Ning Wang

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/1212115/publications.pdf

Version: 2024-02-01

86	9,741	76326 40	58581 82
papers	citations	h-index	g-index

88	88	88	10986
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Mechanotransduction at a distance: mechanically coupling the extracellular matrix with the nucleus. Nature Reviews Molecular Cell Biology, 2009, 10, 75-82.	37.0	1,538
2	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
3	Vinculin potentiates E-cadherin mechanosensing and is recruited to actin-anchored sites within adherens junctions in a myosin Ilâ€“dependent manner. Journal of Cell Biology, 2010, 189, 1107-1115.	5.2	569
4	Material properties of the cell dictate stress-induced spreading and differentiation in embryonic stemÂcells. Nature Materials, 2010, 9, 82-88.	27.5	506
5	Transcription upregulation via force-induced direct stretching of chromatin. Nature Materials, 2016, 15, 1287-1296.	27.5	458
6	A comparison of methods to assess cell mechanical properties. Nature Methods, 2018, 15, 491-498.	19.0	448
7	Soft fibrin gels promote selection and growth of tumorigenic cells. Nature Materials, 2012, 11, 734-741.	27.5	384
8	Rapid signal transduction in living cells is a unique feature of mechanotransduction. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 6626-6631.	7.1	383
9	Cell Mechanics: Mechanical Response, Cell Adhesion, and Molecular Deformation. Annual Review of Biomedical Engineering, 2000, 2, 189-226.	12.3	365
10	Soft Substrates Promote Homogeneous Self-Renewal of Embryonic Stem Cells via Downregulating Cell-Matrix Tractions. PLoS ONE, 2010, 5, e15655.	2.5	286
11	Contribution of intermediate filaments to cell stiffness, stiffening, and growth. American Journal of Physiology - Cell Physiology, 2000, 279, C188-C194.	4.6	261
12	Micropatterning tractional forces in living cells. Cytoskeleton, 2002, 52, 97-106.	4.4	248
13	Intracellular stress tomography reveals stress focusing and structural anisotropy in cytoskeleton of living cells. American Journal of Physiology - Cell Physiology, 2003, 285, C1082-C1090.	4.6	225
14	Probing transmembrane mechanical coupling and cytomechanics using magnetic twisting cytometry. Biochemistry and Cell Biology, 1995, 73, 327-335.	2.0	213
15	Cell prestress. II. Contribution of microtubules. American Journal of Physiology - Cell Physiology, 2002, 282, C617-C624.	4.6	190
16	Reversing drug resistance of soft tumor-repopulating cells by tumor cell-derived chemotherapeutic microparticles. Cell Research, 2016, 26, 713-727.	12.0	183
17	Twisting integrin receptors increases endothelin-1 gene expression in endothelial cells. American Journal of Physiology - Cell Physiology, 2001, 280, C1475-C1484.	4.6	178
18	Matrix softness regulates plasticity of tumour-repopulating cells via H3K9 demethylation and Sox2 expression. Nature Communications, 2014, 5, 4619.	12.8	162

#	Article	IF	Citations
19	Mechanics of vimentin intermediate filaments. Journal of Muscle Research and Cell Motility, 2002, 23, 535-540.	2.0	142
20	Prestress mediates force propagation into the nucleus. Biochemical and Biophysical Research Communications, 2005, 329, 423-428.	2.1	134
21	Mechanical anisotropy of adherent cells probed by a three-dimensional magnetic twisting device. American Journal of Physiology - Cell Physiology, 2004, 287, C1184-C1191.	4.6	125
22	Dynamic force-induced direct dissociation of protein complexes in a nuclear body in living cells. Nature Communications, 2012, 3, 866.	12.8	124
23	Mechanochemical Delivery and Dynamic Tracking of Fluorescent Quantum Dots in the Cytoplasm and Nucleus of Living Cells. Nano Letters, 2009, 9, 2193-2198.	9.1	119
24	Generation of organized germ layers from a single mouse embryonic stem cell. Nature Communications, 2014, 5, 4000.	12.8	104
25	Review of cellular mechanotransduction. Journal Physics D: Applied Physics, 2017, 50, 233002.	2.8	104
26	Long-distance propagation of forces in a cell. Biochemical and Biophysical Research Communications, 2005, 328, 1133-1138.	2.1	103
27	Quantifying compressive forces between living cell layers and within tissues using elastic round microgels. Nature Communications, 2018, 9, 1878.	12.8	91
28	Distinct mechanisms regulating mechanical force-induced Ca2+ signals at the plasma membrane and the ER in human MSCs. ELife, 2015, 4, e04876.	6.0	90
29	Invited Review: Engineering approaches to cytoskeletal mechanics. Journal of Applied Physiology, 2000, 89, 2085-2090.	2.5	89
30	Cell softness regulates tumorigenicity and stemness of cancer cells. EMBO Journal, 2021, 40, e106123.	7.8	77
31	Fibrin Stiffness Mediates Dormancy of Tumor-Repopulating Cells via a Cdc42-Driven Tet2 Epigenetic Program. Cancer Research, 2018, 78, 3926-3937.	0.9	74
32	Rapid Activation of Rac GTPase in Living Cells by Force Is Independent of Src. PLoS ONE, 2009, 4, e7886.	2.5	73
33	Upregulation of Cytosolic Phosphoenolpyruvate Carboxykinase Is a Critical Metabolic Event in Melanoma Cells That Repopulate Tumors. Cancer Research, 2015, 75, 1191-1196.	0.9	69
34	Overexpression of chemerin was associated with tumor angiogenesis and poor clinical outcome in squamous cell carcinoma of the oral tongue. Clinical Oral Investigations, 2014, 18, 997-1004.	3.0	56
35	Cell Softness Prevents Cytolytic T-cell Killing of Tumor-Repopulating Cells. Cancer Research, 2021, 81, 476-488.	0.9	54
36	Force-induced gene up-regulation does not follow the weak power law but depends on H3K9 demethylation. Science Advances, 2020, 6, eaay9095.	10.3	47

