Dimitrije StamenoviÄ

List of Publications by Year
in descending order

66 papers	4,043 citations	172457 29 h-index	138484 58 g-index
68 all docs	68 docs citations	68 times ranked	3925 citing authors

#	Article	IF	Citations
1	Integrin Î²1 orchestrates the abnormal cell-matrix attachment and invasive behaviour of E-cadherin dysfunctional cells. Gastric Cancer, 2022, 25, 124-137.	5.3	13
2	Reply to the â€˜Comment on â€œTensional homeostasis at different length scalesâ€•by J. Humphrey and C. Cyron, Soft Matter, 2022, 18, DOI: 10.1039/D1SM01151Kâ€™. Soft Matter, 2022, 18, 680-682.	2.7	0
3	Pattern Generation for Micropattern Traction Microscopy. Journal of Visualized Experiments, 2022, , .	0.3	0
4	Differential Impacts on Tensional Homeostasis of Gastric Cancer Cells Due to Distinct Domain Variants of E-Cadherin. Cancers, 2022, 14, 2690.	3.7	2
5	Inflation instability in the lung: an analytical model of a thick-walled alveolus with wavy fibres under large deformations. Journal of the Royal Society Interface, 2021, 18, 20210594.	3.4	9
6	Effect of correlation between traction forces on tensional homeostasis in clusters of endothelial cells and fibroblasts. Journal of Biomechanics, 2020, 100, 109588.	2.1	5
7	Tensional homeostasis at different length scales. Soft Matter, 2020, 16, 6946-6963.	2.7	21
8	Focal adhesion displacement magnitude is a unifying feature of tensional homeostasis. Acta Biomaterialia, 2020, 113, 372-379.	8.3	7
9	As the endothelial cell reorients, its tensile forces stabilize. Journal of Biomechanics, 2020, 105, 109770.	2.1	7
10	Dependence of Tensional Homeostasis on Cell Type and on Cellâ€“Cell Interactions. Cellular and Molecular Bioengineering, 2018, 11, 175-184.	2.1	16
11	Modeling tensional homeostasis in multicellular clusters. International Journal for Numerical Methods in Biomedical Engineering, 2017, 33, e02801.	2.1	5
12	Tensional homeostasis in endothelial cells is a multicellular phenomenon. American Journal of Physiology - Cell Physiology, 2016, 311, C528-C535.	4.6	21
13	Multicellular Regulation of Tensional Homeostasis. Biophysical Journal, 2015, 108, 307a.	0.5	0
14	Biomechanical imaging of cell stiffness and prestress with subcellular resolution. Biomechanics and Modeling in Mechanobiology, 2014, 13, 665-678.	2.8	33
15	Topographical control of multiple cell adhesion molecules for traction force microscopy. Integrative Biology (United Kingdom), 2014, 6, 357-365.	1.3	24
16	Tensegrity, cellular biophysics, and the mechanics of living systems. Reports on Progress in Physics, 2014, 77, 046603.	20.1	339
17	Stiffness versus prestress relationship at subcellular length scale. Journal of Biomechanics, 2014, 47, 3222-3225.	2.1	4
18	A Preliminary Assessment of a Novel Pneumatic Unloading Knee Brace on the Gait Mechanics of Patients With Knee Osteoarthritis. PM and R, 2013, 5, 816-824.	1.6	24

#	ARTICLE	IF	CITATIONS
19	Cytoskeletal Prestress as a Determinant of Deformability and Rheology of Adherent Cells. , 2012, , 92-118.		4
20	Fluidization, resolidification, and reorientation of the endothelial cell in response to slow tidal stretches. American Journal of Physiology - Cell Physiology, 2012, 303, C368-C375.	4.6	54
21	A micropatterning and image processing approach to simplify measurement of cellular traction forces. Acta Biomaterialia, 2012, 8, 82-88.	8.3	79
22	Lung Parenchymal Mechanics. , 2011, 1, 1317-1351.		139
23	A Model for Stress Fiber Realignment Caused by Cytoskeletal Fluidization During Cyclic Stretching. Cellular and Molecular Bioengineering, 2011, 4, 67-80.	2.1	17
24	Stress Transmission within the Cell. , 2011, 1, 499-524.		21
25	Pneumatic Osteoarthritis Knee Brace. Journal of Biomechanical Engineering, 2009, 131, 045001.	1.3	18
26	A zipper network model of the failure mechanics of extracellular matrices. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 1081-1086.	7.1	33
27	Mechanical Stability Determines Stress Fiber and Focal Adhesion Orientation. Cellular and Molecular Bioengineering, 2009, 2, 475-485.	2.1	31
28	Tensegrity-guided self assembly: from molecules to living cells. Soft Matter, 2009, 5, 1137-1145.	2.7	62
29	Rheological behavior of mammalian cells. Cellular and Molecular Life Sciences, 2008, 65, 3592-3605.	5.4	38
30	Durotaxis as an elastic stability phenomenon. Journal of Biomechanics, 2008, 41, 1289-1294.	2.1	48
31	Cytoskeletal mechanics in airway smooth muscle cells. Respiratory Physiology and Neurobiology, 2008, 163, 25-32.	1.6	16
32	Power-law creep behavior of a semiflexible chain. Physical Review E, 2008, 78, 041922.	2.1	12
33	Rheological Behavior of Living Cells Is Timescale-Dependent. Biophysical Journal, 2007, 93, L39-L41.	0.5	100
34	Contributions of the Active and Passive Components of the Cytoskeletal Prestress to Stiffening of Airway Smooth Muscle Cells. Annals of Biomedical Engineering, 2007, 35, 224-234.	2.5	15
35	Two regimes, maybe three?. Nature Materials, 2006, 5, 597-598.	27.5	20
36	On Extended Polar Decomposition. Journal of Elasticity, 2006, 83, 277-289.	1.9	5

