Special Issue

New and Innovative Applications of Antimicrobial Photodynamic Therapy

Message from the Guest Editor

Antimicrobial photodynamic therapy (aPDT) is based on the light-induced and photosensitizer-mediated overproduction of reactive oxygen species to kill a wide spectrum of microorganisms irrespective of their resistance to conventional treatment. Motivated by the success of aPDT in human medicine, novel and very promising applications of this antimicrobial approach are constantly identified and discovered. Recent developments include photodynamic decontamination of food based on edible photosensitizers, photoactive and self-disinfecting materials and textiles, photo-insecticides, and application of aPDT in plant protection against pathogens. As microorganisms trouble humans in all habitats, nearly no limits are set to imagination in terms of further expanding the scope of applications. We invite investigators to contribute original research papers as well as review articles to this Special Issue that will stimulate the efforts to widen the application spectrum of the antimicrobial photodynamic approach.

Keywords: antimicrobial photodynamic therapy (aPDT); plant pathogens; food safety; photo-insecticides; aquacultures

Guest Editor

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Message from the Editor-in-Chief

There are very few fields that attract as much attention as scientific endeavor related to antibiotic discovery, use and preservation. The public, patients, scientists, clinicians, policy-makers, NGOs, governments, and supra-governmental organizations are all focusing intensively on it: all are concerned that we use our existing agents more effectively, and develop and evaluate new interventions in time to face emerging challenges for the benefit of present and future generations. We need every discipline to contribute and collaborate: molecular, microbiological, clinical, epidemiological, geographic, economic, social scientific and policy disciples are all key. *Antibiotics* is a nimble, inclusive and rigorous indexed journal as an enabling platform for all who can contribute to solving the greatest broad concerns of the modern world.

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