#	Article	IF	Citations
37	Efficient extravasation of tumor-repopulating cells depends on cell deformability. Scientific Reports, 2016, 6, 19304.	3.3	46
38	Plectin contributes to mechanical properties of living cells. American Journal of Physiology - Cell Physiology, 2009, 296, C868-C877.	4.6	45
39	Embryonic Stem Cells Do Not Stiffen on Rigid Substrates. Biophysical Journal, 2010, 99, L19-L21.	0.5	43
40	Interfacing 3D magnetic twisting cytometry with confocal fluorescence microscopy to image force responses in living cells. Nature Protocols, 2017, 12, 1437-1450.	12.0	42
41	Inhibition of cancer stem cell like cells by a synthetic retinoid. Nature Communications, 2018, 9, 1406.	12.8	40
42	Stress fiber anisotropy contributes to force-mode dependent chromatin stretching and gene upregulation in living cells. Nature Communications, 2020, 11, 4902.	12.8	36
43	Visualization of perforin/gasdermin/complement-formed pores in real cell membranes using atomic force microscopy. Cellular and Molecular Immunology, 2019, 16, 611-620.	10.5	35
44	Force via integrins but not E-cadherin decreases Oct3/4 expression in embryonic stem cells. Biochemical and Biophysical Research Communications, 2011, 415, 396-400.	2.1	34
45	Regulatory networks in mechanotransduction reveal key genes in promoting cancer cell stemness and proliferation. Oncogene, 2019, 38, 6818-6834.	5.9	34
46	An aerodynamic valve in the avian primary bronchus. The Journal of Experimental Zoology, 1992, 262, 441-445.	1.4	33
47	Foxp3 gene polymorphisms and haplotypes associate with susceptibility of Graves' disease in Chinese Han population. International Immunopharmacology, 2015, 25, 425-431.	3.8	33
48	Colorectal Cancer Metastases to Brain or Bone and the Relationship to Primary Tumor Location: a Population-Based Study. Journal of Gastrointestinal Surgery, 2020, 24, 1833-1842.	1.7	32
49	Is Cell Rheology Governed by Nonequilibrium-to-Equilibrium Transition of Noncovalent Bonds?. Biophysical Journal, 2008, 95, 5719-5727.	0.5	30
50	Cytoskeletal prestress: The cellular hallmark in mechanobiology and mechanomedicine. Cytoskeleton, 2021, 78, 249-276.	2.0	28
51	Resveratrol attenuates excessive ethanol exposure induced insulin resistance in rats via improving NAD⁺/NADH ratio. Molecular Nutrition and Food Research, 2017, 61, 1700087.	3.3	23
52	Combined blockade of Tim-3 and MEK inhibitor enhances the efficacy against melanoma. Biochemical and Biophysical Research Communications, 2017, 484, 378-384.	2.1	21
53	Resveratrol protects against ethanol-induced impairment of insulin secretion in INS-1 cells through SIRT1-UCP2 axis. Toxicology in Vitro, 2020, 65, 104808.	2.4	20
54	Tissue cell differentiation and multicellular evolution via cytoskeletal stiffening in mechanically stressed microenvironments. Acta Mechanica Sinica/Lixue Xuebao, 2019, 35, 270-274.	3.4	18

