## Marcos Gonzalez-Gaitan

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/5408757/publications.pdf

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86 papers 7,532 citations

57758 44 h-index 83 g-index

101 all docs

101 docs citations

times ranked

101

7494 citing authors

#	Article	IF	CITATIONS
1	Gradient Formation of the TGF-Î <sup>2</sup> Homolog Dpp. Cell, 2000, 103, 981-992.	28.9	577
2	Role of Drosophila Rab5 during endosomal trafficking at the synapse and evoked neurotransmitter release. Journal of Cell Biology, 2003, 161, 609-624.	5.2	395
3	Kinetics of Morphogen Gradient Formation. Science, 2007, 315, 521-525.	12.6	355
4	A fluorescent membrane tension probe. Nature Chemistry, 2018, 10, 1118-1125.	13.6	343
5	The Endocytic Protein α-Adaptin Is Required for Numb-Mediated Asymmetric Cell Division in Drosophila. Developmental Cell, 2002, 3, 221-231.	7.0	340
6	Dynamics of Dpp Signaling and Proliferation Control. Science, 2011, 331, 1154-1159.	12.6	330
7	Role of Drosophila α-Adaptin in Presynaptic Vesicle Recycling. Cell, 1997, 88, 767-776.	28.9	247
8	Morphogen Gradient Formation. Cold Spring Harbor Perspectives in Biology, 2009, 1, a001255-a001255.	5.5	244
9	SiR–Hoechst is a far-red DNA stain for live-cell nanoscopy. Nature Communications, 2015, 6, 8497.	12.8	244
10	spalt encodes an evolutionarily conserved zinc finger protein of novel structure which provides homeotic gene function in the head and tail region of the Drosophila embryo EMBO Journal, 1994, 13, 168-179.	7.8	229
11	Directional Delta and Notch trafficking in Sara endosomes during asymmetric cell division. Nature, 2009, 458, 1051-1055.	27.8	179
12	Fluorescent Flippers for Mechanosensitive Membrane Probes. Journal of the American Chemical Society, 2015, 137, 568-571.	13.7	159
13	Quantitative approaches in developmental biology. Nature Reviews Genetics, 2009, 10, 517-530.	16.3	149
14	Precision of the Dpp gradient. Development (Cambridge), 2008, 135, 1137-1146.	2.5	138
15	Biochemical Membrane Lipidomics during Drosophila Development. Developmental Cell, 2013, 24, 98-111.	7.0	133
16	Signal dispersal and transduction through the endocytic pathway. Nature Reviews Molecular Cell Biology, 2003, 4, 213-224.	37.0	129
17	Polarized endosome dynamics by spindle asymmetry during asymmetric cell division. Nature, 2015, 528, 280-285.	27.8	116
18	Highly Activatable and Environment-Insensitive Optical Highlighters for Selective Spatiotemporal Imaging of Target Proteins. Journal of the American Chemical Society, 2012, 134, 11153-11160.	13.7	115

#	Article	IF	Citations
19	Cell proliferation patterns in the wing imaginal disc of Drosophila. Mechanisms of Development, 1994, 46, 183-200.	1.7	113
20	Essential role of endophilin A in synaptic vesicle budding at the Drosophila neuromuscular junction. EMBO Journal, 2002, 21, 1661-1672.	7.8	109
21	Dpp gradient formation by dynamin-dependent endocytosis: receptor trafficking and the diffusion model. Development (Cambridge), 2004, 131, 4843-4856.	2.5	106
22	Efficient Delivery of Quantum Dots into the Cytosol of Cells Using Cell-Penetrating Poly(disulfide)s. Journal of the American Chemical Society, 2017, 139, 10172-10175.	13.7	106
23	Target-selected mutant screen by TILLING in Drosophila. Genome Research, 2005, 15, 718-723.	5.5	105
24	Understanding morphogenetic growth control â€" lessons from flies. Nature Reviews Molecular Cell Biology, 2011, 12, 594-604.	37.0	103
25	Sara Endosomes and the Maintenance of Dpp Signaling Levels Across Mitosis. Science, 2006, 314, 1135-1139.	12.6	99
26	Number, identity, and sequence of the Drosophila head segments as revealed by neural elements and their deletion patterns in mutants Proceedings of the National Academy of Sciences of the United States of America, 1994, 91, 8363-8367.	7.1	98
27	spalt encodes an evolutionarily conserved zinc finger protein of novel structure which provides homeotic gene function in the head and tail region of the Drosophila embryo. EMBO Journal, 1994, 13, 168-79.	7.8	95
28	Robust Formation of Morphogen Gradients. Physical Review Letters, 2005, 94, 018103.	7.8	94
29	Spatial restriction of receptor tyrosine kinase activity through a polarized endocytic cycle controls border cell migration. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 22558-22563.	7.1	91
30	Spermatocyte cytokinesis requires rapid membrane addition mediated by ARF6 on central spindle recycling endosomes. Development (Cambridge), 2007, 134, 4437-4447.	2.5	90
31	Directional Notch trafficking in Sara endosomes during asymmetric cell division in the spinal cord. Nature Cell Biology, 2015, 17, 333-339.	10.3	83
32	Redundant functions of the genes knirps and knirps-related for the establishment of anterior Drosophila head structures Proceedings of the National Academy of Sciences of the United States of America, 1994, 91, 8567-8571.	7.1	71
33	Nucleic Acid Templated Chemical Reaction in a Live Vertebrate. ACS Central Science, 2016, 2, 394-400.	11.3	71
34	Visualizing Long-Range Movement of the Morphogen Xnr2 in the Xenopus Embryo. Current Biology, 2004, 14, 1916-1923.	3.9	66
35	Endocytic Regulation of Notch Signalling During Development. Traffic, 2009, 10, 792-802.	2.7	65
36	Investigating the principles of morphogen gradient formation: from tissues to cells. Current Opinion in Genetics and Development, 2012, 22, 527-532.	3.3	65

