

List of Publications by Year in descending order

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80
papers

11,144
citations

44069

48
h-index

69250

77
g-index

103
all docs

103
docs citations

103
times ranked

12609
citing authors

#	ARTICLE	IF	CITATIONS
1	The extracellular matrix guides the orientation of the cell division axis. <i>Nature Cell Biology</i> , 2005, 7, 947-953.	10.3	725
2	Micropatterning as a tool to decipher cell morphogenesis and functions. <i>Journal of Cell Science</i> , 2010, 123, 4201-4213.	2.0	625
3	Mechanisms to suppress multipolar divisions in cancer cells with extra centrosomes. <i>Genes and Development</i> , 2008, 22, 2189-2203.	5.9	562
4	Anisotropy of cell adhesive microenvironment governs cell internal organization and orientation of polarity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006, 103, 19771-19776.	7.1	525
5	Spatial organization of the extracellular matrix regulates cell-cell junction positioning. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 1506-1511.	7.1	502
6	Cell distribution of stress fibres in response to the geometry of the adhesive environment. <i>Cytoskeleton</i> , 2006, 63, 341-355.	4.4	386
7	β 1- and α v-class integrins cooperate to regulate myosin II during rigidity sensing of fibronectin-based microenvironments. <i>Nature Cell Biology</i> , 2013, 15, 625-636.	10.3	386
8	Experimental and theoretical study of mitotic spindle orientation. <i>Nature</i> , 2007, 447, 493-496.	27.8	377
9	Oncogene-like induction of cellular invasion from centrosome amplification. <i>Nature</i> , 2014, 510, 167-171.	27.8	360
10	Tubulin acetylation protects long-lived microtubules against mechanical ageing. <i>Nature Cell Biology</i> , 2017, 19, 391-398.	10.3	359
11	Microtubules acquire resistance from mechanical breakage through intraluminal acetylation. <i>Science</i> , 2017, 356, 328-332.	12.6	342
12	Cytokinesis Failure Triggers Hippo Tumor Suppressor Pathway Activation. <i>Cell</i> , 2014, 158, 833-848.	28.9	312
13	Actin Network Architecture Can Determine Myosin Motor Activity. <i>Science</i> , 2012, 336, 1310-1314.	12.6	281
14	Tubulin tyrosination is a major factor affecting the recruitment of CAP-Gly proteins at microtubule plus ends. <i>Journal of Cell Biology</i> , 2006, 174, 839-849.	5.2	271
15	Cell shape and cell division. <i>Current Opinion in Cell Biology</i> , 2006, 18, 648-657.	5.4	270
16	The Universal Dynamics of Cell Spreading. <i>Current Biology</i> , 2007, 17, 694-699.	3.9	249
17	Microtubules self-repair in response to mechanical stress. <i>Nature Materials</i> , 2015, 14, 1156-1163.	27.5	244
18	Simple and rapid process for single cell micro-patterning. <i>Lab on A Chip</i> , 2009, 9, 1640.	6.0	236

