Hans Westerhoff

List of Publications by Year in descending order

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418 papers	23,217 citations	6613 79 h-index	12946 131 g-index
448 all docs	448 docs citations	448 times ranked	17821 citing authors

#	Article	IF	Citations
1	Simultaneous Integration of Gene Expression and Nutrient Availability for Studying the Metabolism of Hepatocellular Carcinoma Cell Lines. Biomolecules, 2021, 11, 490.	4.0	11
2	System-Level Scenarios for the Elucidation of T Cell-Mediated Germinal Center B Cell Differentiation. Frontiers in Immunology, 2021, 12, 734282.	4.8	12
3	Development and evaluation of a harmonized whole body physiologically based pharmacokinetic (PBPK) model for flutamide in rats and its extrapolation to humans. Environmental Research, 2020, 182, 108948.	7.5	12
4	Clb3-centered regulations are recurrent across distinct parameter regions in minimal autonomous cell cycle oscillator designs. Npj Systems Biology and Applications, 2020, 6, 8.	3.0	9
5	ROS networks: designs, aging, Parkinsonâ€™s disease and precision therapies. Npj Systems Biology and Applications, 2020, 6, 34.	3.0	50
6	Complex Stability and an Irrevertible Transition Reverted by Peptide and Fibroblasts in a Dynamic Model of Innate Immunity. Frontiers in Immunology, 2020, 10, 3091.	4.8	2
7	Advice from a systems-biology model of the corona epidemics. Npj Systems Biology and Applications, 2020, 6, 18.	3.0	10
8	Ample Arsenite Bio-Oxidation Activity in Bangladesh Drinking Water Wells: A Bonanza for Bioremediation?. Microorganisms, 2019, 7, 246.	3.6	9
9	Ranking network mechanisms by how they fit diverse experiments and deciding on E. coli's ammonium transport and assimilation network. Npj Systems Biology and Applications, 2019, 5, 14.	3.0	25
10	Integration of single-cell RNA-seq data into population models to characterize cancer metabolism. PLoS Computational Biology, 2019, 15, e1006733.	3.2	70
11	Activities Reducing the Stress among Undergraduate Medical Students: The Students' Perception. Bangladesh Journal of Medical Education, 2019, 10, 20-24.	0.1	0
12	Neural plasticity and adult neurogenesis: the deep biology perspective. Neural Regeneration Research, 2019, 14, 201.	3.0	26
13	STRENDA DB: enabling the validation and sharing of enzyme kinetics data. FEBS Journal, 2018, 285, 2193-2204.	4.7	38
14	Rational cell culture optimization enhances experimental reproducibility in cancer cells. Scientific Reports, 2018, 8, 3029.	3.3	25
15	NET works after all? Engineering robustness through diversity. IFAC-PapersOnLine, 2018, 51, 128-137.	0.9	0
16	Neutral metalloaminopeptidases APN and MetAP2 as newly discovered anticancer molecular targets of actinomycin D and its simple analogs. Oncotarget, 2018, 9, 29365-29378.	1.8	9
17	Predictable Irreversible Switching Between Acute and Chronic Inflammation. Frontiers in Immunology, 2018, 9, 1596.	4.8	26
18	Metabolic flexibility of a prospective bioremediator:Desulfitobacterium hafnienseY51 challenged in chemostats. Environmental Microbiology, 2018, 20, 2652-2669.	3.8	5