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37	Dynamics of anisotropic tissue growth. New Journal of Physics, 2008, 10, 063001.	2.9	64
38	ESCRT proteins restrict constitutive NF- $\hat{\mathbb{P}}$ B signaling by trafficking cytokine receptors. Science Signaling, 2016, 9, ra8.	3.6	64
39	Pharmacological disruption of the Notch transcription factor complex. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 16292-16301.	7.1	64
40	Growth control by a moving morphogen gradient during <i>Drosophila</i> eye development. Development (Cambridge), 2014, 141, 1884-1893.	2.5	55
41	Postsynaptic Mad Signaling at the Drosophila Neuromuscular Junction. Current Biology, 2006, 16, 625-635.	3.9	54
42	Sara endosomes and the asymmetric division of intestinal stem cells. Development (Cambridge), 2014, 141, 2014-2023.	2.5	52
43	Invagination centers within the <i>Drosophila</i> stomatogastric nervous system anlage are positioned by <i>Notch</i> -mediated signaling which is spatially controlled through <i>wingless</i> Development (Cambridge), 1995, 121, 2313-2325.	2.5	51
44	Anthrax toxin receptor 2a controls mitotic spindle positioning. Nature Cell Biology, 2013, 15, 28-39.	10.3	47
45	Headgroup engineering in mechanosensitive membrane probes. Chemical Communications, 2016, 52, 14450-14453.	4.1	46
46	Morphogen transport in epithelia. Physical Review E, 2007, 75, 011901.	2.1	45
47	The Decapentaplegic morphogen gradient: a precise definition. Current Opinion in Cell Biology, 2008, 20, 137-143.	5.4	45
48	A novel function for the Rab5 effector Rabenosyn-5 in planar cell polarity. Development (Cambridge), 2010, 137, 2353-2364.	2.5	44
49	Identical transacting factor requirement for knirps and knirps-related gene expression in the anterior but not in the posterior region of the Drosophila embryo. Mechanisms of Development, 1994, 46, 169-181.	1.7	42
50	Quantification of Biological Interactions with Particle Image Cross-Correlation Spectroscopy (PICCS). Biophysical Journal, 2011, 100, 1810-1818.	0.5	37
51	Oriented cell division in vertebrate embryogenesis. Current Opinion in Cell Biology, 2011, 23, 697-704.	5.4	35
52	BMP Signaling Gradient Scaling in the Zebrafish Pectoral Fin. Cell Reports, 2020, 30, 4292-4302.e7.	6.4	35
53	Morphogen gradient scaling by recycling of intracellular Dpp. Nature, 2022, 602, 287-293.	27.8	33
54	Endocytic trafficking during Drosophila development. Mechanisms of Development, 2003, 120, 1265-1282.	1.7	32

