Special Issue

Gene Editing Using Synthetic Nucleic Acids

Message from the Guest Editor

Recently, gene editing using synthetic nucleic acids has emerged as a powerful approach to precisely modifying DNA. Synthetic nucleic acids, such as peptide nucleic acids (PNAs), morpholinos, Phosphorothioate Oligonucleotides, Xeno Nucleic Acids (XNAs), and locked nucleic acids (LNAs), are artificial molecules designed to mimic or bind to DNA/RNA with high specificity and stability. These synthetic nucleic acids offer advantages over traditional methods, including the ability to target specific genes without relying on nucleases, enabling applications such as the correction of genetic mutations or the silencing of harmful genes. Their resistance to enzymatic degradation enhances their potential in therapeutics, such as treating genetic disorders and cancers. This technology is continually evolving, promising safer, more effective tools for precise genome editing in medicine and research.

Guest Editor

Dr. Debmalya Bhunia
Cold Spring Harbor Laboratory, 1 Bungtown Rd., Cold Spring Harbor, NY 11724, USA

Deadline for manuscript submissions

closed (25 April 2026)

Cells

an Open Access Journal by MDPI

Impact Factor 5.2
CiteScore 11.4
Indexed in PubMed

mdpi.com/si/253476

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 11.4
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
Neuroscience, UMN Twin Cities, 6-145 Jackson Hall, 321 Church 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).