Special Issue

Status of The Eupraxia Design Study – Towards The Next Generation of Particle Accelerators

Message from the Guest Editors

The EuPRAXIA consortium is preparing a conceptual design report of a highly compact and cost-effective European facility with multi-GeV electron beams using plasma as the acceleration medium. The accelerator facility will be based on a laser and/or a beam driven plasma acceleration approach and will be used for photon science, high-energy physics detector tests, and other applications, such as compact X-ray sources. The aim of this Special Issue is to provide an overview of the current state of the design of the different elements of the EuPRAXIA facility, including simulations of different acceleration schemes, plasma structures, high-power lasers, and the development of possible applications like free-electron lasers and positron sources.

Guest Editors

Dr. Ralph Aßmann

Prof. Dr. Carsten P. Welsch

Dr. Ricardo Torres

Deadline for manuscript submissions

closed (31 March 2020)

Instruments

an Open Access Journal by MDPI

CiteScore 3.3
Tracked for Impact Factor

mdpi.com/si/18384

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

mdpi.com/journal/instruments

Instruments

an Open Access Journal by MDPI

CiteScore 3.3
Tracked for Impact Factor

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, CAPlus / SciFinder, INSPIRE, and other databases.

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 21.1 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 2025).

Recognition of Reviewers:

reviewers who provide timely, thorough peer-review reports receive vouchers entitling them to a discount on the APC of their next publication in any MDPI journal, in appreciation of the work done.

MDPI