



## Novel Plasma Science, Technology, and Medicine

Guest Editor:

### Dr. Yury Gorbanev

Research Group PLASMANT,  
Department of Chemistry,  
University of Antwerp,  
Universiteitsplein 1, 2610 Wilrijk,  
Belgium

Deadline for manuscript  
submissions:

**closed (30 June 2022)**

### Message from the Guest Editor

Dear Colleagues,

Plasma is an ionised gas, used in the production of microelectronics for decades. In the last decade or so, plasma has emerged as an appealing alternative to existing technologies, because of its potential in intermittent operation, decentralised deployment, and compatibility with renewable electricity. Recent developments demonstrate the tremendous advances in plasma applications for N<sub>2</sub> fixation, CO<sub>2</sub> and N<sub>2</sub>O conversion, dry reforming of CH<sub>4</sub>, etc. Besides, plasma is also an invaluable tool in medicine, actively researched as an anti-microbial, anti-cancer, wound healing and dental agent.

We welcome manuscripts on all aspects of plasma research: from developing plasma power supplies and reactors to process optimization, from optical analyses to medicinal plasma studies, with both applied and fundamental science discoveries

### Keywords

- atmospheric pressure plasma
- plasma medicine
- sustainability
- plasma nitrogen fixation
- plasma DRM
- plasma for microelectronics





an Open Access Journal by MDPI

## Editor-in-Chief

**Prof. Dr. Giulio Nicola Cerullo**  
Dipartimento di Fisica,  
Politecnico di Milano, Piazza L.  
da Vinci 32, 20133 Milano, Italy

## 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.

## 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), Inspec, CAPlus / SciFinder, and other databases.

**Journal Rank:** JCR - Q1 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)

## Contact Us

---

Applied Sciences Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/applsci](http://mdpi.com/journal/applsci)  
[applsci@mdpi.com](mailto:applsci@mdpi.com)  
[X@Applsci](#)