

Special Issue

The Advances in Antimicrobial Biomaterials

Message from the Guest Editors

Starting with penicillin, mankind has advanced medicine to the next level by pioneering the field of antibiotics. However, the overuse of antibiotics in recent decades has resulted in the emergence of drug-resistant microbial strains. It has become one of the most pressing public health problems in the world. It is necessary to develop biomaterials with antimicrobial properties to inhibit microbial growth without using antibiotics and to ensure product quality and safety. This Special Issue includes different aspects of synthesis, modification, and physicochemical characterization of antimicrobial agents for the fabrication of antimicrobial biomaterials. The potential topics include (but are not limited to) the following research areas:

- Natural-based biomaterials with antimicrobial properties.
- Organic or carbon nanoparticles with antimicrobial.
- Active biopolymer development and mass production process (statistical optimization).
- Antimicrobial films (bioelastomers) for food packaging applications.
- Screening technologies for antimicrobial candidates.
- Selective pathogen-sensing technology.

Guest Editors

Dr. Hah Young Yoo

Department of Biotechnology, Sangmyung University, Seoul 03016, Republic of Korea

Prof. Dr. Jin Cheol Yoo

Department of Pharmacy, College of Pharmacy, Chosun University, Gwangju 501-759, Republic of Korea

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4052 Basel, Switzerland
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Avda. Conocimiento s/n, 18100 Armilla, Granada, Spain

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