

Mini Symposium MS2

Tissue, cellular and molecular biomechanics

Chair: P. Janmey (USA)

Co-Chair(s): D. Barthes-Biesel (France), A. Hoger (USA)

Introductory Lectures

Paper ID	Title	Authors
MS2I_10709	Molecular Mechanics of Cytoskeletal Components	Christoph F. Schmidt, M. Atakhorrami, K. Addas, G.H. Koenderinck, F. C. MacKintosh, J. X. Tang
MS2I_10933	Tissue Mechanics	Susan S. Margulies
MS2I_12811	Elastic Interactions of Biological Cells	Samuel Safran, Alice Nicolas, Ulrich Schwarz

Contributed Papers

Paper ID	Title	Authors
MS2L_10627	Micromechanics of Cytoskeletal Actin Networks	Erik Van der Giessen, Patrick Onck
MS2L_10670	Residual Stress Fields in Soft Tissues	Anders Klarbring, Tobias Olsson, Jonas Staalhand
MS2L_10689	From Individual Cells To Complex Tissues - an Immersed Boundary Approach	Katarzyna A. Rejniak
MS2S_10838	Travelling Waves in a Model of Skin Pattern Formation	Kazimierz Piechor, Bogdan Kazmierczak
MS2L_10988	Mechanics of Deep Penetration of Soft Solids	Norman Fleck, Oliver Shergold
MS2S_11102	Mechanics of Elastic and Viscous Magnetic Filaments	Andrejs Cebers, I. Javaitis
MS2S_11148	Intracellular Control Mechanisms of Cardiac Contraction & Energetics	Samuel Sideman
MS2L_11581	Mechanics of Venus' flytrap Closure	Yoel Forterre, Jan Skotheim, Jacques Dumais, L. Mahadevan
MS2L_11808	Approximations of Stiffness Tensor of Bone - Determining and Accuracy	Jaroslav Piekarski, K. Kowalczyk-Gajewska, J.H. Waarsing, M. Mazdziarz

MS2L_11866	Theory of Polymorphism in Bacterial Flagella	Srikanth V. Srigiriraju, Thomas R. Powers
MS2L_11961	Hydrodynamic Interaction Between Two Bioartificial Capsules in Shear Flow	Arnaud Morel, Etienne Lac, Dominique Barthes-Biesel
MS2L_12031	Stress and Strain in a Yeast Cell under High Hydrostatic Pressure	Christoph Hartmann, Antonio Delgado
MS2S_12059	Models of Hair Cell Bundle Functioning	Alexander V. Kondrachuk, Vasyl P. Lukomsky, Ivan S. Gandzha
MS2L_12064	Measuring the Mechanical Properties of Soft Biological Tissues	Edoardo Mazza, Alessandro Nava, Davide Valtorta
MS2S_12100	Anisotropic Hyperelastic and Pseudo-hyperelastic Materials and Applications to Soft Tissue Modelling	Stanislaw Jemioło, Jozef Joachim Telega
MS2S_12192	Molecular Dynamics Study of Permeation Process of Small Molecules Through A Lipid Bilayer	Taisuke Sugii, Shu Takagi, Yoichiro Matsumoto
MS2L_12315	Modeling of Periodic Load Effects in Bone Tissue Adaptation	Tomasz Lekszycki
MS2S_12453	A Particle Method Computer Simulation of Blood Flow	Ken-ichi Tsubota, Shigeo Wada, Takami Yamaguchi
MS2L_13049	Wrinkling and Buckling of Isotropic Biological Tissues	Luigi Gambarotta, Roberta Massabo, Vittoria Villa