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19	Fat1 deletion promotes hybrid EMT state, tumour stemness and metastasis. Nature, 2021, 589, 448-455.	27.8	232
20	Architecture and Connectivity Govern Actin Network Contractility. Current Biology, 2016, 26, 616-626.	3.9	221
21	A new micropatterning method of soft substrates reveals that different tumorigenic signals can promote or reduce cell contraction levels. Lab on A Chip, 2011, 11, 2231.	6.0	217
22	The centrosome is an actin-organizing centre. Nature Cell Biology, 2016, 18, 65-75.	10.3	206
23	Cell shape and contractility regulate ciliogenesis in cell cycle“arrested cells. Journal of Cell Biology, 2010, 191, 303-312.	5.2	182
24	Comparative study and improvement of current cell micro-patterning techniques. Lab on A Chip, 2007, 7, 672-680.	6.0	158
25	Self-repair promotes microtubule rescue. Nature Cell Biology, 2016, 18, 1054-1064.	10.3	153
26	Kank2 activates talin, reduces force transduction across integrins and induces central adhesion“formation. Nature Cell Biology, 2016, 18, 941-953.	10.3	144
27	The first World Cell Race. Current Biology, 2012, 22, R673-R675.	3.9	130
28	Nucleation geometry governs ordered actin networks structures. Nature Materials, 2010, 9, 827-832.	27.5	117
29	Directed cytoskeleton self-organization. Trends in Cell Biology, 2012, 22, 671-682.	7.9	111
30	Actin nucleation at the centrosome controls lymphocyte polarity. Nature Communications, 2016, 7, 10969.	12.8	109
31	Measurement of cell traction forces with ImageJ. Methods in Cell Biology, 2015, 125, 269-287.	1.1	108
32	Protein Micropatterns. Methods in Cell Biology, 2010, 97, 133-146.	1.1	104
33	Convergence of microengineering and cellular self-organization towards functional tissue manufacturing. Nature Biomedical Engineering, 2017, 1, 939-956.	22.5	90
34	Get round and stiff for mitosis. HFSP Journal, 2008, 2, 65-71.	2.5	89
35	Polarity Reversal by Centrosome Repositioning Primes Cell Scattering during Epithelial-to-Mesenchymal Transition. Developmental Cell, 2017, 40, 168-184.	7.0	89
36	Microtubule-sliding activity of a kinesin-8 promotes spindle assembly and spindle-length control. Nature Cell Biology, 2013, 15, 948-957.	10.3	82

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37	Actin-Network Architecture Regulates Microtubule Dynamics. <i>Current Biology</i> , 2018, 28, 2647-2656.e4.	3.9	82
38	Actin filaments regulate microtubule growth at the centrosome. <i>EMBO Journal</i> , 2019, 38, .	7.8	82
39	Lattice defects induce microtubule self-renewal. <i>Nature Physics</i> , 2019, 15, 830-838.	16.7	79
40	Microtubules tune mechanosensitive cell responses. <i>Nature Materials</i> , 2022, 21, 366-377.	27.5	77
41	Stress fibres are embedded in a contractile cortical network. <i>Nature Materials</i> , 2021, 20, 410-420.	27.5	73
42	Polyacrylamide Hydrogel Micropatterning. <i>Methods in Cell Biology</i> , 2014, 120, 93-116.	1.1	70
43	Centrosome centering and decentering by microtubule network rearrangement. <i>Molecular Biology of the Cell</i> , 2016, 27, 2833-2843.	2.1	70
44	Tailoring cryo-electron microscopy grids by photo-micropatterning for in-cell structural studies. <i>Nature Methods</i> , 2020, 17, 50-54.	19.0	67
45	Self-repair protects microtubules from destruction by molecular motors. <i>Nature Materials</i> , 2021, 20, 883-891.	27.5	67
46	Reprogramming cell shape with laser nano-patterning. <i>Journal of Cell Science</i> , 2012, 125, 2134-40.	2.0	66
47	Microtubule stabilization drives 3D centrosome migration to initiate primary ciliogenesis. <i>Journal of Cell Biology</i> , 2017, 216, 3713-3728.	5.2	64
48	Spatial segregation between cell-cell and cell-matrix adhesions. <i>Current Opinion in Cell Biology</i> , 2012, 24, 628-636.	5.4	55
49	Fabrication of three-dimensional electrical connections by means of directed actin self-organization. <i>Nature Materials</i> , 2013, 12, 416-421.	27.5	55
50	CLASP Mediates Microtubule Repair by Restricting Lattice Damage and Regulating Tubulin Incorporation. <i>Current Biology</i> , 2020, 30, 2175-2183.e6.	3.9	50
51	Local actin nucleation tunes centrosomal microtubule nucleation during passage through mitosis. <i>EMBO Journal</i> , 2019, 38, .	7.8	48
52	Geometrical confinement controls the asymmetric patterning of Brachyury in cultures of pluripotent cells. <i>Development (Cambridge)</i> , 2018, 145, .	2.5	44
53	Variation in traction forces during cell cycle progression. <i>Biology of the Cell</i> , 2018, 110, 91-96.	2.0	43
54	Microtubules control nuclear shape and gene expression during early stages of hematopoietic differentiation. <i>EMBO Journal</i> , 2020, 39, e103957.	7.8	42

