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Materials and Technological Solutions Preventing Biofilms and Antimicrobial Resistance

Guest Editors:

Message from the Guest Editors

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Deadline for manuscript submissions: closed (21 October 2022)

Dear Colleagues,

Biofilms and antimicrobial resistant microorganisms are the main source of infections in humans, and conventional disinfectants/antibiotics rarely succeed in destroying them. Materials science can offer non-conventional solutions, complementing the standard biomolecular and pharmaceutical approaches.

Hot topics to be covered by the symposium:

- Smart functional inorganic anti-biofilm nanomaterials and coatings of any composition
- Synergistic, hybrid and/or multifunctional materials fighting biofilms and antibiotic-resistant species
- Novel bioactive molecular/biogenic compounds (bacteriophages, endolysins, exopolysaccharide depolymerases, bacteriocins, etc) for biofilm inhibition and removal
- Materials science and characterization solutions for biofilm monitoring, including: sensors, electrochemical techniques, mass spectrometry, microscopy (electron, scanning probe, confocal, etc) and spectroscopy techniques of any kind









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Editor-in-Chief

Message from the Editor-in-Chief

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

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