Boris N Kholodenko

List of Publications by Year
in descending order

189 papers	13,075 citations	28190 55 h-index	27345 106 g-index
194 all docs	194 docs citations	194 times ranked	12186 citing authors

#	Article	IF	Citations
1	Cell-signalling dynamics in time and space. Nature Reviews Molecular Cell Biology, 2006, 7, 165-176.	16.1	1,241
2	Signaling switches and bistability arising from multisite phosphorylation in protein kinase cascades. Journal of Cell Biology, 2004, 164, 353-359.	2.3	620
3	Signalling ballet in space and time. Nature Reviews Molecular Cell Biology, 2010, 11, 414-426.	16.1	563
4	Negative feedback and ultrasensitivity can bring about oscillations in the mitogen-activated protein kinase cascades. FEBS Journal, 2000, 267, 1583-1588.	0.2	552
5	Quantification of Short Term Signaling by the Epidermal Growth Factor Receptor. Journal of Biological Chemistry, 1999, 274, 30169-30181.	1.6	507
6	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.	3.3	386
7	Cross-talk between mitogenic Ras/MAPK and survival PI3K/Akt pathways: a fine balance. Biochemical Society Transactions, 2012, 40, 139-146.	1.6	385
8	The dynamic control of signal transduction networks in cancer cells. Nature Reviews Cancer, 2015, 15, 515-527.	12.8	282
9	Ligand-Specific c-Fos Expression Emerges from the Spatiotemporal Control of ErbB Network Dynamics. Cell, 2010, 141, 884-896.	13.5	217
10	Why cytoplasmic signalling proteins should be recruited to cell membranes. Trends in Cell Biology, 2000, 10, 173-178.	3.6	216
11	The Mammalian MAPK/ERK Pathway Exhibits Properties of a Negative Feedback Amplifier. Science Signaling, 2010, 3, ra90.	1.6	216
12	Systemsâ€level interactions between insulinâ€“EGF networks amplify mitogenic signaling. Molecular Systems Biology, 2009, 5, 256.	3.2	205
13	Ligandâ€dependent responses of the ErbB signaling network: experimental and modeling analyses. Molecular Systems Biology, 2007, 3, 144.	3.2	203
14	Frequency modulation of <scp>ERK</scp> activation dynamics rewires cell fate. Molecular Systems Biology, 2015, 11, 838.	3.2	189
15	Quantitative analysis of signaling networks. Progress in Biophysics and Molecular Biology, 2004, 86, 5-43.	1.4	188
16	Spatial gradients of cellular phospho-proteins. FEBS Letters, 1999, 457, 452-454.	1.3	175
17	Evaluating Strategies to Normalise Biological Replicates of Western Blot Data. PLoS ONE, 2014, 9, e87293.	1.1	174
18	Bistability in the Rac1, PAK, and RhoA Signaling Network Drives Actin Cytoskeleton Dynamics and Cell Motility Switches. Cell Systems, 2016, 2, 38-48.	2.9	159

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19	When ubiquitination meets phosphorylation: a systems biology perspective of EGFR/MAPK signalling. Cell Communication and Signaling, 2013, 11, 52.	2.7	154
20	Scaffolding Protein Grb2-associated Binder 1 Sustains Epidermal Growth Factor-induced Mitogenic and Survival Signaling by Multiple Positive Feedback Loops*. Journal of Biological Chemistry, 2006, 281, 19925-19938.	1.6	153
21	Computational Approaches for Analyzing Information Flow in Biological Networks. Science Signaling, 2012, 5, re1.	1.6	152
22	Inferring dynamic architecture of cellular networks using time series of gene expression, protein and metabolite data. Bioinformatics, 2004, 20, 1877-1886.	1.8	148
23	Effects of sequestration on signal transduction cascades. FEBS Journal, 2006, 273, 895-906.	2.2	148
24	Four-dimensional organization of protein kinase signaling cascades: the roles of diffusion, endocytosis and molecular motors. Journal of Experimental Biology, 2003, 206, 2073-2082.	0.8	146
25	Quantification of information transfer via cellular signal transduction pathways. FEBS Letters, 1997, 414, 430-434.	1.3	141
26	Signaling pathway models as biomarkers: Patient-specific simulations of JNK activity predict the survival of neuroblastoma patients. Science Signaling, 2015, 8, ra130.	1.6	140
27	Protein interaction switches coordinate Raf-1 and MST2/Hippo signalling. Nature Cell Biology, 2014, 16, 673-684.	4.6	138
28	Crosstalk and Signaling Switches in Mitogen-Activated Protein Kinase Cascades. Frontiers in Physiology, 2012, 3, 355.	1.3	137
29	A dynamic model of the hypoxia-inducible factor 1-alpha (HIF-1Î±) network. Journal of Cell Science, 2013, 126, 1454-63.	1.2	112
30	Modular Response Analysis of Cellular Regulatory Networks. Journal of Theoretical Biology, 2002, 218, 507-520.	0.8	106
31	Implications of macromolecular crowding for signal transduction and metabolite channeling. Proceedings of the National Academy of Sciences of the United States of America, 1998, 95, 10547-10552.	3.3	102
32	Metabolic channelling and control of the flux. FEBS Letters, 1993, 320, 71-74.	1.3	97
33	MAP kinase cascade signaling and endocytic trafficking: a marriage of convenience?. Trends in Cell Biology, 2002, 12, 173-177.	3.6	96
34	Modular Response Analysis of Cellular Regulatory Networks. Journal of Theoretical Biology, 2002, 218, 507-520.	0.8	95
35	Signaling through Receptors and Scaffolds: Independent Interactions Reduce Combinatorial Complexity. Biophysical Journal, 2005, 89, 951-966.	0.2	91
36	Prolactin-stimulated activation of ERK1/2 mitogen-activated protein kinases is controlled by PI3-kinase/Rac/PAK signaling pathway in breast cancer cells. Cellular Signalling, 2011, 23, 1794-1805.	1.7	89

