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Atmospheric Plasma Treatment or Assistance for Functional Coatings or Biomedical Applications

Guest Editor:

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Message from the Guest Editor

Dear Colleagues,

Plasma is an ionized form of gas composed of charged particles, electronically excited atoms and molecules, radicals, and UV photons. There are a lot of applications based on the variability of the excited species. Atmospheric plasma devices have been designed in various forms for varied applications such as surface cleaning, functional coatings, surface modification, and particle synthesis. On the other hand, a nonthermal atmospheric microplasma device has also been designed for low-temperature (<40 °C) applications such as the treatment of chronic wounds and pathogen-induced diseases on the skin, the suppression of cancer cells, and the influence of medically relevant cellular processes. This Special Issue aims to collect cutting-edge research on the applications of atmospheric plasma devices in functional coatings and biomedicine. Of particular interest are plasma devices that may be used in the non-invasive treatment of skin disease or as auxiliaries. for minimally invasive surgery.

Prof. Dr. Jiunn-Der Liao Guest Editor





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Message from the Editorial Board

Now more than ever, research is called for to produce technologies and improve knowledge to solve the major challenges faced by our society. The development of new materials and devices for (without the ambition to be exhaustive) energy, health and food technology, together with the need for establishing processes that reduce the impact on critical resources and the environment, is indeed at the center of most contemporary research. Surface science and engineering play a key role in this regard. Refining surfaces and their modifications provides new materials, architectures and processes with a huge potential to aid most societal challenges. Coatings is a well-established, peer-reviewed, online journal that focuses on the dissemination of publications in the field of surface science and engineering. Coatings publishes original research articles that report cutting-edge results and review papers on the hottest topics.

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