

Philippe Nghe

List of Publications by Year in descending order

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Version: 2024-02-01

34
papers

1,616
citations

471509

17
h-index

361022

35
g-index

41
all docs

41
docs citations

41
times ranked

1992
citing authors

#	ARTICLE	IF	CITATIONS
1	The Origin of Life: What Is the Question?. <i>Astrobiology</i> , 2022, 22, 851-862.	3.0	7
2	Darwinian properties and their trade-offs in autocatalytic RNA reaction networks. <i>Nature Communications</i> , 2021, 12, 842.	12.8	17
3	RNA diversification by a self-reproducing ribozyme revealed by deep sequencing and kinetic modelling. <i>Chemical Communications</i> , 2021, 57, 7517-7520.	4.1	10
4	Natural Selection beyond Life? A Workshop Report. <i>Life</i> , 2021, 11, 1051.	2.4	3
5	The generality of transient compartmentalization and its associated error thresholds. <i>Journal of Theoretical Biology</i> , 2020, 487, 110110.	1.7	9
6	Universal motifs and the diversity of autocatalytic systems. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 25230-25236.	7.1	54
7	Thresholds in Origin of Life Scenarios. <i>IScience</i> , 2020, 23, 101756.	4.1	15
8	Metabolic cost of rapid adaptation of single yeast cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 10660-10666.	7.1	17
9	Flux, toxicity, and expression costs generate complex genetic interactions in a metabolic pathway. <i>Science Advances</i> , 2020, 6, eabb2236.	10.3	26
10	Predicting Evolutionary Constraints by Identifying Conflicting Demands in Regulatory Networks. <i>Cell Systems</i> , 2020, 10, 526-534.e3.	6.2	2
11	Predicting Evolution Using Regulatory Architecture. <i>Annual Review of Biophysics</i> , 2020, 49, 181-197.	10.0	9
12	Recent insights into the genotype-phenotype relationship from massively parallel genetic assays. <i>Evolutionary Applications</i> , 2019, 12, 1721-1742.	3.1	52
13	Mineral surfaces select for longer RNA molecules. <i>Chemical Communications</i> , 2019, 55, 2090-2093.	4.1	23
14	Large scale control and programming of gene expression using CRISPR. <i>Seminars in Cell and Developmental Biology</i> , 2019, 96, 124-132.	5.0	5
15	Stochasticity in cellular metabolism and growth: Approaches and consequences. <i>Current Opinion in Systems Biology</i> , 2018, 8, 131-136.	2.6	18
16	Selection Dynamics in Transient Compartmentalization. <i>Physical Review Letters</i> , 2018, 120, 158101.	7.8	21
17	Sign epistasis caused by hierarchy within signalling cascades. <i>Nature Communications</i> , 2018, 9, 1451.	12.8	22
18	Coupled catabolism and anabolism in autocatalytic RNA sets. <i>Nucleic Acids Research</i> , 2018, 46, 9660-9666.	14.5	36

#	ARTICLE	IF	CITATIONS
19	A graph-based algorithm for the multi-objective optimization of gene regulatory networks. <i>European Journal of Operational Research</i> , 2018, 270, 784-793.	5.7	3
20	Topological and thermodynamic factors that influence the evolution of small networks of catalytic RNA species. <i>Rna</i> , 2017, 23, 1088-1096.	3.5	16
21	Information-theoretic analysis of the directional influence between cellular processes. <i>PLoS ONE</i> , 2017, 12, e0187431.	2.5	12
22	Transient compartmentalization of RNA replicators prevents extinction due to parasites. <i>Science</i> , 2016, 354, 1293-1296.	12.6	116
23	Generation and filtering of gene expression noise by the bacterial cell cycle. <i>BMC Biology</i> , 2016, 14, 11.	3.8	45
24	Individuality and universality in the growth-division laws of single <i>E. coli</i> cells. <i>Physical Review E</i> , 2016, 93, 012408.	2.1	82
25	Prebiotic network evolution: six key parameters. <i>Molecular BioSystems</i> , 2015, 11, 3206-3217.	2.9	93
26	Evolutionary constraints in variable environments, from proteins to networks. <i>Trends in Genetics</i> , 2014, 30, 192-198.	6.7	27
27	Stochasticity of metabolism and growth at the single-cell level. <i>Nature</i> , 2014, 514, 376-379.	27.8	370
28	Single-Cell Dynamics Reveals Sustained Growth during Diauxic Shifts. <i>PLoS ONE</i> , 2013, 8, e61686.	2.5	80
29	Microfabricated Polyacrylamide Devices for the Controlled Culture of Growing Cells and Developing Organisms. <i>PLoS ONE</i> , 2013, 8, e75537.	2.5	25
30	Microfluidics and complex fluids. <i>Lab on A Chip</i> , 2011, 11, 788.	6.0	65
31	Flow-induced polymer degradation probed by a high throughput microfluidic set-up. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2010, 165, 313-322.	2.4	32
32	Interfacially Driven Instability in the Microchannel Flow of a Shear-Banding Fluid. <i>Physical Review Letters</i> , 2010, 104, 248303.	7.8	42
33	Microfluidic stickers. <i>Lab on A Chip</i> , 2008, 8, 274-279.	6.0	228
34	High shear rheology of shear banding fluids in microchannels. <i>Applied Physics Letters</i> , 2008, 93, .	3.3	29