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37	Emergence of bimodal cell population responses from the interplay between analog single-cell signaling and protein expression noise. BMC Systems Biology, 2012, 6, 109.	3.0	89
38	Bistability from double phosphorylation in signal transduction. FEBS Journal, 2006, 273, 3915-3926.	2.2	87
39	PI3K/Akt-sensitive MEK-independent compensatory circuit of ERK activation in ER-positive PI3K-mutant T47D breast cancer cells. Cellular Signalling, 2010, 22, 1369-1378.	1.7	84
40	Why do protein kinase cascades have more than one level?. Trends in Biochemical Sciences, 1997, 22, 288.	3.7	82
41	A domain-oriented approach to the reduction of combinatorial complexity in signal transduction networks. BMC Bioinformatics, 2006, 7, 34.	1.2	78
42	Temperature Dependence of the Epidermal Growth Factor Receptor Signaling Network Can Be Accounted for by a Kinetic Modelâ€. Biochemistry, 2002, 41, 306-320.	1.2	74
43	Longâ€range signaling by phosphoprotein waves arising from bistability in protein kinase cascades. Molecular Systems Biology, 2006, 2, 61.	3.2	74
44	Rac1 and RhoA: Networks, loops and bistability. Small GTPases, 2018, 9, 316-321.	0.7	74
45	Inference of signaling and gene regulatory networks by steady-state perturbation experiments: structure and accuracy. Journal of Theoretical Biology, 2005, 232, 427-441.	0.8	73
46	Diffusion control of protein phosphorylation in signal transduction pathways. Biochemical Journal, 2000, 350, 901-907.	1.7	72
47	MAPK kinase signalling dynamics regulate cell fate decisions and drug resistance. Current Opinion in Structural Biology, 2016, 41, 151-158.	2.6	72
48	Complexity of Receptor Tyrosine Kinase Signal Processing. Cold Spring Harbor Perspectives in Biology, 2013, 5, a009043-a009043.	2.3	70
49	Control Analysis for Autonomously Oscillating Biochemical Networks. Biophysical Journal, 2002, 82, 99-108.	0.2	69
50	Oscillatory dynamics arising from competitive inhibition and multisite phosphorylation. Journal of Theoretical Biology, 2007, 244, 68-76.	0.8	68
51	Fourâ€dimensional dynamics of MAPK informationâ€processing systems. Wiley Interdisciplinary Reviews: Systems Biology and Medicine, 2009, 1, 28-44.	6.6	67
52	Untangling the signalling wires. Nature Cell Biology, 2007, 9, 247-249.	4.6	66
53	Integrating network reconstruction with mechanistic modeling to predict cancer therapies. Science Signaling, 2016, 9, ra114.	1.6	63
54	Spatially distributed cell signalling. FEBS Letters, 2009, 583, 4006-4012.	1.3	62

