# **Special Issue**

## Bio-Inspired and Biomimetic Materials for Healthcare: From Nature to Clinics

## Message from the Guest Editors

The technological developments that have occurred in the last several decades have allowed a tremendous expansion of bio-inspired and biomimetic compounds and approaches for use in medicine, not only for skeletal repair but also in other domains such as medical devices for dermatology, oncology, hematology, medical imaging, gene transfection, etc. Additionally, the exploration of 2D features and 3D-architectured systems present in nature as in bone, nacre, etc. have inspired researchers in their quest for bioactive or tissue-mimicking surfaces and scaffolds, including via bio-printing, exploiting natural biological/biochemical pathways in response to implanted materials, etc. This Special Issue covers the whole spectrum of bio-inspired and biomimetic materials for use in the biomedical field. It envisions to gather, in a single open-access Special Issue, the state-of-the-art on Nature-inspired biomaterials and medical devices and related strategies for use in today's and tomorrow's medicine.

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## Deadline for manuscript submissions

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## 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

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