

## Special Issue

# Targeting Epilepsy: Molecular Mechanisms, Neuroinflammation and Emerging Therapies

### Message from the Guest Editor

This Special Issue presents cutting-edge advancements in the understanding and treatment of epilepsy, a complex neurological disorder characterized by recurrent, unprovoked seizures. Emphasis is placed on the identification and characterization of novel molecular targets involved in epileptogenesis, including ion channels, neurotransmitter systems, and intracellular signaling pathways. The role of neuroinflammation and immune-mediated mechanisms in seizure initiation and progression is critically examined, highlighting emerging opportunities for targeted intervention. Contributions also address advances in rational drug design, high-throughput screening, and translational models that bridge preclinical models and clinical applications and accelerate antiseizure medication discovery. By integrating insights from molecular neuroscience, pharmacology, and systems biology, this collection aims to foster interdisciplinary dialog and inform future directions in epilepsy research and therapeutic innovation.

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### Guest Editor

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## International Journal of Molecular Sciences

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### Message from the Editor-in-Chief

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