Dennis E Discher

List of Publications by Year
in descending order

#	Article	IF	Citations
1	Lipid droplets displace cytoskeleton & inhibit phagocytosisâ€"implications for dysfunction in obesity. Biophysical Journal, 2022, 121, 518a.	0.2	0
2	Nuclear curvature, rupture, and lamin regulation: relations to tumor proliferation and cancer survival. Biophysical Journal, 2022, 121, 119a.	0.2	0
3	Human CD47-Derived Cyclic Peptides Enhance Engulfment of mAb-Targeted Melanoma by Primary Macrophages. Bioconjugate Chemistry, 2022, 33, 1973-1982.	1.8	2
4	Gaussian curvature dilutes the nuclear lamina, favoring nuclear rupture, especially at high strain rate. Nucleus, 2022, 13, 130-144.	0.6	15
5	Suppressing or Enhancing Macrophage Engulfment through the Use of CD47 and Related Peptides. Bioconjugate Chemistry, 2022, 33, 1989-1995.	1.8	8
6	CD47-SIRPÎ± Checkpoint Disruption in Metastases Requires Tumor-Targeting Antibody for Molecular and Engineered Macrophage Therapies. Cancers, 2022, 14, 1930.	1.7	5
7	Nuclear mechanoprotection: From tissue atlases as blueprints to distinctive regulation of nuclear lamins. APL Bioengineering, 2022, 6, .	3.3	8
8	Tissue mechanics coevolves with fibrillar matrisomes in healthy and fibrotic tissues. Matrix Biology, 2022, 111, 153-188.	1.5	11
9	Piezo1 and Piezo2 foster mechanical gating of K2P channels. Cell Reports, 2021, 37, 110070.	2.9	10
10	Scaling concepts in â€˜omics: Nuclear lamin-B scales with tumor growth and often predicts poor prognosis, unlike fibrosis. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	15
11	Tension in fibrils suppresses their enzymatic degradation â€" A molecular mechanism for â€˜use it or lose itâ€™. Matrix Biology, 2020, 85-86, 34-46.	1.5	41
12	Multivalent, Soluble Nano-Self Peptides Increase Phagocytosis of Antibody-Opsonized Targets while Suppressing â€œSelfâ€•Signaling. ACS Nano, 2020, 14, 15083-15093.	7.3	12
13	Macrophage checkpoint blockade: results from initial clinical trials, binding analyses, and CD47-SIRPÎ± structureâ€"function. Antibody Therapeutics, 2020, 3, 80-94.	1.2	73
14	Lipid Droplets Deform Nucleus and Cause Mislocalization of DNA Repair Factors. Biophysical Journal, 2020, 118, 283a-284a.	0.2	0
15	Heterogeneously Strained Tissue Collagen Resists Collagenase Degradation Where Strains are High. Biophysical Journal, 2020, 118, 398a.	0.2	0
16	Macrophages show higher levels of engulfment after disruption of <i>cis</i> interactions between CD47 and the checkpoint receptor SIRPÎ±. Journal of Cell Science, 2020, 133, .	1.2	33
17	From DNA damage to epithelial integrity: new roles for cell forces. Molecular Biology of the Cell, 2019, 30, 1879-1881.	0.9	2
18	Pulling the Roof Down on Anchored Nuclei. Developmental Cell, 2019, 50, 130-131.	3.1	0

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19	Rescue of DNA damage after constricted migration reveals a mechano-regulated threshold for cell cycle. Journal of Cell Biology, 2019, 218, 2545-2563.	2.3	76
20	The macrophage checkpoint CD47 : SIRPÎ± for recognition of â€˜selfâ€™ cells: from clinical trials of blocking antibodies to mechanobiological fundamentals. Philosophical Transactions of the Royal Society B: Biological Sciences, 2019, 374, 20180217.	1.8	32
21	Nuclear failure, DNA damage, and cell cycle disruption after migration through small pores: a brief review. Essays in Biochemistry, 2019, 63, 569-577.	2.1	23
22	Constricted migration modulates stem cell differentiation. Molecular Biology of the Cell, 2019, 30, 1985-1999.	0.9	23
23	Mechanosensing by the Lamina Protects against Nuclear Rupture, DNA Damage, and Cell-Cycle Arrest. Developmental Cell, 2019, 49, 920-935.e5.	3.1	217
