

# James J Collins

## List of Publications by Year in descending order

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Version: 2024-02-01

181  
papers

65,305  
citations

1713

107  
h-index

4035

182  
g-index

192  
all docs

192  
docs citations

192  
times ranked

68424  
citing authors

#	ARTICLE	IF	CITATIONS
1	RNA-responsive elements for eukaryotic translational control. <i>Nature Biotechnology</i> , 2022, 40, 539-545.	9.4	34
2	Increased energy demand from anabolic-catabolic processes drives $\beta$ -lactam antibiotic lethality. <i>Cell Chemical Biology</i> , 2022, 29, 276-286.e4.	2.5	20
3	Field validation of the performance of paper-based tests for the detection of the Zika and chikungunya viruses in serum samples. <i>Nature Biomedical Engineering</i> , 2022, 6, 246-256.	11.6	27
4	An engineered live biotherapeutic for the prevention of antibiotic-induced dysbiosis. <i>Nature Biomedical Engineering</i> , 2022, 6, 910-921.	11.6	36
5	CellComm infers cellular crosstalk that drives haematopoietic stem and progenitor cell development. <i>Nature Cell Biology</i> , 2022, 24, 579-589.	4.6	11
6	Modulating the evolutionary trajectory of tolerance using antibiotics with different metabolic dependencies. <i>Nature Communications</i> , 2022, 13, 2525.	5.8	22
7	Deep-Learning Resources for Studying Glycan-Mediated Host-Microbe Interactions. <i>Cell Host and Microbe</i> , 2021, 29, 132-144.e3.	5.1	46
8	Anomalous COVID-19 tests hinder researchers. <i>Science</i> , 2021, 371, 244-245.	6.0	11
9	Clinically relevant mutations in core metabolic genes confer antibiotic resistance. <i>Science</i> , 2021, 371, .	6.0	187
10	Engineering advanced logic and distributed computing in human CAR immune cells. <i>Nature Communications</i> , 2021, 12, 792.	5.8	68
11	Synthetic biology in the clinic: engineering vaccines, diagnostics, and therapeutics. <i>Cell</i> , 2021, 184, 881-898.	13.5	56
12	Using deep learning for dermatologist-level detection of suspicious pigmented skin lesions from wide-field images. <i>Science Translational Medicine</i> , 2021, 13, .	5.8	78
13	Cytoplasmic condensation induced by membrane damage is associated with antibiotic lethality. <i>Nature Communications</i> , 2021, 12, 2321.	5.8	49
14	Designing Biological Circuits: Synthetic Biology Within the Operon Model and Beyond. <i>Annual Review of Biochemistry</i> , 2021, 90, 221-244.	5.0	28
15	Wearable materials with embedded synthetic biology sensors for biomolecule detection. <i>Nature Biotechnology</i> , 2021, 39, 1366-1374.	9.4	286
16	CRISPR-based diagnostics. <i>Nature Biomedical Engineering</i> , 2021, 5, 643-656.	11.6	492
17	Minimally instrumented SHERLOCK (miSHERLOCK) for CRISPR-based point-of-care diagnosis of SARS-CoV-2 and emerging variants. <i>Science Advances</i> , 2021, 7, .	4.7	189
18	Deep learning identifies synergistic drug combinations for treating COVID-19. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	87