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19	Targeting pathogen metabolism without collateral damage to the host. Scientific Reports, 2017, 7, 40406.	3.3	42
20	Learning to read and write in evolution: from static pseudoenzymes and pseudosignalers to dynamic gear shifters. Biochemical Society Transactions, 2017, 45, 635-652.	3.4	7
21	Identification of Three Early Phases of Cell-Fate Determination during Osteogenic and Adipogenic Differentiation by Transcription Factor Dynamics. Stem Cell Reports, 2017, 8, 947-960.	4.8	66
22	The Peculiar Glycolytic Pathway in Hyperthermophylic Archaea: Understanding Its Whims by Experimentation In Silico. International Journal of Molecular Sciences, 2017, 18, 876.	4.1	7
23	A metabolic core model elucidates how enhanced utilization of glucose and glutamine, with enhanced glutamine-dependent lactate production, promotes cancer cell growth: The WarburQ effect. PLoS Computational Biology, 2017, 13, e1005758.	3.2	64
24	Synthetic biology and regulatory networks: where metabolic systems biology meets control engineering. Journal of the Royal Society Interface, 2016, 13, 20151046.	3.4	47
25	Molecular assessment of bacterial vaginosis by Lactobacillus abundance and species diversity. BMC Infectious Diseases, 2016, 16, 180.	2.9	68
26	Maps for when the living gets tough: Maneuvering through a hostile energy landscape. IFAC-PapersOnLine, 2016, 49, 364-370.	0.9	5
27	MUFINS: multi-formalism interaction network simulator. Npj Systems Biology and Applications, 2016, 2, 16032.	3.0	18
28	Iron Cycling Potentials of Arsenic Contaminated Groundwater in Bangladesh as Revealed by Enrichment Cultivation. Geomicrobiology Journal, 2016, 33, 779-792.	2.0	31
29	Multi-omic profiles of human non-alcoholic fatty liver disease tissue highlight heterogenic phenotypes. Scientific Data, 2015, 2, 150068.	5.3	48
30	Quantitative analysis of drug effects at the whole-body level: a case study for glucose metabolism in malaria patients. Biochemical Society Transactions, 2015, 43, 1157-1163.	3.4	2
31	Metabolite profiling of CHO cells: Molecular reflections of bioprocessing effectiveness. Biotechnology Journal, 2015, 10, 1434-1445.	3.5	42
32	Tracing the molecular basis of transcriptional dynamics in noisy data by using an experiment-based mathematical model. Nucleic Acids Research, 2015, 43, 153-161.	14.5	88
33	Network-based pharmacology through systems biology. Drug Discovery Today: Technologies, 2015, 15, 15-16.	4.0	10
34	Systems Pharmacology: An opinion on how to turn the impossible into grand challenges. Drug Discovery Today: Technologies, 2015, 15, 23-31.	4.0	40
35	Multiplex Eukaryotic Transcription (In)activation: Timing, Bursting and Cycling of a Ratchet Clock Mechanism. PLoS Computational Biology, 2015, 11, e1004236.	3.2	25
36	SupraBiology 2014: Promoting UKâ€China collaboration on Systems Biology and High Performance Computing. Quantitative Biology, 2015, 3, 46-53.	0.5	0

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37	Silence on the relevant literature and errors in implementation. Nature Biotechnology, 2015, 33, 336-339.	17.5	14
38	A reason for intermittent fasting to suppress the awakening of dormant breast tumors. BioSystems, 2015, 127, 1-6.	2.0	5
39	Effects of Cadmium and Mercury on the Upper Part of Skeletal Muscle Glycolysis in Mice. PLoS ONE, 2014, 9, e80018.	2.5	28
40	Monte-Carlo Modeling of the Central Carbon Metabolism of Lactococcus lactis: Insights into Metabolic Regulation. PLoS ONE, 2014, 9, e106453.	2.5	31
41	Understanding Principles of the Dynamic Biochemical Networks of Life Through Systems Biology. , 2014, , 21-44.		7
42	Macromolecular networks and intelligence in microorganisms. Frontiers in Microbiology, 2014, 5, 379.	3.5	55
43	Clusters of reaction rates and concentrations in protein networks such as the phosphotransferase system. FEBS Journal, 2014, 281, 531-548.	4.7	0
44	The Control Analysis of Signal Transduction. Springer Series in Biophysics, 2014, , 39-62.	0.4	0
45	Abstract 4336: Design of a chamber for studying glucose metabolism by anoxic cancer cells. , 2014, , .		0
46	Glutathione metabolism modeling: A mechanism for liver drug-robustness and a new biomarker strategy. Biochimica Et Biophysica Acta - General Subjects, 2013, 1830, 4943-4959.	2.4	28
47	A new regulatory principle for in vivo biochemistry: Pleiotropic low affinity regulation by the adenine nucleotides â€“ Illustrated for the glycolytic enzymes of Saccharomyces cerevisiae. FEBS Letters, 2013, 587, 2860-2867.	2.8	14
48	Regulation of the Activity of Lactate Dehydrogenases from Four Lactic Acid Bacteria. Journal of Biological Chemistry, 2013, 288, 21295-21306.	3.4	47
49	Multiscale modelling approach combining a kinetic model of glutathione metabolism with PBPK models of paracetamol and the potential glutathione-depletion biomarkers ophthalmic acid and 5-oxoproline in humans and rats. Integrative Biology (United Kingdom), 2013, 5, 877-888.	1.3	34
50	A model of yeast glycolysis based on a consistent kinetic characterisation of all its enzymes. FEBS Letters, 2013, 587, 2832-2841.	2.8	113
51	Nitrogen Assimilation in Escherichia coli: Putting Molecular Data into a Systems Perspective. Microbiology and Molecular Biology Reviews, 2013, 77, 628-695.	6.6	237
52	Tradeâ€off of dynamic fragility but not of robustness in metabolic pathways inÂsilico. FEBS Journal, 2013, 280, 160-173.	4.7	18
53	Computing life: Add logos to biology and bios to physics. Progress in Biophysics and Molecular Biology, 2013, 111, 69-74.	2.9	10
54	An in vivo control map for the eukaryotic mRNA translation machinery. Molecular Systems Biology, 2013, 9, 635.	7.2	89