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55	Quantification of growth asymmetries in developing epithelia. European Physical Journal E, 2009, 30, 93-99.	1.6	31
56	Labelling cell structures and tracking cell lineage in zebrafish using SNAP-tag. Developmental Dynamics, 2011, 240, 820-827.	1.8	31
57	Uninflatable and Notch Control the Targeting of Sara Endosomes during Asymmetric Division. Current Biology, 2014, 24, 2142-2148.	3.9	30
58	Diselenolaneâ€Mediated Cellular Uptake: Efficient Cytosolic Delivery of Probes, Peptides, Proteins, Artificial Metalloenzymes and Proteinâ€Coated Quantum Dots. Chemistry - A European Journal, 2019, 25, 4047-4051.	3.3	29
59	Cell-Penetrating Streptavidin: A General Tool for Bifunctional Delivery with Spatiotemporal Control, Mediated by Transport Systems Such as Adaptive Benzopolysulfane Networks. Journal of the American Chemical Society, 2020, 142, 4784-4792.	13.7	28
60	The range of spalt-activating Dpp signalling is reduced in endocytosis-defective Drosophila wing discs. Mechanisms of Development, 1999, 87, 143-151.	1.7	26
61	Endocytosis and mitosis: A two-way relationship. Cell Cycle, 2009, 8, 3311-3318.	2.6	26
62	Analysis of neural elements in head-mutant Drosophila embryos suggests segmental origin of the optic lobes. Roux's Archives of Developmental Biology, 1995, 205, 31-44.	1.2	25
63	Endocytosis, asymmetric cell division, stem cells and cancer: Unus pro omnibus, omnes pro uno. Molecular Oncology, 2009, 3, 339-353.	4.6	25
64	Critical Point in Self-Organized Tissue Growth. Physical Review Letters, 2018, 120, 198102.	7.8	25
65	Membrane traffic during embryonic development: epithelial formation, cell fate decisions and differentiation. Current Opinion in Cell Biology, 2004, 16, 407-414.	5.4	22
66	The Role of Endocytosis during Morphogenetic Signaling. Cold Spring Harbor Perspectives in Biology, 2014, 6, a016881-a016881.	5.5	21
67	Response to Comment on "Dynamics of Dpp Signaling and Proliferation Control― Science, 2012, 335, 401-401.	12.6	20
68	The missing link: implementation of morphogenetic growth control on the cellular and molecular level. Current Opinion in Genetics and Development, 2011, 21, 690-695.	3.3	19
69	Monitoring Notch/Delta Endosomal Trafficking and Signaling in Drosophila. Methods in Enzymology, 2014, 534, 301-321.	1.0	19
70	The wing and the eye: a parsimonious theory for scaling and growth control?. Wiley Interdisciplinary Reviews: Developmental Biology, 2015, 4, 591-608.	5.9	19
71	Tip cellâ€derived RTK signaling initiates cell movements in theDrosophilastomatogastric nervous system anlage. EMBO Reports, 2000, 1, 366-371.	4.5	16
72	From endocytosis to tumors through asymmetric cell division of stem cells. Current Opinion in Cell Biology, 2008, 20, 462-469.	5.4	16

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73	The Crumbs_C isoform of <i>Drosophila &lt; li&gt;shows tissue- and stage-specific expression and prevents light-dependent retinal degeneration. Biology Open, 2017, 6, 165-175.</i>	1.2	16
74	Invagination centers within the Drosophila stomatogastric nervous system anlage are positioned by Notch-mediated signaling which is spatially controlled through wingless. Development (Cambridge), 1995, 121, 2313-25.	2.5	14
75	Sara phosphorylation state controls the dispatch of endosomes from the central spindle during asymmetric division. Nature Communications, 2017, 8, 15285.	12.8	12
76	Embryonic limb development in Drosophila. Trends in Genetics, 1993, 9, 371-373.	6.7	10
77	Endocytic Adaptor Protein Tollip Inhibits Canonical Wnt Signaling. PLoS ONE, 2015, 10, e0130818.	2.5	10
78	Endosomal Trafficking During Mitosis and Notch-Dependent Asymmetric Division. Progress in Molecular and Subcellular Biology, 2018, 57, 301-329.	1.6	10
79	Flipper Probes for the Community. Chimia, 2021, 75, 1004.	0.6	9
80	A role for Flower and cell death in controlling morphogen gradient scaling. Nature Cell Biology, 2022, 24, 424-433.	10.3	9
81	The Garden of Forking Paths: Recycling, Signaling, and Degradation. Developmental Cell, 2008, 15, 172-174.	<b>7.</b> 0	8
82	Wnt-controlled sphingolipids modulate Anthrax Toxin Receptor palmitoylation to regulate oriented mitosis in zebrafish. Nature Communications, 2020, 11, 3317.	12.8	8
83	Tales of 1001 Functions: The Multiple Roles of Membrane Trafficking in Development. Traffic, 2009, 10, 781-782.	2.7	4
84	Quantitative Imaging of Morphogen Gradients in <i>Drosophila</i> Imaginal Discs. Cold Spring Harbor Protocols, 2013, 2013, pdb.top074237.	0.3	4
85	Integrating levels of complexity: a trend in developmental biology. Current Opinion in Cell Biology, 2011, 23, 647-649.	5.4	2
86	When cell biology meets theory. Journal of Cell Biology, 2015, 210, 1041-1045.	5.2	2