

Special Issue

Smart Electrical Circuits and Systems for Neural Interface

Message from the Guest Editor

The nervous system is highly adaptive. If we can interface and communicate with the nervous system, we can guide neural adaptation in the proper direction for the desired human augmentation or rehabilitation. We can also guide neural adaptation in response to internal and environmental changes, because natural adaptation is often sub-optimal and results in undesirable secondary conditions. Electrical circuits and systems can favorably intervene in the operation of the nervous system, as the neural signal can be recorded and modulated electrically. The goal of favorable neural intervention can be achieved only when all components of the electrical neural interface work in harmony. The electrical neural interface can be composed of several electrical components, including but not limited to electrodes, neural amplifiers, filters, analog-to-digital converters, microprocessors, neural stimulators, power management, wireless power transfer, wireless transceivers, and antenna. In this Special Issue, we would like to provide researchers with an overview of the current trends in electrical circuits and systems for neural interfaces.

Guest Editor

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About the Journal

Message from the Editor-in-Chief

Electronics is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guest-edited by leading experts in selected topics of interest.

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