Hans Westerhoff

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

431	19,653	75	123
papers	citations	h-index	g-index
447	21,405	5.3	6.42
ext. papers	ext. citations	avg, IF	L-index

#	Paper	IF	Citations
431	Simultaneous Integration of Gene Expression and Nutrient Availability for Studying the Metabolism of Hepatocellular Carcinoma Cell Lines. <i>Biomolecules</i> , 2021 , 11,	5.9	2
430	System-Level Scenarios for the Elucidation of T Cell-Mediated Germinal Center B Cell Differentiation. <i>Frontiers in Immunology</i> , 2021 , 12, 734282	8.4	1
429	Advice from a systems-biology model of the corona epidemics. <i>Npj Systems Biology and Applications</i> , 2020 , 6, 18	5	7
428	Development and evaluation of a harmonized whole body physiologically based pharmacokinetic (PBPK) model for flutamide in rats and its extrapolation to humans. <i>Environmental Research</i> , 2020 , 182, 108948	7.9	7
427	Clb3-centered regulations are recurrent across distinct parameter regions in minimal autonomous cell cycle oscillator designs. <i>Npj Systems Biology and Applications</i> , 2020 , 6, 8	5	6
426	ROS networks: designs, aging, Parkinson's disease and precision therapies. <i>Npj Systems Biology and Applications</i> , 2020 , 6, 34	5	17
425	Ranking network mechanisms by how they fit diverse experiments and deciding on 's ammonium transport and assimilation network. <i>Npj Systems Biology and Applications</i> , 2019 , 5, 14	5	7
424	Integration of single-cell RNA-seq data into population models to characterize cancer metabolism. <i>PLoS Computational Biology</i> , 2019 , 15, e1006733	5	36
423	Complex Stability and an Irrevertible Transition Reverted by Peptide and Fibroblasts in a Dynamic Model of Innate Immunity. <i>Frontiers in Immunology</i> , 2019 , 10, 3091	8.4	2
422	Ample Arsenite Bio-Oxidation Activity in Bangladesh Drinking Water Wells: A Bonanza for Bioremediation?. <i>Microorganisms</i> , 2019 , 7,	4.9	7
421	Neural plasticity and adult neurogenesis: the deep biology perspective. <i>Neural Regeneration Research</i> , 2019 , 14, 201-205	4.5	17
420	Activities Reducing the Stress among Undergraduate Medical Students: The Students' Perception. Bangladesh Journal of Medical Education, 2019 , 10, 20-24	0.1	
419	STRENDA DB: enabling the validation and sharing of enzyme kinetics data. FEBS Journal, 2018, 285, 21	93 5 2/20)419
418	Rational cell culture optimization enhances experimental reproducibility in cancer cells. <i>Scientific Reports</i> , 2018 , 8, 3029	4.9	18
417	Predictable Irreversible Switching Between Acute and Chronic Inflammation. <i>Frontiers in Immunology</i> , 2018 , 9, 1596	8.4	13
416	Metabolic flexibility of a prospective bioremediator: Desulfitobacterium hafniense Y51 challenged in chemostats. <i>Environmental Microbiology</i> , 2018 , 20, 2652-2669	5.2	1
415	The Membranes Involved in Proton-Mediated Free-Energy Transduction: Thermodynamic Implications of their Physical Structure 2018 , 115-154		

414	NET works after all? Engineering robustness through diversity. IFAC-PapersOnLine, 2018, 51, 128-137	0.7	
413	Neutral metalloaminopeptidases APN and MetAP2 as newly discovered anticancer molecular targets of actinomycin D and its simple analogs. <i>Oncotarget</i> , 2018 , 9, 29365-29378	3.3	3
412	Targeting pathogen metabolism without collateral damage to the host. Scientific Reports, 2017, 7, 4040	06 4.9	32
411	Learning to read and write in evolution: from static pseudoenzymes and pseudosignalers to dynamic gear shifters. <i>Biochemical Society Transactions</i> , 2017 , 45, 635-652	5.1	5
410	Identification of Three Early Phases of Cell-Fate Determination during Osteogenic and Adipogenic Differentiation by Transcription Factor Dynamics. <i>Stem Cell Reports</i> , 2017 , 8, 947-960	8	50
409	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. <i>PLoS Computational Biology</i> , 2017 , 13, e1005758	5	38
