 2.8



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



About the Journal

Message from the Editor-in-Chief

The realization of dedicated instrumentation has always been a collateral aspect of experimental research. In addition, many groups dedicate efforts and resources solely to the development of new devices, sensors, equipment and large infrastructure, theoretical and numerical studies, and novel experimental methodologies. With *Instruments* we wish to address both established and emerging communities, also to favor the creation of innovative trans-disciplinary approaches. We see *Instruments* as an exciting high-impact journal that will soon hold a leading position in disseminating cutting edge scientific and technological research.

Editor-in-Chief

Prof. Dr. Antonio Ereditato

Enrico Fermi Institute, The University of Chicago, Chicago, IL 60637,
USA

Author Benefits

High Visibility:

indexed within ESCI (Web of Science), Scopus, Inspec, CAPIus / SciFinder, INSPIRE, and other databases.

Journal Rank:

CiteScore - Q2 (Instrumentation)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 25.8 days after submission; acceptance to publication is undertaken in 3.8 days (median values for papers published in this journal in the first half of 2026).