Sandeep Krishna

List of Publications by Year
in descending order

40 papers	1,532 citations	304743 22 h-index	330143 37 g-index
59 all docs	59 docs citations	59 times ranked	1642 citing authors

#	Article	IF	Citations
1	Emergence of networks of shared restriction-modification systems in phageâ€“bacteria ecosystems. Journal of Biosciences, 2022, 47, .	1.1	2
2	Self-Reproduction and Darwinian Evolution in Autocatalytic Chemical Reaction Systems. Life, 2021, 11, 308.	2.4	18
3	A tale of two rhythms: Locked clocks and chaos in biology. Cell Systems, 2021, 12, 291-303.	6.2	29
4	Optimizing testing for COVID-19 in India. PLoS Computational Biology, 2021, 17, e1009126.	3.2	12
5	Analysis of Infection Time Courses Shows CII Levels Determine the Frequency of Lysogeny in Phage 186. Pharmaceuticals, 2021, 14, 998.	3.8	1
6	Natural Selection beyond Life? A Workshop Report. Life, 2021, 11, 1051.	2.4	3
7	Defence versus growth in a hostile world: lessons from phage and bacteria. Royal Society Open Science, 2020, 7, 201118.	2.4	3
8	Emergence of metabolic heterogeneity in cell populations: lessons from budding yeast. , 2020, , 335-360.		3
9	Resource plasticity-driven carbon-nitrogen budgeting enables specialization and division of labor in a clonal community. ELife, 2020, 9, .	6.0	8
10	Constraints on somite formation in developing embryos. Journal of the Royal Society Interface, 2019, 16, 20190451.	3.4	3
11	On chaotic dynamics in transcription factors and the associated effects in differential gene regulation. Nature Communications, 2019, 10, 71.	12.8	60
12	Metabolic constraints drive self-organization of specialized cell groups. ELife, 2019, 8, .	6.0	42
13	Evidence of sinks and sources in the phospholipase Câ€activated <scp>PIP</scp>₂ cycle. FEBS Letters, 2018, 592, 962-972.	2.8	5
14	Entrainment as a means of controlling phase waves in populations of coupled oscillators. Physical Review E, 2018, 98, .	2.1	6
15	A minimal â€œpushâ€“pullâ€• bistability model explains oscillations between quiescent and proliferative cell states. Molecular Biology of the Cell, 2018, 29, 2243-2258.	2.1	12
16	Time Correlations in Mode Hopping of Coupled Oscillators. Journal of Statistical Physics, 2017, 167, 792-805.	1.2	3
17	In silico Evolution of Lysis-Lysogeny Strategies Reproduces Observed Lysogeny Propensities in Temperate Bacteriophages. Frontiers in Microbiology, 2017, 8, 1386.	3.5	32
18	Noise Induces Hopping between NF-Îº B Entrainment Modes. Cell Systems, 2016, 3, 532-539.e3.	6.2	44

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19	Restriction modification systems as engines of diversity. Frontiers in Microbiology, 2015, 6, 528.	3.5	35
20	The effect of LacI autoregulation on the performance of the lactose utilization system in Escherichia coli. Nucleic Acids Research, 2013, 41, 6381-6390.	14.5	20
21	Context-dependent conservation of DNA methyltransferases in bacteria. Nucleic Acids Research, 2012, 40, 7066-7073.	14.5	60
22	Limit-cycle oscillations and stable patterns in repressor lattices. Physical Review E, 2012, 86, 031905.	2.1	2
23	Inducing phaseâ€locking and chaos in cellular oscillators by modulating the driving stimuli. FEBS Letters, 2012, 586, 1664-1668.	2.8	37
24	Modeling the NF-ÎºB mediated inflammatory response predicts cytokine waves in tissue. BMC Systems Biology, 2011, 5, 115.	3.0	54
25	Direct and indirect effects in the regulation of overlapping promoters. Nucleic Acids Research, 2011, 39, 6879-6885.	14.5	25
26	Minimal Gene Regulatory Circuits for a Lysis-Lysogeny Choice in the Presence of Noise. PLoS ONE, 2010, 5, e15037.	2.5	16
27	Timing of Gene Transcription in the Galactose Utilization System of Escherichia coli. Journal of Biological Chemistry, 2010, 285, 38062-38068.	3.4	16
28	A Wnt Oscillator Model for Somitogenesis. Biophysical Journal, 2010, 98, 943-950.	0.5	45
29	Modeling oscillatory control in NF-ÎºB, p53 and Wnt signaling. Current Opinion in Genetics and Development, 2010, 20, 656-664.	3.3	63
30	Simplified Models of Biological Networks. Annual Review of Biophysics, 2010, 39, 43-59.	10.0	90
31	Repressor Lattice: Feedback, Commensurability, and Dynamical Frustration. Physical Review Letters, 2009, 103, 118101.	7.8	32
32	Dynamic features of gene expression control by small regulatory RNAs. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 10655-10659.	7.1	78
33	Dominant Negative Autoregulation Limits Steady-State Repression Levels in Gene Networks. Journal of Bacteriology, 2009, 191, 4487-4491.	2.2	17
34	Combinatorics of feedback in cellular uptake and metabolism of small molecules. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 20815-20819.	7.1	27
35	Oscillation patterns in negative feedback loops. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 6533-6537.	7.1	119
36	Signal integration in the galactose network of <i>Escherichia coli</i>. Molecular Microbiology, 2007, 65, 465-476.	2.5	63

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37	Minimal model of spiky oscillations in NF-ÂB signaling. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 10840-10845.	7.1	151
38	Crashes, recoveries, and â€œcore shiftsâ€• in a model of evolving networks. Physical Review E, 2002, 65, 026103.	2.1	26
39	Large extinctions in an evolutionary model: The role of innovation and keystone species. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 2055-2060.	7.1	78
40	Autocatalytic Sets and the Growth of Complexity in an Evolutionary Model. Physical Review Letters, 1998, 81, 5684-5687.	7.8	174