Special Issue

Advances in Electroporation Systems and Applications

Message from the Guest Editor

Electroporation is a phenomenon of biological cell membrane permeabilization triggered by a pulsed electric field; it is accompanied by the electro-transfer of target molecules inside or outside the cell. It is widely used in biomedicine, food processing, biotechnology, and other applied sciences. Depending on the electric field parameters, a variety of electroporation-mediated biological effects can be triggered, which require state-of-the-art technological platforms for pulse generation, metrology, and application. As a result, the development of electroporation systems is ongoing, and the array of applications is systemically expanded. This Special Issue is dedicated to all aspects of applied electroporation research, as well as the development of pulsed power devices.

Guest Editor

Prof. Dr. Vitalij Novickij

1. Institute of High Magnetic Fields, Vilnius Gediminas Technical University, LT-10223 Vilnius, Lithuania
2. Department of Immunology, Centre for Innovative Medicine, LT-08406 Vilnius, Lithuania

Deadline for manuscript submissions

closed (20 June 2025)

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/si/185814

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)