Allen J Ehrlicher

List of Publications by Year in descending order

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48 papers

3,444 citations

279487 23 h-index 253896 43 g-index

54 all docs

54 docs citations

54 times ranked

5441 citing authors

#	Article	IF	CITATIONS
1	Substrate stiffening promotes VEGF-A functions via the PI3K/Akt/mTOR pathway. Biochemical and Biophysical Research Communications, 2022, 586, 27-33.	1.0	10
2	Cell monolayer deformation microscopy reveals mechanical fragility of cell monolayers following EMT. Biophysical Journal, 2022, , .	0.2	4
3	Advancing the Mechanical Performance of Glasses: Perspectives and Challenges. Advanced Materials, 2022, 34, e2109029.	11.1	50
4	GTPase-Dependent Mechanointegration of Shear-Mediated Cell Contractility Through Dynamic Binding of FLNa and FilGAP. Frontiers in Physics, 2022, 10, .	1.0	1
5	Pattern-Based Contractile Screening (PaCS), A Reference-Free Traction Force Microscopy Methodology, Reveals Contractile Differences in Breast Cancer Cells. Biophysical Journal, 2021, 120, 65a.	0.2	0
6	Pattern-Based Contractility Screening, a Reference-Free Alternative to Traction Force Microscopy Methodology. ACS Applied Materials & Samp; Interfaces, 2021, 13, 19726-19735.	4.0	10
7	Spatial distribution of lamin A/C determines nuclear stiffness and stress-mediated deformation. Journal of Cell Science, 2021, 134, .	1.2	18
8	Bioprintable, Stiffness-Tunable Collagen-Alginate Microgels for Increased Throughput 3D Cell Culture Studies. ACS Biomaterials Science and Engineering, 2021, 7, 2814-2822.	2.6	13
9	10.1063/5.0047185.1., 2021, , .		0
10	Toward embryo cryopreservation-on-a-chip: A standalone microfluidic platform for gradual loading of cryoprotectants to minimize cryoinjuries. Biomicrofluidics, 2021, 15, 034104.	1.2	11
11	Centrifugation and index matching yield a strong and transparent bioinspired nacreous composite. Science, 2021, 373, 1229-1234.	6.0	48
12	Decellularized Extracellular Matrix Composite Hydrogel Bioinks for the Development of 3D Bioprinted Head and Neck in Vitro Tumor Models. ACS Biomaterials Science and Engineering, 2021, 7, 5288-5300.	2.6	31
13	Endocytic proteins with prion-like domains form viscoelastic condensates that enable membrane remodeling. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	84
14	Engineering bioprintable alginate/gelatin composite hydrogels with tunable mechanical and cell adhesive properties to modulate tumor spheroid growth kinetics. Biofabrication, 2020, 12, 015024.	3.7	67
15	Tissue traction microscopy to quantify muscle contraction within precision-cut lung slices. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2020, 318, L323-L330.	1.3	11
16	A nondestructive contactless technique to assess the viscoelasticity of blood clots in real-time. Journal of the Mechanical Behavior of Biomedical Materials, 2020, 110, 103921.	1.5	4
17	Dynamic actin cross-linking governs the cytoplasm's transition to fluid-like behavior. Molecular Biology of the Cell, 2020, 31, 1744-1752.	0.9	23
18	Nuclei deformation reveals pressure distributions in 3D cell clusters. PLoS ONE, 2019, 14, e0221753.	1.1	17