408	The Peculiar Glycolytic Pathway in Hyperthermophylic Archaea: Understanding Its Whims by Experimentation In Silico. <i>International Journal of Molecular Sciences</i> , 2017 , 18,	6.3	6
407	Maps for when the living gets tough: Maneuvering through a hostile energy landscape. <i>IFAC-PapersOnLine</i> , 2016 , 49, 364-370	0.7	3
406	MUFINS: multi-formalism interaction network simulator. <i>Npj Systems Biology and Applications</i> , 2016 , 2, 16032	5	14
405	Iron Cycling Potentials of Arsenic Contaminated Groundwater in Bangladesh as Revealed by Enrichment Cultivation. <i>Geomicrobiology Journal</i> , 2016 , 33, 779-792	2.5	23
404	Synthetic biology and regulatory networks: where metabolic systems biology meets control engineering. <i>Journal of the Royal Society Interface</i> , 2016 , 13,	4.1	36
403	Molecular assessment of bacterial vaginosis by Lactobacillus abundance and species diversity. <i>BMC Infectious Diseases</i> , 2016 , 16, 180	4	44
402	Systems Pharmacology: An opinion on how to turn the impossible into grand challenges. <i>Drug Discovery Today: Technologies</i> , 2015 , 15, 23-31	7.1	15
401	Multiplex Eukaryotic Transcription (In)activation: Timing, Bursting and Cycling of a Ratchet Clock Mechanism. <i>PLoS Computational Biology</i> , 2015 , 11, e1004236	5	15
400	SupraBiology 2014: Promoting UK-China collaboration on Systems Biology and High Performance Computing. <i>Quantitative Biology</i> , 2015 , 3, 46-53	3.9	
399	Silence on the relevant literature and errors in implementation. <i>Nature Biotechnology</i> , 2015 , 33, 336-9	44.5	8
398	A reason for intermittent fasting to suppress the awakening of dormant breast tumors. <i>BioSystems</i> , 2015 , 127, 1-6	1.9	4
397	Multi-omic profiles of human non-alcoholic fatty liver disease tissue highlight heterogenic phenotypes. <i>Scientific Data</i> , 2015 , 2, 150068	8.2	34

396	Quantitative analysis of drug effects at the whole-body level: a case study for glucose metabolism in malaria patients. <i>Biochemical Society Transactions</i> , 2015 , 43, 1157-63	5.1	1
395	Metabolite profiling of CHO cells: Molecular reflections of bioprocessing effectiveness. Biotechnology Journal, 2015 , 10, 1434-45	5.6	33
394	Tracing the molecular basis of transcriptional dynamics in noisy data by using an experiment-based mathematical model. <i>Nucleic Acids Research</i> , 2015 , 43, 153-61	20.1	19
393	Effects of cadmium and mercury on the upper part of skeletal muscle glycolysis in mice. <i>PLoS ONE</i> , 2014 , 9, e80018	3.7	24
392	Monte-Carlo modeling of the central carbon metabolism of Lactococcus lactis: insights into metabolic regulation. <i>PLoS ONE</i> , 2014 , 9, e106453	3.7	18
391	Understanding Principles of the Dynamic Biochemical Networks of Life Through Systems Biology 2014 , 21-44		7
390	Macromolecular networks and intelligence in microorganisms. Frontiers in Microbiology, 2014, 5, 379	5.7	41
389	Clusters of reaction rates and concentrations in protein networks such as the phosphotransferase system. <i>FEBS Journal</i> , 2014 , 281, 531-48	5.7	
388	The Control Analysis of Signal Transduction. Springer Series in Biophysics, 2014, 39-62		
387	Glutathione metabolism modeling: a mechanism for liver drug-robustness and a new biomarker strategy. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2013 , 1830, 4943-59	4	25
386	A new regulatory principle for in vivo biochemistry: pleiotropic low affinity regulation by the adenine nucleotidesillustrated for the glycolytic enzymes of Saccharomyces cerevisiae. <i>FEBS Letters</i> , 2013 , 587, 2860-7	3.8	13
385	Regulation of the activity of lactate dehydrogenases from four lactic acid bacteria. <i>Journal of Biological Chemistry</i> , 2013 , 288, 21295-21306	5.4	29
384	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. <i>Integrative Biology (United Kingdom)</i> , 2013 , 5, 877-88	3.7	30
383	A model of yeast glycolysis based on a consistent kinetic characterisation of all its enzymes. <i>FEBS Letters</i> , 2013 , 587, 2832-41	3.8	91
