Nicolas Minc

List of Publications by Year
in descending order

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56 papers	3,217 citations	201674 27 h-index	168389 53 g-index
65 all docs	65 docs citations	65 times ranked	3588 citing authors

#	Article	IF	Citations
1	Cell division geometries as central organizers of early embryo development. Seminars in Cell and Developmental Biology, 2022, 130, 3-11.	5.0	8
2	Cells under pressure: how yeast cells respond to mechanical forces. Trends in Microbiology, 2022, 30, 495-510.	7.7	26
3	Contribution of cytoplasm viscoelastic properties to mitotic spindle positioning. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	28
4	Roadmap for the multiscale coupling of biochemical and mechanical signals during development. Physical Biology, 2021, 18, 041501.	1.8	29
5	Detection of surface forces by the cell-wall mechanosensor Wsc1 in yeast. Developmental Cell, 2021, 56, 2856-2870.e7.	7.0	15
6	Bioelectric signaling and the control of cardiac cell identity in response to mechanical forces. Science, 2021, 374, 351-354.	12.6	40
7	InÂVitro Reconstitution of Dynein Force Exertion in a Bulk Viscous Medium. Current Biology, 2020, 30, 4534-4540.e7.	3.9	11
8	An image analysis method to survey the dynamics of polar protein abundance in the regulation of tip growth. Journal of Cell Science, 2020, 133, .	2.0	5
9	The Perinuclear ER Scales Nuclear Size Independently of Cell Size in Early Embryos. Developmental Cell, 2020, 54, 395-409.e7.	7.0	40
10	Cytoskeleton Force Exertion in Bulk Cytoplasm. Frontiers in Cell and Developmental Biology, 2020, 8, 69.	3.7	28
11	Systematic mapping of cell wall mechanics in the regulation of cell morphogenesis. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 13833-13838.	7.1	24
12	Scaling properties of centering forces. Europhysics Letters, 2019, 125, 48001.	2.0	3
13	Modeling Embryonic Cleavage Patterns. Methods in Molecular Biology, 2019, 1920, 393-406.	0.9	2
14	Asymmetric division through a reduction of microtubule centering forces. Journal of Cell Biology, 2019, 218, 771-782.	5.2	28
15	Mechanosensation Dynamically Coordinates Polar Growth and Cell Wall Assembly to Promote Cell Survival. Developmental Cell, 2018, 45, 170-182.e7.	7.0	60
16	How cells sense their own shape â€“ mechanisms to probe cell geometry and their implications in cellular organization and function. Journal of Cell Science, 2018, 131, .	2.0	64
17	A Positive Feedback between Growth and Polarity Provides Directional Persistency and Flexibility to the Process of Tip Growth. Current Biology, 2018, 28, 3342-3351.e3.	3.9	28
18	Physical forces determining the persistency and centring precision of microtubule asters. Nature Physics, 2018, 14, 848-854.	16.7	51

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19	Microtubule Dynamics Scale with Cell Size to Set Spindle Length and Assembly Timing. Developmental Cell, 2018, 45, 496-511.e6.	7.0	76
20	Contractile forces at tricellular contacts modulate epithelial organization and monolayer integrity. Nature Communications, 2017, 8, 13998.	12.8	68
21	Gradients of phosphatidylserine contribute to plasma membrane charge localization and cell polarity in fission yeast. Molecular Biology of the Cell, 2017, 28, 210-220.	2.1	30
22	Eml1 loss impairs apical progenitor spindle length and soma shape in the developing cerebral cortex. Scientific Reports, 2017, 7, 17308.	3.3	26
23	The invariant cleavage pattern displayed by ascidian embryos depends on spindle positioning along the cell's longest axis in the apical plane and relies on asynchronous cell divisions. ELife, 2017, 6, .	6.0	29
24	Generic Theoretical Models to Predict Division Patterns of Cleaving Embryos. Developmental Cell, 2016, 39, 667-682.	7.0	59
25	Shapeâ€“motion relationships of centering microtubule asters. Journal of Cell Biology, 2016, 212, 777-787.	5.2	68
26	Epithelial tricellular junctions act as interphase cell shape sensors to orient mitosis. Nature, 2016, 530, 495-498.	27.8	217
27	Measurement and manipulation of cell size parameters in fission yeast. Methods in Cell Biology, 2015, 125, 423-436.	1.1	19
28	Actin-Based Transport Adapts Polarity Domain Size to Local Cellular Curvature. Current Biology, 2015, 25, 2677-2683.	3.9	21
29	Mechanics and morphogenesis of fission yeast cells. Current Opinion in Microbiology, 2015, 28, 36-45.	5.1	34
30	Magnetic Field-Based Lab-on-Chip Devices. , 2015, , 1681-1689.		1
31	Dissecting the Molecular Mechanisms of Electrotactic Effects. Advances in Wound Care, 2014, 3, 139-148.	5.1	6
32	Electrochemical Regulation of Budding Yeast Polarity. PLoS Biology, 2014, 12, e1002029.	5.6	23
33	Symmetry Breaking in Spore Germination Relies on an Interplay between Polar Cap Stability and Spore Wall Mechanics. Developmental Cell, 2014, 28, 534-546.	7.0	80
34	Microfabricated Chambers as Force Sensors for Probing Forces of Fungal Growth. Methods in Cell Biology, 2014, 120, 215-226.	1.1	3
35	Electrochemical Control of Cell and Tissue Polarity. Annual Review of Cell and Developmental Biology, 2014, 30, 317-336.	9.4	69
36	Manipulating Cell Shape by Placing Cells into Micro-fabricated Chambers. Methods in Molecular Biology, 2014, 1136, 281-290.	0.9	10