24	Scaling laws indicate distinct nucleation mechanisms of holes in the nuclear lamina. Nature Physics, 2019, 15, 823-829.	6.5	21
25	Inhibiting Tumor Fibrosis and Actomyosin through GPCR activation. Trends in Cancer, 2019, 5, 197-199.	3.8	6
26	Nuclear mechanics duringÂand after constricted migration. Acta Mechanica Sinica/Lixue Xuebao, 2019, 35, 299-308.	1.5	20
27	Forced Unfolding of Proteins Directs Biochemical Cascades. Biochemistry, 2019, 58, 4893-4902.	1.2	21
28	Mesenchymal stem cell perspective: cell biology to clinical progress. Npj Regenerative Medicine, 2019, 4, 22.	2.5	1,113
29	Static and time-dependent mechanical response of organic matrix of bone. Journal of the Mechanical Behavior of Biomedical Materials, 2019, 91, 315-325.	1.5	10
30	Manipulating the mechanics of extracellular matrix to study effects on the nucleus and its structure. Methods, 2019, 157, 3-14.	1.9	3
31	Nuclear Mechanics and Cancer Cell Migration. Advances in Experimental Medicine and Biology, 2019, 1146, 117-130.	0.8	15
32	Polymersomes. , 2019, , 537-550.		0
33	Filomicelles Deliver a Chemo-Differentiation Combination of Paclitaxel and Retinoic Acid That Durably Represses Carcinomas in Liver to Prolong Survival. Bioconjugate Chemistry, 2018, 29, 914-927.	1.8	15
34	Progerin phosphorylation in interphase is lower and less mechanosensitive than lamin-A,C in iPS-derived mesenchymal stem cells. Nucleus, 2018, 9, 235-250.	0.6	35
35	Glassy worm-like micelles in solvent and shear mediated shape transitions. Soft Matter, 2018, 14, 4194-4203.	1.2	6
36	Cellâ€“Extracellular Matrix Mechanobiology: Forceful Tools and Emerging Needs for Basic and Translational Research. Nano Letters, 2018, 18, 1-8.	4.5	103

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37	Rationally engineered advances in cancer research. APL Bioengineering, 2018, 2, 031601.	3.3	2
38	Biomembrane Mechanical Properties Direct Diverse Cell Functions. , 2018, , 263-285.		1
39	Nuclear mechanosensing. Emerging Topics in Life Sciences, 2018, 2, 713-725.	1.1	17
40	Biomembrane Adhesion to Substrates Topographically Patterned with Nanopits. Biophysical Journal, 2018, 115, 1292-1306.	0.2	7
41	Nuclear rupture at sites of high curvature compromises retention of DNA repair factors. Journal of Cell Biology, 2018, 217, 3796-3808.	2.3	134
42	Membrane fluctuations and acidosis regulate cooperative binding of â€œmarker of selfâ€•CD47 with macrophage checkpoint receptor SIRPÎ±. Journal of Cell Science, 2018, 132, .	1.2	45
43	Constricted migration increases DNA damage and independently represses cell cycle. Molecular Biology of the Cell, 2018, 29, 1948-1962.	0.9	101
44	Stem Cell Differentiation is Regulated by Extracellular Matrix Mechanics. Physiology, 2018, 33, 16-25.	1.6	191
45	Matrix Rigidity Myosin-II and Lamin-A Regulate Curvature Induced Nuclear Rupture Causing Repair Factor Mislocalization and DNA Damage. Biophysical Journal, 2018, 114, 515a.	0.2	0
46	Mechanosensing by the nucleus: From pathways to scaling relationships. Journal of Cell Biology, 2017, 216, 305-315.	2.3	301
47	Persistence-Driven Durotaxis: Generic, Directed Motility in Rigidity Gradients. Physical Review Letters, 2017, 118, 078103.	2.9	58
48	Genome variation across cancers scales with tissue stiffness â€“ An invasion-mutation mechanism and implications for immune cell infiltration. Current Opinion in Systems Biology, 2017, 2, 103-114.	1.3	50
49	Spray stability of self-assembled filaments for delivery. Journal of Controlled Release, 2017, 263, 162-171.	4.8	8