382	Nitrogen assimilation in Escherichia coli: putting molecular data into a systems perspective. <i>Microbiology and Molecular Biology Reviews</i> , 2013 , 77, 628-95	13.2	147
381	Trade-off of dynamic fragility but not of robustness in metabolic pathways in silico. <i>FEBS Journal</i> , 2013 , 280, 160-73	5.7	16
380	Computing life: Add logos to biology and bios to physics. <i>Progress in Biophysics and Molecular Biology</i> , 2013 , 111, 69-74	4.7	7
379	An in vivo control map for the eukaryotic mRNA translation machinery. <i>Molecular Systems Biology</i> , 2013 , 9, 635	12.2	71

378	A community-driven global reconstruction of human metabolism. <i>Nature Biotechnology</i> , 2013 , 31, 419-3	2 5 _{14.5}	746
377	'Domino' systems biology and the 'A' of ATP. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2013 , 1827, 19-29	4.6	6
376	Mathematical modelling of miRNA mediated BCR.ABL protein regulation in chronic myeloid leukaemia vis-a-vis therapeutic strategies. <i>Integrative Biology (United Kingdom)</i> , 2013 , 5, 543-54	3.7	19
375	(Im)Perfect robustness and adaptation of metabolic networks subject to metabolic and gene-expression regulation: marrying control engineering with metabolic control analysis. <i>BMC Systems Biology</i> , 2013 , 7, 131	3.5	20
374	Optimization of stress response through the nuclear receptor-mediated cortisol signalling network. <i>Nature Communications</i> , 2013 , 4, 1792	17.4	20
373	Intermediate instability at high temperature leads to low pathway efficiency for an in vitro reconstituted system of gluconeogenesis in Sulfolobus solfataricus. <i>FEBS Journal</i> , 2013 , 280, 4666-80	5.7	20
372	Emergence of the silicon human and network targeting drugs. <i>European Journal of Pharmaceutical Sciences</i> , 2012 , 46, 190-7	5.1	30
371	A mathematical modelling approach to assessing the reliability of biomarkers of glutathione metabolism. <i>European Journal of Pharmaceutical Sciences</i> , 2012 , 46, 233-43	5.1	17
370	Systems biology tools for toxicology. <i>Archives of Toxicology</i> , 2012 , 86, 1251-71	5.8	33
369	Dupuytren's disease metabolite analyses reveals alterations following initial short-term fibroblast culturing. <i>Molecular BioSystems</i> , 2012 , 8, 2274-88		15
368	Why in vivo may not equal in vitro - new effectors revealed by measurement of enzymatic activities under the same in vivo-like assay conditions. <i>FEBS Journal</i> , 2012 , 279, 4145-59	5.7	48
367	Engineering of self-sustaining systems: substituting the yeast glucose transporter plus hexokinase for the Lactococcus lactis phosphotransferase system in a Lactococcus lactis network in silico. <i>Biotechnology Journal</i> , 2012 , 7, 877-83	5.6	2
366	Understanding complexity in neurodegenerative diseases: in silico reconstruction of emergence. <i>Frontiers in Physiology</i> , 2012 , 3, 291	4.6	11
365	A Systems Biology Approach to Deciphering the Etiology of Steatosis Employing Patient-Derived Dermal Fibroblasts and iPS Cells. <i>Frontiers in Physiology</i> , 2012 , 3, 339	4.6	17
364	Understanding Dupuytren's Disease Using Systems Biology: A Move Away from Reductionism. <i>Frontiers in Physiology</i> , 2012 , 3, 316	4.6	2
363	Testing biochemistry revisited: how in vivo metabolism can be understood from in vitro enzyme kinetics. <i>PLoS Computational Biology</i> , 2012 , 8, e1002483	5	68
362	Modeling Approaches in Systems Biology, Including Silicon Cell Models 2011 , 31-51		2
361	Enzyme kinetics for systems biology when, why and how. <i>Methods in Enzymology</i> , 2011 , 500, 233-57	1.7	12

360	Absorption spectroscopy. <i>Methods in Enzymology</i> , 2011 , 500, 59-75	1.7	5
359	From Silicon Cell to Silicon Human 2011 , 437-458		3
358	What it takes to understand and cure a living system: computational systems biology and a systems biology-driven pharmacokinetics-pharmacodynamics platform. <i>Interface Focus</i> , 2011 , 1, 16-23	3.9	8
