

# Timothy E Saunders

## List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

52  
papers

1,441  
citations

18  
h-index

37  
g-index

75  
ext. papers

2,020  
ext. citations

7.3  
avg, IF

4.99  
L-index

#	Paper	IF	Citations
52	Multiview light-sheet microscope for rapid in toto imaging. <i>Nature Methods</i> , <b>2012</b> , 9, 730-3	21.6	321
51	Imaging fluorescence (cross-) correlation spectroscopy in live cells and organisms. <i>Nature Protocols</i> , <b>2015</b> , 10, 1948-74	18.8	113
50	Embryo-scale tissue mechanics during <i>Drosophila</i> gastrulation movements. <i>Nature Communications</i> , <b>2015</b> , 6, 8677	17.4	93
49	Spin freezing in geometrically frustrated antiferromagnets with weak disorder. <i>Physical Review Letters</i> , <b>2007</b> , 98, 157201	7.4	82
48	Cortical regulation of cell size by a sizer <i>cdr2p</i> . <i>ELife</i> , <b>2014</b> , 3, e02040	8.9	74
47	Basolateral protrusion and apical contraction cooperatively drive <i>Drosophila</i> germ-band extension. <i>Nature Cell Biology</i> , <b>2017</b> , 19, 375-383	23.4	72
46	Spin-glass transition in geometrically frustrated antiferromagnets with weak disorder. <i>Physical Review B</i> , <b>2010</b> , 81,	3.3	68
45	Noise reduction in the intracellular <i>pom1p</i> gradient by a dynamic clustering mechanism. <i>Developmental Cell</i> , <b>2012</b> , 22, 558-72	10.2	63
44	Decoding temporal interpretation of the morphogen Bicoid in the early embryo. <i>ELife</i> , <b>2017</b> , 6,	8.9	51
43	Shaping a morphogen gradient for positional precision. <i>Biophysical Journal</i> , <b>2010</b> , 99, 697-707	2.9	40
42	Subtle changes in motif positioning cause tissue-specific effects on robustness of an enhancer's activity. <i>PLoS Genetics</i> , <b>2014</b> , 10, e1004060	6	35
41	Morphogen profiles can be optimized to buffer against noise. <i>Physical Review E</i> , <b>2009</b> , 80, 041902	2.4	32
40	Activation of butterfly eyespots by <i>Distal-less</i> is consistent with a reaction-diffusion process. <i>Development (Cambridge)</i> , <b>2019</b> , 146,	6.6	31
39	Coupling optogenetics and light-sheet microscopy, a method to study Wnt signaling during embryogenesis. <i>Scientific Reports</i> , <b>2017</b> , 7, 16636	4.9	27
38	When it pays to rush: interpreting morphogen gradients prior to steady-state. <i>Physical Biology</i> , <b>2009</b> , 6, 046020	3	25
37	Bicoid gradient formation mechanism and dynamics revealed by protein lifetime analysis. <i>Molecular Systems Biology</i> , <b>2018</b> , 14, e8355	12.2	25
36	Selective Filopodia Adhesion Ensures Robust Cell Matching in the <i>Drosophila</i> Heart. <i>Developmental Cell</i> , <b>2018</b> , 46, 189-203.e4	10.2	21