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37	Viscoelastic and dynamic nonlinear properties of airway smooth muscle tissue: roles of mechanical force and the cytoskeleton. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2006, 290, L1227-L1237.	2.9	42
38	Dynamics of Prestressed Semiflexible Polymer Chains as a Model of Cell Rheology. Physical Review Letters, 2006, 97, 168101.	7.8	33
39	A mathematical model of cell reorientation in response to substrate stretching. MCB Molecular and Cellular Biomechanics, 2006, 3, 43-8.	0.7	7
40	Microtubules may harden or soften cells, depending of the extent of cell distension. Journal of Biomechanics, 2005, 38, 1728-1732.	2.1	39
41	Effects of cytoskeletal prestress on cell rheological behavior. Acta Biomaterialia, 2005, 1, 255-262.	8.3	80
42	On Unsheared Tetrads. Journal of Elasticity, 2005, 81, 153-157.	1.9	0
43	Biomechanics of the lung parenchyma: critical roles of collagen and mechanical forces. Journal of Applied Physiology, 2005, 98, 1892-1899.	2.5	263
44	Contractile torque as a steering mechanism for orientation of adherent cells. Mcb Mechanics and Chemistry of Biosystems, 2005, 2, 69-76.	0.3	1
45	A Computational Tensegrity Model Predicts Dynamic Rheological Behaviors in Living Cells. Annals of Biomedical Engineering, 2004, 32, 520-530.	2.5	103
46	Distending stress of the cytoskeleton is a key determinant of cell rheological behavior. Biochemical and Biophysical Research Communications, 2004, 321, 617-622.	2.1	36
47	Rheology of airway smooth muscle cells is associated with cytoskeletal contractile stress. Journal of Applied Physiology, 2004, 96, 1600-1605.	2.5	128
48	Fractional Derivatives Embody Essential Features of Cell Rheological Behavior. Annals of Biomedical Engineering, 2003, 31, 692-699.	2.5	157
49	A Prestressed Cable Network Model of the Adherent Cell Cytoskeleton. Biophysical Journal, 2003, 84, 1328-1336.	0.5	90
50	Experimental tests of the cellular tensegrity hypothesis. Biorheology, 2003, 40, 221-5.	0.4	10
51	Cell prestress. II. Contribution of microtubules. American Journal of Physiology - Cell Physiology, 2002, 282, C617-C624.	4.6	190
52	Cell prestress. I. Stiffness and prestress are closely associated in adherent contractile cells. American Journal of Physiology - Cell Physiology, 2002, 282, C606-C616.	4.6	591
53	Effect of surface tension on alveolar surface area. Journal of Applied Physiology, 2002, 93, 1015-1022.	2.5	7
54	Effect of the cytoskeletal prestress on the mechanical impedance of cultured airway smooth muscle cells. Journal of Applied Physiology, 2002, 92, 1443-1450.	2.5	54

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55	Dynamic instabilities in the inflating lung. Nature, 2002, 417, 809-811.	27.8	84
56	Contribution of intermediate filaments to cell stiffness, stiffening, and growth. American Journal of Physiology - Cell Physiology, 2000, 279, C188-C194.	4.6	261
57	Invited Review: Engineering approaches to cytoskeletal mechanics. Journal of Applied Physiology, 2000, 89, 2085-2090.	2.5	89
58	Confined and unconfined stress relaxation of cartilage: appropriateness of a transversely isotropic analysis. Journal of Biomechanics, 1999, 32, 1125-1130.	2.1	104
59	The Role of Prestress and Architecture of the Cytoskeleton and Deformability of Cytoskeletal Filaments in Mechanics of Adherent Cells: a Quantitative Analysis. Journal of Theoretical Biology, 1999, 201, 63-74.	1.7	121
60	Mathematical Modeling of the First Inflation of Degassed Lungs. Annals of Biomedical Engineering, 1998, 26, 608-617.	2.5	30
61	A Microstructural Approach to Cytoskeletal Mechanics based on Tensegrity. Journal of Theoretical Biology, 1996, 181, 125-136.	1.7	212
62	Static Shear Modulus of Gasâ€“Liquid Foam Determined by the Punch Indentation Test. Journal of Colloid and Interface Science, 1996, 181, 661-666.	9.4	9
63	Measurements of Shear Wave Propagation Speed in Gas-Liquid Foam. Journal of Colloid and Interface Science, 1994, 163, 269-276.	9.4	7
64	A model of foam elasticity based upon the laws of plateau. Journal of Colloid and Interface Science, 1991, 145, 255-259.	9.4	48
65	The mixture of phases and elastic stability of lungs with constant surface forces. Mathematical Modelling, 1986, 7, 1071-1082.	0.2	5
66	Focal Adhesion Displacement Magnitude is a Unifying Feature of Tensional Homeostasis. SSRN Electronic Journal, 0, , .	0.4	0