Special Issue

Soft Micromachines in Biomedicine

Message from the Guest Editor

In recent years, advances in new technology have resulted in the development of soft micromachines for healthcare applications, including wearables in medicine and minimally invasive surgical and diagnostic equipment. Soft micromachines are made of flexible materials which can act very similar to living organisms. Compared to rigid equipment, soft micromachines allow safe human interaction and are adaptable to wearables technologies. However, there are several challenges yet to be addressed, including methods of sensing and robust control, high mobility, and long endurance. In this Special Issue, we will focus on the importance and the challenges of soft micromachines in biomedicine that deserve more research to maximize their commercialization success. Topics of interest include but are not limited to experimental, theoretical, and modeling studies towards soft micromachines for biomedicine: advantages, limitations, and future trends of soft micromachines for biomedicine; fabrication of bioinspired soft robots; development of wearables in medicine; manufacture of advanced flexible biomaterials; and development of novel manufacturing approaches of soft robots.

Guest Editor

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