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Recent Advances in Implantable Neural Interfaces

Guest Editor:

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Deadline for manuscript submissions:
closed (20 March 2021)

Message from the Guest Editor

Dear Colleagues,

Implantable neural interfaces may be used for monitoring and/or modulating neurophysiological activity in the peripheral or central nervous systems. As such, this broad range of devices offers tremendous opportunities to modulate pathologies affected by the nervous system, such as mood disorders, urinary incontinence, and chronic pain. Despite substantial advances in fabrication and interfacing technologies over recent years, the field still faces challenges related to long-term biocompatibility as well as open questions regarding the theoretical/mechanistic underpinnings of the therapeutic action of these interfaces.

This Special Issue of *Micromachines* seeks to showcase research manuscripts and review articles that focus on novel technological, biological, and/or theoretical developments in implantable electrical or optical recording and stimulating neural interfaces. Specifically, the goal of this Special Issue will be to showcase research that addresses fundamental challenges facing the adoption of electrical and optical interfaces in either the peripheral or central nervous systems.

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Message from the Editor-in-Chief

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