Michael Krieg

List of Publications by Year
in descending order

28 papers	2,817 citations	331670 21 h-index	477307 29 g-index
40 all docs	40 docs citations	40 times ranked	4145 citing authors

#	Article	IF	Citations
1	Atomic force microscopy-based mechanobiology. Nature Reviews Physics, 2019, 1, 41-57.	26.6	500
2	Wnt11 Functions in Gastrulation by Controlling Cell Cohesion through Rab5c and E-Cadherin. Developmental Cell, 2005, 9, 555-564.	7.0	273
3	The nucleus measures shape changes for cellular proprioception to control dynamic cell behavior. Science, 2020, 370, .	12.6	232
4	Control of Directed Cell Migration In Vivo by Membrane-to-Cortex Attachment. PLoS Biology, 2010, 8, e1000544.	5.6	231
5	Mechanical control of the sense of touch by Î²-spectrin. Nature Cell Biology, 2014, 16, 224-233.	10.3	173
6	Measuring cell adhesion forces of primary gastrulating cells from zebrafish using atomic force microscopy. Journal of Cell Science, 2005, 118, 4199-4206.	2.0	161
7	Feeling Force: Physical and Physiological Principles Enabling Sensory Mechanotransduction. Annual Review of Cell and Developmental Biology, 2015, 31, 347-371.	9.4	128
8	Electrostatic Cell-Surface Repulsion Initiates Lumen Formation in Developing Blood Vessels. Current Biology, 2010, 20, 2003-2009.	3.9	124
9	Movement Directionality in Collective Migration of Germ Layer Progenitors. Current Biology, 2010, 20, 161-169.	3.9	111
10	Phospholipids that Contain Polyunsaturated Fatty Acids Enhance Neuronal Cell Mechanics and Touch Sensation. Cell Reports, 2014, 6, 70-80.	6.4	98
11	Genetic defects in Î²-spectrin and tau sensitize C. elegans axons to movement-induced damage via torque-tension coupling. ELife, 2017, 6, .	6.0	93
12	Rationally designed azobenzene photoswitches for efficient two-photon neuronal excitation. Nature Communications, 2019, 10, 907.	12.8	86
13	Locating ligand binding and activation of a single antiporter. EMBO Reports, 2005, 6, 668-674.	4.5	85
14	New frontiers in atomic force microscopy: analyzing interactions from single-molecules to cells. Current Opinion in Biotechnology, 2009, 20, 4-13.	6.6	72
15	A Bond for a Lifetime: Employing Membrane Nanotubes from Living Cells to Determine Receptorâ€"Ligand Kinetics. Angewandte Chemie - International Edition, 2008, 47, 9775-9777.	13.8	70
16	Direction Selectivity in Drosophila Proprioceptors Requires the Mechanosensory Channel Tmc. Current Biology, 2019, 29, 945-956.e3.	3.9	58
17	Pneumatic stimulation of C. elegans mechanoreceptor neurons in a microfluidic trap. Lab on A Chip, 2017, 17, 1116-1127.	6.0	55
18	FBN-1, a fibrillin-related protein, is required for resistance of the epidermis to mechanical deformation during C. elegans embryogenesis. ELife, 2015, 4, .	6.0	52

#	Article	IF	Citations
19	The tubulin repertoire of<i>Caenorhabditis elegans</i>sensory neurons and its contextâ€‘dependent role in process outgrowth. Molecular Biology of the Cell, 2016, 27, 3717-3728.	2.1	47
20	Mechanical systems biology of <i>C. elegans</i> touch sensation. BioEssays, 2015, 37, 335-344.	2.5	34
21	Assay for characterizing the recovery of vertebrate cells for adhesion measurements by singleâ€cell force spectroscopy. FEBS Letters, 2014, 588, 3639-3648.	2.8	28
22	Cortical anchoring of the microtubule cytoskeleton is essential for neuron polarity. ELife, 2020, 9, .	6.0	26
23	An asymmetric mechanical code ciphers curvature-dependent proprioceptor activity. Science Advances, 2021, 7, eabg4617.	10.3	17
24	Using a Microfluidics Device for Mechanical Stimulation and High Resolution Imaging of C. elegans. Journal of Visualized Experiments, 2018, , .	0.3	12
25	A Force Balance Can Explain Local and Global Cell Movements during Early Zebrafish Development. Biophysical Journal, 2015, 109, 407-414.	0.5	9
26	Direct Force Measurements of Subcellular Mechanics in Confinement using Optical Tweezers. Journal of Visualized Experiments, 2021, , .	0.3	7
27	Neuronal stretch reception â€" Making sense of the mechanosense. Experimental Cell Research, 2019, 378, 104-112.	2.6	6
28	Mechanosensitive bodyâ€"brain interactions in Caenorhabditis elegans. Current Opinion in Neurobiology, 2022, 75, 102574.	4.2	4