JanÃ© Kondev

List of Publications by Year
in descending order

58 papers	3,587 citations	236925 25 h-index	182427 51 g-index
69 all docs	69 docs citations	69 times ranked	3166 citing authors

#	Article	IF	Citations
1	Transcriptional regulation by the numbers: models. Current Opinion in Genetics and Development, 2005, 15, 116-124.	3.3	660
2	Transcriptional regulation by the numbers: applications. Current Opinion in Genetics and Development, 2005, 15, 125-135.	3.3	343
3	Mechanics of DNA packaging in viruses. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 3173-3178.	7.1	260
4	Forces during Bacteriophage DNA Packaging and Ejection. Biophysical Journal, 2005, 88, 851-866.	0.5	254
5	Regulation of Noise in Gene Expression. Annual Review of Biophysics, 2013, 42, 469-491.	10.0	191
6	Strong intranucleoid interactions organize the <i>Escherichia coli</i> chromosome into a nucleoid filament. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 4991-4995.	7.1	164
7	Effect of Promoter Architecture on the Cell-to-Cell Variability in Gene Expression. PLoS Computational Biology, 2011, 7, e1001100.	3.2	141
8	Transcriptional control of noise in gene expression. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 5081-5086.	7.1	140
9	Complex signal processing in synthetic gene circuits using cooperative regulatory assemblies. Science, 2019, 364, 593-597.	12.6	117
10	Geometrical Exponents of Contour Loops on Random Gaussian Surfaces. Physical Review Letters, 1995, 74, 4580-4583.	7.8	114
11	Nonlinear measures for characterizing rough surface morphologies. Physical Review E, 2000, 61, 104-125.	2.1	85
12	Bacterial RNA polymerase can retain Ïƒ ⁷⁰ throughout transcription. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 602-607.	7.1	79
13	Deciphering Transcriptional Dynamics In Vivo by Counting Nascent RNA Molecules. PLoS Computational Biology, 2015, 11, e1004345.	3.2	61
14	Synergy between Cyclase-associated protein and Cofilin accelerates actin filament depolymerization by two orders of magnitude. Nature Communications, 2019, 10, 5319.	12.8	60
15	Four-coloring model on the square lattice: A critical ground state. Physical Review B, 1995, 52, 6628-6639.	3.2	58
16	Design Principles of Length Control of Cytoskeletal Structures. Annual Review of Biophysics, 2016, 45, 85-116.	10.0	54
17	Thermodynamics of Biological Processes. Methods in Enzymology, 2011, 492, 27-59.	1.0	45
18	Fundamental limits on the rate of bacterial growth and their influence on proteomic composition. Cell Systems, 2021, 12, 924-944.e2.	6.2	45

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19	A general mechanism for competitor-induced dissociation of molecular complexes. Nature Communications, 2014, 5, 5207.	12.8	43
20	Liouville Field Theory of Fluctuating Loops. Physical Review Letters, 1997, 78, 4320-4323.	7.8	41
21	The Limiting-Pool Mechanism Fails to Control the Size of Multiple Organelles. Cell Systems, 2017, 4, 559-567.e14.	6.2	39
22	Transcription by the numbers redux: experiments and calculations that surprise. Trends in Cell Biology, 2010, 20, 723-733.	7.9	38
23	Yeast ATM and ATR kinases use different mechanisms to spread histone H2A phosphorylation around a DNA double-strand break. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 21354-21363.	7.1	35
24	Length-dependent disassembly maintains four different flagellar lengths in Giardia. ELife, 2019, 8, .	6.0	33
25	Mechanism of transcriptional repression at a bacterial promoter by analysis of single molecules. EMBO Journal, 2011, 30, 3940-3946.	7.8	32
26	Lattice Model of Diffusion-Limited Bimolecular Chemical Reactions in Confined Environments. Physical Review Letters, 2009, 102, 218302.	7.8	31
27	Alternative transcription cycle for bacterial RNA polymerase. Nature Communications, 2020, 11, 448.	12.8	31
28	Force steps during viral DNA packaging?. Journal of the Mechanics and Physics of Solids, 2003, 51, 2239-2257.	4.8	29
29	Dynamics of Homology Searching During Gene Conversion in<i>Saccharomyces cerevisiae</i>Revealed by Donor Competition. Genetics, 2011, 189, 1225-1233.	2.9	28
30	Length regulation of multiple flagella that self-assemble from a shared pool of components. ELife, 2019, 8, .	6.0	28
31	Effect of Chromosome Tethering on Nuclear Organization in Yeast. PLoS ONE, 2014, 9, e102474.	2.5	27
32	Antenna Mechanism of Length Control of Actin Cables. PLoS Computational Biology, 2015, 11, e1004160.	3.2	27
33	Statistical Topography of Glassy Interfaces. Physical Review Letters, 1998, 80, 109-112.	7.8	24
34	Conformational Entropy of Compact Polymers. Physical Review Letters, 1998, 81, 2922-2925.	7.8	23
35	Conformal Charge and Exact Exponents in then=2Fully Packed Loop Model. Physical Review Letters, 1994, 73, 2786-2786.	7.8	22
36	Transition from the Compact to the Dense Phase of Two-Dimensional Polymers. Journal of Statistical Physics, 1999, 96, 21-48.	1.2	19

