



Microelectronics Design and Precision Instrumentation

Guest Editor:

Prof. Dr. David Gascon

1. Dept. Física Quàntica i
Astrofísica. Institut de Ciències
del Cosmos (ICCUB), Universitat
de Barcelona, 08028 Barcelona,
Spain
2. Institut d'Estudis Espacials de
Catalunya (IEEC), C/ Gran Capità,
2-4, 08034 Barcelona, Spain

Deadline for manuscript
submissions:

closed (31 May 2020)

Message from the Guest Editor

The application of microelectronics in scientific and industrial instrumentation is ubiquitous and continuously evolving. The aim of this Special Issue is to collect contributions to review the application of microelectronics in different domains of the instrumentation. Particularly, we focus on the application of microelectronics in precision instrumentation.

We invite the submission of contributions addressing, but not limited to, the following applications of microelectronics in instrumentation:

1. Scientific instrumentation
 - Particle and nuclear detectors (e.g., pixels, trackers, calorimeters, and others)
 - Astrophysics and astro-particle physics
 - Scientific imagers (e.g., CMOS, CCD)
 - Microwave and cryogenic detectors
 - Space instrumentation
2. Industrial applications
 - Molecular and medical imaging
 - Imaging in biology
 - Security and inspection
 - Transportation and autonomous driving
 - Others: mining, geology, agriculture, etc.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Antonio Ereditato

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

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.

Author Benefits

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

High Visibility: indexed within Scopus, Inspec, CAPlus / SciFinder, INSPIRE, and other databases.

Rapid Publication: manuscripts are peer-reviewed and a first decision is provided to authors approximately 24.9 days after submission; acceptance to publication is undertaken in 7.2 days (median values for papers published in this journal in the first half of 2024).

Contact Us

Instruments Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/instruments
instruments@mdpi.com
[X@instrumentsmdpi](https://x.com/instrumentsmdpi)