357	Systems biology left and right. <i>Methods in Enzymology</i> , 2011 , 500, 3-11	1.7	16
356	How molecular competition influences fluxes in gene expression networks. <i>PLoS ONE</i> , 2011 , 6, e28494	3.7	39
355	A domino effect in drug action: from metabolic assault towards parasite differentiation. <i>Molecular Microbiology</i> , 2011 , 79, 94-108	4.1	40
354	HPLC-MS/MS methods for the quantitative analysis of 5-oxoproline (pyroglutamate) in rat plasma and hepatic cell line culture medium. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2011 , 56, 655-6	3 ^{3.5}	29
353	ITFoM IThe IT Future of Medicine. <i>Procedia Computer Science</i> , 2011 , 7, 26-29	1.6	13
352	AmtB-mediated NH3 transport in prokaryotes must be active and as a consequence regulation of transport by GlnK is mandatory to limit futile cycling of NH4(+)/NH3. <i>FEBS Letters</i> , 2011 , 585, 23-8	3.8	35
351	Recommendations for terminology and databases for biochemical thermodynamics. <i>Biophysical Chemistry</i> , 2011 , 155, 89-103	3.5	45
350	Metabolite profiling of recombinant CHO cells: designing tailored feeding regimes that enhance recombinant antibody production. <i>Biotechnology and Bioengineering</i> , 2011 , 108, 3025-31	4.9	92
349	Dupuytren's: a systems biology disease. Arthritis Research and Therapy, 2011 , 13, 238	5.7	31
348	HPLC-MS/MS methods for the quantitative analysis of ophthalmic acid in rodent plasma and hepatic cell line culture medium. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2011 , 54, 1128-35	3.5	19
347	Quantitative analysis of flux regulation through hierarchical regulation analysis. <i>Methods in Enzymology</i> , 2011 , 500, 571-95	1.7	10
346	A probabilistic approach to identify putative drug targets in biochemical networks. <i>Journal of the Royal Society Interface</i> , 2011 , 8, 880-95	4.1	33
345	Health technology assessment in the era of personalized health care. <i>International Journal of Technology Assessment in Health Care</i> , 2011 , 27, 118-26	1.8	19
344	Restriction point control of the mammalian cell cycle via the cyclin E/Cdk2:p27 complex. <i>FEBS Journal</i> , 2010 , 277, 357-67	5.7	37
343	Measuring enzyme activities under standardized in vivo-like conditions for systems biology. <i>FEBS Journal</i> , 2010 , 277, 749-60	5.7	115

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342	Design principles of nuclear receptor signaling: how complex networking improves signal transduction. <i>Molecular Systems Biology</i> , 2010 , 6, 446	12.2	26
341	Systems Biology: Towards Realistic and Useful Models of Molecular Networks 2010 , 439-453		2
340	Metabolic control analysis indicates a change of strategy in the treatment of cancer. <i>Mitochondrion</i> , 2010 , 10, 626-39	4.9	63
339	The silicon trypanosome. <i>Parasitology</i> , 2010 , 137, 1333-41	2.7	24
338	Systems biochemistry in practice: experimenting with modelling and understanding, with regulation and control. <i>Biochemical Society Transactions</i> , 2010 , 38, 1189-96	5.1	13
337	Why does yeast ferment? A flux balance analysis study. <i>Biochemical Society Transactions</i> , 2010 , 38, 1225	-9.1	24
336	Integrated multilaboratory systems biology reveals differences in protein metabolism between two reference yeast strains. <i>Nature Communications</i> , 2010 , 1, 145	17.4	78
335	Time-dependent regulation of yeast glycolysis upon nitrogen starvation depends on cell history. <i>IET Systems Biology</i> , 2010 , 4, 157-68	1.4	11
334	Systematic integration of experimental data and models in systems biology. <i>BMC Bioinformatics</i> , 2010 , 11, 582	3.6	20
333	Comparative systems biology: from bacteria to man. <i>Wiley Interdisciplinary Reviews: Systems Biology and Medicine</i> , 2010 , 2, 518-532	6.6	14
332	Noise management by molecular networks. <i>PLoS Computational Biology</i> , 2009 , 5, e1000506	5	61
