

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

Dr. Peng Teng

College of Pharmaceutical Sciences, Zhejiang University, Hangzhou 310058, China

Dr. Chao Lu

College of Pharmacy, Jinan University, Guangzhou, China

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Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
molecules@mdpi.com

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Message from the Editor-in-Chief

As the premier open access journal dedicated to experimental organic chemistry, and now in its 25th 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 multidisciplinary topics bridging biochemistry, biophysics and materials science, as well as timely reviews and topical issues on cutting edge fields in all these areas.

Editor-in-Chief

Prof. Dr. Thomas J. Schmidt

Institute of Pharmaceutical Biology and Phytochemistry, University of Münster, Corrensstrasse 48, D-48149 Münster, Germany

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