

Special Issue

Intracellular Organellar Ion Channels and Molecular Physiology

Message from the Guest Editors

Intracellular membranes have ion gradients across them. It is expected that ion channels and transporters play important roles in generating and/or maintaining these gradients and in using the electrochemical gradients to drive movement of signals and materials across membranes. In this Special Issue, experts will provide a detailed introduction to the ion channels of interest in each organelle and will discuss their physiological or pathophysiological functions. The intracellular membrane-enclosed organelles generally include ER, Golgi apparatus, mitochondria, lysosomes, chloroplasts, endosomes, peroxisomes, lysosome-related organelles, trafficking vesicles, secretory granules, synaptic vesicles, phagosomes, autophagosomes, vacuoles, etc. Exosomes are also considered because of their intracellular origin. The general theme is to discuss cation or anion channels discovered with relatively high certainty and crystallize the current understandings into a mechanistic basis for physiology and pathophysiology.

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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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