

Special Issue

Organic Bioelectronics: Design, Fabrication, Characterization, Modeling and Applications

Message from the Guest Editors

The recent developments in organic bioelectronics are facing new challenges, such as lack of adequate metrological tools for cellular and molecular measurements, the difficulty in creating better sensors and developing novel fabrication techniques, the limited bandwidth and lower detection precision in biosensors and actuators, and the necessity of verifying whether massive parallelization of biosensors can bring the same benefits as those in silicon integrated circuits in consideration of Moore's law. To address these challenges, this Special Issue invites high-quality submissions with significant scientific and technical contributions related to the key topics of organic bioelectronics as follows:

- Self-assembled electronic materials with long-term stability and biodegradability
- Massively parallel hardware architectures for high-performance computing
- Biotic interface between organic sensors and biological tissues
- Additive manufacturing for new information processing systems, sensors, actuators, and molecular fabrication down to the atomic level
- Multiphysics modeling of biocompatible and flexible bioelectronic devices.

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Editor-in-Chief

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