Johan Paulsson

List of Publications by Year
in descending order

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50 papers	8,875 citations	136740 32 h-index	197535 49 g-index
56 all docs	56 docs citations	56 times ranked	7081 citing authors

#	Article	IF	Citations
1	Bacterial persisters are a stochastically formed subpopulation of low-energy cells. PLoS Biology, 2021, 19, e3001194.	2.6	85
2	Tracking bacterial lineages in complex and dynamic environments with applications for growth control and persistence. Nature Microbiology, 2021, 6, 783-791.	5.9	59
3	Handheld Microfluidic Filtration Platform Enables Rapid, Lowâ€Cost, and Robust Selfâ€Testing of SARSâ€CoVâ€2 Virus. Small, 2021, 17, e2104009.	5.2	20
4	Handheld Microfluidic Filtration Platform Enables Rapid, Lowâ€Cost, and Robust Selfâ€Testing of SARSâ€CoVâ€2 Virus (Small 52/2021). Small, 2021, 17, .	5.2	0
5	Isolating live cells after high-throughput, long-term, time-lapse microscopy. Nature Methods, 2020, 17, 93-100.	9.0	40
6	A universal trade-off between growth and lag in fluctuating environments. Nature, 2020, 584, 470-474.	13.7	139
7	Toward a translationally independent RNA-based synthetic oscillator using deactivated CRISPR-Cas. Nucleic Acids Research, 2020, 48, 8165-8177.	6.5	18
8	Bacterial variability in the mammalian gut captured by a single-cell synthetic oscillator. Nature Communications, 2019, 10, 4665.	5.8	54
9	Kinetic Uncertainty Relations for the Control of Stochastic Reaction Networks. Physical Review Letters, 2019, 123, 108101.	2.9	11
10	A universal control system for synthetic gene networks. Nature, 2019, 570, 452-453.	13.7	1
11	Stochastic antagonism between two proteins governs a bacterial cell fate switch. Science, 2019, 366, 116-120.	6.0	44
12	Quantification of very low-abundant proteins in bacteria using the HaloTag and epi-fluorescence microscopy. Scientific Reports, 2019, 9, 7902.	1.6	24
13	Microfluidics and single-cell microscopy to study stochastic processes in bacteria. Current Opinion in Microbiology, 2018, 43, 186-192.	2.3	60
14	Single-cell microscopy of suspension cultures using a microfluidics-assisted cell screening platform. Nature Protocols, 2018, 13, 170-194.	5.5	21
15	Random versus Cell Cycle-Regulated Replication Initiation in Bacteria: Insights from Studying Vibrio cholerae Chromosome 2. Microbiology and Molecular Biology Reviews, 2017, 81, .	2.9	26
16	The processive kinetics of gene conversion in bacteria. Molecular Microbiology, 2017, 104, 752-760.	1.2	15
17	Noise in a phosphorelay drives stochastic entry into sporulation in <i>Bacillus subtilis</i>. EMBO Journal, 2017, 36, 2856-2869.	3.5	42
18	Ribosomes are optimized for autocatalytic production. Nature, 2017, 547, 293-297.	13.7	60

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19	Use of a microfluidic platform to uncover basic features of energy and environmental stress responses in individual cells of Bacillus subtilis. PLoS Genetics, 2017, 13, e1006901.	1.5	42
20	Synchronous long-term oscillations in a synthetic gene circuit. Nature, 2016, 538, 514-517.	13.7	266
21	Mechanical slowing-down of cytoplasmic diffusion allows in vivo counting of proteins in individual cells. Nature Communications, 2016, 7, 11641.	5.8	46
22	Exploiting Natural Fluctuations to Identify Kinetic Mechanisms in Sparsely Characterized Systems. Cell Systems, 2016, 2, 251-259.	2.9	40
23	Stochastic activation of a DNA damage response causes cell-to-cell mutation rate variation. Science, 2016, 351, 1094-1097.	6.0	125
24	Constraints on Fluctuations in Sparsely Characterized Biological Systems. Physical Review Letters, 2016, 116, 058101.	2.9	48
25	Visualization of Periplasmic and Cytoplasmic Proteins with a Self-Labeling Protein Tag. Journal of Bacteriology, 2016, 198, 1035-1043.	1.0	49
26	Accurate concentration control of mitochondria and nucleoids. Science, 2016, 351, 169-172.	6.0	78
27	Cell-Size Control and Homeostasis in Bacteria. Current Biology, 2015, 25, 385-391.	1.8	632
28	Defiant daughters and coordinated cousins. Nature, 2015, 519, 422-423.	13.7	5
29	Stochastic Switching of Cell Fate in Microbes. Annual Review of Microbiology, 2015, 69, 381-403.	2.9	157
30	Memory and modularity in cell-fate decision making. Nature, 2013, 503, 481-486.	13.7	230
31	New quantitative methods for measuring plasmid loss rates reveal unexpected stability. Plasmid, 2013, 70, 353-361.	0.4	57
32	Segregation of molecules at cell division reveals native protein localization. Nature Methods, 2012, 9, 480-482.	9.0	287
33	Evaluating quantitative methods for measuring plasmid copy numbers in single cells. Plasmid, 2012, 67, 167-173.	0.4	24
34	Non-genetic heterogeneity from stochastic partitioning at cell division. Nature Genetics, 2011, 43, 95-100.	9.4	334
35	Random partitioning of molecules at cell division. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 15004-15009.	3.3	191
36	Fundamental limits on the suppression of molecular fluctuations. Nature, 2010, 467, 174-178.	13.7	417

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37	Noise in Gene Regulatory Networks. IEEE Transactions on Automatic Control, 2008, 53, 189-200.	3.6	83
38	Effects of Molecular Memory and Bursting on Fluctuations in Gene Expression. Science, 2008, 319, 339-343.	6.0	365
39	On the analysis of noise in gene regulatory networks. , 2007, , .		2
40	Origin inactivation in bacterial DNA replication control. Molecular Microbiology, 2006, 61, 9-15.	1.2	41
41	Noise in protein expression scales with natural protein abundance. Nature Genetics, 2006, 38, 636-643.	9.4	769
42	Models of stochastic gene expression. Physics of Life Reviews, 2005, 2, 157-175.	1.5	652
43	Real-Time Kinetics of Gene Activity in Individual Bacteria. Cell, 2005, 123, 1025-1036.	13.5	1,334
44	Effect of the CopB Auxiliary Replication Control System on Stability of Maintenance of Par + Plasmid R1. Journal of Bacteriology, 2004, 186, 207-211.	1.0	12
45	Summing up the noise in gene networks. Nature, 2004, 427, 415-418.	13.7	1,143
46	Near-Critical Phenomena in Intracellular Metabolite Pools. Biophysical Journal, 2003, 84, 154-170.	0.2	92
47	Unsolved Problems of Intracellular Noise. AIP Conference Proceedings, 2003, , .	0.3	0
48	Multileveled Selection on Plasmid Replication. Genetics, 2002, 161, 1373-1384.	1.2	113
49	Noise in a minimal regulatory network: plasmid copy number control. Quarterly Reviews of Biophysics, 2001, 34, 1-59.	2.4	204
50	Random Signal Fluctuations Can Reduce Random Fluctuations in Regulated Components of Chemical Regulatory Networks. Physical Review Letters, 2000, 84, 5447-5450.	2.9	177