331	Systems biology: the elements and principles of life. <i>FEBS Letters</i> , 2009 , 583, 3882-90	3.8	66
330	Matrix method for determining steps most rate-limiting to metabolic fluxes in biotechnological processes. 1987. <i>Biotechnology and Bioengineering</i> , 2009 , 104, 1-9	4.9	4
329	Systems biology towards life in silico: mathematics of the control of living cells. <i>Journal of Mathematical Biology</i> , 2009 , 58, 7-34	2	66
328	Super lifehow and why 'cell selection' leads to the fastest-growing eukaryote. <i>FEBS Journal</i> , 2009 , 276, 254-70	5.7	58
327	The pivotal regulator GlnB of Escherichia coli is engaged in subtle and context-dependent control. <i>FEBS Journal</i> , 2009 , 276, 3324-40	5.7	9
326	Simplified yet highly accurate enzyme kinetics for cases of low substrate concentrations. <i>FEBS Journal</i> , 2009 , 276, 5491-506	5.7	22
325	Time-dependent regulation analysis dissects shifts between metabolic and gene-expression regulation during nitrogen starvation in baker's yeast. <i>FEBS Journal</i> , 2009 , 276, 5521-36	5.7	22

324	How Geobacteraceae may dominate subsurface biodegradation: physiology of Geobacter metallireducens in slow-growth habitat-simulating retentostats. <i>Environmental Microbiology</i> , 2009 , 11, 2425-33	5.2	35
323	SulfoSYS (Sulfolobus Systems Biology): towards a silicon cell model for the central carbohydrate metabolism of the archaeon Sulfolobus solfataricus under temperature variation. <i>Biochemical Society Transactions</i> , 2009 , 37, 58-64	5.1	25
322	The probability to initiate X chromosome inactivation is determined by the X to autosomal ratio and X chromosome specific allelic properties. <i>PLoS ONE</i> , 2009 , 4, e5616	3.7	28
321	A consensus yeast metabolic network reconstruction obtained from a community approach to systems biology. <i>Nature Biotechnology</i> , 2008 , 26, 1155-60	44.5	471
320	Control, responses and modularity of cellular regulatory networks: a control analysis perspective. <i>IET Systems Biology</i> , 2008 , 2, 397-410	1.4	22
319	Compartmentation prevents a lethal turbo-explosion of glycolysis in trypanosomes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008 , 105, 17718-23	11.5	108
318	Control and regulation of gene expression: quantitative analysis of the expression of phosphoglycerate kinase in bloodstream form Trypanosoma brucei. <i>Journal of Biological Chemistry</i> , 2008 , 283, 2495-507	5.4	70
317	Recurrent design patterns in the feedback regulation of the mammalian signalling network. <i>Molecular Systems Biology</i> , 2008 , 4, 190	12.2	90
316	Signalling control strength. Journal of Theoretical Biology, 2008, 252, 555-67	2.3	26
315	Mixed and diverse metabolic and gene-expression regulation of the glycolytic and fermentative pathways in response to a HXK2 deletion in Saccharomyces cerevisiae. <i>FEMS Yeast Research</i> , 2008 , 8, 155-64	3.1	10
314	Increased glucose metabolism and ATP level in brain tissue of Huntington's disease transgenic mice. <i>FEBS Journal</i> , 2008 , 275, 4740-55	5.7	49
313	Introduction to systems biology. <i>Exs</i> , 2007 , 97, 1-19		12
312	Metabolic control analysis to identify optimal drug targets. <i>Progress in Drug Research Fortschritte Der Arzneimittelforschung Progres Des Recherches Pharmaceutiques</i> , 2007 , 64, 171, 173-89		17
311	The methodologies of systems biology 2007 , 23-70		21
310	Towards philosophical foundations of Systems Biology: introduction 2007 , 3-19		11
309	Afterthoughts as foundations for systems biology 2007 , 321-336		5
308	Ecological control analysis: being(s) in control of mass flux and metabolite concentrations in anaerobic degradation processes. <i>Environmental Microbiology</i> , 2007 , 9, 500-11	5.2	23
307	Temperature compensation through systems biology. <i>FEBS Journal</i> , 2007 , 274, 940-50	5.7	45

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306	Mathematical and theoretical biology for systems biology, and then vice versa. <i>Journal of Mathematical Biology</i> , 2007 , 54, 147-50	2	3