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55	A community-driven global reconstruction of human metabolism. Nature Biotechnology, 2013, 31, 419-425.	17.5	920
56	â€˜Dominoâ€™ systems biology and the â€˜Aâ€™ of ATP. Biochimica Et Biophysica Acta - Bioenergetics, 2013, 1827, 19-29.	1.0	7
57	Mathematical modelling of miRNA mediated BCR.ABL protein regulation in chronic myeloid leukaemia vis-a-vis therapeutic strategies. Integrative Biology (United Kingdom), 2013, 5, 543.	1.3	21
58	(Im)Perfect robustness and adaptation of metabolic networks subject to metabolic and gene-expression regulation: marrying control engineering with metabolic control analysis. BMC Systems Biology, 2013, 7, 131.	3.0	28
59	Optimization of stress response through the nuclear receptor-mediated cortisol signalling network. Nature Communications, 2013, 4, 1792.	12.8	22
60	Intermediate instability at high temperature leads to low pathway efficiency for an in vitro reconstituted system of gluconeogenesis in Sulfolobus solfataricus. FEBS Journal, 2013, 280, 4666-4680.	4.7	22
61	Understanding complexity in neurodegenerative diseases: in silico reconstruction of emergence. Frontiers in Physiology, 2012, 3, 291.	2.8	16
62	A Systems Biology Approach to Deciphering the Etiology of Steatosis Employing Patient-Derived Dermal Fibroblasts and iPS Cells. Frontiers in Physiology, 2012, 3, 339.	2.8	22
63	Understanding Dupuytren's Disease Using Systems Biology: A Move Away from Reductionism. Frontiers in Physiology, 2012, 3, 316.	2.8	2
64	Testing Biochemistry Revisited: How In Vivo Metabolism Can Be Understood from In Vitro Enzyme Kinetics. PLoS Computational Biology, 2012, 8, e1002483.	3.2	88
65	Systems biology tools for toxicology. Archives of Toxicology, 2012, 86, 1251-1271.	4.2	41
66	Low stress weekends promote adaptation to stressful weeks: The design principles of the biological response to stress. New Biotechnology, 2012, 29, S148-S149.	4.4	0
67	Dupuytren's disease metabolite analyses reveals alterations following initial short-term fibroblast culturing. Molecular BioSystems, 2012, 8, 2274.	2.9	17
68	Why inÂvivo may not equal inÂvitro â€“ new effectors revealed by measurement of enzymatic activities under the same inÂvivoâ€like assay conditions. FEBS Journal, 2012, 279, 4145-4159.	4.7	64
69	Biotechnology and the future of medicine: engineering self-sustaining systems. New Biotechnology, 2012, 29, S30.	4.4	0
70	Engineering of selfâ€sustaining systems: Substituting the yeast glucose transporter plus hexokinase for the Lactococcus lactis phosphotransferase system in a Lactococcus lactis network in silico. Biotechnology Journal, 2012, 7, 877-883.	3.5	3
71	Emergence of the silicon human and network targeting drugs. European Journal of Pharmaceutical Sciences, 2012, 46, 190-197.	4.0	32
72	A mathematical modelling approach to assessing the reliability of biomarkers of glutathione metabolism. European Journal of Pharmaceutical Sciences, 2012, 46, 233-243.	4.0	23

