DESCRIPTION

The Journal of Structural Biology publishes papers dealing with the structural analysis of living material at every level of organization by all methods that lead to an understanding of biological function in terms of molecular and supermolecular structure.

Techniques covered include:

- Light microscopy including confocal microscopy
- All types of electron microscopy
- X-ray diffraction
- Nuclear magnetic resonance
- Scanning force microscopy, scanning probe microscopy, and tunneling microscopy
- Digital image processing
- Computational insights into structure

The field covered by the journal extends from the structural organization of cells and tissues, their membranes, compartments, organelles and supramolecular assemblies, to the structure and conformation of proteins and nucleic acids from the molecular to the atomic level. !!! Important information for NIH authors !!!

AUDIENCE

Biochemists, crystallographers, cell biologists, structural biologists

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**INTRODUCTION**

The *Journal of Structural Biology* (J. Struct. Biol., JSB) publishes papers dealing with the structural analysis of biological matter at all levels of organization and the functional connotations of such observations. The field covered by the journal extends from individual macromolecules to cells and tissues with emphasis on the supramolecular (e.g. complexes and machines) and subcellular (e.g., membranes, compartments, cytoskeleton) levels of the structural hierarchy.

Novel applications of and methodological innovations in electron microscopy, X-ray diffraction, probe microscopy, and light microscopy as well as aspects of computational biology image processing, bioinformatics and structural prediction, and other biophysical techniques yielding structural information are of interest to the journal. In the context of structural cell biology, papers dealing with cellular architecture and dynamics are particularly welcomed. We see biomineralization as an important emerging area.

Preference will be given to research that correlates structural results with functional, biochemical, biophysical, immunological, or genetic data on the system under study. Purely descriptive contributions should deal with the discovery of novel structural entities of biological significance or novel insights from innovative imaging modalities. A limited number of reviews (usually invited) will be published to keep the reader abreast of recent progress in the various fields of structural biology and advances in methodology.

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ii. crystals of a membrane protein or large macromolecular complex;
iii. 2D crystals (planar or helical/tubular) for EM analysis;
iv. other significant novelty.
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