305	Systems biology and food microbiology 2007 , 250-288		2
304	The fluxes through glycolytic enzymes in Saccharomyces cerevisiae are predominantly regulated at posttranscriptional levels. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007 , 104, 15753-8	11.5	192
303	The nature of systems biology. <i>Trends in Microbiology</i> , 2007 , 15, 45-50	12.4	356
302	Functioning of oxidative phosphorylation in liver mitochondria of high-fat diet fed rats. <i>Biochimica Et Biophysica Acta - Molecular Basis of Disease</i> , 2007 , 1772, 307-16	6.9	38
301	Palmitate and oleate have distinct effects on the inflammatory phenotype of human endothelial cells. <i>Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids</i> , 2007 , 1771, 147-54	5	23
300	Systems biology and the reconstruction of the cell: from molecular components to integral function. <i>Sub-Cellular Biochemistry</i> , 2007 , 43, 239-62	5.5	2
299	Summation theorems for flux and concentration control coefficients of dynamic systems. <i>IET Systems Biology</i> , 2006 , 153, 314-7		9
298	Time-dependent hierarchical regulation analysis: deciphering cellular adaptation. <i>IET Systems Biology</i> , 2006 , 153, 318-22		20
297	Unraveling the complexity of flux regulation: a new method demonstrated for nutrient starvation in Saccharomyces cerevisiae. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006 , 103, 2166-71	11.5	110
296	Introduction to Computational Models of Biochemical Reaction Networks 2006 , 127-148		2
295	A wave of reactive oxygen species (ROS)-induced ROS release in a sea of excitable mitochondria. <i>Antioxidants and Redox Signaling</i> , 2006 , 8, 1651-65	8.4	143
294	Systems biology and the silicon cell: Order out of chaos. <i>Computer Aided Chemical Engineering</i> , 2006 , 21, 81-93	0.6	2
293	Effects of sequestration on signal transduction cascades. <i>FEBS Journal</i> , 2006 , 273, 895-906	5.7	122
292	Metabolic control of mitochondrial properties by adenine nucleotide translocator determines palmitoyl-CoA effects. Implications for a mechanism linking obesity and type 2 diabetes. <i>FEBS Journal</i> , 2006 , 273, 5288-302	5.7	42
291	Cancer: a Systems Biology disease. <i>BioSystems</i> , 2006 , 83, 81-90	1.9	298
290	Towards building the silicon cell: a modular approach. <i>BioSystems</i> , 2006 , 83, 207-16	1.9	97
289	Analyses of dose-response curves to compare the antimicrobial activity of model cationic alpha-helical peptides highlights the necessity for a minimum of two activity parameters. <i>Analytical Biochemistry</i> , 2006 , 350, 81-90	3.1	25

288	Epidermal growth factor receptor-induced activator protein 1 activity controls density-dependent growth inhibition in normal rat kidney fibroblasts. <i>Molecular Biotechnology</i> , 2006 , 34, 101-8	3	О
287	Oncogenes are to lose control on signaling following mutation: should we aim off target?. <i>Molecular Biotechnology</i> , 2006 , 34, 109-16	3	7
286	Is there an optimal ribosome concentration for maximal protein production?. <i>IET Systems Biology</i> , 2006 , 153, 398-400		1
285	Principles behind the multifarious control of signal transduction. ERK phosphorylation and kinase/phosphatase control. <i>FEBS Journal</i> , 2005 , 272, 244-58	5.7	117
284	What is systems biology? From genes to function and back. <i>Topics in Current Genetics</i> , 2005 , 119-141		5
283	Yeast glycolytic oscillations that are not controlled by a single oscillophore: a new definition of oscillophore strength. <i>Journal of Theoretical Biology</i> , 2005 , 232, 385-98	2.3	25
282	Hierarchical and metabolic regulation of glucose influx in starved Saccharomyces cerevisiae. <i>FEMS Yeast Research</i> , 2005 , 5, 611-9	3.1	48
281	Control of MAPK signalling: from complexity to what really matters. <i>Oncogene</i> , 2005 , 24, 5533-42	9.2	158