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73	Dupuytren's: a systems biology disease. Arthritis Research and Therapy, 2011, 13, 238.	3.5	36
74	Enzyme Kinetics for Systems Biology. Methods in Enzymology, 2011, 500, 233-257.	1.0	16
75	Absorption Spectroscopy. Methods in Enzymology, 2011, 500, 59-75.	1.0	12
76	From Silicon Cell to Silicon Human. , 2011, , 437-458.		4
77	What it takes to understand and cure a living system: computational systems biology and a systems biology-driven pharmacokineticsâ€“pharmacodynamics platform. Interface Focus, 2011, 1, 16-23.	3.0	8
78	Systems Biology Left and Right. Methods in Enzymology, 2011, 500, 3-11.	1.0	18
79	How Molecular Competition Influences Fluxes in Gene Expression Networks. PLoS ONE, 2011, 6, e28494.	2.5	49
80	A domino effect in drug action: from metabolic assault towards parasite differentiation. Molecular Microbiology, 2011, 79, 94-108.	2.5	44
81	HPLCâ€“MS/MS methods for the quantitative analysis of 5-oxoproline (pyroglutamate) in rat plasma and hepatic cell line culture medium. Journal of Pharmaceutical and Biomedical Analysis, 2011, 56, 655-663.	2.8	33
82	ITFoM â€“ The IT Future of Medicine. Procedia Computer Science, 2011, 7, 26-29.	2.0	17
83	AmtB-mediated NH₃transport in prokaryotes must be active and as a consequence regulation of transport by GlnK is mandatory to limit futile cycling of NH4+/NH3. FEBS Letters, 2011, 585, 23-28.	2.8	47
84	Recommendations for terminology and databases for biochemical thermodynamics. Biophysical Chemistry, 2011, 155, 89-103.	2.8	57
85	Metabolite profiling of recombinant CHO cells: Designing tailored feeding regimes that enhance recombinant antibody production. Biotechnology and Bioengineering, 2011, 108, 3025-3031.	3.3	110
86	HPLCâ€“MS/MS methods for the quantitative analysis of ophthalmic acid in rodent plasma and hepatic cell line culture medium. Journal of Pharmaceutical and Biomedical Analysis, 2011, 54, 1128-1135.	2.8	20
87	Quantitative Analysis of Flux Regulation Through Hierarchical Regulation Analysis. Methods in Enzymology, 2011, 500, 571-595.	1.0	12
88	Preface. Methods in Enzymology, 2011, 500, xxiii-xxiv.	1.0	1
89	A probabilistic approach to identify putative drug targets in biochemical networks. Journal of the Royal Society Interface, 2011, 8, 880-895.	3.4	41
90	Health technology assessment in the era of personalized health care. International Journal of Technology Assessment in Health Care, 2011, 27, 118-126.	0.5	28

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91	Systems biochemistry in practice: experimenting with modelling and understanding, with regulation and control. Biochemical Society Transactions, 2010, 38, 1189-1196.	3.4	14
92	Why does yeast ferment? A flux balance analysis study. Biochemical Society Transactions, 2010, 38, 1225-1229.	3.4	26
93	Integrated multilaboratory systems biology reveals differences in protein metabolism between two reference yeast strains. Nature Communications, 2010, 1, 145.	12.8	100
94	Time-dependent regulation of yeast glycolysis upon nitrogen starvation depends on cell history. IET Systems Biology, 2010, 4, 157-168.	1.5	11
95	Systematic integration of experimental data and models in systems biology. BMC Bioinformatics, 2010, 11, 582.	2.6	28
96	Comparative systems biology: from bacteria to man. Wiley Interdisciplinary Reviews: Systems Biology and Medicine, 2010, 2, 518-532.	6.6	15
97	Restriction point control of the mammalian cell cycle via the cyclin E/Cdk2:p27 complex. FEBS Journal, 2010, 277, 357-367.	4.7	44
98	Measuring enzyme activities under standardized inâ€ƒvivoâ€like conditions for systems biology. FEBS Journal, 2010, 277, 749-760.	4.7	147
99	Design principles of nuclear receptor signaling: how complex networking improves signal transduction. Molecular Systems Biology, 2010, 6, 446.	7.2	32
100	Systems Biology: Towards Realistic and Useful Models of Molecular Networks. , 2010, , 439-453.		2
101	Metabolic control analysis indicates a change of strategy in the treatment of cancer. Mitochondrion, 2010, 10, 626-639.	3.4	77
102	The silicon trypanosome. Parasitology, 2010, 137, 1333-1341.	1.5	25
103	Noise Management by Molecular Networks. PLoS Computational Biology, 2009, 5, e1000506.	3.2	70
104	Systems Biology: The elements and principles of Life. FEBS Letters, 2009, 583, 3882-3890.	2.8	77
105	Matrix method for determining steps most rateâ€limiting to metabolic fluxes in biotechnological processes. Biotechnology and Bioengineering, 2009, 104, 1-9.	3.3	21
106	Systems biology towards life in silico: mathematics of the control of living cells. Journal of Mathematical Biology, 2009, 58, 7-34.	1.9	77
107	Super life â€“ how and why â€˜cell selectionâ€™ leads to the fastestâ€growing eukaryote. FEBS Journal, 2009, 276, 254-270.	4.7	84
108	The pivotal regulator GlnB of Escherichiaâ€ƒcoli is engaged in subtle and contextâ€dependent control. FEBS Journal, 2009, 276, 3324-3340.	4.7	9

