Lingchong You

List of Publications by Year
in descending order

98 papers	7,528 citations	71102 41 h-index	60623 81 g-index
108 all docs	108 docs citations	108 times ranked	7841 citing authors

#	Article	IF	Citations
1	Editorial overview: All microbial systems go`. Current Opinion in Microbiology, 2022, 65, iii-iv.	5.1	0
2	Modulation of microbial community dynamics by spatial partitioning. Nature Chemical Biology, 2022, 18, 394-402.	8.0	23
3	Intra- and interpopulation transposition of mobile genetic elements driven by antibiotic selection. Nature Ecology and Evolution, 2022, 6, 555-564.	7.8	37
4	Programmable living assembly of materials by bacterial adhesion. Nature Chemical Biology, 2022, 18, 289-294.	8.0	40
5	Advances and challenges in programming pattern formation using living cells. Current Opinion in Chemical Biology, 2022, 68, 102147.	6.1	6
6	Engineering consortia by polymeric microbial swarmbots. Nature Communications, 2022, 13, .	12.8	29
7	Repulsive expansion dynamics in colony growth and gene expression. PLoS Computational Biology, 2021, 17, e1008168.	3.2	5
8	Collective colony growth is optimized by branching pattern formation in <i>Pseudomonas aeruginosa</i>. Molecular Systems Biology, 2021, 17, e10089.	7.2	20
9	Living fabrication of functional semi-interpenetrating polymeric materials. Nature Communications, 2021, 12, 3422.	12.8	31
10	Predicting plasmid persistence in microbial communities by coarseâ€grained modeling. BioEssays, 2021, 43, 2100084.	2.5	2
11	Design patterns for engineering genetic stability. Current Opinion in Biomedical Engineering, 2021, 19, 100297.	3.4	14
12	Engineered microbial consortia: strategies and applications. Microbial Cell Factories, 2021, 20, 211.	4.0	39
13	Growthâ€stageâ€dependent regulation of conjugation. AIChE Journal, 2020, 66, e16848.	3.6	17
14	Bacterial Aggregation Leads to Collective Elimination. Trends in Microbiology, 2020, 28, 243-244.	7.7	0
15	Temporal encoding of bacterial identity and traits in growth dynamics. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 20202-20210.	7.1	10
16	The persistence potential of transferable plasmids. Nature Communications, 2020, 11, 5589.	12.8	16
17	Interindividual Variation in Dietary Carbohydrate Metabolism by Gut Bacteria Revealed with Droplet Microfluidic Culture. MSystems, 2020, 5, .	3.8	34
18	Environmental and genetic determinants of plasmid mobility in pathogenic <i>Escherichia coli</i>. Science Advances, 2020, 6, eaax3173.	10.3	45

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19	Quantifying E2F1 protein dynamics in single cells. Quantitative Biology, 2020, 8, 20-30.	0.5	2
20	Polar-opposite fates. Nature Chemical Biology, 2019, 15, 850-852.	8.0	0
21	Bacterial metabolic state more accurately predicts antibiotic lethality than growth rate. Nature Microbiology, 2019, 4, 2109-2117.	13.3	171
22	Versatile biomanufacturing through stimulus-responsive cellâ€“material feedback. Nature Chemical Biology, 2019, 15, 1017-1024.	8.0	50
23	Massive computational acceleration by using neural networks to emulate mechanism-based biological models. Nature Communications, 2019, 10, 4354.	12.8	50
24	Synthetic Pattern Formation. Biochemistry, 2019, 58, 1478-1483.	2.5	43
25	Engineered Ribonucleoprotein Granules Inhibit Translation in Protocells. Molecular Cell, 2019, 75, 66-75.e5.	9.7	52
26	Prophage Hunter: an integrative hunting tool for active prophages. Nucleic Acids Research, 2019, 47, W74-W80.	14.5	169
27	Emerging strategies for engineering microbial communities. Biotechnology Advances, 2019, 37, 107372.	11.7	88
28	Universal antibiotic tolerance arising from antibiotic-triggered accumulation of pyocyanin in Pseudomonas aeruginosa. PLoS Biology, 2019, 17, e3000573.	5.6	54
29	A unifying framework for interpreting and predicting mutualistic systems. Nature Communications, 2019, 10, 242.	12.8	21
30	Metabolic division of labor in microbial systems. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 2526-2531.	7.1	191
31	Bacterially driven cadmium sulfide precipitation on porous membranes: Toward platforms for photocatalytic applications. Biointerphases, 2018, 13, 011006.	1.6	2
32	Robust, linear correlations between growth rates and Î²-lactamâ€“mediated lysis rates. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 4069-4074.	7.1	113
33	Applying ecological resistance and resilience to dissect bacterial antibiotic responses. Science Advances, 2018, 4, eaau1873.	10.3	32
34	Synthetic Biology: Reports from CSHA 2016 and More. Biotechnology Journal, 2018, 13, e1800160.	3.5	0
35	Cyclin D/CDK4/6 activity controls G1 length in mammalian cells. PLoS ONE, 2018, 13, e0185637.	2.5	42
36	Hybrid (Organic/Inorganic) Electrodes from Bacterially Precipitated CdS for PEC/Storage Applications. Journal of Physical Chemistry C, 2017, 121, 3734-3743.	3.1	13

