Rodrigo Fernandez-Gonzalez

List of Publications by Year
in descending order

67 papers	3,680 citations	236612 25 h-index	155451 55 g-index
76 all docs	76 docs citations	76 times ranked	4319 citing authors

#	Article	IF	Citations
1	Myosin II Dynamics Are Regulated by Tension in Intercalating Cells. Developmental Cell, 2009, 17, 736-743.	3.1	581
2	3D reconstruction of histological sections: Application to mammary gland tissue. Microscopy Research and Technique, 2010, 73, 1019-1029.	1.2	565
3	Integration of contractile forces during tissue invagination. Journal of Cell Biology, 2010, 188, 735-749.	2.3	495
4	Rho-Kinase Directs Bazooka/Par-3 Planar Polarity during Drosophila Axis Elongation. Developmental Cell, 2010, 19, 377-388.	3.1	244
5	Oscillatory behaviors and hierarchical assembly of contractile structures in intercalating cells. Physical Biology, 2011, 8, 045005.	0.8	171
6	A stepwise model of Reaction-Diffusion and Positional-Information governs self-organized human peri-gastrulation-like patterning. Development (Cambridge), 2017, 144, 4298-4312.	1.2	124
7	Anisotropic stress orients remodelling of mammalian limb bud ectoderm. Nature Cell Biology, 2015, 17, 569-579.	4.6	102
8	Local mechanical forces promote polarized junctional assembly and axis elongation in Drosophila. ELife, 2016, 5, .	2.8	90
9	Force-dependent allostery of the Î±-catenin actin-binding domain controls adherens junction dynamics and functions. Nature Communications, 2018, 9, 5121.	5.8	86
10	Polarized E-cadherin endocytosis directs actomyosin remodeling during embryonic wound repair. Journal of Cell Biology, 2015, 210, 801-816.	2.3	69
11	Wounded cells drive rapid epidermal repair in the early Drosophila embryo. Molecular Biology of the Cell, 2013, 24, 3227-3237.	0.9	62
12	Myosin II promotes the anisotropic loss of the apical domain during <i>Drosophila</i> neuroblast ingression. Journal of Cell Biology, 2017, 216, 1387-1404.	2.3	62
13	Dynamic force patterns promote collective cell movements during embryonic wound repair. Nature Physics, 2018, 14, 750-758.	6.5	55
14	Oxidative Stress Orchestrates Cell Polarity to Promote Embryonic Wound Healing. Developmental Cell, 2018, 47, 377-387.e4.	3.1	55
15	High-throughput analysis of multispectral images of breast cancer tissue. IEEE Transactions on Image Processing, 2006, 15, 2259-2268.	6.0	53
16	Basal Cell-Extracellular Matrix Adhesion Regulates Force Transmission during Tissue Morphogenesis. Developmental Cell, 2016, 39, 611-625.	3.1	52
17	Cellâ€“cell and cellâ€“extracellular matrix adhesions cooperate to organize actomyosin networks and maintain force transmission during dorsal closure. Molecular Biology of the Cell, 2017, 28, 1301-1310.	0.9	47
18	System for combined three-dimensional morphological and molecular analysis of thick tissue specimens. Microscopy Research and Technique, 2002, 59, 522-530.	1.2	40

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19	Cell Mechanics and Feedback Regulation of Actomyosin Networks. Science Signaling, 2009, 2, pe78.	1.6	39
20	Tension regulates myosin dynamics during <i>Drosophila</i> embryonic wound repair. Journal of Cell Science, 2017, 130, 689-696.	1.2	39
21	An Actomyosin-Arf-GEF Negative Feedback Loop for Tissue Elongation under Stress. Current Biology, 2017, 27, 2260-2270.e5.	1.8	37
22	Automated multidimensional image analysis reveals a role for Abl in embryonic wound repair. Development (Cambridge), 2014, 141, 2901-2911.	1.2	36
23	Role of Î±-Catenin and its mechanosensing properties in regulating Hippo/YAP-dependent tissue growth. PLoS Genetics, 2019, 15, e1008454.	1.5	34
24	Automated cell tracking identifies mechanically-oriented cell divisions during <i>Drosophila</i> axis elongation. Development (Cambridge), 2017, 144, 1350-1361.	1.2	33
25	Collision of Expanding Actin Caps with Actomyosin Borders for Cortical Bending and Mitotic Rounding in a Syncytium. Developmental Cell, 2018, 45, 551-564.e4.	3.1	32
26	Forceful closure: cytoskeletal networks in embryonic wound repair. Molecular Biology of the Cell, 2019, 30, 1353-1358.	0.9	30
27	A biomechanical model for cell polarization and intercalation during<i>Drosophila</i>germband extension. Physical Biology, 2015, 12, 056011.	0.8	29
28	Coordinating cell movements in vivo: junctional and cytoskeletal dynamics lead the way. Current Opinion in Cell Biology, 2017, 48, 54-62.	2.6	29
29	REEP5 depletion causes sarco-endoplasmic reticulum vacuolization and cardiac functional defects. Nature Communications, 2020, 11, 965.	5.8	28
30	Quantitative Image Analysis of Cell Behavior and Molecular Dynamics During Tissue Morphogenesis. Methods in Molecular Biology, 2015, 1189, 99-113.	0.4	28
31	Tension (re)builds: Biophysical mechanisms of embryonic wound repair. Mechanisms of Development, 2017, 144, 43-52.	1.7	27
32	DDR1 (Discoidin Domain Receptor-1)-RhoA (Ras Homolog Family Member A) Axis Senses Matrix Stiffness to Promote Vascular Calcification. Arteriosclerosis, Thrombosis, and Vascular Biology, 2020, 40, 1763-1776.	1.1	24
33	Automatic segmentation of histological structures in mammary gland tissue sections. Journal of Biomedical Optics, 2004, 9, 444.	1.4	21
34	Mapping mammary gland architecture using multi-scale in situ analysis. Integrative Biology (United) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	0.6	21
35	Limiting-Dilution Transplantation Assays in Mammary Stem Cell Studies. Methods in Molecular Biology, 2010, 621, 29-47.	0.4	18
36	Quantitative modelling of epithelial morphogenesis: integrating cell mechanics and molecular dynamics. Seminars in Cell and Developmental Biology, 2017, 67, 153-160.	2.3	17

