Sean G Megason

List of Publications by Year
in descending order

38 papers	4,317 citations	257450 24 h-index	330143 37 g-index
50 all docs	50 docs citations	50 times ranked	6527 citing authors

#	Article	IF	Citations
1	Single-cell mapping of gene expression landscapes and lineage in the zebrafish embryo. Science, 2018, 360, 981-987.	12.6	653
2	A mitogen gradient of dorsal midline Wnts organizes growth in the CNS. Development (Cambridge), 2002, 129, 2087-2098.	2.5	600
3	The dynamics of gene expression in vertebrate embryogenesis at single-cell resolution. Science, 2018, 360, .	12.6	471
4	Observing the cell in its native state: Imaging subcellular dynamics in multicellular organisms. Science, 2018, 360, .	12.6	420
5	A mitogen gradient of dorsal midline Wnts organizes growth in the CNS. Development (Cambridge), 2002, 129, 2087-98.	2.5	278
6	Cortical column and whole-brain imaging with molecular contrast and nanoscale resolution. Science, 2019, 363, .	12.6	277
7	Specified Neural Progenitors Sort to Form Sharp Domains after Noisy Shh Signaling. Cell, 2013, 153, 550-561.	28.9	147
8	Membrane dynamics of dividing cells imaged by lattice light-sheet microscopy. Molecular Biology of the Cell, 2016, 27, 3418-3435.	2.1	121
9	Sources of artifact in measurements of 6mA and 4mC abundance in eukaryotic genomic DNA. BMC Genomics, 2019, 20, 445.	2.8	120
10	In Toto Imaging of Embryogenesis with Confocal Time-Lapse Microscopy. Methods in Molecular Biology, 2009, 546, 317-332.	0.9	114
11	ACME: Automated Cell Morphology Extractor for Comprehensive Reconstruction of Cell Membranes. PLoS Computational Biology, 2012, 8, e1002780.	3.2	111
12	Interplay of Cell Shape and Division Orientation Promotes Robust Morphogenesis of Developing Epithelia. Cell, 2014, 159, 415-427.	28.9	108
13	Rapid positional cloning of zebrafish mutations by linkage and homozygosity mapping using whole-genome sequencing. Development (Cambridge), 2012, 139, 4280-4290.	2.5	86
14	An adhesion code ensures robust pattern formation during tissue morphogenesis. Science, 2020, 370, 113-116.	12.6	83
15	Attenuation of Notch and Hedgehog Signaling Is Required for Fate Specification in the Spinal Cord. PLoS Genetics, 2012, 8, e1002762.	3.5	76
16	Mathematically guided approaches to distinguish models of periodic patterning. Development (Cambridge), 2015, 142, 409-419.	2.5	72
17	Suppression of transcytosis regulates zebrafish blood-brain barrier function. ELife, 2019, 8, .	6.0	57
18	Improved Long-Term Imaging of Embryos with Genetically Encoded Î±-Bungarotoxin. PLoS ONE, 2015, 10, e0134005.	2.5	53

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19	Otolith tethering in the zebrafish otic vesicle requires Otogelin and Î±-Tectorin. Development (Cambridge), 2015, 142, 1137-1145.	2.5	52
20	Orientation of Turing-like Patterns by Morphogen Gradients and Tissue Anisotropies. Cell Systems, 2015, 1, 408-416.	6.2	50
21	Size control of the inner ear via hydraulic feedback. ELife, 2019, 8, .	6.0	46
22	Extracellular hyaluronate pressure shaped by cellular tethers drives tissue morphogenesis. Cell, 2021, 184, 6313-6325.e18.	28.9	44
23	Size-reduced embryos reveal a gradient scaling based mechanism for zebrafish somite formation. Development (Cambridge), 2018, 145, .	2.5	35
24	Iterative use of nuclear receptor Nr5a2 regulates multiple stages of liver and pancreas development. Developmental Biology, 2016, 418, 108-123.	2.0	32
25	Lamellar projections in the endolymphatic sac act as a relief valve to regulate inner ear pressure. ELife, 2018, 7, .	6.0	23
26	Myc and Fgf Are Required for Zebrafish Neuromast Hair Cell Regeneration. PLoS ONE, 2016, 11, e0157768.	2.5	22
27	Adhesion-Based Self-Organization in Tissue Patterning. Annual Review of Cell and Developmental Biology, 2022, 38, 349-374.	9.4	22
28	A novel deep learning-based 3D cell segmentation framework for future image-based disease detection. Scientific Reports, 2022, 12, 342.	3.3	21
29	Hydrostatic pressure as a driver of cell and tissue morphogenesis. Seminars in Cell and Developmental Biology, 2022, 131, 134-145.	5.0	21
30	Feedback between tissue packing and neurogenesis in the zebrafish neural tube. Development (Cambridge), 2018, 145, .	2.5	20
31	Multibow: Digital Spectral Barcodes for Cell Tracing. PLoS ONE, 2015, 10, e0127822.	2.5	15
32	Recovery of shape and size in a developing organ pair. Developmental Dynamics, 2017, 246, 451-465.	1.8	14
33	Abstracting the principles of development using imaging and modeling. Integrative Biology (United) Tj ETQq1 1 0.784314 rgBT /Overlo	1.3	13
34	An efficient, scalable, and adaptable framework for solving generic systems of level-set PDEs. Frontiers in Neuroinformatics, 2013, 7, 35.	2.5	4
35	<scp>Singleâ€cell</scp> profiling for advancing birth defects research and prevention. Birth Defects Research, 2021, 113, 546-559.	1.5	4
36	Surgical Size Reduction of Zebrafish for the Study of Embryonic Pattern Scaling. Journal of Visualized Experiments, 2019, , .	0.3	2

#	Article	IF	Citations
37	Current challenges in image analysis for in toto imaging of zebrafish. , 2011, , .		1
38	Dynamic Encoding in the Notch Pathway. Developmental Cell, 2018, 44, 411-412.	7.0	1