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55	Control analysis of glycolytic oscillations. Biophysical Chemistry, 1996, 62, 15-24.	1.5	61
56	Performance of objective functions and optimisation procedures for parameter estimation in system biology models. Npj Systems Biology and Applications, 2017, 3, 20.	1.4	57
57	The sum of the control coefficients of all enzymes on the flux through a group-transfer pathway can be as high as two. FEBS Journal, 1993, 212, 791-799.	0.2	56
58	The macroworld versus the microworld of biochemical regulation and control. Trends in Biochemical Sciences, 1995, 20, 52-54.	3.7	56
59	Feedback regulation in cell signalling: Lessons for cancer therapeutics. Seminars in Cell and Developmental Biology, 2016, 50, 85-94.	2.3	53
60	Dissecting RAF Inhibitor Resistance by Structure-based Modeling Reveals Ways to Overcome Oncogenic RAS Signaling. Cell Systems, 2018, 7, 161-179.e14.	2.9	53
61	Ca2+ stimulates both the respiratory and phosphorylation subsystems in rat heart mitochondria. Biochemical Journal, 1996, 320, 329-334.	1.7	52
62	Signal processing at the Ras circuit: what shapes Ras activation patterns?. IET Systems Biology, 2004, 1, 104-113.	2.0	51
63	The complexities and versatility of the RAS-to-ERK signalling system in normal and cancer cells. Seminars in Cell and Developmental Biology, 2016, 58, 96-107.	2.3	51
64	Modular response analysis of cellular regulatory networks. Journal of Theoretical Biology, 2002, 218, 507-20.	0.8	51
65	The role of adenine nucleotide translocators in regulation of oxidative phosphorylation in heart mitochondria. FEBS Letters, 1987, 223, 247-250.	1.3	50
66	Pseudophosphatase STYX modulates cell-fate decisions and cell migration by spatiotemporal regulation of ERK1/2. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, E2934-43.	3.3	49
67	Defining control coefficients in non-ideal metabolic pathways. Biophysical Chemistry, 1995, 56, 215-226.	1.5	47
68	Control Analysis of Periodic Phenomena in Biological Systems. Journal of Physical Chemistry B, 1997, 101, 2070-2081.	1.2	47
69	Signalling by protein phosphatases and drug development: a systemsâ€centred view. FEBS Journal, 2013, 280, 751-765.	2.2	47
70	Calcium Indirectly Increases the Control Exerted by the Adenine Nucleotide Translocator over 2-Oxoglutarate Oxidation in Rat Heart Mitochondria. Archives of Biochemistry and Biophysics, 1995, 324, 130-134.	1.4	44
71	Phosphorylation of RAF Kinase Dimers Drives Conformational Changes that Facilitate Transactivation. Angewandte Chemie - International Edition, 2016, 55, 983-986.	7.2	43
72	Extensive rewiring of the EGFR network in colorectal cancer cells expressing transforming levels of KRASG13D. Nature Communications, 2020, 11, 499.	5.8	42

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73	Control of the metabolic flux in a system with high enzyme concentrations and moiety-conserved cycles. The sum of the flux control coefficients can drop significantly below unity. FEBS Journal, 1992, 210, 147-153.	0.2	40
74	Periodic propagating waves coordinate RhoGTPase network dynamics at the leading and trailing edges during cell migration. ELife, 2020, 9, .	2.8	40
75	It takes two to tango â€“ signalling by dimeric Raf kinases. Molecular BioSystems, 2013, 9, 551-558.	2.9	39
76	The Intracellular Signaling Network as a Target for Ethanol. Alcoholism: Clinical and Experimental Research, 1998, 22, 224S-230S.	1.4	38
77	Control of spatially heterogeneous and time-varying cellular reaction networks: a new summation law. Journal of Theoretical Biology, 2003, 225, 477-487.	0.8	38
78	Multistrip Western blotting to increase quantitative data output. Electrophoresis, 2007, 28, 3163-3173.	1.3	38
79	The Regulation of Glycolysis in Human Erythrocytes. The Dependence of the Glycolytic Flux on the ATP Concentration. FEBS Journal, 1981, 115, 359-365.	0.2	37
80	Drug Resistance Resulting from Kinase Dimerization Is Rationalized by Thermodynamic Factors Describing Allosteric Inhibitor Effects. Cell Reports, 2015, 12, 1939-1949.	2.9	37
81	Acute Phase Response as a Biological Mechanismâ€ofâ€Action of (Nano)particleâ€Induced Cardiovascular Disease. Small, 2020, 16, e1907476.	5.2	37
82	How do external parameters control fluxes and concentrations of metabolites? An additional relationship in the theory of metabolic control. FEBS Letters, 1988, 232, 383-386.	1.3	36
83	Metabolic design: How to engineer a living cell to desired metabolite concentrations and fluxes. Biotechnology and Bioengineering, 1998, 59, 239-247.	1.7	36
84	Trading the micro-world of combinatorial complexity for the macro-world of protein interaction domains. BioSystems, 2006, 83, 152-166.	0.9	36
85	Positional Information Generated by Spatially Distributed Signaling Cascades. PLoS Computational Biology, 2009, 5, e1000330.	1.5	36
86	Signaling cascades as cellular devices for spatial computations. Journal of Mathematical Biology, 2009, 58, 35-55.	0.8	36
87	â€˜Channelledâ€™ pathways can be more sensitive to specific regulatory signals. FEBS Letters, 1993, 320, 75-78.	1.3	35
88	Getting to the inside of cells using metabolic control analysis. Biophysical Chemistry, 1994, 50, 273-283.	1.5	35
89	Toggle switches, pulses and oscillations are intrinsic properties of the Src activation/deactivation cycle. FEBS Journal, 2009, 276, 4102-4118.	2.2	35
90	Kinetics and control of oxidative phosphorylation in rat liver mitochondria after chronic ethanol feeding. Biochemical Journal, 2000, 349, 519-526.	1.7	34