50	Engineering macrophages to eat cancer: from â€œmarker of selfâ€•CD47 and phagocytosis to differentiation. Journal of Leukocyte Biology, 2017, 102, 31-40.	1.5	51
51	Mechanosensing of matrix by stem cells: From matrix heterogeneity, contractility, and the nucleus in pore-migration to cardiogenesis and muscle stem cells in vivo. Seminars in Cell and Developmental Biology, 2017, 71, 84-98.	2.3	61
52	Matrix Mechanosensing: From Scaling Concepts in â€™Omics Data to Mechanisms in the Nucleus, Regeneration, and Cancer. Annual Review of Biophysics, 2017, 46, 295-315.	4.5	89
53	Elastic-Fluid Model for DNA Damage and Mutation from Nuclear Fluid Segregation Due to Cell Migration. Biophysical Journal, 2017, 112, 2271-2279.	0.2	21
54	Matrix rigidity regulates microtubule network polarization in migration. Cytoskeleton, 2017, 74, 114-124.	1.0	32

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55	DNA Damage Follows Repair Factor Depletion and Portends Genome Variation in Cancer Cells after Pore Migration. Current Biology, 2017, 27, 210-223.	1.8	239
56	Optimal Contractile Forces for a Mesenchymal Engine. Developmental Cell, 2017, 42, 313-315.	3.1	0
57	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
58	Rupture Dynamics and Chromatin Herniation inÂDeformed Nuclei. Biophysical Journal, 2017, 113, 1060-1071.	0.2	33
59	Mitotic progression following DNA damage enables pattern recognition within micronuclei. Nature, 2017, 548, 466-470.	13.7	1,042
60	Cover Image, Volume 74, Issue 3. Cytoskeleton, 2017, 74, C1-C1.	1.0	0
61	SIRPA-Inhibited, Marrow-Derived Macrophages Engorge, Accumulate, and Differentiate in Antibody-Targeted Regression of Solid Tumors. Current Biology, 2017, 27, 2065-2077.e6.	1.8	99
62	As a Nucleus Enters a Small Pore, Chromatin Stretches and Maintains Integrity, Even with DNA Breaks. Biophysical Journal, 2017, 112, 446-449.	0.2	41
63	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
64	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
65	Filomicelles from aromatic diblock copolymers increase paclitaxel-induced tumor cell death and aneuploidy compared with aliphatic copolymers. Nanomedicine, 2016, 11, 1551-1569.	1.7	17
66	Mechanotransduction in cancer. Current Opinion in Chemical Engineering, 2016, 11, 77-84.	3.8	138
67	The Nuclear Lamina: From Mechanosensing in Differentiation to Cancer Cell Migration. , 2016, , 175-195.		3
68	<i>Leishmania major</i> Infectionâ€"Induced VEGF-A/VEGFR-2 Signaling Promotes Lymphangiogenesis That Controls Disease. Journal of Immunology, 2016, 197, 1823-1831.	0.4	27
69	Mechanical signaling coordinates the embryonic heartbeat. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 8939-8944.	3.3	46
70	Nuclear constriction segregates mobile nuclear proteins away from chromatin. Molecular Biology of the Cell, 2016, 27, 4011-4020.	0.9	104
71	SnapShot: Mechanosensing Matrix. Cell, 2016, 165, 1820-1820.e1.	13.5	51
72	Nuclear Lamins in Cancer. Cellular and Molecular Bioengineering, 2016, 9, 258-267.	1.0	95

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73	Filovirus Mimics Deliver Effectively. Biophysical Journal, 2016, 110, 504a.	0.2	0
74	Myosin-II repression favors pre/proplatelets but shear activation generates platelets and fails in macrothrombocytopenia. Blood, 2015, 125, 525-533.	0.6	38
75	Cell rigidity and shape override CD47â€™s â€œselfâ€•signaling in phagocytosis by hyperactivating myosin-II. Blood, 2015, 125, 542-552.	0.6	122
76	The reason sickle reticulocytes expose PS. Blood, 2015, 126, 1737-1738.	0.6	5
77	Nuclear Damage in Highly Constrained Migration: From Lamina Defects to DNA Breaks. Biophysical Journal, 2015, 108, 115a-116a.	0.2	0