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19	Engineering living therapeutics with synthetic biology. <i>Nature Reviews Drug Discovery</i> , 2021, 20, 941-960.	21.5	142
20	A deep learning approach to programmable RNA switches. <i>Nature Communications</i> , 2020, 11, 5057.	5.8	83
21	Eradicating Bacterial Persisters with Combinations of Strongly and Weakly Metabolism-Dependent Antibiotics. <i>Cell Chemical Biology</i> , 2020, 27, 1544-1552.e3.	2.5	55
22	Parallel bimodal single-cell sequencing of transcriptome and chromatin accessibility. <i>Genome Research</i> , 2020, 30, 1027-1039.	2.4	52
23	Ultrasensitive CRISPR-based diagnostic for field-applicable detection of <i>Plasmodium</i> species in symptomatic and asymptomatic malaria. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 25722-25731.	3.3	146
24	Diversification of reprogramming trajectories revealed by parallel single-cell transcriptome and chromatin accessibility sequencing. <i>Science Advances</i> , 2020, 6, .	4.7	37
25	Creating CRISPR-responsive smart materials for diagnostics and programmable cargo release. <i>Nature Protocols</i> , 2020, 15, 3030-3063.	5.5	42
26	Continuous bioactivity-dependent evolution of an antibiotic biosynthetic pathway. <i>Nature Communications</i> , 2020, 11, 4202.	5.8	19
27	Evidence that coronavirus superspreading is fat-tailed. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 29416-29418.	3.3	104
28	Predictive biology: modelling, understanding and harnessing microbial complexity. <i>Nature Reviews Microbiology</i> , 2020, 18, 507-520.	13.6	80
29	Point-of-Care Devices to Detect Zika and Other Emerging Viruses. <i>Annual Review of Biomedical Engineering</i> , 2020, 22, 371-386.	5.7	20
30	Cell-free biosensors for rapid detection of water contaminants. <i>Nature Biotechnology</i> , 2020, 38, 1451-1459.	9.4	221
31	A Deep Learning Approach to Antibiotic Discovery. <i>Cell</i> , 2020, 180, 688-702.e13.	13.5	978
32	A CRISPR-based assay for the detection of opportunistic infections post-transplantation and for the monitoring of transplant rejection. <i>Nature Biomedical Engineering</i> , 2020, 4, 601-609.	11.6	80
33	A systems biology pipeline identifies regulatory networks for stem cell engineering. <i>Nature Biotechnology</i> , 2019, 37, 810-818.	9.4	18
34	Bacterial Metabolism and Antibiotic Efficacy. <i>Cell Metabolism</i> , 2019, 30, 251-259.	7.2	305
35	De novo-designed translation-repressing riboregulators for multi-input cellular logic. <i>Nature Chemical Biology</i> , 2019, 15, 1173-1182.	3.9	90
36	Bacterial metabolic state more accurately predicts antibiotic lethality than growth rate. <i>Nature Microbiology</i> , 2019, 4, 2109-2117.	5.9	171

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37	Programmable CRISPR-responsive smart materials. <i>Science</i> , 2019, 365, 780-785.	6.0	248
38	Engineering microbial peer pressure. <i>Science</i> , 2019, 365, 986-987.	6.0	1
39	A White-Box Machine Learning Approach for Revealing Antibiotic Mechanisms of Action. <i>Cell</i> , 2019, 177, 1649-1661.e9.	13.5	227
40	Complex signal processing in synthetic gene circuits using cooperative regulatory assemblies. <i>Science</i> , 2019, 364, 593-597.	6.0	117
41	A multiplexable assay for screening antibiotic lethality against drug-tolerant bacteria. <i>Nature Methods</i> , 2019, 16, 303-306.	9.0	30
42	Definitions and guidelines for research on antibiotic persistence. <i>Nature Reviews Microbiology</i> , 2019, 17, 441-448.	13.6	748
43	Targeting Antibiotic Tolerance, Pathogen by Pathogen. <i>Cell</i> , 2018, 172, 1228-1238.	13.5	139
44	Reconstruction of complex single-cell trajectories using CellRouter. <i>Nature Communications</i> , 2018, 9, 892.	5.8	78
45	Multiplexed and portable nucleic acid detection platform with Cas13, Cas12a, and Csm6. <i>Science</i> , 2018, 360, 439-444.	6.0	1,649
46	Universal Chimeric Antigen Receptors for Multiplexed and Logical Control of T Cell Responses. <i>Cell</i> , 2018, 173, 1426-1438.e11.	13.5	454
47	CRISPR-based genomic tools for the manipulation of genetically intractable microorganisms. <i>Nature Reviews Microbiology</i> , 2018, 16, 333-339.	13.6	88
48	Understanding Biological Regulation Through Synthetic Biology. <i>Annual Review of Biophysics</i> , 2018, 47, 399-423.	4.5	88
49	Precise Cas9 targeting enables genomic mutation prevention. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 3669-3673.	3.3	28
50	A CRISPR-Cas9-based gene drive platform for genetic interaction analysis in <i>Candida albicans</i> . <i>Nature Microbiology</i> , 2018, 3, 73-82.	5.9	135
51	CRISPR Guide RNA Cloning for Mammalian Systems. <i>Journal of Visualized Experiments</i> , 2018, , .	0.2	6
52	Next-generation biocontainment systems for engineered organisms. <i>Nature Chemical Biology</i> , 2018, 14, 530-537.	3.9	161
53	Designing microbial consortia with defined social interactions. <i>Nature Chemical Biology</i> , 2018, 14, 821-829.	3.9	250
54	BioBits, Explorer: A modular synthetic biology education kit. <i>Science Advances</i> , 2018, 4, eaat5105.	4.7	113