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109	Simplified yet highly accurate enzyme kinetics for cases of low substrate concentrations. FEBS Journal, 2009, 276, 5491-5506.	4.7	23
110	Timeâ€dependent regulation analysis dissects shifts between metabolic and geneâ€expression regulation during nitrogen starvation in bakerâ€™s yeast. FEBS Journal, 2009, 276, 5521-5536.	4.7	24
111	How Geobacteraceae may dominate subsurface biodegradation: physiology of Geobacter metallireducens in slowâ€growth habitatâ€simulating retentostats. Environmental Microbiology, 2009, 11, 2425-2433.	3.8	39
112	SulfoSYS (Sulfolobus Systems Biology): towards a silicon cell model for the central carbohydrate metabolism of the archaeon Sulfolobus solfataricus under temperature variation. Biochemical Society Transactions, 2009, 37, 58-64.	3.4	25
113	The Probability to Initiate X Chromosome Inactivation Is Determined by the X to Autosomal Ratio and X Chromosome Specific Allelic Properties. PLoS ONE, 2009, 4, e5616.	2.5	31
114	Signalling control strength. Journal of Theoretical Biology, 2008, 252, 555-567.	1.7	30
115	Mixed and diverse metabolic and gene-expression regulation of the glycolytic and fermentative pathways in response to aHXK2deletion inSaccharomyces cerevisiae. FEMS Yeast Research, 2008, 8, 155-164.	2.3	12
116	Increased glucose metabolism and ATP level in brain tissue of Huntingtonâ€™s disease transgenic mice. FEBS Journal, 2008, 275, 4740-4755.	4.7	60
117	A consensus yeast metabolic network reconstruction obtained from a community approach to systems biology. Nature Biotechnology, 2008, 26, 1155-1160.	17.5	530
118	Control, responses and modularity of cellular regulatory networks: a control analysis perspective. IET Systems Biology, 2008, 2, 397-410.	1.5	27
119	Compartmentation prevents a lethal turbo-explosion of glycolysis in trypanosomes. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 17718-17723.	7.1	123
120	Control and Regulation of Gene Expression. Journal of Biological Chemistry, 2008, 283, 2495-2507.	3.4	76
121	Recurrent design patterns in the feedback regulation of the mammalian signalling network. Molecular Systems Biology, 2008, 4, 190.	7.2	100
122	Systems biology and food microbiology. , 2007, , 250-288.		3
123	The fluxes through glycolytic enzymes in Saccharomyces cerevisiae are predominantly regulated at posttranscriptional levels. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 15753-15758.	7.1	223
124	The nature of systems biology. Trends in Microbiology, 2007, 15, 45-50.	7.7	446
125	Functioning of oxidative phosphorylation in liver mitochondria of high-fat diet fed rats. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2007, 1772, 307-316.	3.8	47
126	Palmitate and oleate have distinct effects on the inflammatory phenotype of human endothelial cells. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2007, 1771, 147-154.	2.4	27

