Special Issue

Advanced Microelectronic Systems for Diagnosis and Therapies

Message from the Guest Editor

Bio-integrated microelectronic systems that can serve as chronically stable, high-performance sensing and stimulation interfaces with the heart, brain, and other living systems (with cellular-level resolution across macroscopic areas) are of broad interest in the fields of cardiology, neuroscience, and biomedicine. Recently, advancements in materials design and integration have created new opportunities for the production of dynamic interfaces and communications with living cells and organoids. Such multi-modality communications between cells are essential in identifying and controlling the mechanism used by cells in coordinating across multi-scale systems to interpret and act upon key events in metabolism and disease pathology. This Special Issue aims to collect articles regarding recent advancements in microelectronic systems as diagnostic and therapeutic interfaces for advanced healthcare, ranging from medical robotics, implantable electronics, and skin-interfaced microelectronics to point-of-care devices and electronic neurotechnology.

- microelectronic
- diagnostic
- healthcare
- point-of-care devices

Guest Editor

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Message from the Editor-in-Chief

Micromachines (ISSN 2072-666X) is a forum for cutting-edge interdisciplinary research on micro and nanoscale science and technology. We emphasise the practical, real-world value of micro and nanotechnologies that will place *Micromachines* in a leading position among engineering and technology journals.

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