

Special Issue

Extracellular Vesicles: Advances in Multi-Omics

Message from the Guest Editor

Extracellular vesicles (EVs) play a pivotal role in intercellular communication, determining physiological and pathological processes in diseases such as cancer, neurodegeneration, and cardiovascular disorders. Recent advances in multi-omics (proteomics, genomics, lipidomics, and metabolomics) have enhanced our understanding of EV biogenesis, cargo trafficking, and functional impact. Alongside these developments, cutting-edge isolation and characterization techniques, including high-resolution characterization by mass spectrometry, imaging, microfluidics, and AI-driven analytics, are accelerating EV research. This Special Issue of the *International Journal of Molecular Sciences* highlights the integration of multi-omic approaches with innovative methodologies to analyze EV-mediated signaling networks. Furthermore, we also emphasize translational potential, showcasing how EVs serve as biomarkers, therapeutic carriers, and regenerative therapy tools in clinical settings. We invite original research studies, reviews, and perspectives that connect basic science with clinical innovation, encouraging interdisciplinary collaboration.

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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