78	Stem cell mechanobiology: diverse lessons from bone marrow. Trends in Cell Biology, 2015, 25, 523-532.	3.6	103
79	Systems Mechano-Biology: Tension-Inhibited Protein Turnover is Sufficient to Physically Control Gene Circuits. Biophysical Journal, 2015, 108, 365a-366a.	0.2	1
80	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
81	Blood and immune cell engineering: Cytoskeletal contractility and nuclear rheology impact cell lineage and localization. BioEssays, 2015, 37, 633-642.	1.2	4
82	Macrophage engulfment of a cell or nanoparticle is regulated by unavoidable opsonization, a species-specific â€˜Marker of Selfâ€™ CD47, and target physical properties. Current Opinion in Immunology, 2015, 35, 107-112.	2.4	85
83	Engineered Donor Marrow Macrophages Phagocytose Cancer Cells and Aggressively Shrink Solid Tumor Xenografts Compared to Tumor Associated Macrophages. Blood, 2015, 126, 2214-2214.	0.6	0
84	Highly cited research articles in Journal of Controlled Release: Commentaries and perspectives by authors. Journal of Controlled Release, 2014, 190, 29-74.	4.8	394
85	Nuclear lamin stiffness is a barrier to 3D-migration, but softness can limit survival. , 2014, , .		2
86	Systems Mechanobiology: Tension-Inhibited Protein Turnover Is Sufficient to Physically Control Gene Circuits. Biophysical Journal, 2014, 107, 2734-2743.	0.2	40
87	Simple insoluble cues specify stem cell differentiation. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 18104-18105.	3.3	10
88	Combining insoluble and soluble factors to steer stem cell fate. Nature Materials, 2014, 13, 532-537.	13.3	76
89	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
90	Material control of stem cell differentiation: challenges in nano-characterization. Current Opinion in Biotechnology, 2014, 28, 46-50.	3.3	29

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91	Contractile Forces Sustain and Polarize Hematopoiesis from Stem and Progenitor Cells. Cell Stem Cell, 2014, 14, 81-93.	5.2	114
92	The nuclear lamina is mechano-responsive to ECM elasticity in mature tissue. Journal of Cell Science, 2014, 127, 3005-15.	1.2	170
93	From Stealthy Polymersomes and Filomicelles to â€œSelfâ€•Peptide-Nanoparticles for Cancer Therapy. Annual Review of Chemical and Biomolecular Engineering, 2014, 5, 281-299.	3.3	68
94	Matrix Elasticity Regulates Lamin-A,C Phosphorylation and Turnover with Feedback to Actomyosin. Current Biology, 2014, 24, 1909-1917.	1.8	320
95	Stress Sensitivity and Mechanotransduction during Heart Development. Current Biology, 2014, 24, R495-R501.	1.8	56
96	How deeply cells feel?. , 2014, , .		1
97	TCR Triggering by pMHC Ligands Tethered on Surfaces via Poly(Ethylene Glycol) Depends on Polymer Length. PLoS ONE, 2014, 9, e112292.	1.1	46
98	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
99	Osmotic Challenge Drives Rapid and Reversible Chromatin Condensation in Chondrocytes. Biophysical Journal, 2013, 104, 759-769.	0.2	105
100	Domain formation in cholesterolâ€“phospholipid membranes exposed to adhesive surfaces or environments. Soft Matter, 2013, 9, 8438.	1.2	22
101	Nuclear Lamin-A Scales with Tissue Stiffness and Enhances Matrix-Directed Differentiation. Science, 2013, 341, 1240104.	6.0	1,595
102	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
103	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
104	Probing the structure of PEGylated-lipid assemblies by coarse-grained molecular dynamics. Soft Matter, 2013, 9, 11549.	1.2	27
105	Heart-Specific Stiffening in Early Embryos Parallels Matrix and Myosin Expression to Optimize Beating. Current Biology, 2013, 23, 2434-2439.	1.8	176