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55	BioBits, a Bright: A fluorescent synthetic biology education kit. <i>Science Advances</i> , 2018, 4, eaat5107.	4.7	90
56	An enhanced CRISPR repressor for targeted mammalian gene regulation. <i>Nature Methods</i> , 2018, 15, 611-616.	9.0	361
57	A low-cost paper-based synthetic biology platform for analyzing gut microbiota and host biomarkers. <i>Nature Communications</i> , 2018, 9, 3347.	5.8	192
58	Next-Generation Machine Learning for Biological Networks. <i>Cell</i> , 2018, 173, 1581-1592.	13.5	648
59	Probiotic strains detect and suppress cholera in mice. <i>Science Translational Medicine</i> , 2018, 10, .	5.8	173
60	Carbon Sources Tune Antibiotic Susceptibility in <i>Pseudomonas aeruginosa</i> via Tricarboxylic Acid Cycle Control. <i>Cell Chemical Biology</i> , 2017, 24, 195-206.	2.5	264
61	A Blueprint for a Synthetic Genetic Feedback Controller to Reprogram Cell Fate. <i>Cell Systems</i> , 2017, 4, 109-120.e11.	2.9	65
62	Nucleic acid detection with CRISPR-Cas13a/C2c2. <i>Science</i> , 2017, 356, 438-442.	6.0	2,275
63	Antibiotic efficacy "context matters". <i>Current Opinion in Microbiology</i> , 2017, 39, 73-80.	2.3	71
64	ZSCAN10 expression corrects the genomic instability of iPSCs from aged donors. <i>Nature Cell Biology</i> , 2017, 19, 1037-1048.	4.6	35
65	Using Engineered Bacteria to Characterize Infection Dynamics and Antibiotic Effects In Vivo. <i>Cell Host and Microbe</i> , 2017, 22, 263-268.e4.	5.1	36
66	Biophysical Constraints Arising from Compositional Context in Synthetic Gene Networks. <i>Cell Systems</i> , 2017, 5, 11-24.e12.	2.9	120
67	Lethality of MalE-LacZ hybrid protein shares mechanistic attributes with oxidative component of antibiotic lethality. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 9164-9169.	3.3	34
68	Comprehensive Mapping of Pluripotent Stem Cell Metabolism Using Dynamic Genome-Scale Network Modeling. <i>Cell Reports</i> , 2017, 21, 2965-2977.	2.9	61
69	Understanding and Sensitizing Density-Dependent Persistence to Quinolone Antibiotics. <i>Molecular Cell</i> , 2017, 68, 1147-1154.e3.	4.5	105
70	Antibiotic-Induced Changes to the Host Metabolic Environment Inhibit Drug Efficacy and Alter Immune Function. <i>Cell Host and Microbe</i> , 2017, 22, 757-765.e3.	5.1	178
71	Complex cellular logic computation using ribocomputing devices. <i>Nature</i> , 2017, 548, 117-121.	13.7	321
72	Multiple mechanisms disrupt the let-7 microRNA family in neuroblastoma. <i>Nature</i> , 2016, 535, 246-251.	13.7	159

