Interdependence of behavioural variability and respons

Nature

468, 819-823

DOI: 10.1038/nature09551

Citation Report

#	Article	IF	Citations
1	Noise Underlies Switching Behavior of the Bacterial Flagellum. Biophysical Journal, 2011, 101, 2336-2340.	0.2	23
2	On the Origin and Characteristics of Noise-Induced LÃ©vy Walks of E. Coli. PLoS ONE, 2011, 6, e18623.	1.1	45
3	Thermal Robustness: Lessons from Bacterial Chemotaxis. Current Biology, 2011, 21, R465-R468.	1.8	3
4	Noise characteristics of the Escherichia coli rotary motor. BMC Systems Biology, 2011, 5, 151.	3.0	10
5	Hierarchical organization of noise generates spontaneous signal in Paramecium cell. Journal of Theoretical Biology, 2011, 283, 1-9.	0.8	6
6	New Motion Analysis System for Characterization of the Chemosensory Response Kinetics of Rhodobacter sphaeroides under Different Growth Conditions. Applied and Environmental Microbiology, 2011, 77, 4082-4088.	1.4	9
7	Reductionistic and Holistic Science. Infection and Immunity, 2011, 79, 1401-1404.	1.0	128
8	Stochastic coordination of multiple actuators reduces latency and improves chemotactic response in bacteria. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 805-810.	3.3	54
9	Noninvasive inference of the molecular chemotactic response using bacterial trajectories. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 1802-1807.	3.3	72
10	Chemotactic adaptation kinetics of individual Escherichia coli cells. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 9869-9874.	3.3	44
11	Cellular Noise Regulons Underlie Fluctuations in Saccharomyces cerevisiae. Molecular Cell, 2012, 45, 483-493.	4.5	143
12	Nonlinearity, Fluctuations, and Response in Sensory Systems. Physical Review Letters, 2012, 108, 258102.	2.9	10
13	Responding to chemical gradients: bacterial chemotaxis. Current Opinion in Cell Biology, 2012, 24, 262-268.	2.6	437
14	Dynamic and structural constraints in signal propagation by regulatory networks. Molecular BioSystems, 2013, 9, 268-284.	2.9	3
15	Adaptation Dynamics in Densely Clustered Chemoreceptors. PLoS Computational Biology, 2013, 9, e1003230.	1.5	23
16	Stochastic effects as a force to increase the complexity of signaling networks. Scientific Reports, 2013, 3, 2297.	1.6	10
17	Coordinated Switching of Bacterial Flagellar Motors: Evidence for Direct Motor-Motor Coupling?. Physical Review Letters, 2013, 110, 158703.	2.9	20
18	The fluctuation-dissipation theorem for stochastic kineticsâ€"Implications on genetic regulations. Journal of Chemical Physics, 2013, 139, 224109.	1.2	11