106	Cysteine-Shotgun Mass Spectrometry (CS-MS) for Probing Nuclear Lamin Conformation during Mechanical Stress. Biophysical Journal, 2013, 104, 19a.	0.2	1
107	â€˜Marker of Selfâ€™, CD47, Modulates Mechanical Forces Imposed by Macrophages during Phagocytosis. Biophysical Journal, 2013, 104, 480a.	0.2	0
108	Minimal "Self" Peptides That Inhibit Phagocytic Clearance and Enhance Delivery of Nanoparticles. Science, 2013, 339, 971-975.	6.0	809

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109	Dynamic Domains in Polymersomes: Mixtures of Polyanionic and Neutral Diblocks Respond More Rapidly to Changes in Calcium than to pH. Langmuir, 2013, 29, 7499-7508.	1.6	9
110	Adhesion-Induced Phase Behavior of Two-Component Membranes and Vesicles. International Journal of Molecular Sciences, 2013, 14, 2203-2229.	1.8	9
111	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
112	Polymersomes and Filomicelles. , 2013, , 183-210.		1
113	How Does CD47-SIRPÎ± â€˜Donâ€™t Eat Me Signalâ€™ Physically Signal Self. Blood, 2013, 122, 953-953.	0.6	1
114	RhoA Is Essential for Maintaining Normal Megakaryocyte Ploidy and Platelet Generation. PLoS ONE, 2013, 8, e69315.	1.1	34
115	Enhancing the Efficacy of Drug-loaded Nanocarriers against Brain Tumors by Targeted Radiation Therapy. Oncotarget, 2013, 4, 64-79.	0.8	51
116	Platelet-Like-Particles Sheared From Myosin-II-Inhibited Megakaryocytes Highlights The Elevated Thrombocrit Of May-Hegglin Anomaly. Blood, 2013, 122, 2426-2426.	0.6	0
117	Platelet generation under shear force modulated by site-specific phosphorylation of myosin-IIA heavy chain. , 2012, , .		0
118	Marker-of-self becomes marker-of-senescence. Blood, 2012, 119, 5343-5344.	0.6	3
119	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
120	Degradable Poly(ethylene oxide)-block-polycaprolactone Worm-like Micelles: From Phase Transitions and Molecular Simulation to Persistent Circulation and Shrinking Tumors. ACS Symposium Series, 2012, , 255-285.	0.5	0
121	Cardiomyocytes from late embryos and neonates do optimal work and striate best on substrates with tissue-level elasticity: metrics and mathematics. Biomechanics and Modeling in Mechanobiology, 2012, 11, 1219-1225.	1.4	19
122	Hyaluronic acid matrices show matrix stiffness in 2D and 3D dictates cytoskeletal order and myosin-II phosphorylation within stem cells. Integrative Biology (United Kingdom), 2012, 4, 422.	0.6	107
123	Soft gels select tumorigenic cells. Nature Materials, 2012, 11, 662-663.	13.3	11
124	Mechanical Force in T Cell Receptor Signal Initiation. Frontiers in Immunology, 2012, 3, 217.	2.2	25
125	Subcellular Organization: Change of Phase in Partitioning the Cellular Milieu. Current Biology, 2012, 22, R188-R190.	1.8	0
126	Nanoparticle Shape Improves Delivery: Rational Coarse Grain Molecular Dynamics (rCGâ€MD) of Taxol in Wormâ€Like PEGâ€PCL Micelles. Advanced Materials, 2012, 24, 3823-3830.	11.1	136

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127	Shear-Optimized Platelet-Like-Particles From High Ploidy Mks: From Segregation to Composition and Activation. Blood, 2012, 120, 3456-3456.	0.6	0
128	RhoA Is Essential for Maintaining Normal Megakaryocyte Ploidy Distribution and Platelet Generation. Blood, 2012, 120, 385-385.	0.6	0
129	Hierarchical Determination of Nuclear Deformability by Lamin Isoforms During Adult Hematopoiesis: Implications in Blood Cell Trafficking. Blood, 2012, 120, 1200-1200.	0.6	0
130	Raft registration across bilayers in a molecularly detailed model. Soft Matter, 2011, 7, 8182.	1.2	51
131	Morphologies of Charged Diblock Copolymers Simulated with a Neutral Coarse-Grained Model. Journal of Physical Chemistry B, 2011, 115, 4689-4695.	1.2	16
