Special Issue

Analysis of Peptidomimetic Toxicity in *E. coli* Bacterial Cells —Studies on Selected Strains

Message from the Guest Editor

This Special Issue is looking for new compounds that could replace antibiotics in terms of their biofunctionality, structure, and toxicity to pathogenic bacterial strains that infect our body. For many years, lengthy and costly research has been carried out in the search for such substances. An alternative to such research are compounds that occur naturally and are called peptidomimetics, which are similar in structure to commonly used antibiotics, but different in the nature of their functioning, because they are more specific and toxic to bacterial cells, such as coumarins and their derivatives and \(\Bar{\Bar}\)-aminoamides. This Special Issue comprehensively discusses the latest achievements in the field of innovative methods of analyzing and assessing the toxicity of these compounds based on MIC and MBC tests and the use of the Fpg enzyme from the BER system, which is a repair glycosylase with two activities of glycosylase and AP-lyase.

Guest Editor

Prof. Dr. Paweł Kowalczyk

Department of Animal Nutrition, The Kielanowski Institute of Animal Physiology and Nutrition, Polish Academy of Sciences, 05-110 Jabłonna, Poland

Deadline for manuscript submissions

closed (31 January 2022)



an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



mdpi.com/si/66443

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

mdpi.com/journal/materials





an Open Access Journal by MDPI

Impact Factor 3.2 CiteScore 6.4 Indexed in PubMed





About the Journal

Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. Materials provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

Editor-in-Chief

Prof. Dr. Maryam Tabrizian

 Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
 Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Ei Compendex, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

Journal Rank:

JCR - Q2 (Metallurgy and Metallurgical Engineering) / CiteScore - Q1 (Condensed Matter Physics)