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37	Expression level is a key determinant of E2F1-mediated cell fate. Cell Death and Differentiation, 2017, 24, 626-637.	11.2	42
38	Programmable assembly of pressure sensors using pattern-forming bacteria. Nature Biotechnology, 2017, 35, 1087-1093.	17.5	94
39	Hacking DNA copy number for circuit engineering. Nature Genetics, 2017, 49, 1164-1165.	21.4	1
40	Long-term growth data of Escherichia coli at a single-cell level. Scientific Data, 2017, 4, 170036.	5.3	23
41	Drug detoxification dynamics explain the postantibiotic effect. Molecular Systems Biology, 2017, 13, 948.	7.2	31
42	Persistence and reversal of plasmid-mediated antibiotic resistance. Nature Communications, 2017, 8, 1689.	12.8	252
43	Quantitative and synthetic biology approaches to combat bacterial pathogens. Current Opinion in Biomedical Engineering, 2017, 4, 116-126.	3.4	4
44	Processing Oscillatory Signals by Incoherent Feedforward Loops. PLoS Computational Biology, 2016, 12, e1005101.	3.2	23
45	Coupling spatial segregation with synthetic circuits to control bacterial survival. Molecular Systems Biology, 2016, 12, 859.	7.2	33
46	Elements of biological oscillations in time and space. Nature Structural and Molecular Biology, 2016, 23, 1030-1034.	8.2	36
47	Collective Space-Sensing Coordinates Pattern Scaling in Engineered Bacteria. Cell, 2016, 165, 620-630.	28.9	82
48	Dissecting the effects of antibiotics on horizontal gene transfer: Analysis suggests a critical role of selection dynamics. BioEssays, 2016, 38, 1283-1292.	2.5	48
49	Antibiotics as a selective driver for conjugation dynamics. Nature Microbiology, 2016, 1, 16044.	13.3	212
50	Addressing biological uncertainties in engineering gene circuits. Integrative Biology (United) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 222 T	1.3	36
51	A noisy linear map underlies oscillations in cell size and gene expression in bacteria. Nature, 2015, 523, 357-360.	27.8	209
52	Dynamic control and quantification of bacterial population dynamics in droplets. Biomaterials, 2015, 61, 239-245.	11.4	25
53	Collective antibiotic tolerance: mechanisms, dynamics and intervention. Nature Chemical Biology, 2015, 11, 182-188.	8.0	125
54	Bacterial Temporal Dynamics Enable Optimal Design of Antibiotic Treatment. PLoS Computational Biology, 2015, 11, e1004201.	3.2	38

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55	A Power-Law Dependence of Bacterial Invasion on Mammalian Host Receptors. PLoS Computational Biology, 2015, 11, e1004203.	3.2	4
56	Linear Population Allocation by Bistable Switches in Response to Transient Stimulation. PLoS ONE, 2014, 9, e105408.	2.5	4
57	Programmed Allee effect in bacteria causes a tradeoff between population spread and survival. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 1969-1974.	7.1	59
58	Division of labour between Myc and G1 cyclins in cell cycle commitment and pace control. Nature Communications, 2014, 5, 4750.	12.8	74
59	Phenotypic Signatures Arising from Unbalanced Bacterial Growth. PLoS Computational Biology, 2014, 10, e1003751.	3.2	10
60	Emergent Dynamics from Quorum Eavesdropping. Chemistry and Biology, 2014, 21, 1601-1602.	6.0	2
61	Synthetic Biology Looks Good on Paper. Cell, 2014, 159, 718-720.	28.9	9
62	Stochastic Sensitivity Analysis and Kernel Inference via Distributional Data. Biophysical Journal, 2014, 107, 1247-1255.	0.5	2
63	Synthetic Microbial Consortia and their Applications. , 2013, , 243-258.		9
64	A programmable microenvironment for cellular studies via microfluidics-generated double emulsions. Biomaterials, 2013, 34, 4564-4572.	11.4	86
65	Programmed cell death in bacteria and implications for antibiotic therapy. Trends in Microbiology, 2013, 21, 265-270.	7.7	67
66	Temporal control of selfâ€organized pattern formation without morphogen gradients in bacteria. Molecular Systems Biology, 2013, 9, 697.	7.2	107
67	Tension and Robustness in Multitasking Cellular Networks. PLoS Computational Biology, 2012, 8, e1002491.	3.2	7
68	Optimality and robustness in quorum sensing (QS)-mediated regulation of a costly public good enzyme. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 19810-19815.	7.1	113
69	Programming stressâ€induced altruistic death in engineered bacteria. Molecular Systems Biology, 2012, 8, 626.	7.2	55
70	A different life?. Current Opinion in Chemical Biology, 2012, 16, 243-244.	6.1	2
71	A Synthetic Biology Approach to Understanding Cellular Information Processing. ACS Synthetic Biology, 2012, 1, 389-402.	3.8	27
72	The inoculum effect and bandâ€pass bacterial response to periodic antibiotic treatment. Molecular Systems Biology, 2012, 8, 617.	7.2	84