280	Training of yeast cell dynamics. FEBS Journal, 2005, 272, 1616-24	5.7	18
279	The multifarious short-term regulation of ammonium assimilation of Escherichia coli: dissection using an in silico replica. <i>FEBS Journal</i> , 2005 , 272, 1965-85	5.7	53
278	Emergence and Its Place in Nature: A Case Study of Biochemical Networks. <i>Synth</i> @ e, 2005 , 145, 131-164	0.8	97
277	Geobacteraceae community composition is related to hydrochemistry and biodegradation in an iron-reducing aquifer polluted by a neighboring landfill. <i>Applied and Environmental Microbiology</i> , 2005 , 71, 5983-91	4.8	47
276	Modular kinetic analysis of the adenine nucleotide translocator-mediated effects of palmitoyl-CoA on the oxidative phosphorylation in isolated rat liver mitochondria. <i>Diabetes</i> , 2005 , 54, 944-51	0.9	45
275	Novel nirK cluster genes in Nitrosomonas europaea are required for NirK-dependent tolerance to nitrite. <i>Journal of Bacteriology</i> , 2005 , 187, 6849-51	3.5	49
274	Nitrosomonas europaea expresses a nitric oxide reductase during nitrification. <i>Journal of Bacteriology</i> , 2004 , 186, 4417-21	3.5	74
273	Frequency-dependent incidence in models of sexually transmitted diseases: portrayal of pair-based transmission and effects of illness on contact behaviour. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2004 , 271, 625-34	4.4	45
272	What makes biochemical networks tick?. FEBS Journal, 2004, 271, 3877-87		7
271	Expression of nitrite reductase in Nitrosomonas europaea involves NsrR, a novel nitrite-sensitive transcription repressor. <i>Molecular Microbiology</i> , 2004 , 54, 148-58	4.1	156

270	The evolution of molecular biology into systems biology. <i>Nature Biotechnology</i> , 2004 , 22, 1249-52	44.5	392
269	Metabolic Control Analysis of the ATPase Network in Contracting Muscle: Regulation of Contractile Function and ATP Free Energy Potential 2004 , 31-46		
268	Coordinated behavior of mitochondria in both space and time: a reactive oxygen species-activated wave of mitochondrial depolarization. <i>Biophysical Journal</i> , 2004 , 87, 2022-34	2.9	101
267	The Silicon Cell Initiative. <i>Current Genomics</i> , 2004 , 5, 687-697	2.6	8
266	Control analysis of trophic chains. <i>Ecological Modelling</i> , 2003 , 168, 153-171	3	11
265	Attractive models: how to make the silicon cell relevant and dynamic. <i>Comparative and Functional Genomics</i> , 2003 , 4, 155-8		1
264	Control of spatially heterogeneous and time-varying cellular reaction networks: a new summation law. <i>Journal of Theoretical Biology</i> , 2003 , 225, 477-87	2.3	34
263	Why the phosphotransferase system of Escherichia coli escapes diffusion limitation. <i>Biophysical Journal</i> , 2003 , 85, 612-22	2.9	34
262	Putting intentions into cell biochemistry: an artificial intelligence perspective. <i>Journal of Theoretical Biology</i> , 2002 , 214, 105-34	2.3	32
261	Selectivity in overlapping MAP kinase cascades. <i>Journal of Theoretical Biology</i> , 2002 , 218, 343-54	2.3	21
260	Modular Response Analysis of Cellular Regulatory Networks. <i>Journal of Theoretical Biology</i> , 2002 , 218, 507-520	2.3	82
259	Metabolic control in integrated biochemical systems. <i>FEBS Journal</i> , 2002 , 269, 4399-408		18
258	DNA supercoiling in Escherichia coli is under tight and subtle homeostatic control, involving gene-expression and metabolic regulation of both topoisomerase I and DNA gyrase. <i>FEBS Journal</i> , 2002 , 269, 1662-9		84
257	DNA supercoiling by gyrase is linked to nucleoid compaction. <i>Molecular Biology Reports</i> , 2002 , 29, 79-82	2.8	35
256	Sensitivity analysis of metabolic cascades catalyzed by bifunctional enzymes. <i>Molecular Biology Reports</i> , 2002 , 29, 211-5	2.8	6
255	Flux control of the bacterial phosphoenolpyruvate:glucose phosphotransferase system and the effect of diffusion. <i>Molecular Biology Reports</i> , 2002 , 29, 21-6	2.8	6
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