#	Article	IF	Citations
55	Electrochemically Controlled Deconjugation and Delivery of Single Quantum Dots into the Nucleus of Living Cells. Small, 2010, 6, 2109-2113.	10.0	17
56	Instant integrin mechanosensing. Nature Materials, 2017, 16, 1173-1174.	27.5	17
57	Effects of forces on chromatin. APL Bioengineering, 2021, 5, 041503.	6.2	17
58	Oxalate-Degrading Enzyme Recombined Lactic Acid Bacteria Strains Reduce Hyperoxaluria. Urology, 2018, 113, 253.e1-253.e7.	1.0	16
59	Auxetic nuclei. Nature Materials, 2014, 13, 540-542.	27.5	15
60	Resveratrol attenuates excessive ethanol exposure-induced Î²-cell senescence in rats: A critical role for the NAD+/SIRT1-p38MAPK/p16 pathway. Journal of Nutritional Biochemistry, 2021, 89, 108568.	4.2	15
61	Lutein attenuates excessive lipid accumulation in differentiated 3T3-L1 cells and abdominal adipose tissue of rats by the SIRT1-mediated pathway. International Journal of Biochemistry and Cell Biology, 2021, 133, 105932.	2.8	15
62	LncRNA-targeting bio-scaffold mediates triple immune effects for postoperative colorectal cancer immunotherapy. Biomaterials, 2022, 284, 121485.	11.4	15
63	Comparison of the efficacy and feasibility of laser enucleation of bladder tumor versus transurethral resection of bladder tumor: a meta-analysis. Lasers in Medical Science, 2017, 32, 2005-2012.	2.1	14
64	Efficacy of Hydroxy-L-proline (HYP) analogs in the treatment of primary hyperoxaluria in Drosophila Melanogaster. BMC Nephrology, 2018, 19, 167.	1.8	13
65	1Î±,25-Dihydroxyvitamin D₃ prevents renal oxidative damage via the PARP1/SIRT1/NOX4 pathway in Zucker diabetic fatty rats. American Journal of Physiology - Endocrinology and Metabolism, 2020, 318, E343-E356.	3.5	13
66	Soft matrices downregulate FAK activity to promote growth of tumor-repopulating cells. Biochemical and Biophysical Research Communications, 2017, 483, 456-462.	2.1	11
67	Microtissue Geometry and Cellâ€Generated Forces Drive Patterning of Liver Progenitor Cell Differentiation in 3D. Advanced Healthcare Materials, 2021, 10, e2100223.	7.6	11
68	A Novel Anticancer Stem Cell Compound Derived from Pleuromutilin Induced Necroptosis of Melanoma Cells. Journal of Medicinal Chemistry, 2021, 64, 15825-15845.	6.4	11
69	Imaging Stress Propagation in the Cytoplasm of a Living Cell. Methods in Cell Biology, 2007, 83, 179-198.	1.1	10
70	TNF-Î± promoter single nucleotide polymorphisms and haplotypes associate with susceptibility of immune thrombocytopenia in Chinese adults. Human Immunology, 2014, 75, 980-985.	2.4	10
71	Genome-Wide DNA Methylation Enhances Stemness in the Mechanical Selection of Tumor-Repopulating Cells. Frontiers in Bioengineering and Biotechnology, 2020, 8, 88.	4.1	10
72	Cdc42-dependent modulation of rigidity sensing and cell spreading in tumor repopulating cells. Biochemical and Biophysical Research Communications, 2018, 500, 557-563.	2.1	9

#	Article	IF	Citations
73	LAP2Î² transmits force to upregulate genes via chromatin domain stretching but not compression. Acta Biomaterialia, 2023, 163, 326-338.	8.3	8
74	Effects of lutein supplementation on inflammatory biomarkers and metabolic risk factors in adults with central obesity: study protocol for a randomised controlled study. Trials, 2020, 21, 32.	1.6	6
75	Germline Mutation of PLCD1 Contributes to Human Multiple Pilomatricomas through Protein Kinase D/Extracellular Signalâ€“Regulated Kinase1/2 Cascade and TRPV6. Journal of Investigative Dermatology, 2021, 141, 533-544.	0.7	5
76	Rapid Polymerization of Aromatic Vinyl Monomers to Porous Organic Polymers via Acid Catalysis at Mild Condition. Macromolecular Rapid Communications, 2019, 40, e1900168.	3.9	4
77	Forces in stem cells and cancer stem cells. Cells and Development, 2022, 170, 203776.	1.5	4
78	Cellular and Molecular Bioengineering: A Tipping Point. Cellular and Molecular Bioengineering, 2012, 5, 239-253.	2.1	3
79	Stem Cells Go Soft: Pliant Substrate Surfaces Enhance Motor Neuron Differentiation. Cell Stem Cell, 2014, 14, 701-703.	11.1	3
80	Regulation of immune-related diseases by multiple factors of chromatin, exosomes, microparticles, vaccines, oxidative stress, dormancy, protein quality control, inflammation and microenvironment: a meeting report of 2017 International Workshop of the Chinese Academy of Medical Sciences (CAMS) Initiative for Innovative Medicine on Tumor Immunology. Acta Pharmaceutica Sinica B, 2017, 7, 532-540.	12.0	3
81	Interactive effects of serum ferritin and high sensitivity C-reactive protein on diabetes in hypertensive patients. Journal of Trace Elements in Medicine and Biology, 2021, 68, 126824.	3.0	3
82	Structural basis of stress concentration in the cytoskeleton. MCB Molecular and Cellular Biomechanics, 2010, 7, 33-44.	0.7	3
83	Performance Analysis of the IEEE 802.11p EDCA for Vehicular Networks in Imperfect Channels. , 2021, , .		3
84	Displacement field of the cytoskeleton in response to a local load. , 0, , .		0
85	Cell Softness Prevents Cytolytic T Cell Killing of Tumor-Repopulating Cells. SSRN Electronic Journal, 0, , .	0.4	0
86	Prescribed Performance Tracking Control of Nonlinear Systems with Unknown Control Directions. , 2021, , .		0