

Special Issue

Frontiers in Functional Materials for Bioelectronics and Biosensors

Message from the Guest Editors

In the past decade, the impact of functional materials on biomedical engineering has seen a dramatic increase. Attributed to the efforts of materials scientists, various promising materials and devices that possess unique biological properties and functions have been developed, such as piezoelectric materials, pyroelectric materials, triboelectric materials, bionic materials, self-healing materials, biodegradable materials, hydrogels, stretchable/flexible devices, and electronic skin. These functional materials have been widely studied and used in energy harvesting from organisms, pulse sensing, human motion detection, electroencephalogram monitoring, electrophysiological monitoring, wireless monitoring of vital signs, etc. The continuous development of functional materials enables scientists and technicians in biomedical engineering to yield more and more valuable achievements for human health and life sciences. Meanwhile, due to advances in nanotechnology and electrical science, wearable/implantable bioelectronics and biosensors have evolved to become miniaturized, multifunctional, soft, and smart, creating new demands for functional materials.

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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.

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