# Special Issue

# Innovations in Neurochemical and Electrophysiological Sensing: Materials, Devices, and Techniques

## Message from the Guest Editors

Understanding brain function requires advanced neural probes capable of monitoring both electrical and chemical signaling across multiple timescales and brain regions. The integration of electrochemical neurotransmitter detection with traditional electrical recording in implantable multielectrode probes has opened new frontiers in neuroscience research. These advancements offer deeper insights into the complex dynamics of neurochemical and electrophysiological processes. This Special Issue aims to spotlight recent developments in materials, devices, and techniques that have enabled or have the potential to advance dualmode recordings. The focus is on innovations that not only enhance the functionality of neural probes but also address critical challenges such as sensor fouling and long-term biocompatibility, thereby minimizing brain damage from chronic implantation. We welcome original research articles, reviews, and mini-reviews that cover a range of topics.

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### Deadline for manuscript submissions

31 October 2025



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Impact Factor 5.6 CiteScore 9.8 Indexed in PubMed



mdpi.com/si/229062

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#### Editor-in-Chief

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