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37	Continuous Melting of Compact Polymers. Physical Review Letters, 2004, 92, 210601.	7.8	19
38	Distribution of Initiation Times Reveals Mechanisms of Transcriptional Regulation in Single Cells. Biophysical Journal, 2018, 114, 2072-2082.	0.5	19
39	Analysis of biological noise in the flagellar length control system. IScience, 2021, 24, 102354.	4.1	19
40	The interplay of phenotypic variability and fitness in finite microbial populations. Journal of the Royal Society Interface, 2020, 17, 20190827.	3.4	16
41	Critical Geometry of Two-Dimensional Passive Scalar Turbulence. Physical Review Letters, 2001, 86, 5890-5893.	7.8	13
42	Chromosome-refolding model of mating-type switching in yeast. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E6929-E6938.	7.1	13
43	Loop Models, Marginally Rough Interfaces, and the Coulomb Gas. International Journal of Modern Physics B, 1997, 11, 153-159.	2.0	10
44	Scaling of subcellular actin structures with cell length through decelerated growth. ELife, 2021, 10, .	6.0	10
45	Non-genetic variability in microbial populations: survival strategy or nuisance?. Reports on Progress in Physics, 2021, 84, .	20.1	10
46	Control of filament length by a depolymerizing gradient. PLoS Computational Biology, 2020, 16, e1008440.	3.2	7
47	Quantitative Analysis of Actin Cable Length in Yeast. Bio-protocol, 2022, 12, .	0.4	4
48	Critical Dynamics of Dimers:â€‰ Implications for the Glass Transition. Journal of Physical Chemistry B, 2005, 109, 21413-21418.	2.6	3
49	Exact Length Distribution of Filamentous Structures Assembled from a Finite Pool of Subunits. Journal of Physical Chemistry B, 2016, 120, 6225-6230.	2.6	3
50	Jamming in a model glass: interplay of dynamics and thermodynamics. Physica A: Statistical Mechanics and Its Applications, 2003, 318, 23-29.	2.6	2
51	Strong Intra-Nucleoid Interactions Organize the E. Coli Chromosome into a Nucleoid Filament. Biophysical Journal, 2010, 98, 658a-659a.	0.5	1
52	Biochemistry on a Leash: Confinement as a Regulatory Mechanism for Bimolecular Reaction Rates. Biophysical Journal, 2009, 96, 596a.	0.5	0
53	Using Polymer Models To Understand The Structure Of Chromosome III In Budding Yeast. Biophysical Journal, 2009, 96, 348a.	0.5	0
54	A Probabilistic Approach to Growth Networks. Operations Research, 2022, 70, 3386-3402.	1.9	0

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55	Control of filament length by a depolymerizing gradient. , 2020, 16, e1008440.		0
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57	Control of filament length by a depolymerizing gradient. , 2020, 16, e1008440.		0
58	Control of filament length by a depolymerizing gradient. , 2020, 16, e1008440.		0