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73	Engineering microbial systems to explore ecological and evolutionary dynamics. Current Opinion in Biotechnology, 2012, 23, 791-797.	6.6	46
74	Viral-Mediated Noisy Gene Expression Reveals Biphasic E2f1 Response to MYC. Molecular Cell, 2011, 41, 275-285.	9.7	45
75	Division of logic labour. Nature, 2011, 469, 171-172.	27.8	28
76	Programming microbial population dynamics by engineered cellâ€“cell communication. Biotechnology Journal, 2011, 6, 837-849.	3.5	34
77	Network calisthenics. Cell Cycle, 2011, 10, 3086-3094.	2.6	70
78	Bayesian Learning from Marginal Data in Bionetwork Models. Statistical Applications in Genetics and Molecular Biology, 2011, 10, .	0.6	25
79	Computation of Steady-State Probability Distributions in Stochastic Models of Cellular Networks. PLoS Computational Biology, 2011, 7, e1002209.	3.2	12
80	Oscillations by Minimal Bacterial Suicide Circuits Reveal Hidden Facets of Host-Circuit Physiology. PLoS ONE, 2010, 5, e11909.	2.5	56
81	Stochastic E2F Activation and Reconciliation of Phenomenological Cell-Cycle Models. PLoS Biology, 2010, 8, e1000488.	5.6	43
82	Optimal tuning of bacterial sensing potential. Molecular Systems Biology, 2009, 5, 286.	7.2	77
83	Emergent bistability by a growth-modulating positive feedback circuit. Nature Chemical Biology, 2009, 5, 842-848.	8.0	306
84	Spatiotemporal modulation of biodiversity in a synthetic chemical-mediated ecosystem. Nature Chemical Biology, 2009, 5, 929-935.	8.0	89
85	Engineering multicellular systems by cellâ€“cell communication. Current Opinion in Biotechnology, 2009, 20, 461-470.	6.6	48
86	Decoding biological principles using gene circuits. Molecular BioSystems, 2009, 5, 695.	2.9	13
87	A bistable Rbâ€“E2F switch underlies the restriction point. Nature Cell Biology, 2008, 10, 476-482.	10.3	373
88	Engineering microbial consortia: a new frontier in synthetic biology. Trends in Biotechnology, 2008, 26, 483-489.	9.3	809
89	A synthetic <i>Escherichia coli</i> predatorâ€“prey ecosystem. Molecular Systems Biology, 2008, 4, 187.	7.2	425
90	Sensing and Integration of Erk and PI3K Signals by Myc. PLoS Computational Biology, 2008, 4, e1000013.	3.2	62

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91	Noise Reduction by Diffusional Dissipation in a Minimal Quorum Sensing Motif. PLoS Computational Biology, 2008, 4, e1000167.	3.2	48
92	A synthetic biology challenge: making cells compute. Molecular BioSystems, 2007, 3, 343.	2.9	35
93	Biology by design: reduction and synthesis of cellular components and behaviour. Journal of the Royal Society Interface, 2007, 4, 607-623.	3.4	56
94	Long-Term Monitoring of Bacteria Undergoing Programmed Population Control in a Microchemostat. Science, 2005, 309, 137-140.	12.6	535
95	Programmed population control by cellâ€“cell communication and regulated killing. Nature, 2004, 428, 868-871.	27.8	696
96	Toward Computational Systems Biology. Cell Biochemistry and Biophysics, 2004, 40, 167-184.	1.8	45
97	Modeling biological systems using Dynetica--a simulator of dynamic networks. Bioinformatics, 2003, 19, 435-436.	4.1	38
98	Intelligent nanoscope for rapid nanomaterial identification and classification. Lab on A Chip, 0, , .	6.0	6