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73	Ribocomputing devices for sophisticated in vivo logic computation. , 2016, , .		1
74	Chemogenomics and orthology-based design of antibiotic combination therapies. Molecular Systems Biology, 2016, 12, 872.	3.2	96
75	Comparison of Cas9 activators in multiple species. Nature Methods, 2016, 13, 563-567.	9.0	438
76	Synthetic biology platform technologies for antimicrobial applications. Advanced Drug Delivery Reviews, 2016, 105, 35-43.	6.6	39
77	Rapid, Low-Cost Detection of Zika Virus Using Programmable Biomolecular Components. Cell, 2016, 165, 1255-1266.	13.5	1,061
78	Engineering Models to Scale. Cell, 2016, 165, 516-517.	13.5	1
79	Targeted erythropoietin selectively stimulates red blood cell expansion in vivo. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 5245-5250.	3.3	16
80	Portable, On-Demand Biomolecular Manufacturing. Cell, 2016, 167, 248-259.e12.	13.5	292
81	Creating Single-Copy Genetic Circuits. Molecular Cell, 2016, 63, 329-336.	4.5	62
82	LIN28 Regulates Stem Cell Metabolism and Conversion to Primed Pluripotency. Cell Stem Cell, 2016, 19, 66-80.	5.2	278
83	RNAi Reveals Phase-Specific Global Regulators of Human Somatic Cell Reprogramming. Cell Reports, 2016, 15, 2597-2607.	2.9	47
84	Contributions of microbiome and mechanical deformation to intestinal bacterial overgrowth and inflammation in a human gut-on-a-chip. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E7-15.	3.3	652
85	'Deadman' and 'Passcode' microbial kill switches for bacterial containment. Nature Chemical Biology, 2016, 12, 82-86.	3.9	249
86	A role for the bacterial GATC methylome in antibiotic stress survival. Nature Genetics, 2016, 48, 581-586.	9.4	85
87	Synthetic biology devices for in vitro and in vivo diagnostics. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 14429-14435.	3.3	281
88	Boosting Bacterial Metabolism to Combat Antibiotic Resistance. Cell Metabolism, 2015, 21, 154-155.	7.2	55
89	Chromatin regulation at the frontier of synthetic biology. Nature Reviews Genetics, 2015, 16, 159-171.	7.7	89
90	Engineered Phagemids for Nonlytic, Targeted Antibacterial Therapies. Nano Letters, 2015, 15, 4808-4813.	4.5	87

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91	Antibiotic efficacy is linked to bacterial cellular respiration. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 8173-8180.	3.3	544
92	Highly efficient Cas9-mediated transcriptional programming. Nature Methods, 2015, 12, 326-328.	9.0	1,245
93	DNA sense-and-respond protein modules for mammalian cells. Nature Methods, 2015, 12, 1085-1090.	9.0	46
94	Bactericidal Antibiotics Induce Toxic Metabolic Perturbations that Lead to Cellular Damage. Cell Reports, 2015, 13, 968-980.	2.9	393
95	Cas9 gRNA engineering for genome editing, activation and repression. Nature Methods, 2015, 12, 1051-1054.	9.0	272
96	Systematic Identification of Factors for Provirus Silencing in Embryonic Stem Cells. Cell, 2015, 163, 230-245.	13.5	162
97	Unraveling the Physiological Complexities of Antibiotic Lethality. Annual Review of Pharmacology and Toxicology, 2015, 55, 313-332.	4.2	222
98	Syntrophic exchange in synthetic microbial communities. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E2149-56.	3.3	498
99	Deconstructing transcriptional heterogeneity in pluripotent stem cells. Nature, 2014, 516, 56-61.	13.7	343
100	A brief history of synthetic biology. Nature Reviews Microbiology, 2014, 12, 381-390.	13.6	646
101	Programmable bacteria detect and record an environmental signal in the mammalian gut. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 4838-4843.	3.3	306
102	Bone marrow "on-a-chip" replicates hematopoietic niche physiology in vitro. Nature Methods, 2014, 11, 663-669.	9.0	369
103	Paper-Based Synthetic Gene Networks. Cell, 2014, 159, 940-954.	13.5	597
104	Toehold Switches: De-Novo-Designed Regulators of Gene Expression. Cell, 2014, 159, 925-939.	13.5	646
105	Antibiotics induce redox-related physiological alterations as part of their lethality. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E2100-9.	3.3	698
106	Tunable protein degradation in bacteria. Nature Biotechnology, 2014, 32, 1276-1281.	9.4	195
107	CellNet: Network Biology Applied to Stem Cell Engineering. Cell, 2014, 158, 903-915.	13.5	490
108	Dissecting Engineered Cell Types and Enhancing Cell Fate Conversion via CellNet. Cell, 2014, 158, 889-902.	13.5	238