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37	A tool for the quantitative spatial analysis of complex cellular systems. IEEE Transactions on Image Processing, 2005, 14, 1300-1313.	6.0	14
38	PyJAMAS: open-source, multimodal segmentation and analysis of microscopy images. Bioinformatics, 2022, 38, 594-596.	1.8	13
39	p38-mediated cell growth and survival drive rapid embryonic wound repair. Cell Reports, 2021, 37, 109874.	2.9	13
40	Quantitative Image Analysis in Mammary Gland Biology. Journal of Mammary Gland Biology and Neoplasia, 2004, 9, 343-359.	1.0	12
41	Laser ablation to investigate cell and tissue mechanics in vivo. , 2015, , 128-147.		12
42	Quantitative in vivo microscopy: the return from the â€˜omicsâ€™. Current Opinion in Biotechnology, 2006, 17, 501-510.	3.3	11
43	An in vitro model of tissue boundary formation for dissecting the contribution of different boundary forming mechanisms. Integrative Biology (United Kingdom), 2015, 7, 298-312.	0.6	11
44	Modeling cell intercalation during<i>Drosophila</i>germband extension. Physical Biology, 2018, 15, 066008.	0.8	11
45	Feeling the Squeeze: Live-Cell Extrusion Limits Cell Density in Epithelia. Cell, 2012, 149, 965-967.	13.5	10
46	Q&A: Quantitative approaches to planar polarity and tissue organization. Journal of Biology, 2009, 8, 103.	2.7	9
47	(Machine-)Learning to analyze in vivo microscopy: Support vector machines. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2017, 1865, 1719-1727.	1.1	9
48	The recycling endosome protein Rab25 coordinates collective cell movements in the zebrafish surface epithelium. ELife, 2021, 10, .	2.8	9
49	Pak1 and PP2A antagonize aPKC function to support cortical tension induced by the Crumbs-Yurt complex. ELife, 2021, 10, .	2.8	9
50	Crumbs complexâ€"directed apical membrane dynamics in epithelial cell ingression. Journal of Cell Biology, 2022, 221, .	2.3	9
51	Epithelial Organization: May the Force Be with You. Current Biology, 2008, 18, R163-R165.	1.8	8
52	Multiscale In Vivo Imaging of Collective Cell Migration in Drosophila Embryos. Methods in Molecular Biology, 2021, 2179, 199-224.	0.4	8
53	In Situ Analysis of Cell Populations: Long-Term Label-Retaining Cells. Methods in Molecular Biology, 2010, 621, 1-28.	0.4	8
54	Use of Stem Cell Markers in Dissociated Mammary Populations. Methods in Molecular Biology, 2010, 621, 49-55.	0.4	8

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55	The Crk adapter protein is essential for<i>Drosophila</i>embryogenesis, where it regulates multiple actin-dependent morphogenic events. Molecular Biology of the Cell, 2019, 30, 2399-2421.	0.9	5
56	Actin and myosin dynamics are independent during<i>Drosophila</i>embryonic wound repair. Molecular Biology of the Cell, 2019, 30, 2901-2912.	0.9	5
57	Myosin cables control the timing of tissue internalization in the Drosophila embryo. Cells and Development, 2021, , 203721.	0.7	5
58	Gastrulation: Cell Polarity Comes Full Circle. Current Biology, 2013, 23, R845-R848.	1.8	2
59	Shape of my heart: Cell-cell adhesion and cytoskeletal dynamics during Drosophila cardiac morphogenesis. Experimental Cell Research, 2017, 358, 65-70.	1.2	2
60	A tool for the quantitative spatial analysis of mammary gland epithelium. , 2004, 2004, 1549-52.		1
61	Oriented Cell Division: The Pull of the Pole. Developmental Cell, 2018, 47, 686-687.	3.1	1
62	A System for Computer-based Reconstruction of 3-Dimensional Structures from Serial Tissue Sections: an Application to the Study of Normal and Neoplastic Mammary Gland Biology. Microscopy and Microanalysis, 2001, 7, 964-965.	0.2	0
63	Automatic segementation of histological structures in normal and neoplastic mammary gland tissue sections. , 2003, , .		0
64	A force to be reckoned with. Nature Physics, 2014, 10, 626-627.	6.5	0
65	Introduction: CANFLY XV 2019. Genome, 2021, 64, vii-viii.	0.9	0
66	Tension regulates myosin dynamics during <i>Drosophila</i> embryonic wound repair. Development (Cambridge), 2017, 144, e1.2-e1.2.	1.2	0
67	Automated cell tracking identifies mechanically oriented cell divisions during Drosophila axis elongation. Journal of Cell Science, 2017, 130, e1.2-e1.2.	1.2	0