

Special Issue

Neuroprosthetics and Brain-Machine Interactions: Today and Tomorrow

Message from the Guest Editors

The brain, as the most important part of the central nervous system, has been the purpose of connecting many neuroprostheses for wide applications in the fields of treatment, rehabilitation, and diagnosis for users with neurological, motor, and cognitive diseases, or for enhancing capabilities for healthy users. Sensory prostheses such as cochlear implants, visual prostheses, or pain reduction prostheses open the way for information to enter and affect the nervous system by stimulating the neural circuits of the cortical and subcortical areas of the brain. The terms brain-machine interfaces or brain-computer interfaces are mainly used to describe technologies that read neural codes from the brain and decode and translate them into outputs to control or communicate for patients with neurological, motor, or cognitive disabilities. The purpose of this Special Issue is to present a collection of studies detailing the latest advances in the development of neural prostheses for these challenges. Authors are invited to present cutting-edge research that addresses a wide range of topics related to brain-machine interactions.

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You are invited to contribute a research article or a comprehensive review for consideration and publication in *Brain Sciences* (ISSN 2076-3425). *Brain Sciences* is an open access, peer-reviewed scientific journal that publishes original articles, critical reviews, research notes, and short communications on neuroscience. The scientific community and the general public can access the content free of charge as soon as it is published.

Editor-in-Chief

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