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109	Using Targeted Chromatin Regulators to Engineer Combinatorial and Spatial Transcriptional Regulation. <i>Cell</i> , 2014, 158, 110-120.	13.5	120
110	A community effort to assess and improve drug sensitivity prediction algorithms. <i>Nature Biotechnology</i> , 2014, 32, 1202-1212.	9.4	653
111	Antibiotics and the gut microbiota. <i>Journal of Clinical Investigation</i> , 2014, 124, 4212-4218.	3.9	529
112	Synthetic biology: How best to build a cell. <i>Nature</i> , 2014, 509, 155-157.	13.7	30
113	Induction of Multipotential Hematopoietic Progenitors from Human Pluripotent Stem Cells via Respecification of Lineage-Restricted Precursors. <i>Cell Stem Cell</i> , 2013, 13, 459-470.	5.2	241
114	Bactericidal Antibiotics Induce Mitochondrial Dysfunction and Oxidative Damage in Mammalian Cells. <i>Science Translational Medicine</i> , 2013, 5, 192ra85.	5.8	391
115	Silver Enhances Antibiotic Activity Against Gram-Negative Bacteria. <i>Science Translational Medicine</i> , 2013, 5, 190ra81.	5.8	574
116	Potentiating antibacterial activity by predictably enhancing endogenous microbial ROS production. <i>Nature Biotechnology</i> , 2013, 31, 160-165.	9.4	375
117	Antibiotic treatment expands the resistance reservoir and ecological network of the phage metagenome. <i>Nature</i> , 2013, 499, 219-222.	13.7	438
118	Microbial Persistence and the Road to Drug Resistance. <i>Cell Host and Microbe</i> , 2013, 13, 632-642.	5.1	405
119	<i>Salmonella typhimurium</i> intercepts <i>Escherichia coli</i> signaling to enhance antibiotic tolerance. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 14420-14425.	3.3	155
120	Iterative plug-and-play methodology for constructing and modifying synthetic gene networks. <i>Nature Methods</i> , 2012, 9, 1077-1080.	9.0	80
121	A Synthetic Biology Framework for Programming Eukaryotic Transcription Functions. <i>Cell</i> , 2012, 150, 647-658.	13.5	293
122	Wisdom of crowds for robust gene network inference. <i>Nature Methods</i> , 2012, 9, 796-804.	9.0	1,481
123	Oxidation of the Guanine Nucleotide Pool Underlies Cell Death by Bactericidal Antibiotics. <i>Science</i> , 2012, 336, 315-319.	6.0	400
124	Antibiotic-Induced Bacterial Cell Death Exhibits Physiological and Biochemical Hallmarks of Apoptosis. <i>Molecular Cell</i> , 2012, 46, 561-572.	4.5	349
125	Signaling-mediated bacterial persister formation. <i>Nature Chemical Biology</i> , 2012, 8, 431-433.	3.9	367
126	Genetic switchboard for synthetic biology applications. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 5850-5855.	3.3	151



