JOURNAL OF MOLECULAR BIOLOGY

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

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Structure and function of amyloidogenic proteins; neurodegenerative diseases

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Transcription initiation and regulation in bacteria, RNA polymerases, bacteriophage development, temporal regulation of gene expression

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Inflammasome, innate immunity and cell death

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apoptosis structural biology. Structural mechanisms of macromolecular machineries, apoptotic pathways, proteasome

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Structure and mechanisms of eukaryotic transcription machinery

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Structure, mechanism and evolution of enzymes

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Transcriptional regulatory networks, gene expression regulation and protein complex assembly

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Amyloids, protein aggregation, neurodegenerative diseases

**Sarah A. Woodson**, Johns Hopkins University, Baltimore, Maryland, USA

RNA folding, ribosome assembly, RNA-chaperone interactions

**Nieng Yan**, Princeton University, Princeton, New Jersey, USA

Membrane transporters, mechanisms of substrate recognition and transport

**Mingjie Zhang**, Hong Kong University of Science and Technology, Kowloon, Hong Kong

Structural biology of neuronal signaling complex organization and regulation; protein complexes governing cell polarity; screening and development of small molecules with therapeutic potentials

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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

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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:
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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.

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