Special Issue

Lysosomal Ion Channels in Cell Physiology and Human Diseases

Message from the Guest Editor

The physiology and functions of ion channels in the plasma membrane have been extensively studied. Due to the inaccessibility of intracellular membranes, our understanding of organellular ion channels is largely hampered. Recent developments in biomedical methodology have led to the identification of a plethora of ion channels in the membrane of lysosome. By regulating ion flux across lysosomal membrane, lysosomal ion channels are implicated in cell signaling, nutrient sensing, membrane trafficking, autophagy, gene expression, and organellar communication. Dysfunction of lysosomal ion channels has been associated with numerous human diseases, including lysosomal storage diseases, neurodegenerative diseases, infectious diseases, and cancer. This Special Issue is devoted to publishing original research articles and review papers focusing on the role of lysosomal ion channels in cell physiology and human diseases. We cordially invite you to contribute an article on any aspects related to the theme of this Special Issue. For further information, please visit the Special Issue website.

Guest Editor

Dr. Xianping Dong
Department of Physiology and Biophysics, Dalhousie University, Halifax, NS, Canada

Deadline for manuscript submissions

closed (1 January 2022)

Cells

an Open Access Journal by MDPI

Impact Factor 5.2
CiteScore 10.5
Indexed in PubMed

mdpi.com/si/82382

Cells
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
cells@mdpi.com

mdpi.com/journal/cells

Cells

an Open Access Journal by MDPI

Impact Factor 5.2
CiteScore 10.5
Indexed in PubMed

mdpi.com/journal/cells

MDPI

About the Journal

Message from the Editorial Board

Cells has become a solid international scientific journal that is now indexed on SCIE and in other databases. We have successfully introduced a special issues format so that these issues serve as mini-forums in specific areas of cell science. *Cells* encourages researchers to suggest new special issues, serve as special issues editors, and volunteer to be reviewers. Our main focus will remain on cell anatomy and physiology, the structure and function of organelles, cell adhesion and motility, and the regulation of intracellular signaling, growth, differentiation, and aging. We are open to both original research papers and reviews.

Editors-in-Chief

Dr. Alexander E. Kalyuzhny
Dental Basic Sciences, University of Minnesota, 308 Harvard St. SE, Minneapolis, MN 55455, USA

Prof. Dr. Cord Brakebusch
Biotech Research & Innovation Centre, The University of Copenhagen, Copenhagen, Denmark

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Cell Biology) / CiteScore - Q1 (General Biochemistry, Genetics and Molecular Biology)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 15.5 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the second half of 2025).