Topical Collection

Membrane Damage and Repair in Organelles

Message from the Collection Editor

Organelle membranes play critical roles to compartmentalize organelle contents from cytosol and to maintain organelle functions in cells. Organelle membranes can be damaged by bacterial escape during infection, inorganic materials internalized from outside, and environmental change (such as osmolarity change). When organelle membranes are damaged, many molecular events are expected to occur. The process of membrane damage and repair has initially been studied in the plasma membrane; however, recent studies have started to reveal the molecular events for organelles. This Topical Collection focuses on membrane damage and repair in organelles and provides an overview of membrane damage caused by pathogen escape, inorganic materials, other methods used to damage organelles, the physical properties of organelle membranes, lipid characteristics, signaling after membrane damage, membrane repair, and the degradation of damaged organelles. This Topical Collection highlights the recent advances and future research directions that are necessary to understand the membrane damage and repair in organelles.

Collection Editor

Dr. Yoko Shiba

Faculty of Science and Engineering, Iwate University, Morioka 020-8551, Japan

Cells

an Open Access Journal by MDPI

Impact Factor 5.2
CiteScore 10.5
Indexed in PubMed

mdpi.com/si/187424

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

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).