Joe Swift

List of Publications by Year in descending order

64 papers	5,351 citations	147566 31 h-index	189595 50 g-index
86 all docs	86 docs citations	86 times ranked	7143 citing authors

#	Article	IF	Citations
1	Nuclear Lamin-A Scales with Tissue Stiffness and Enhances Matrix-Directed Differentiation. Science, 2013, 341, 1240104.	6.0	1,595
2	Nuclear lamin stiffness is a barrier to 3D migration, but softness can limit survival. Journal of Cell Biology, 2014, 204, 669-682.	2.3	512
3	Matrix Elasticity Regulates Lamin-A,C Phosphorylation and Turnover with Feedback to Actomyosin. Current Biology, 2014, 24, 1909-1917.	1.8	320
4	Crawling from soft to stiff matrix polarizes the cytoskeleton and phosphoregulates myosin-II heavy chain. Journal of Cell Biology, 2012, 199, 669-683.	2.3	249
5	Heart-Specific Stiffening in Early Embryos Parallels Matrix and Myosin Expression to Optimize Beating. Current Biology, 2013, 23, 2434-2439.	1.8	176
6	The nuclear lamina is mechano-responsive to ECM elasticity in mature tissue. Journal of Cell Science, 2014, 127, 3005-15.	1.2	170
7	Lamins regulate cell trafficking and lineage maturation of adult human hematopoietic cells. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 18892-18897.	3.3	165
8	Circadian control of the secretory pathway maintains collagen homeostasis. Nature Cell Biology, 2020, 22, 74-86.	4.6	130
9	Contractile Forces Sustain and Polarize Hematopoiesis from Stem and Progenitor Cells. Cell Stem Cell, 2014, 14, 81-93.	5.2	114
10	Membrane Tension Orchestrates Rear Retraction in Matrix-Directed Cell Migration. Developmental Cell, 2019, 51, 460-475.e10.	3.1	112
11	Fractal heterogeneity in minimal matrix models of scars modulates stiff-niche stem-cell responses via nuclear exit of a mechanorepressor. Nature Materials, 2015, 14, 951-960.	13.3	108
12	Osmotic Challenge Drives Rapid and Reversible Chromatin Condensation in Chondrocytes. Biophysical Journal, 2013, 104, 759-769.	0.2	105
13	Stem cell mechanobiology: diverse lessons from bone marrow. Trends in Cell Biology, 2015, 25, 523-532.	3.6	103
14	Mechanically activated Piezo1 channels of cardiac fibroblasts stimulate p38 mitogen-activated protein kinase activity and interleukin-6 secretion. Journal of Biological Chemistry, 2019, 294, 17395-17408.	1.6	99
15	Nuclear Lamins in Cancer. Cellular and Molecular Bioengineering, 2016, 9, 258-267.	1.0	95
16	Coordinated increase of nuclear tension and lamin-A with matrix stiffness outcompetes lamin-B receptor that favors soft tissue phenotypes. Molecular Biology of the Cell, 2017, 28, 3333-3348.	0.9	94
17	Photoresponsive Hydrogels with Photoswitchable Mechanical Properties Allow Time-Resolved Analysis of Cellular Responses to Matrix Stiffening. ACS Applied Materials & Interfaces, 2018, 10, 7765-7776.	4.0	93
18	Directing Noble Metal Ion Chemistry within a Designed Ferritin Protein[,]. Biochemistry, 2008, 47, 12729-12739.	1.2	84