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127	Cellular Decision Making and Biological Noise: From Microbes to Mammals. <i>Cell</i> , 2011, 144, 910-925.	13.5	944
128	Synthetic Biology Moving into the Clinic. <i>Science</i> , 2011, 333, 1248-1252.	6.0	348
129	Metabolite-enabled eradication of bacterial persisters by aminoglycosides. <i>Nature</i> , 2011, 473, 216-220.	13.7	787
130	An Atlas for <i>Schistosoma mansoni</i> Organs and Life-Cycle Stages Using Cell Type-Specific Markers and Confocal Microscopy. <i>PLoS Neglected Tropical Diseases</i> , 2011, 5, e1009.	1.3	116
131	Bacterial charity work leads to population-wide resistance. <i>Nature</i> , 2010, 467, 82-85.	13.7	515
132	Synthetic biology: applications come of age. <i>Nature Reviews Genetics</i> , 2010, 11, 367-379.	7.7	1,130
133	How antibiotics kill bacteria: from targets to networks. <i>Nature Reviews Microbiology</i> , 2010, 8, 423-435.	13.6	1,648
134	Tracking, tuning, and terminating microbial physiology using synthetic riboregulators. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 15898-15903.	3.3	166
135	Sublethal Antibiotic Treatment Leads to Multidrug Resistance via Radical-Induced Mutagenesis. <i>Molecular Cell</i> , 2010, 37, 311-320.	4.5	793
136	Highly Efficient Reprogramming to Pluripotency and Directed Differentiation of Human Cells with Synthetic Modified mRNA. <i>Cell Stem Cell</i> , 2010, 7, 618-630.	5.2	2,368
137	Diversity-based, model-guided construction of synthetic gene networks with predicted functions. <i>Nature Biotechnology</i> , 2009, 27, 465-471.	9.4	409
138	Next-generation synthetic gene networks. <i>Nature Biotechnology</i> , 2009, 27, 1139-1150.	9.4	321
139	Synthetic Gene Networks That Count. <i>Science</i> , 2009, 324, 1199-1202.	6.0	528
140	Hydroxyurea Induces Hydroxyl Radical-Mediated Cell Death in <i>Escherichia coli</i> . <i>Molecular Cell</i> , 2009, 36, 845-860.	4.5	168
141	Engineered bacteriophage targeting gene networks as adjuvants for antibiotic therapy. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 4629-4634.	3.3	446
142	The Immunological Genome Project: networks of gene expression in immune cells. <i>Nature Immunology</i> , 2008, 9, 1091-1094.	7.0	1,576
143	Mistranslation of Membrane Proteins and Two-Component System Activation Trigger Antibiotic-Mediated Cell Death. <i>Cell</i> , 2008, 135, 679-690.	13.5	459
144	Gyrase inhibitors induce an oxidative damage cellular death pathway in <i>Escherichia coli</i> . <i>Molecular Systems Biology</i> , 2007, 3, 91.	3.2	397

