Chris H Wiggins

List of Publications by Year
in descending order

36 papers	3,123 citations

279798

23 h-index	

345221

36 g-index	

38 all docs	38 docs citations

38 times ranked	3814 citing authors

#	Article	IF	Citations
1	Multimodal transcriptional control of pattern formation in embryonic development. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 836-847.	7.1	82
2	Durable Interactions of T Cells with T Cell Receptor Stimuli in the Absence of a Stable Immunological Synapse. Cell Reports, 2018, 22, 340-349.	6.4	36
3	Noise Expands the Response Range of the Bacillus subtilis Competence Circuit. PLoS Computational Biology, 2016, 12, e1004793.	3.2	20
4	Integrative analysis of T cell motility from multi-channel microscopy data using TIAM. Journal of Immunological Methods, 2015, 416, 84-93.	1.4	10
5	Statistical Inference for Nanopore Sequencing with a Biased Random WalkÂModel. Biophysical Journal, 2015, 108, 1852-1855.	0.5	2
6	Single-molecule dataset (SMD): a generalized storage format for raw and processed single-molecule data. BMC Bioinformatics, 2015, 16, 3.	2.6	17
7	Pegasus: a comprehensive annotation and prediction tool for detection of driver gene fusions in cancer. BMC Systems Biology, 2014, 8, 97.	3.0	60
8	Multiple LacI-mediated loops revealed by Bayesian statistics and tethered particle motion. Nucleic Acids Research, 2014, 42, 10265-10277.	14.5	29
9	Empirical Bayes Methods Enable Advanced Population-Level Analyses of Single-Molecule FRET Experiments. Biophysical Journal, 2014, 106, 1327-1337.	0.5	172
10	Hierarchically-coupled hidden Markov models for learning kinetic rates from single-molecule data. JMLR Workshop and Conference Proceedings, 2013, 28, 361-369.	1.4	16
11	Analytic Methods for Modeling Stochastic Regulatory Networks. Methods in Molecular Biology, 2012, 880, 273-322.	0.9	35
12	Statistical method for revealing form-function relations in biological networks. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 446-451.	7.1	5
13	Graphical models for inferring single molecule dynamics. BMC Bioinformatics, 2010, 11, S2.	2.6	18
14	Information-Optimal Transcriptional Response to Oscillatory Driving. Physical Review Letters, 2010, 105, 058101.	7.8	16
15	Allosteric collaboration between elongation factor G and the ribosomal L1 stalk directs tRNA movements during translation. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 15702-15707.	7.1	136
16	A stochastic spectral analysis of transcriptional regulatory cascades. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 6529-6534.	7.1	52
17	Learning Rates and States from Biophysical Time Series: A Bayesian Approach to Model Selection and Single-Molecule FRET Data. Biophysical Journal, 2009, 97, 3196-3205.	0.5	368
18	Spectral solutions to stochastic models of gene expression with bursts and regulation. Physical Review E, 2009, 80, 041921.	2.1	71

#	ARTICLE	IF	CITATIONS
19	Quantification of Cell Edge Velocities and Traction Forces Reveals Distinct Motility Modules during Cell Spreading. PLoS ONE, 2008, 3, e3735.	2.5	112
20	Bayesian Approach to Network Modularity. Physical Review Letters, 2008, 100, 258701.	7.8	212
21	Opposing Effects of PKCÎ¸ and WASp on Symmetry Breaking and Relocation of the Immunological Synapse. Cell, 2007, 129, 773-785.	28.9	316
22	Optimal Signal Processing in Small Stochastic Biochemical Networks. PLoS ONE, 2007, 2, e1077.	2.5	107
23	Learning Regulatory Programs That Accurately Predict Differential Expression with MEDUSA. Annals of the New York Academy of Sciences, 2007, 1115, 178-202.	3.8	13
24	Nonmuscle Myosin IIA-Dependent Force Inhibits Cell Spreading and Drives F-Actin Flow. Biophysical Journal, 2006, 91, 3907-3920.	0.5	255
25	Lateral Membrane Waves Constitute a Universal Dynamic Pattern of Motile Cells. Physical Review Letters, 2006, 97, 038102.	7.8	142
26	A classification-based framework for predicting and analyzing gene regulatory response. BMC Bioinformatics, 2006, 7, S5.	2.6	15
27	Multiple events on single molecules: Unbiased estimation in single-molecule biophysics. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 1750-1755.	7.1	19
28	The small GTPase R-Ras regulates organization of actin and drives membrane protrusions through the activity of PLCÏµ. Journal of Cell Science, 2006, 119, 1307-1319.	2.0	67
29	Dynamics of semiflexible polymers in a flow field. Physical Review E, 2006, 74, 041911.	2.1	39
30	Motif Discovery Through Predictive Modeling of Gene Regulation. Lecture Notes in Computer Science, 2005, , 538-552.	1.3	12
31	Information-theoretic approach to network modularity. Physical Review E, 2005, 71, 046117.	2.1	74
32	Dynamic Patterns and Self-Knotting of a Driven Hanging Chain. Physical Review Letters, 2001, 87, 114301.	7.8	57
33	Biopolymer mechanics: stability, dynamics, and statistics. Mathematical Methods in the Applied Sciences, 2001, 24, 1325-1335.	2.3	6
34	Viscous Nonlinear Dynamics of Twist and Writhe. Physical Review Letters, 1998, 80, 5232-5235.	7.8	105
35	Trapping and Wiggling: Elastohydrodynamics of Driven Microfilaments. Biophysical Journal, 1998, 74, 1043-1060.	0.5	186
36	Flexive and Propulsive Dynamics of Elastica at Low Reynolds Number. Physical Review Letters, 1998, 80, 3879-3882.	7.8	235