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37	Magnetic Field-Based Lab-on-Chip Devices. , 2014, , 1-10.		0
38	Anthrax receptors position the spindle. Nature Cell Biology, 2013, 15, 11-13.	10.3	1
39	Tension-oriented cell divisions limit anisotropic tissue tension in epithelial spreading during zebrafish epiboly. Nature Cell Biology, 2013, 15, 1405-1414.	10.3	226
40	Contributions of Turgor Pressure, the Contractile Ring, and Septum Assembly to Forces in Cytokinesis in Fission Yeast. Current Biology, 2012, 22, 1601-1608.	3.9	130
41	Electrochemical regulation of cell polarity and the cytoskeleton. Cytoskeleton, 2012, 69, 601-612.	2.0	20
42	Predicting division plane position and orientation. Trends in Cell Biology, 2012, 22, 193-200.	7.9	97
43	Influence of Cell Geometry on Division-Plane Positioning. Cell, 2011, 144, 414-426.	28.9	338
44	Electrical Control of Cell Polarization in the Fission Yeast Schizosaccharomyces pombe. Current Biology, 2010, 20, 710-716.	3.9	74
45	Microfluidic sorting and multimodal typing of cancer cells in self-assembled magnetic arrays. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 14524-14529.	7.1	296
46	Establishing New Sites of Polarization by Microtubules. Current Biology, 2009, 19, 83-94.	3.9	82
47	Mechanical Forces of Fission Yeast Growth. Current Biology, 2009, 19, 1096-1101.	3.9	156
48	Controlled proteolysis of normal and pathological prion protein in a microfluidic chip. Lab on A Chip, 2008, 8, 294.	6.0	47
49	Autoassemblage de colloÃ¯des magnÃ©tiques sur un rÃ©seau de plots en nickelÂ: Application Ã lâ€™Ã©lectrophorÃ¨se de longs ADN. Houille Blanche, 2007, 93, 34-38.	0.3	1
50	Functionalized magnetic micro- and nanoparticles: Optimization and application to Î¼-chip tryptic digestion. Electrophoresis, 2006, 27, 1811-1824.	2.4	67
51	In-capillary non-covalent labeling of insulin and one gastrointestinal peptide for their analyses by capillary electrophoresis with laser-induced fluorescence detection. Journal of Chromatography A, 2005, 1087, 203-209.	3.7	11
52	Motion of single long DNA molecules through arrays of magnetic columns. Electrophoresis, 2005, 26, 362-375.	2.4	39
53	Non-Markovian Transport of DNA in Microfluidic Post Arrays. Physical Review Letters, 2005, 94, 198105.	7.8	30
54	Use of self assembled magnetic beads for on-chip protein digestion. Lab on A Chip, 2005, 5, 935.	6.0	114

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55	Utilization of newly developed immobilized enzyme reactors for preparation and study of immunoglobulin G fragments. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2004, 808, 15-24.	2.3	38
56	Quantitative Microfluidic Separation of DNA in Self-Assembled Magnetic Matrixes. Analytical Chemistry, 2004, 76, 3770-3776.	6.5	103