Stanislas Leibler

List of Publications by Year
in descending order

39 papers	17,749 citations	186265 28 h-index	315739 38 g-index
40 all docs	40 docs citations	40 times ranked	15596 citing authors

#	Article	IF	Citations
1	A synthetic oscillatory network of transcriptional regulators. Nature, 2000, 403, 335-338.	27.8	4,143
2	From molecular to modular cell biology. Nature, 1999, 402, C47-C52.	27.8	3,121
3	Bacterial Persistence as a Phenotypic Switch. Science, 2004, 305, 1622-1625.	12.6	2,451
4	Phenotypic Diversity, Population Growth, and Information in Fluctuating Environments. Science, 2005, 309, 2075-2078.	12.6	1,157
5	Establishment of developmental precision and proportions in the early Drosophila embryo. Nature, 2002, 415, 798-802.	27.8	701
6	Protein Sectors: Evolutionary Units of Three-Dimensional Structure. Cell, 2009, 138, 774-786.	28.9	642
7	Protein Mobility in the Cytoplasm of Escherichia coli. Journal of Bacteriology, 1999, 181, 197-203.	2.2	539
8	An Ultrasensitive Bacterial Motor Revealed by Monitoring Signaling Proteins in Single Cells. Science, 2000, 287, 1652-1655.	12.6	538
9	Mechanisms of noise-resistance in genetic oscillators. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 5988-5992.	7.1	518
10	Dynamic Persistence of Antibiotic-Stressed Mycobacteria. Science, 2013, 339, 91-95.	12.6	495
11	Combinatorial Synthesis of Genetic Networks. Science, 2002, 296, 1466-1470.	12.6	480
12	Circadian clocks limited by noise. Nature, 2000, 403, 267-268.	27.8	477
13	Bacterial Persistence. Genetics, 2005, 169, 1807-1814.	2.9	476
14	Resilient circadian oscillator revealed in individual cyanobacteria. Nature, 2004, 430, 81-85.	27.8	223
15	Modeling network dynamics. Journal of Cell Biology, 2003, 161, 471-476.	5.2	195
16	DNA Looping and Physical Constraints on Transcription Regulation. Journal of Molecular Biology, 2003, 331, 981-989.	4.2	173
17	Photoactivation turns green fluorescent protein red. Current Biology, 1997, 7, 809-812.	3.9	165
18	A magnetic manipulator for studying local rheology and micromechanical properties of biological systems. Review of Scientific Instruments, 1996, 67, 818-827.	1.3	158

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19	The Value of Information for Populations in Varying Environments. Journal of Statistical Physics, 2011, 142, 1124-1166.	1.2	146
20	Environmental stresses can alleviate the average deleterious effect of mutations. , 2003, 2, 14.		118
21	An interdomain sector mediating allostery in Hsp70 molecular chaperones. Molecular Systems Biology, 2010, 6, 414.	7.2	118
22	Individual histories and selection in heterogeneous populations. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 13183-13188.	7.1	95
23	A model for the generation and transmission of variations in evolution. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E1940-9.	7.1	80
24	Benefits of phenotypic plasticity for population growth in varying environments. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 12745-12750.	7.1	75
25	Protein Sectors: Statistical Coupling Analysis versus Conservation. PLoS Computational Biology, 2015, 11, e1004091.	3.2	70
26	Strain analysis of protein structures and low dimensionality of mechanical allosteric couplings. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E5847-E5855.	7.1	61
27	Multifarious assembly mixtures: Systems allowing retrieval of diverse stored structures. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 54-59.	7.1	52
28	Environment-to-phenotype mapping and adaptation strategies in varying environments. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 13847-13855.	7.1	49
29	Discriminatory Proofreading Regimes in Nonequilibrium Systems. Physical Review X, 2014, 4, .	8.9	41
30	Lessons from equilibrium statistical physics regarding the assembly of protein complexes. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 114-120.	7.1	32
31	Evolutionary learning of adaptation to varying environments through a transgenerational feedback. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 11266-11271.	7.1	29
32	Homeorhesis and ecological succession quantified in synthetic microbial ecosystems. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 14852-14861.	7.1	25
33	Bacterial Growth Control Mechanisms Inferred from Multivariate Statistical Analysis of Single-Cell Measurements. Current Biology, 2021, 31, 955-964.e4.	3.9	24
34	Polymer-Population Mapping and Localization in the Space of Phenotypes. Physical Review Letters, 2006, 97, 068101.	7.8	22
35	Bet Hedging against Demographic Fluctuations. Physical Review Letters, 2017, 119, 108103.	7.8	19
36	Strongly Deterministic Population Dynamics in Closed Microbial Communities. Physical Review X, 2015, 5, .	8.9	18

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37	Nongenetic individuality, changeability, and inheritance in bacterial behavior. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	11
38	Trend and fluctuations: Analysis and design of population dynamics measurements in replicate ecosystems. Physical Review E, 2013, 88, 062714.	2.1	8
39	Evolutionary dynamics, evolutionary forces, and robustness: A nonequilibrium statistical mechanics perspective. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2112083119.	7.1	4