

Journal of Advanced Microscopy Research

Special Issue on

“AFM in biology and medicine”

CALL FOR PAPERS

Since its invention in 1986, atomic force microscopy (AFM) has evolved from an imaging technique into a multi-functional toolbox that has made it possible to unravel biochemical, chemical and physical properties of biomacromolecules, cells, and natural and synthetic tissues. For instance, AFM has been used to extract information about the folding/unfolding mechanisms of proteins that carry out biological functions under mechanical stress (*i.e.* titin) and made it possible to detect early morphological and biomechanical changes in the cartilage of osteoarthritic patients. AFM is clearly emerging as a powerful tool that will open up exciting new avenues in biology and medicine.

This special issue of the *Journal of Advanced Microscopy Research* is aimed at addressing the applications of AFM in biology and medicine including, but not limited to:

- high resolution, time-lapse and multimodal imaging
- functional imaging (*i.e.* mapping of cellular elasticity, cell surface receptor and/or functional group distribution)
- single-molecule and single-cell force spectroscopy
- dip-pen nanolithography
- cantilever arrays

We invite submission of both original research articles and review chapters.

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MANUSCRIPT SUBMISSION

Manuscripts must be prepared according to the journal's guidelines available at <http://www.aspbs.com/jamr>. It is highly recommended to submit a letter of intent (LOI) directly to the guest editor, Massimo Bottini, at mbottini@sbpdiscovery.org. Upon acceptance of the LOI, the cover letter and manuscript should be submitted in MS word or PDF format to the guest editor *via* email. All papers submitted to this issue will be subjected to a strict peer review process to ensure high quality articles. Please mention in the cover letter that the submitted papers have not been published previously and are not currently submitted for review to any other journal and will not be submitted elsewhere before a decision is made by this journal.

IMPORTANT DATES

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