

Special Issue

Epilepsy Research and Antiepileptic Drugs

Message from the Guest Editor

Epilepsy is a group of non-communicable neurological disorders characterized by recurrent epileptic seizures. Animal models are mainly used to study the mechanisms of epilepsy, brain electrophysiology, and behavioral changes and to screen new antiepileptic drugs. Epilepsy is accompanied by active free radical reactions, so scavenging free radicals and blocking free radical reactions open up a new way for the treatment of epilepsy. Recent antioxidant agents are studied to develop new types of antiepileptic drugs that protect against neuronal damage originating from seizure onset. In addition, α -amino-3-hydroxy-5-methyl-4-isoxazole-propionic acid (AMPA) receptors mediate fast excitatory synaptic transmission in epilepsy-related brain regions and play a role in the occurrence of epilepsy and epilepsy-induced brain damage. This Special Issue, titled "Epilepsy Research and Antiepileptic Drug Development", will focus on fundamental research of epilepsy animal models and antiepileptic drug development research. Experimental papers sharing new data and up-to-date review articles are welcome.

Guest Editor

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Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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