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19	Myosin-II inhibition and soft 2D matrix maximize multinucleation and cellular projections typical of platelet-producing megakaryocytes. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 11458-11463.	3.3	74
20	Photoinitiated Destruction of Composite Porphyrinâ^'Protein Polymersomes. Journal of the American Chemical Society, 2009, 131, 3872-3874.	6.6	69
21	A novel scavenging tool for cancer biomarker discovery based on the blood-circulating nanoparticle protein corona. Biomaterials, 2019, 188, 118-129.	5.7	62
22	Structure and activity of apoferritin-stabilized gold nanoparticles. Journal of Inorganic Biochemistry, 2007, 101, 1719-1729.	1.5	61
23	Efficient Self-Assembly of Archaeoglobus fulgidus Ferritin around Metallic Cores. Langmuir, 2009, 25, 5219-5225.	1.6	60
24	Cross-linked matrix rigidity and soluble retinoids synergize in nuclear lamina regulation of stem cell differentiation. Molecular Biology of the Cell, 2017, 28, 2010-2022.	0.9	59
25	Mechanobiology of bone marrow stem cells: From myosin-II forces to compliance of matrix and nucleus in cell forms and fates. Differentiation, 2013, 86, 77-86.	1.0	58
26	Filomicelles in nanomedicine â€“ from flexible, fragmentable, and ligand-targetable drug carrier designs to combination therapy for brain tumors. Journal of Materials Chemistry B, 2013, 1, 5177.	2.9	58
27	Nuclear decoupling is part of a rapid protein-level cellular response to high-intensity mechanical loading. Nature Communications, 2019, 10, 4149.	5.8	58
28	Design of Functional Ferritin-Like Proteins with Hydrophobic Cavities. Journal of the American Chemical Society, 2006, 128, 6611-6619.	6.6	55
29	Registration of the extracellular matrix components constituting the fibroblastic focus in idiopathic pulmonary fibrosis. JCI Insight, 2019, 4, .	2.3	54
30	Enhancing the Efficacy of Drug-loaded Nanocarriers against Brain Tumors by Targeted Radiation Therapy. Oncotarget, 2013, 4, 64-79.	0.8	51
31	MicroRNA-dependent regulation of biomechanical genes establishes tissue stiffness homeostasis. Nature Cell Biology, 2019, 21, 348-358.	4.6	44
32	Laser capture microdissection coupled mass spectrometry (LCM-MS) for spatially resolved analysis of formalin-fixed and stained human lung tissues. Clinical Proteomics, 2020, 17, 24.	1.1	37
33	An immortalised mesenchymal stem cell line maintains mechano-responsive behaviour and can be used as a reporter of substrate stiffness. Scientific Reports, 2018, 8, 8981.	1.6	31
34	Low temperature hydrogenation properties of platinum group metal treated, nickel metal hydride electrode alloy. Journal of Alloys and Compounds, 2002, 330-332, 806-809.	2.8	20
35	â€œMarker of Selfâ€•CD47 on lentiviral vectors decreases macrophage-mediated clearance and increases delivery to SIRPA-expressing lung carcinoma tumors. Molecular Therapy - Methods and Clinical Development, 2016, 3, 16080.	1.8	18
36	Physical Plasticity of the Nucleus and its Manipulation. Methods in Cell Biology, 2010, 98, 207-220.	0.5	17