35	3D Protein Dynamics in the Cell Nucleus. <i>Biophysical Journal</i> , <b>2017</b> , 112, 133-142	2.9	18
34	Geometric constraints alter cell arrangements within curved epithelial tissues. <i>Molecular Biology of the Cell</i> , <b>2017</b> , 28, 3582-3594	3.5	18
33	Cortical tension overrides geometrical cues to orient microtubules in confined protoplasts. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2020</b> , 117, 32731-32738	11.5	18
32	Shaping the zebrafish myotome by intertissue friction and active stress. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2019</b> , 116, 25430-25439	11.5	18
31	Critical phenomena in a highly constrained classical spin system: NBI ordering from the Coulomb phase. <i>Europhysics Letters</i> , <b>2008</b> , 84, 36002	1.6	16
30	Temporal development of embryos is highly robust across a wide temperature range. <i>Journal of the Royal Society Interface</i> , <b>2018</b> , 15,	4.1	16
29	Structural phase transitions in geometrically frustrated antiferromagnets. <i>Physical Review B</i> , <b>2008</b> , 77,	3.3	14
28	Spatiotemporal Coordination of FGF and Shh Signaling Underlies the Specification of Myoblasts in the Zebrafish Embryo. <i>Developmental Cell</i> , <b>2018</b> , 46, 735-750.e4	10.2	14
27	Embryonic geometry underlies phenotypic variation in decanalized conditions. <i>ELife</i> , <b>2020</b> , 9,	8.9	13
26	Spatiotemporal analysis of different mechanisms for interpreting morphogen gradients. <i>Biophysical Journal</i> , <b>2015</b> , 108, 2061-73	2.9	12
25	Periodic Oscillations of Myosin-II Mechanically Proofread Cell-Cell Connections to Ensure Robust Formation of the Cardiac Vessel. <i>Current Biology</i> , <b>2020</b> , 30, 3364-3377.e4	6.3	12
24	A matter of time: Formation and interpretation of the Bicoid morphogen gradient. <i>Current Topics in Developmental Biology</i> , <b>2020</b> , 137, 79-117	5.3	10
23	Gene expression boundary scaling and organ size regulation in the Drosophila embryo. <i>Development Growth and Differentiation</i> , <b>2017</b> , 59, 21-32	3	9
22	Growing Up in a Changing World: Environmental Regulation of Development in Insects. <i>Annual Review of Entomology</i> , <b>2021</b> , 66, 81-99	21.8	9
21	Shaping Organs: Shared Structural Principles Across Kingdoms. <i>Annual Review of Cell and Developmental Biology</i> , <b>2020</b> , 36, 385-410	12.6	8
20	Aggregation-fragmentation model of robust concentration gradient formation. <i>Physical Review E</i> , <b>2015</b> , 91, 022704	2.4	8
19	Stochastic activation and bistability in a Rab GTPase regulatory network. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2020</b> , 117, 6540-6549	11.5	7
18	Open questions: how to get developmental biology into shape?. <i>BMC Biology</i> , <b>2019</b> , 17, 17	7.3	6

17	The mirtron miR-1010 functions in concert with its host gene SKIP to balance elevation of nAcR $\beta$ . <i>Scientific Reports</i> , <b>2020</b> , 10, 1688	4.9	5
16	MpFEW RHIZOIDS1 miRNA-Mediated Lateral Inhibition Controls Rhizoid Cell Patterning in <i>Marchantia polymorpha</i> . <i>Current Biology</i> , <b>2020</b> , 30, 1905-1915.e4	6.3	5
15	Roadmap for the multiscale coupling of biochemical and mechanical signals during development. <i>Physical Biology</i> , <b>2021</b> , 18,	3	5
14	The Science of Living Matter for Tomorrow. <i>Cell Systems</i> , <b>2018</b> , 6, 400-402	10.6	3
13	Imag(in)ing growth and form. <i>Mechanisms of Development</i> , <b>2017</b> , 145, 13-21	1.7	2
12	Eleven quick tips for running an interdisciplinary short course for new graduate students. <i>PLoS Computational Biology</i> , <b>2018</b> , 14, e1006039	5	2
11	JNK signaling in pioneer neurons directs the architectural organization of the CNS and coordinates the motor activity of the <i>Drosophila</i> embryo		2
10	Aster repulsion drives local ordering in an active system		2
9	Stochastic activation and bistability in a Rab GTPase regulatory network		2
8	Scaling of internal organs during <i>Drosophila</i> embryonic development. <i>Biophysical Journal</i> , <b>2021</b> , 120, 4264-4276	2.9	2
7	Mechanics of epidermal morphogenesis in the <i>Drosophila</i> pupa. <i>Seminars in Cell and Developmental Biology</i> , <b>2021</b> ,	7.5	1
6	Condensation of the <i>Drosophila</i> Nerve Cord is Oscillatory and depends on Coordinated Mechanical Interactions		1
5	The role of cellular active stresses in shaping the zebrafish body axis. <i>Current Opinion in Cell Biology</i> , <b>2021</b> , 73, 69-77	9	1
4	Condensation of the <i>Drosophila</i> nerve cord is oscillatory and depends on coordinated mechanical interactions.. <i>Developmental Cell</i> , <b>2022</b> , 57, 867-882.e5	10.2	1
3	Mechanical processes underlying precise and robust cell matching. <i>Seminars in Cell and Developmental Biology</i> , <b>2021</b> , 120, 75-75	7.5	
2	The early <i>Drosophila</i> embryo as a model system for quantitative biology. <i>Cells and Development</i> , <b>2021</b> , 203722		
1	Protocol for batch imaging and quantification of cellular mismatch during embryonic heart formation. <i>STAR Protocols</i> , <b>2021</b> , 2, 100817	1.4	