Special Issue

Advanced Functional Hybrid Materials for Novel Biomolecular Electronics

Message from the Guest Editor

Recent advances in bioelectronics open a new avenue in material sciences to translate highly-specific functions of biological systems into opto-electric signals. During the past several decades, the traditional approaches in biosensing have been replaced by the development of new materials, such as high electron mobility organic semiconductors, bio-inspired hybrid materials, low-dimensional semiconductors functionalized with proteins. The main focus of the forthcoming special issue is to present a comprehensive overview to our readers by assembling state-of-the -art research articles and reviews on advanced biomolecular electronics. This Special Issue welcomes contributions from versatile approaches, including synthesis of organic semiconductors that function in water, structure and dynamics of material/water interface, modulation of semiconductor band structures by bio-organic molecules, and realization of high throughput and/or parallel operation of biomolecular electronic devices. Thank you very much for your consideration.

Guest Editor

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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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