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55	Acto-myosin network geometry defines centrosome position. <i>Current Biology</i> , 2021, 31, 1206-1220.e5.	3.9	42
56	Microtubule self-repair. <i>Current Opinion in Cell Biology</i> , 2021, 68, 144-154.	5.4	36
57	Quantification of MAP and molecular motor activities on geometrically controlled microtubule networks. <i>Cytoskeleton</i> , 2013, 70, 12-23.	2.0	35
58	Dynamic reorganization of the actin cytoskeleton. <i>F1000Research</i> , 2015, 4, 940.	1.6	35
59	Geometrical and Mechanical Properties Control Actin Filament Organization. <i>PLoS Computational Biology</i> , 2015, 11, e1004245.	3.2	30
60	Network heterogeneity regulates steering in actin-based motility. <i>Nature Communications</i> , 2017, 8, 655.	12.8	30
61	The size-speed-force relationship governs migratory cell response to tumorigenic factors. <i>Molecular Biology of the Cell</i> , 2017, 28, 1612-1621.	2.1	28
62	Dissipation of contractile forces: the missing piece in cell mechanics. <i>Molecular Biology of the Cell</i> , 2017, 28, 1825-1832.	2.1	28
63	Spatial integration of mechanical forces by $\hat{\alpha}$ -actinin establishes actin network symmetry. <i>Journal of Cell Science</i> , 2019, 132, .	2.0	25
64	Design of a 2D no-flow chamber to monitor hematopoietic stem cells. <i>Lab on A Chip</i> , 2015, 15, 77-85.	6.0	20
65	Quantitative regulation of the dynamic steady state of actin networks. <i>ELife</i> , 2019, 8, .	6.0	16
66	Geometrical Control of Actin Assembly and Contractility. <i>Methods in Cell Biology</i> , 2014, 120, 19-38.	1.1	13
67	Kinesin-6 Klp9 orchestrates spindle elongation by regulating microtubule sliding and growth. <i>ELife</i> , 2021, 10, .	6.0	9
68	The biochemical composition of the actomyosin network sets the magnitude of cellular traction forces. <i>Molecular Biology of the Cell</i> , 2021, 32, 1737-1748.	2.1	8
69	Hematopoietic progenitors polarize in contact with bone marrow stromal cells in response to SDF1. <i>Journal of Cell Biology</i> , 2021, 220, .	5.2	8
70	Directed Actin Assembly and Motility. <i>Methods in Enzymology</i> , 2014, 540, 283-300.	1.0	7
71	Manufacturing a Bone Marrow-On-A-Chip Using Maskless Photolithography. <i>Methods in Molecular Biology</i> , 2021, 2308, 263-278.	0.9	7
72	Stem Cell-Like Properties of CK2 ² -down Regulated Mammary Cells. <i>Cancers</i> , 2017, 9, 114.	3.7	6

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73	Wave of migration. Nature Physics, 2012, 8, 583-584.	16.7	5
74	Probing Ciliogenesis Using Micropatterned Substrates. Methods in Enzymology, 2013, 525, 109-130.	1.0	4
75	Cellular stretch reveals superelastic powers. Nature, 2018, 563, 192-194.	27.8	2
76	Homage to Michel Bornens, who passed away on March 9, 2022 at the age of 84. EMBO Reports, 2022, , e55237.	4.5	1
77	Golgi mechanics controls lipid metabolism. Nature Cell Biology, 2019, 21, 301-302.	10.3	0
78	A new perspective on microtubule dynamics: destruction by molecular motors and self-repair. Comptes Rendus - Biologies, 2021, 344, 297-310.	0.2	0
79	Visualization and Quantification of Microtubule Self-Repair. Methods in Molecular Biology, 2022, 2430, 279-289.	0.9	0
80	Reconstituting the Interaction Between Purified Nuclei and Microtubule Network. Methods in Molecular Biology, 2022, 2430, 385-399.	0.9	0