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145	Large-Scale Mapping and Validation of Escherichia coli Transcriptional Regulation from a Compendium of Expression Profiles. PLoS Biology, 2007, 5, e8.	2.6	1,308
146	A Common Mechanism of Cellular Death Induced by Bactericidal Antibiotics. Cell, 2007, 130, 797-810.	13.5	2,334
147	Dispersing biofilms with engineered enzymatic bacteriophage. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 11197-11202.	3.3	728
148	Phenotypic Consequences of Promoter-Mediated Transcriptional Noise. Molecular Cell, 2006, 24, 853-865.	4.5	591
149	RNA synthetic biology. Nature Biotechnology, 2006, 24, 545-554.	9.4	332
150	Chemogenomic profiling on a genome-wide scale using reverse-engineered gene networks. Nature Biotechnology, 2005, 23, 377-383.	9.4	330
151	Stochasticity in gene expression: from theories to phenotypes. Nature Reviews Genetics, 2005, 6, 451-464.	7.7	2,066
152	Engineered riboregulators enable post-transcriptional control of gene expression. Nature Biotechnology, 2004, 22, 841-847.	9.4	513
153	Programmable cells: Interfacing natural and engineered gene networks. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 8414-8419.	3.3	546
154	Noise-enhanced human sensorimotor function. IEEE Engineering in Medicine and Biology Magazine, 2003, 22, 76-83.	1.1	155
155	Noise in eukaryotic gene expression. Nature, 2003, 422, 633-637.	13.7	1,531
156	Prediction and measurement of an autoregulatory genetic module. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 7714-7719.	3.3	409
157	Synthetic Gene Network for Entraining and Amplifying Cellular Oscillations. Physical Review Letters, 2002, 88, 148101.	2.9	181
158	Engineered gene circuits. Nature, 2002, 420, 224-230.	13.7	660
159	Predicting cerebral blood flow response to orthostatic stress from resting dynamics: effects of healthy aging. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2001, 281, R716-R722.	0.9	37
160	Computational studies of gene regulatory networks: in numero molecular biology. Nature Reviews Genetics, 2001, 2, 268-279.	7.7	508
161	Unspinning the web. Nature, 2001, 411, 30-31.	13.7	45
162	Construction of a genetic toggle switch in Escherichia coli. Nature, 2000, 403, 339-342.	13.7	3,885

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163	Neutralizing noise in gene networks. <i>Nature</i> , 2000, 405, 520-521.	13.7	32
164	Noise-based switches and amplifiers for gene expression. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2000, 97, 2075-2080.	3.3	569
165	Mechanism of stochastic resonance enhancement in neuronal models driven by noise. <i>Physical Review E</i> , 1999, 60, 4637-4644.	0.8	49
166	Synchronization of noisy systems by stochastic signals. <i>Physical Review E</i> , 1999, 60, 284-292.	0.8	78
167	Frequency Control of an Oscillatory Reaction by Reversible Binding of an Autocatalyst. <i>Physical Review Letters</i> , 1999, 82, 1582-1585.	2.9	14
168	Fishing for function in noise. <i>Nature</i> , 1999, 402, 241-242.	13.7	46
169	Assessing muscle stiffness from quiet stance in Parkinson's disease. <i>Nature</i> , 1999, 22, 635-639.		34
170	Effects of Colored Noise on Stochastic Resonance in Sensory Neurons. <i>Physical Review Letters</i> , 1999, 82, 2402-2405.	2.9	268
171	It's a small world. <i>Nature</i> , 1998, 393, 409-410.	13.7	510
172	Real-time experimental control of a system in its chaotic and nonchaotic regimes. <i>Physical Review E</i> , 1997, 56, R3749-R3752.	0.8	26
173	Noise-mediated enhancements and decrements in human tactile sensation. <i>Physical Review E</i> , 1997, 56, 923-926.	0.8	175
174	Stochastic Resonance in Ensembles of Nondynamical Elements: The Role of Internal Noise. <i>Physical Review Letters</i> , 1997, 79, 4701-4704.	2.9	98
175	Dynamic Control of Cardiac Alternans. <i>Physical Review Letters</i> , 1997, 78, 4518-4521.	2.9	191
176	Noise in human muscle spindles. <i>Nature</i> , 1996, 383, 769-770.	13.7	275
177	Noise-enhanced tactile sensation. <i>Nature</i> , 1996, 383, 770-770.	13.7	406
178	Tuning stochastic resonance. <i>Nature</i> , 1995, 378, 341-342.	13.7	10
179	Upright, correlated random walks: A statistical biomechanics approach to the human postural control system. <i>Chaos</i> , 1995, 5, 57-63.	1.0	136
180	A group-theoretic approach to rings of coupled biological oscillators. <i>Biological Cybernetics</i> , 1994, 71, 95-103.	0.6	16

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181	Hard-wired central pattern generators for quadrupedal locomotion. <i>Biological Cybernetics</i> , 1994, 71, 375-385.	0.6	23