Nigel J Burroughs

List of Publications by Year
in descending order

33 papers	1,115 citations	516710 16 h-index	434195 31 g-index
45 all docs	45 docs citations	45 times ranked	1575 citing authors

#	Article	IF	Citations
1	A Virulent Strain of Deformed Wing Virus (DWV) of Honeybees (Apis mellifera) Prevails after Varroa destructor-Mediated, or In Vitro, Transmission. PLoS Pathogens, 2014, 10, e1004230.	4.7	294
2	Actomyosin Ring Formation and Tension Generation in Eukaryotic Cytokinesis. Current Biology, 2016, 26, R719-R737.	3.9	95
3	Kinesin expands and stabilizes the GDP-microtubule lattice. Nature Nanotechnology, 2018, 13, 386-391.	31.5	81
4	Regulation of Gene Expression in Shewanella oneidensis MR-1 during Electron Acceptor Limitation and Bacterial Nanowire Formation. Applied and Environmental Microbiology, 2016, 82, 5428-5443.	3.1	59
5	Ligand Detection and Discrimination by Spatial Relocalization: A Kinase-Phosphatase Segregation Model of TCR Activation. Biophysical Journal, 2006, 91, 1619-1629.	0.5	51
6	Changes in Gene Expression in Space and Time Orchestrate Environmentally Mediated Shaping of Root Architecture. Plant Cell, 2017, 29, 2393-2412.	6.6	49
7	Matched Sizes of Activating and Inhibitory Receptor/Ligand Pairs Are Required for Optimal Signal Integration by Human Natural Killer Cells. PLoS ONE, 2010, 5, e15374.	2.5	45
8	Ensemble-Level Organization of Human Kinetochores and Evidence for Distinct Tension and Attachment Sensors. Cell Reports, 2020, 31, 107535.	6.4	40
9	Discriminating self from nonself with short peptides from large proteomes. Immunogenetics, 2004, 56, 311-320.	2.4	39
10	Detection of Diffusion Heterogeneity in Single Particle Tracking Trajectories Using a Hidden Markov Model with Measurement Noise Propagation. PLoS ONE, 2015, 10, e0140759.	2.5	38
11	Human kinetochores are swivel joints that mediate microtubule attachments. ELife, 2016, 5, .	6.0	30
12	Inferring the Forces Controlling Metaphase Kinetochore Oscillations by Reverse Engineering System Dynamics. PLoS Computational Biology, 2015, 11, e1004607.	3.2	29
13	Stochasticity and spatial heterogeneity in T‐cell activation. Immunological Reviews, 2007, 216, 69-80.	6.0	25
14	Boltzmann Energy-based Image Analysis Demonstrates that Extracellular Domain Size Differences Explain Protein Segregation at Immune Synapses. PLoS Computational Biology, 2011, 7, e1002076.	3.2	24
15	Kinetochore life histories reveal an Aurora-B-dependent error correction mechanism in anaphase. Developmental Cell, 2021, 56, 3082-3099.e5.	7.0	24
16	Probing microtubule polymerisation state at single kinetochores during metaphase chromosome motion. Journal of Cell Science, 2015, 128, 1991-2001.	2.0	23
17	A Hidden Markov Model for Detecting Confinement in Single-Particle Tracking Trajectories. Biophysical Journal, 2018, 115, 1741-1754.	0.5	23
18	Super-resolution kinetochore tracking reveals the mechanisms of human sister kinetochore directional switching. ELife, 2015, 4, .	6.0	20

#	Article	IF	Citations
19	Close contact fluctuations: The seeding of signalling domains in the immunological synapse. Europhysics Letters, 2007, 77, 48003.	2.0	15
20	Actin turnover ensures uniform tension distribution during cytokinetic actomyosin ring contraction. Molecular Biology of the Cell, 2019, 30, 933-941.	2.1	14
21	Solar powered biohydrogen production requires specific localization of the hydrogenase. Energy and Environmental Science, 2014, 7, 3791-3800.	30.8	12
22	Size matters for single-cell C_4 photosynthesis in *Bienertia*. Journal of Experimental Botany, 2017, 68, 255-267.	4.8	12
23	KiT: a MATLAB package for kinetochore tracking. Bioinformatics, 2016, 32, 1917-1919.	4.1	11
24	Mitotic live-cell imaging at different timescales. Methods in Cell Biology, 2018, 145, 1-27.	1.1	8
25	MosaicSolver: a tool for determining recombinants of viral genomes from pileup data. Nucleic Acids Research, 2014, 42, e123-e123.	14.5	6
26	Modelling the suppression of autoimmunity after pathogen infection. Mathematical Methods in the Applied Sciences, 2018, 41, 8565-8570.	2.3	6
27	Computational modelling predicts substantial carbon assimilation gains for C3 plants with a single-celled C4 biochemical pump. PLoS Computational Biology, 2019, 15, e1007373.	3.2	6
28	The Effect of a Linear Tuning between the Antigenic Stimulations of CD4+ T Cells and CD4+ Tregs. Mathematics, 2020, 8, 293.	2.2	6
29	Bayesian inference of origin firing time distributions, origin interference and licencing probabilities from Next Generation Sequencing data. Nucleic Acids Research, 2019, 47, 2229-2243.	14.5	4
30	Error correction and diversity analysis of population mixtures determined by NGS. PeerJ, 2014, 2, e645.	2.0	4
31	Correcting for link loss in causal network inference caused by regulator interference. Bioinformatics, 2014, 30, 2779-2786.	4.1	2
32	Subcellular Euclidean distance measurements with multicolor fluorescence localization imaging in cultured cells. STAR Protocols, 2021, 2, 100774.	1.2	2
33	Kinetochore tracking in 3D from lattice light-sheet imaging data with KiT. Bioinformatics, 2022, 38, 3315-3317.	4.1	1