132	Striated Acto-Myosin Fibers Can Reorganize and Register in Response toÂElastic Interactions with the Matrix. Biophysical Journal, 2011, 100, 2706-2715.	0.2	42
133	Divalent Cation-Dependent Formation of Electrostatic PIP2 Clusters in Lipid Monolayers. Biophysical Journal, 2011, 101, 2178-2184.	0.2	75
134	Endothelial Targeting of Antibody-Decorated Polymeric Filomicelles. ACS Nano, 2011, 5, 6991-6999.	7.3	102
135	Curvature, rigidity, and pattern formation in functional polymer micelles and vesicles â€“ From dynamic visualization to molecular simulation. Current Opinion in Solid State and Materials Science, 2011, 15, 277-284.	5.6	33
136	Bubble wrap of cell-like aggregates. Nature, 2011, 471, 172-173.	13.7	14
137	Upregulation of paxillin and focal adhesion signaling follows Dystroglycan Complex deletions and promotes a hypertensive state of differentiation. European Journal of Cell Biology, 2011, 90, 249-260.	1.6	24
138	Bio-inspired, bioengineered and biomimetic drug delivery carriers. Nature Reviews Drug Discovery, 2011, 10, 521-535.	21.5	1,038
139	The effect of CD47 modified polymer surfaces on inflammatory cell attachment and activation. Biomaterials, 2011, 32, 4317-4326.	5.7	71
140	Lung vascular targeting through inhalation delivery: Insight from filamentous viruses and other shapes. IUBMB Life, 2011, 63, 607-612.	1.5	27
141	Protein unfolding accounts for the unusual mechanical behavior of fibrin networks. Acta Biomaterialia, 2011, 7, 2374-2383.	4.1	75
142	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
143	Cysteine shotgunâ€“mass spectrometry (CS-MS) reveals dynamic sequence of protein structure changes within mutant and stressed cells. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 8269-8274.	3.3	39
144	Myosin-II Is a Major Modulator of Human Hematopoietic Stem Cell Proliferation and Differentiation. Blood, 2011, 118, 2343-2343.	0.6	0

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145	Exonâ€skipped dystrophins for treatment of Duchenne muscular dystrophy: Mass spectrometry mapping of most exons and cooperative domain designs based on single molecule mechanics. Cytoskeleton, 2010, 67, 796-807.	1.0	20
146	Polymer Vesicles with a Red Cellâ€like Surface Charge: Microvascular Imaging and in vivo Tracking with Nearâ€Infrared Fluorescence. Macromolecular Rapid Communications, 2010, 31, 135-141.	2.0	33
147	Stem cells feel the difference. Nature Methods, 2010, 7, 695-697.	9.0	86
148	Polymersomes and Wormlike Micelles Made Fluorescent by Direct Modifications of Block Copolymer Amphiphiles. International Journal of Polymer Science, 2010, 2010, 1-10.	1.2	10
149	Mechanical Regulation of Cells by Materials and Tissues. MRS Bulletin, 2010, 35, 578-583.	1.7	37
150	Matrix elasticity, cytoskeletal forces and physics of the nucleus: how deeply do cells â€˜feelâ€™ outside and in?. Journal of Cell Science, 2010, 123, 297-308.	1.2	349
151	Curvature-Coupled Hydration of Semicrystalline Polymer Amphiphiles Yields flexible Worm Micelles but Favors Rigid Vesicles: Polycaprolactone-Based Block Copolymers. Macromolecules, 2010, 43, 9736-9746.	2.2	111
152	Self inhibition of phagocytosis: The affinity of â€˜marker of selfâ€™ CD47 for SIRPÎ± dictates potency of inhibition but only at low expression levels. Blood Cells, Molecules, and Diseases, 2010, 45, 67-74.	0.6	121
153	Physical Plasticity of the Nucleus and its Manipulation. Methods in Cell Biology, 2010, 98, 207-220.	0.5	17
154	How deeply cells feel: methods for thin gels. Journal of Physics Condensed Matter, 2010, 22, 194116.	0.7	264