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19	High Throughput Traction Force Microscopy Using PDMS Reveals Dose-Dependent Effects of Transforming Growth Factor-β on the Epithelial-to-Mesenchymal Transition. Journal of Visualized Experiments, 2019, , .	0.2	15
20	Multiplexed, high-throughput measurements of cell contraction and endothelial barrier function. Laboratory Investigation, 2019, 99, 138-145.	1.7	7
21	Traction Force Screening Enabled by Compliant PDMS Elastomers. Biophysical Journal, 2018, 114, 2194-2199.	0.2	50
22	An Intestinal Organ Culture System Uncovers a Role for the Nervous System in Microbe-Immune Crosstalk. Cell, 2017, 168, 1135-1148.e12.	13.5	182
23	Robust mechanobiological behavior emerges in heterogeneous myosin systems. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E8147-E8154.	3.3	5
24	Growth and Attachment-Facilitated Entry of Bacteria into Submicrometer Pores Can Enhance Bioremediation and Oil Recovery in Low-Permeability and Microporous Media. Environmental Science and Technology Letters, 2016, 3, 399-403.	3.9	13
25	Composite alginate gels for tunable cellular microenvironment mechanics. Scientific Reports, 2016, 6, 30854.	1.6	43
26	Structurally Governed Cell Mechanotransduction through Multiscale Modeling. Scientific Reports, 2015, 5, 8622.	1.6	10
27	Microtubule sliding drives proplatelet elongation and is dependent on cytoplasmic dynein. Blood, 2015, 125, 860-868.	0.6	87
28	A cost-effective microindentation system for soft material characterization., 2015,,.		2
29	Alpha-actinin binding kinetics modulate cellular dynamics and force generation. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 6619-6624.	3.3	87
30	Neuronal and metastatic cancer cells: Unlike brothers. Biochimica Et Biophysica Acta - Molecular Cell Research, 2015, 1853, 3126-3131.	1.9	18
31	Probing the Stochastic, Motor-Driven Properties of the Cytoplasm Using Force Spectrum Microscopy. Cell, 2014, 158, 822-832.	13.5	444
32	Force Spectrum Microscopy Reveals Active Diffusive-Like Fluctuations in Living Cells. Biophysical Journal, 2014, 106, 244a.	0.2	0
33	Platelet bioreactor-on-a-chip. Blood, 2014, 124, 1857-1867.	0.6	177
34	The Role of Vimentin Intermediate Filaments in Cortical and Cytoplasmic Mechanics. Biophysical Journal, 2013, 105, 1562-1568.	0.2	225
35	Microwave dielectric heating of non-aqueous droplets in a microfluidic device for nanoparticle synthesis. Nanoscale, 2013, 5, 5468.	2.8	36
36	Actin Filament Elasticity and Retrograde Flow Shape the Force-Velocity Relation of Motile Cells. Biophysical Journal, 2012, 102, 287-295.	0.2	69

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37	Controlled Synthesis of Cell-Laden Microgels by Radical-Free Gelation in Droplet Microfluidics. Journal of the American Chemical Society, 2012, 134, 4983-4989.	6.6	208
38	Dewetting-Induced Membrane Formation by Adhesion of Amphiphile-Laden Interfaces. Journal of the American Chemical Society, 2011, 133, 4420-4426.	6.6	79
39	Mechanical strain in actin networks regulates FilGAP and integrin binding to filamin A. Nature, 2011, 478, 260-263.	13.7	309
40	Contracting to stiffness. Nature Materials, 2011, 10, 12-13.	13.3	17
41	Cytoskeletal mechanics of proplatelet maturation and platelet release. Journal of Cell Biology, 2010, 191, 861-874.	2.3	228
42	Buckling, stiffening, and negative dissipation in the dynamics of a biopolymer in an active medium. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 19776-19779.	3.3	32
43	Statistical analysis of neuronal growth: edge dynamics and the effect of a focused laser on growth cone motility. New Journal of Physics, 2007, 9, 426-426.	1.2	12
44	Optical Neuronal Guidance. Methods in Cell Biology, 2007, 83, 495-520.	0.5	12
45	The Forces Behind Cell Movement. International Journal of Biological Sciences, 2007, 3, 303-317.	2.6	356
46	Cell migration through small gaps. European Biophysics Journal, 2006, 35, 713-719.	1.2	53
47	Optical control of neuronal growth. , 2004, , .		5
48	Guiding neuronal growth with light. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 16024-16028.	3.3	201