Special Issue

Novel Antimicrobial Agents: Design, Synthesis and Activity

Message from the Guest Editors

The discovery of antibiotics has improved human health significantly; however, the global increase of antibiotic resistance has compromised the usefulness of antibiotics recently. No new class of antibiotics for the treatment of Gram-negative bacteria has been approved in the last four decades. Hence, there is an urgent need for the development of new types of antibiotics against multidrug-resistant bacteria. The Special Issue "Novel Antimicrobial Agents: Design, Synthesis, and Activity" aims to present the recent achievements in the rational design and synthesis of new antimicrobial agents in terms of new chemical scaffolds, to expand the limited structural diversity. Typically, new cyclic lipopeptides, antimicrobial peptide mimics, and new class of small-molecules stand for the highest potential toolbox to reinvigorate the discovery of new antibiotics. In addition, the antimicrobial activities and resistance profiles of newly obtained compounds against both Gram-positive and Gram-negative bacterial pathogens will be covered concomitantly. Both research articles and review papers will be included in this particular topic.

Guest Editors

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Deadline for manuscript submissions

closed (30 June 2023)



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As the premier open access journal dedicated to molecular chemistry, now in its 29th year of publication, the papers published in *Molecules* span from classical synthetic methodology to natural product isolation and characterization, as well as physicochemical studies and the applications of these molecules as pharmaceuticals, catalysts, and novel materials. Pushing the boundaries of the discipline, we invite papers on all major fields of molecular chemistry and multidisciplinary topics bridging chemistry with biology, physics, and materials science, as well as timely reviews and topical issues on cutting-edge fields in all of these areas.

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