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37	The consequences of ageing, progeroid syndromes and cellular senescence on mechanotransduction and the nucleus. Experimental Cell Research, 2019, 378, 98-103.	1.2	17
38	Circadian time series proteomics reveals daily dynamics in cartilage physiology. Osteoarthritis and Cartilage, 2021, 29, 739-749.	0.6	17
39	Label-free mass spectrometry exploits dozens of detected peptides to quantify lamins in wildtype and knockdown cells. Nucleus, 2013, 4, 450-459.	0.6	16
40	Therapeutic Manipulation of Ageing: Repurposing Old Dogs and Discovering New Tricks. EBioMedicine, 2016, 14, 24-31.	2.7	15
41	Roles of Cross-Membrane Transport and Signaling in the Maintenance of Cellular Homeostasis. Cellular and Molecular Bioengineering, 2016, 9, 234-246.	1.0	10
42	BayesENproteomics: Bayesian Elastic Nets for Quantification of Peptidoforms in Complex Samples. Journal of Proteome Research, 2020, 19, 2167-2184.	1.8	9
43	Peptide location fingerprinting reveals modificationâ€associated biomarker candidates of ageing in human tissue proteomes. Aging Cell, 2021, 20, e13355.	3.0	9
44	Photoresponsive Hydrogels with Photoswitchable Stiffness: Emerging Platforms to Study Temporal Aspects of Mesenchymal Stem Cell Responses to Extracellular Stiffness Regulation. Advances in Experimental Medicine and Biology, 2018, 1144, 53-69.	0.8	6
45	BioID-based proteomic analysis of the Bid interactome identifies novel proteins involved in cell-cycle-dependent apoptotic priming. Cell Death and Disease, 2020, 11, 872.	2.7	6
46	The Nuclear Lamina: From Mechanosensing in Differentiation to Cancer Cell Migration. , 2016, , 175-195.		3
47	Nuclear lamin stiffness is a barrier to 3D-migration, but softness can limit survival. , 2014, , .		2
48	Interior decoration: Adapting multiwell plates for high throughput mechanobiology. Biotechnology Journal, 2015, 10, 1513-1514.	1.8	2
49	Differentiation of Hematopoietic Stem Cell Modulated by Actomyosin Forces. Biophysical Journal, 2011, 100, 442a-443a.	0.2	1
50	Lamin-A/C is a Nuclear Rheostat that Couples Microenvironment Rigidity to Cell Lineage. Biophysical Journal, 2012, 102, 48a.	0.2	1
51	Cysteine-Shotgun Mass Spectrometry (CS-MS) for Probing Nuclear Lamin Conformation during Mechanical Stress. Biophysical Journal, 2013, 104, 19a.	0.2	1
52	Lamin-A is Mechanosensitive to Matrix Stiffness and Couples to the Retinoic Acid Pathway in Differentiation. Biophysical Journal, 2014, 106, 8a.	0.2	1
53	How deeply cells feel?. , 2014, , .		1
54	Subcellular Organization: Change of Phase in Partitioning the Cellular Milieu. Current Biology, 2012, 22, R188-R190.	1.8	0

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55	Mapping Protein Structure Changes with Cysteine Labeling Kinetics Measured by Mass Spectrometry. Biophysical Journal, 2013, 104, 168a.	0.2	0
56	How Deeply Cells Feel: Nuclear Phenotypes Defined by Cellular Tactile Sensing. Biophysical Journal, 2013, 104, 151a.	0.2	0
57	Hierarchical Determination of Nuclear Deformability by Lamin Isoforms during Adult Hematopoiesis: Implications in Blood Cell Trafficking. Biophysical Journal, 2013, 104, 150a-151a.	0.2	0
58	Lamin-A Levels Limit 3D-Migration but Protect against Migration-Induced Apoptosis. Biophysical Journal, 2013, 104, 151a.	0.2	0
59	Crosslinked Collagen Films Stiffen the Nucleus of Marrow Stromal Cells and Promote Osteogenesis. Biophysical Journal, 2013, 104, 374a.	0.2	0
60	Lamins Regulate Cell Trafficking and Lineage Maturation of Hematopoietic Cells. Biophysical Journal, 2014, 106, 571a.	0.2	0
61	Cross-Linked Matrix Rigidity and Soluble Factors Induce Differentiation via Distinct but Overlapping Pathways. Biophysical Journal, 2015, 108, 560a-561a.	0.2	0
62	Matrix and Soluble Factor Pathways to Lineage Specification. Biophysical Journal, 2016, 110, 95a.	0.2	0
63	Myosin-II Plays Central Roles In Cell Life and Death Decisions During Adult Hematopoiesis.. Blood, 2010, 116, 1595-1595.	0.6	0
64	Hierarchical Determination of Nuclear Deformability by Lamin Isoforms During Adult Hematopoiesis: Implications in Blood Cell Trafficking. Blood, 2012, 120, 1200-1200.	0.6	0