JOURNAL OF MOLECULAR BIOLOGY

AUTHOR INFORMATION PACK

TABLE OF CONTENTS

- Description: p.1
- Audience: p.1
- Impact Factor: p.1
- Abstracting and Indexing: p.2
- Editorial Board: p.2
- Guide for Authors: p.7

DESCRIPTION

The Journal of Molecular Biology provides high quality, comprehensive and broad coverage in all areas of molecular biology. The journal publishes original scientific research papers that provide mechanistic and functional insights and report a significant advance to the field. The journal encourages the submission of multidisciplinary studies that use complementary experimental and computational approaches to address challenging biological questions.

Research areas include but are not limited to: Biomolecular interactions, signaling networks, systems biology Cell cycle, cell growth, cell differentiation Cell death, autophagy Cell signaling and regulation Chemical biology Computational biology, in combination with experimental studies DNA replication, repair, and recombination Development, regenerative biology, mechanistic and functional studies of stem cells Epigenetics, chromatin structure and function Gene expression Membrane processes, cell surface proteins and cell-cell interactions Methodological advances, both experimental and theoretical, including databases Microbiology, virology, and interactions with the host or environment Microbiota mechanistic and functional studies Nuclear organization Post-translational modifications, proteomics Processing and function of biologically important macromolecules and complexes Molecular basis of disease RNA processing, structure and functions of non-coding RNAs, transcription Sorting, spatiotemporal organization, trafficking Structural biology Synthetic biology Translation, protein folding, chaperones, protein degradation and quality control !!! Important information for NIH authors !!!

AUDIENCE

Molecular biologists, biochemists, structural biochemists, geneticists, virologists and cell biologists.

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GUIDE FOR AUTHORS

INTRODUCTION
The Journal of Molecular Biology provides high quality, comprehensive and broad coverage in all areas of molecular biology. The journal publishes original scientific research papers that provide functional and mechanistic insights and report a significant advance to the field. The journal encourages the submission of multidisciplinary studies that use complementary experimental and computational approaches to address challenging biological questions.

In addition to research Communications and Articles, the journal welcomes submission of Methods Notes Databases/ Web Servers, Brevia, Perspectives and Reviews

Research areas include but are not limited to: DNA replication, repair and recombination, gene expression, epigenetics and chromatin structure and function, RNA processing, functions of non-coding RNAs, transcription Structure, chemistry, processing and function of biologically important macromolecules and complexes Biomolecular interactions, systems biology Computational biology Translation, protein folding, processing and degradation Sorting, spatiotemporal organization, trafficking, signal transduction and intracellular signaling Membrane processes, cell surface proteins and cell-cell interactions Molecular basis of disease Methodological advances, both experimental and theoretical, including databases

The Journal will not, as a rule, publish papers which fall outside the areas defined above.

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The Journal aims to publish novel and significant research in the general areas of molecular genetics and structural biology. Acceptance of papers for publication in the Journal is at the discretion of the Editors. All manuscripts are reviewed initially by the Editorial Board and only those papers that meet the scientific and editorial standards of the Journal will be sent for outside review. Authors should indicate a suitable Editor to whom the paper could be allocated. However, the Journal reserves the right to reallocate manuscripts to the most appropriate Editor.

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The Board will editorially reject papers, without outside review, if in their opinion the paper falls outside the scope of papers normally published by JMB, if the paper lacks originality, or if the paper fails to meet expected technical standards. The following specific points are brought to the attention of authors:
(a) **Originality.** The Board will reject those papers that it considers to provide only slight or incremental advances over previously published material.

(b) **Methodology papers.** Papers that deal only with new methods and do not contain important new results discovered by means of these methods will be accepted only when the general applicability and interest of the method are immediately obvious and clearly documented in the manuscript. Improvements on existing methods will in general be viewed as appropriate to more specialized journals unless it can be shown that they lead to important new insights that were not accessible with current technologies.

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Papers dealing with amino acid sequences of proteins or with nucleotide sequences must carry a statement that the data have been deposited with an appropriate data bank, e.g., the European Molecular Biology Laboratory (EMBL) or GenBank Data Libraries. The data base accession number must be given at the end of the Materials and Methods section of the manuscript under the separate heading 'Accession numbers'. For example: Coordinates and structure factors have been deposited in the Protein Data Bank with accession number 2XYZ. Lengthy nucleotide sequences will be published only if, in the judgement of the Editorial Board, these results are of general interest and importance.

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For papers describing structures of biological macromolecules, the atomic coordinates and the related experimental data (structure factor amplitudes/intensities and/or NMR restraints) must be deposited at a member site of the Worldwide Protein Data Bank (http://www.wwpdb.org): RCSB PDB (http://www.pdb.org), MSD-EBI (http://www.ebi.ac.uk/pdbe/), PDBj (http://www.pdbj.org), or BMRB (http://www.bmrb.wisc.edu). Manuscripts must carry a statement that coordinates and structure factors (or NMR restraints) have been deposited in the Protein Data Bank. The accession number(s) must be cited in the manuscript at the end of the Materials and Methods section. Authors must agree to release the atomic coordinates and experimental data immediately upon publication. Small angle scattering (Small angle X-ray and neutron scattering (SAXS and SANS)) data and structural models must be deposited at SASBDB (https://www.sasbdb.org/) prior to submission. The database accession numbers must be cited in the manuscript and authors must agree to release the experimental data and structural models immediately upon publication.

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In keeping with NIH guidelines, the Journal considers it to be good practice for cultured cell lines to be authenticated. A description of the methods used to authenticate cells should be included in the Materials and Methods section. Authors are expected to check that cell lines used in their experiments are free from mycoplasma infections.

**Types of paper**
The *Journal of Molecular Biology* will publish full Articles, Communications, Reviews, Perspectives, Brevia, Methods Notes, Databases/ Web Servers.
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Methods Notes report novel methods of immediate and general interest and applicability. Methods Notes are limited to 5 pages, including references and captions, with a maximum of 3 displayed items (figures or tables). Additional details required to implement the new method must be provided as Supplemental Material. Preliminary enquiries about the suitability of a submission to this section are encouraged.

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