Special Issue

New Trends in Laser Wake Field Acceleration and Related Secondary Particles Generation

Message from the Guest Editors

This Special Issue on “New Trends in Laser Wake Field Acceleration and Related Secondary Particles Generation” examines the current status of laser wake field acceleration, with a view on the landscape of multiple directions we are exploring so as to optimize the acceleration process aimed at generating either high-brightness or high-charge-density beams. Explorations of bridges with particle-driven wake field acceleration through the hybrid LWFA/PWFA scheme are also warmly welcome for this Special Issue. We are also looking at contributions covering progress in new particle injection mechanisms, with emphasis on schemes that are capable of generating ultra-low-emittance electron beams, attosecond beams or trains, or high-charge injection schemes for secondary sources generation. Review or research contributions on X/gamma photon generation through Thomson/Compton, Betatron or Bremsstrahlung mechanisms or positrons as well as neutron and muon generations are also of interest for this Special Issue.

Guest Editors

Dr. Paolo Tomassini

Dr. Vojtech Horny

Dr. Domenico Doria

Dr. Luca Labate

Deadline for manuscript submissions

closed (30 June 2024)

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/si/188513

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

mdpi.com/journal/applsci

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/journal/applsci

MDPI

About the Journal

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, 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), Ei Compendex, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)