Special Issue

Nanosecond Discharge Processes in Liquid Water

Message from the Guest Editors

This Special Issue on “Nanosecond Discharge Processes in Liquid Water” aims to highlight recent advances both in experiments and computational modeling addressing key issues of ultrafast plasma formation in polar liquids, namely in water. Topics include, but are not limited to:

- Signatures of ultrafast processes associated with plasma formation in liquid water;
- Novel diagnostic approaches performed at a (sub)ns resolution in time and sub(μm) resolution in space;
- Experimental fingerprints differentiating the direct breakdown in liquid from bubble-assisted breakdown (e.g., radiative and acoustic signatures, energy efficiency of discharge products);
- Dynamics of a dielectric liquid in pulsed electric fields;
- Nucleation theory and cavitation in pulsed electric fields;
- Sources of primary electrons and mechanisms of electron multiplication;
- Model weaving.

Guest Editors

Dr. Milan Simek

Department of Pulsed Plasma Systems, Institute of Plasma Physics, The Czech Academy of Sciences, 18200 Prague, Czech Republic

Dr. Zdenek Bonaventura

Department of Physical Electronics, Masaryk University, 61137 Brno, Czech Republic

Deadline for manuscript submissions

closed (31 August 2022)

Processes

an Open Access Journal by MDPI

Impact Factor 2.8
CiteScore 5.5

mdpi.com/si/70432

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

mdpi.com/journal/processes

Processes

an Open Access Journal by MDPI

Impact Factor 2.8
CiteScore 5.5

mdpi.com/journal/processes

About the Journal

Message from the Editor-in-Chief

You are invited to contribute either a research article or a comprehensive review for consideration and publication in *Processes* (ISSN 2227-9717). *Processes* is published in open access format – research articles, reviews, and other content are released on the internet immediately after acceptance. The scientific community and the general public have unlimited, free access to the content. As an open access journal, *Processes* is supported by the authors and their institutes through the payment of article processing charges (APCs) for accepted papers. We would be pleased to welcome you as one of our authors.

Editor-in-Chief

Prof. Dr. Giancarlo Cravotto
Department of Drug Science and Technology, University of Turin, Via P. Giuria 9, 10125 Turin, 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, AGRIS, and other databases.

Journal Rank:

CiteScore - Q2 (Chemical Engineering (miscellaneous))