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127	Introduction to systems biology. , 2007, 97, 1-19.		15
128	Metabolic control analysis to identify optimal drug targets. , 2007, 64, 171-189.		24
129	The methodologies of systems biology. , 2007, , 23-70.		22
130	Towards philosophical foundations of Systems Biology: introduction. , 2007, , 3-19.		16
131	Afterthoughts as foundations for systems biology. , 2007, , 321-336.		7
132	Ecological control analysis: being(s) in control of mass flux and metabolite concentrations in anaerobic degradation processes. Environmental Microbiology, 2007, 9, 500-511.	3.8	26
133	Temperature compensation through systems biology. FEBS Journal, 2007, 274, 940-950.	4.7	51
134	Systems Biology and the Reconstruction of the Cell: From Molecular Components to Integral Function. , 2007, 43, 239-262.		2
135	Introduction to Computational Models of Biochemical Reaction Networks. , 2006, , 127-148.		2
136	A Wave of Reactive Oxygen Species (ROS)-Induced ROS Release in a Sea of Excitable Mitochondria. Antioxidants and Redox Signaling, 2006, 8, 1651-1665.	5.4	158
137	Systems biology and the silicon cell: Order out of chaos. Computer Aided Chemical Engineering, 2006, 21, 81-93.	0.5	2
138	Effects of sequestration on signal transduction cascades. FEBS Journal, 2006, 273, 895-906.	4.7	148
139	Metabolic control of mitochondrial properties by adenine nucleotide translocator determines palmitoyl-CoA effects.. FEBS Journal, 2006, 273, 5288-5302.	4.7	48
140	Cancer: A Systems Biology disease. BioSystems, 2006, 83, 81-90.	2.0	359
141	Towards building the silicon cell: A modular approach. BioSystems, 2006, 83, 207-216.	2.0	107
142	Analyses of doseâ€“response curves to compare the antimicrobial activity of model cationic Î±-helical peptides highlights the necessity for a minimum of two activity parameters. Analytical Biochemistry, 2006, 350, 81-90.	2.4	32
143	Epidermal Growth Factor Receptor-Induced Activator Protein 1 Activity Controls Density-Dependent Growth Inhibition in Normal Rat Kidney Fibroblasts. Molecular Biotechnology, 2006, 34, 101-108.	2.4	1
144	Oncogenes Are to Lose Control on Signaling Following Mutation: Should We Aim Off Target?. Molecular Biotechnology, 2006, 34, 109-116.	2.4	7

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145	Is there an optimal ribosome concentration for maximal protein production?. IET Systems Biology, 2006, 153, 398.	2.0	2
146	Mathematical and theoretical biology for systems biology, and then ... vice versa. Journal of Mathematical Biology, 2006, 54, 147-150.	1.9	3
147	Summation theorems for flux and concentration control coefficients of dynamic systems. IET Systems Biology, 2006, 153, 314.	2.0	10
148	Time-dependent hierarchical regulation analysis: deciphering cellular adaptation. IET Systems Biology, 2006, 153, 318.	2.0	20
149	Unraveling the complexity of flux regulation: A new method demonstrated for nutrient starvation inSaccharomyces cerevisiae. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 2166-2171.	7.1	137
150	What is systems biology? From genes to function and back. Topics in Current Genetics, 2005, , 119-141.	0.7	10
151	Yeast glycolytic oscillations that are not controlled by a single oscillophore: a new definition of oscillophore strength. Journal of Theoretical Biology, 2005, 232, 385-398.	1.7	31
152	Hierarchical and metabolic regulation of glucose influx in starved. FEMS Yeast Research, 2005, 5, 611-619.	2.3	69
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154	Training of yeast cell dynamics. FEBS Journal, 2005, 272, 1616-1624.	4.7	22
155	The multifarious short-term regulation of ammonium assimilation of Escherichia coli: dissection using an in silico replica. FEBS Journal, 2005, 272, 1965-1985.	4.7	62
156	The Residual Protonmotive Force in Mitochondria after an Oxygen Pulse. FEBS Journal, 2005, 115, 107-113.	0.2	18
157	Emergence and Its Place in Nature: A Case Study of Biochemical Networks. SynthÃˆse, 2005, 145, 131-164.	1.1	123
158	Geobacteraceae Community Composition Is Related to Hydrochemistry and Biodegradation in an Iron-Reducing Aquifer Polluted by a Neighboring Landfill. Applied and Environmental Microbiology, 2005, 71, 5983-5991.	3.1	49
159	Modular Kinetic Analysis of the Adenine Nucleotide Translocator-Mediated Effects of Palmitoyl-CoA on the Oxidative Phosphorylation in Isolated Rat Liver Mitochondria. Diabetes, 2005, 54, 944-951.	0.6	47
160	Novel nirK Cluster Genes in Nitrosomonas europaea Are Required for NirK-Dependent Tolerance to Nitrite. Journal of Bacteriology, 2005, 187, 6849-6851.	2.2	56
161	News. IET Systems Biology, 2005, 152, 53.	2.0	1
162	Nitrosomonas europaea Expresses a Nitric Oxide Reductase during Nitrification. Journal of Bacteriology, 2004, 186, 4417-4421.	2.2	78