#	Article	IF	Citations
20	Intrinsic activity in cells and the brain. Molecular Biology of the Cell, 2014, 25, 737-738.	0.9	6
21	Limits of Feedback Control in Bacterial Chemotaxis. PLoS Computational Biology, 2014, 10, e1003694.	1.5	65
22	Switching dynamics of the bacterial flagellar motor near zero load. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 15752-15755.	3.3	32
23	Trimethylation Enhancement using Diazomethane (TrEnDi): Rapid On-Column Quaternization of Peptide Amino Groups via Reaction with Diazomethane Significantly Enhances Sensitivity in Mass Spectrometry Analyses via a Fixed, Permanent Positive Charge. Analytical Chemistry, 2014, 86, 3291-3299.	3.2	20
24	Uncovering Scaling Laws to Infer Multidrug Response of Resistant Microbes and Cancer Cells. Cell Reports, 2014, 6, 1073-1084.	2.9	53
26	Consciousness, endogenous generation of goals and homeostasis. International Journal of General Systems, 2015, 44, 655-666.	1.2	3
28	Direct Correlation between Motile Behavior and Protein Abundance in Single Cells. PLoS Computational Biology, 2016, 12, e1005041.	1.5	60
29	Asymptotic analysis of noisy fitness maximization, applied to metabolism & growth. Journal of Statistical Mechanics: Theory and Experiment, 2016, 2016, 123502.	0.9	8
30	Nonâ€genetic diversity modulates population performance. Molecular Systems Biology, 2016, 12, 895.	3.2	59
31	Noise Control in Gene Regulatory Networks with Negative Feedback. Journal of Physical Chemistry B, 2016, 120, 6166-6177.	1.2	15
32	Noise-Induced Increase of Sensitivity in Bacterial Chemotaxis. Biophysical Journal, 2016, 111, 430-437.	0.2	23
33	Recent Advances and Future Prospects in Bacterial and Archaeal Locomotion and Signal Transduction. Journal of Bacteriology, 2017, 199, e00203-17.	1.0	27
34	Emergent properties of bacterial chemotaxis pathway. Current Opinion in Microbiology, 2017, 39, 24-33.	2.3	79
35	Understanding Robust Adaptation Dynamics of Gene Regulatory Network. IEEE Transactions on Biomedical Circuits and Systems, 2017, 11, 942-957.	2.7	3
36	Growth-dependent behavioral difference in bacterial chemotaxis. Physical Review E, 2017, 95, 062404.	0.8	10
37	Multiple sources of slow activity fluctuations in a bacterial chemosensory network. ELife, 2017, 6, .	2.8	31
38	Phenotypic diversity and temporal variability in a bacterial signaling network revealed by single-cell FRET. ELife, 2017, 6, .	2.8	58
39	Ultrasensitivity and fluctuations in the Barkai-Leibler model of chemotaxis receptors in Escherichia coli. PLoS ONE, 2017, 12, e0175309.	1.1	5

#	Article	IF	Citations
40	Behavioral Variability and Phenotypic Diversity in Bacterial Chemotaxis. Annual Review of Biophysics, 2018, 47, 595-616.	4.5	54
41	Optimal methylation noise for best chemotactic performance ofE. coli. Physical Review E, 2018, 97, 032420.	0.8	8
42	Motor Adaptive Remodeling Speeds Up Bacterial Chemotactic Adaptation. Biophysical Journal, 2018, 114, 1225-1231.	0.2	20
43	A path-integral characterization of run and tumble motion and chemotaxis of bacteria. Journal of Physics A: Mathematical and Theoretical, 2019, 52, 505601.	0.7	3
44	Bacterial chemotaxis in a microfluidic T-maze reveals strong phenotypic heterogeneity in chemotactic sensitivity. Nature Communications, 2019, 10, 1877.	5.8	74
45	Escherichia coli Remodels the Chemotaxis Pathway for Swarming. MBio, 2019, 10, .	1.8	49
46	Chemotactic behaviour of Escherichia coli at high cell density. Nature Communications, 2019, 10, 5329.	5.8	55
47	Swimming Escherichia coli Cells Explore the Environment by LÃ©vy Walk. Applied and Environmental Microbiology, 2021, 87, .	1.4	13
48	Non-Genetic Diversity in Chemosensing and Chemotactic Behavior. International Journal of Molecular Sciences, 2021, 22, 6960.	1.8	8
49	Multiple functions of flagellar motility and chemotaxis in bacterial physiology. FEMS Microbiology Reviews, 2021, 45, .	3.9	122
50	Temporal fluctuations in chemotaxis gain implement a simulated-tempering strategy for efficient navigation in complex environments. IScience, 2021, 24, 102796.	1.9	5
52	Endogenous Generation of Goals and Homeostasis. Cognitive Systems Monographs, 2015, , 175-191.	0.1	2
54	Adaptive Responses Limited by Intrinsic Noise. PLoS ONE, 2015, 10, e0136095.	1.1	7
55	Adaptability of non-genetic diversity in bacterial chemotaxis. ELife, 2014, 3, .	2.8	90
62	Metformin Alters the Chemotaxis and Flagellar Motility of Escherichia coli. Frontiers in Microbiology, 2021, 12, 792406.	1.5	4
63	Proteomicsâ€based scoring of cellular response to stimuli for improved characterization of signaling pathway activity. Proteomics, 2023, 23, .	1.3	3