155	Matrix elasticity in vitro controls muscle stem cell fate in vivo. Stem Cell Research and Therapy, 2010, 1, 38.	2.4	21
156	Curvature-driven molecular demixing in the budding and breakup of mixed component worm-like micelles. Soft Matter, 2010, 6, 1419.	1.2	59
157	Preparation of Collagen-Coated Gels that Maximize In Vitro Myogenesis of Stem Cells by Matching the Lateral Elasticity of In Vivo Muscle. Methods in Molecular Biology, 2010, 621, 185-202.	0.4	29
158	Myosin-II Plays Central Roles In Cell Life and Death Decisions During Adult Hematopoiesis.. Blood, 2010, 116, 1595-1595.	0.6	0
159	The foldome in cellular force transduction. , 2009, 2009, 3341-2.		1
160	Nanopolymeric Therapeutics. MRS Bulletin, 2009, 34, 422-431.	1.7	51
161	Polymersome delivery of siRNA and antisense oligonucleotides. Journal of Controlled Release, 2009, 134, 132-140.	4.8	167
162	Conformational Changes and Signaling in Cell and Matrix Physics. Current Biology, 2009, 19, R781-R789.	1.8	79

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163	Stem cells, microenvironment mechanics, and growth factor activation. Current Opinion in Cell Biology, 2009, 21, 630-635.	2.6	95
164	Biomechanics: Cell Research and Applications for the Next Decade. Annals of Biomedical Engineering, 2009, 37, 847-859.	1.3	169
165	Matrix Strains Induced by Cells: Computing How Far Cells Can Feel. Cellular and Molecular Bioengineering, 2009, 2, 39-48.	1.0	172
166	Spotted vesicles, striped micelles and Janus assemblies induced by ligand binding. Nature Materials, 2009, 8, 843-849.	13.3	283
167	Filamentous Polymer Nanocarriers of Tunable Stiffness that Encapsulate the Therapeutic Enzyme Catalase. Biomacromolecules, 2009, 10, 1324-1330.	2.6	39
168	Flexible Filaments for <i>in Vivo</i> Imaging and Delivery: Persistent Circulation of Filomicelles Opens the Dosage Window for Sustained Tumor Shrinkage. Molecular Pharmaceutics, 2009, 6, 1343-1352.	2.3	259
169	Calcium-Dependent Lateral Organization in Phosphatidylinositol 4,5-Bisphosphate (PIP2)- and Cholesterol-Containing Monolayers. Biochemistry, 2009, 48, 8241-8248.	1.2	87
170	Polymersome carriers: From self-assembly to siRNA and protein therapeutics. European Journal of Pharmaceutics and Biopharmaceutics, 2009, 71, 463-474.	2.0	348
171	Growth Factors, Matrices, and Forces Combine and Control Stem Cells. Science, 2009, 324, 1673-1677.	6.0	2,351
172	Cross-Correlated TIRF/AFM Reveals Asymmetric Distribution of Force-Generating Heads along Self-Assembled, â€œSyntheticâ€• Myosin Filaments. Biophysical Journal, 2009, 96, 1952-1960.	0.2	32
173	Multiscale Mechanics of Fibrin Polymer: Gel Stretching with Protein Unfolding and Loss of Water. Science, 2009, 325, 741-744.	6.0	346
174	Cell differentiation through tissue elasticity-coupled, myosin-driven remodeling. Current Opinion in Cell Biology, 2008, 20, 609-615.	2.6	87
175	Cys shotgun labeling of macrophages adhering to and engulfing Ig-opsonized cells. Transfusion Clinique Et Biologique, 2008, 15, 58-61.	0.2	2
176	Organization of Self-Assembled Peptideâ^'Polymer Nanofibers in Solution. Macromolecules, 2008, 41, 1430-1437.	2.2	55
177	Inhibition of â€œselfâ€• engulfment through deactivation of myosin-II at the phagocytic synapse between human cells. Journal of Cell Biology, 2008, 180, 989-1003.	2.3	379
178	Embryonic cardiomyocytes beat best on a matrix with heart-like elasticity: scar-like rigidity inhibits beating. Journal of Cell Science, 2008, 121, 3794-3802.	1.2	773
179	Matrix Elasticity, Cytoskeletal Tension, and TGF-Î²: The Insoluble and Soluble Meet. Science Signaling, 2008, 1, pe13.	1.6	159
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