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163	Frequencyâ€“dependent incidence in models of sexually transmitted diseases: portrayal of pairâ€“based transmission and effects of illness on contact behaviour. Proceedings of the Royal Society B: Biological Sciences, 2004, 271, 625-634.	2.6	53
164	What makes biochemical networks tick?. FEBS Journal, 2004, 271, 3877-3887.	0.2	10
165	Principles behind the multifarious control of signal transduction. FEBS Journal, 2004, 272, 244-258.	4.7	135
166	Expression of nitrite reductase in Nitrosomonas europaea involves NsrR, a novel nitriteâ€sensitive transcription repressor. Molecular Microbiology, 2004, 54, 148-158.	2.5	177
167	The evolution of molecular biology into systems biology. Nature Biotechnology, 2004, 22, 1249-1252.	17.5	460
168	Metabolic Control Analysis of the ATPase Network in Contracting Muscle: Regulation of Contractile Function and ATP Free Energy Potential. , 2004, , 31-46.		0
169	Coordinated Behavior of Mitochondria in Both Space and Time: A Reactive Oxygen Species-Activated Wave of Mitochondrial Depolarization. Biophysical Journal, 2004, 87, 2022-2034.	0.5	111
170	The Silicon Cell Initiative. Current Genomics, 2004, 5, 687-697.	1.6	13
171	Control analysis of trophic chains. Ecological Modelling, 2003, 168, 153-171.	2.5	11
172	Attractive Models: How to Make the Silicon Cell Relevant and Dynamic. Comparative and Functional Genomics, 2003, 4, 155-158.	2.0	3
173	Control of spatially heterogeneous and time-varying cellular reaction networks: a new summation law. Journal of Theoretical Biology, 2003, 225, 477-487.	1.7	38
174	Why the Phosphotransferase System of Escherichia coli Escapes Diffusion Limitation. Biophysical Journal, 2003, 85, 612-622.	0.5	39
175	The Glycolytic Flux in Escherichia coli Is Controlled by the Demand for ATP. Journal of Bacteriology, 2002, 184, 3909-3916.	2.2	315
176	Nitrite Reductase of Nitrosomonas europaea Is Not Essential for Production of Gaseous Nitrogen Oxides and Confers Tolerance to Nitrite. Journal of Bacteriology, 2002, 184, 2557-2560.	2.2	123
177	Product dependence and bifunctionality compromise the ultrasensitivity of signal transduction cascades. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 1170-1175.	7.1	62
178	Untangling the wires: A strategy to trace functional interactions in signaling and gene networks. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 12841-12846.	7.1	386
179	Inter-level relations in computer science, biology, and psychology. Philosophical Psychology, 2002, 15, 463-471.	0.9	11
180	Metabolic engineering of lactic acid bacteria, the combined approach: kinetic modelling, metabolic control and experimental analysis The GenBank accession number for the sequence reported in this paper is AY046926.. Microbiology (United Kingdom), 2002, 148, 1003-1013.	1.8	196

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181	Synchronization of glycolytic oscillations in a yeast cell population. Faraday Discussions, 2002, 120, 261-275.	3.2	53
182	A turbo engine with automatic transmission? How to marry chemicomotion to the subtleties and robustness of life. Biochimica Et Biophysica Acta - Bioenergetics, 2002, 1555, 75-82.	1.0	8
183	Simplicity in complexity: the photosynthetic reaction center performs as a simple 0.2 V battery. FEBS Letters, 2002, 510, 105-107.	2.8	17
184	Control Analysis for Autonomously Oscillating Biochemical Networks. Biophysical Journal, 2002, 82, 99-108.	0.5	69
185	Modular Response Analysis of Cellular Regulatory Networks. Journal of Theoretical Biology, 2002, 218, 507-520.	1.7	106
186	Putting Intentions into Cell Biochemistry: An Artificial Intelligence Perspective. Journal of Theoretical Biology, 2002, 214, 105-134.	1.7	36
187	Selectivity in Overlapping MAP Kinase Cascades. Journal of Theoretical Biology, 2002, 218, 343-354.	1.7	21
188	Modular Response Analysis of Cellular Regulatory Networks. Journal of Theoretical Biology, 2002, 218, 507-520.	1.7	95
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