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91	Integrating Bayesian variable selection with Modular Response Analysis to infer biochemical network topology. BMC Systems Biology, 2013, 7, 57.	3.0	34
92	The ErbB4 CYT2 variant protects EGFR from ligand-induced degradation to enhance cancer cell motility. Science Signaling, 2014, 7, ra78.	1.6	34
93	Composite control of cell function: metabolic pathways behaving as single control units. FEBS Letters, 1995, 368, 1-4.	1.3	33
94	Switches, Excitable Responses and Oscillations in the Ring1B/Bmi1 Ubiquitination System. PLoS Computational Biology, 2011, 7, e1002317.	1.5	33
95	The topology design principles that determine the spatiotemporal dynamics of G-protein cascades. Molecular BioSystems, 2012, 8, 730.	2.9	33
96	Tyr-317 Phosphorylation Increases Shc Structural Rigidity and Reduces Coupling of Domain Motions Remote from the Phosphorylation Site as Revealed by Molecular Dynamics Simulations. Journal of Biological Chemistry, 2004, 279, 4657-4662.	1.6	30
97	Endocytosis and signalling: A meeting with mathematics. Molecular Oncology, 2009, 3, 308-320.	2.1	30
98	Systems medicine: helping us understand the complexity of disease. QJM - Monthly Journal of the Association of Physicians, 2013, 106, 891-895.	0.2	30
99	Proteinâ€"protein interactions generate hidden feedback and feed-forward loops to trigger bistable switches, oscillations and biphasic doseâ€"responses. Molecular BioSystems, 2015, 11, 2750-2762.	2.9	30
100	Control by Enzymes, Coenzymes and Conserved Moieties. A Generalisation of the Connectivity Theorem of Metabolic Control Analysis. FEBS Journal, 1994, 225, 179-186.	0.2	29
101	Polyubiquitin chain assembly and organization determine the dynamics of protein activation and degradation. Frontiers in Physiology, 2014, 5, 4.	1.3	28
102	HER2-HER3 dimer quantification by FLIM-FRET predicts breast cancer metastatic relapse independently of HER2 IHC status. Oncotarget, 2016, 7, 51012-51026.	0.8	28
103	Dynamic stability of steady states and static stabilization in unbranched metabolic pathways. Journal of Mathematical Biology, 1982, 15, 51-63.	0.8	27
104	Control theory of metabolic channelling. Molecular and Cellular Biochemistry, 1995, 143, 151-168.	1.4	26
105	Effect of channelling on the concentration of bulk-phase intermediates as cytosolic proteins become more concentrated. Biochemical Journal, 1996, 313, 921-926.	1.7	26
106	Control Analysis of Stationary Forced Oscillations. Journal of Physical Chemistry B, 1999, 103, 10695-10710.	1.2	26
107	Diffusion control of protein phosphorylation in signal transduction pathways. Biochemical Journal, 2000, 350, 901.	1.7	25
108	Control theory of one enzyme. BBA - Proteins and Proteomics, 1994, 1208, 294-305.	2.1	24

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109	Signalling over a distance: gradient patterns and phosphorylation waves within single cells. Biochemical Society Transactions, 2010, 38, 1235-1241.	1.6	24
110	Nonlinear signalling networks and cell-to-cell variability transform external signals into broadly distributed or bimodal responses. Journal of the Royal Society Interface, 2014, 11, 20140383.	1.5	24
111	Advances in dynamic modeling of colorectal cancer signaling-network regions, a path toward targeted therapies. Oncotarget, 2015, 6, 5041-5058.	0.8	24
112	Giving Space to Cell Signaling. Cell, 2008, 133, 566-567.	13.5	23
113	DYVIPAC: an integrated analysis and visualisation framework to probe multi-dimensional biological networks. Scientific Reports, 2015, 5, 12569.	1.6	23
114	Competing to coordinate cell fate decisions: the MST2-Raf-1 signaling device. Cell Cycle, 2015, 14, 189-199.	1.3	23
115	Kinetics and control of oxidative phosphorylation in rat liver mitochondria after chronic ethanol feeding. Biochemical Journal, 2000, 349, 519.	1.7	22
116	Species differential regulation of COX2 can be described by an NFÎºB-dependent logic AND gate. Cellular and Molecular Life Sciences, 2015, 72, 2431-2443.	2.4	22
117	Reconstructing static and dynamic models of signaling pathways using Modular Response Analysis. Current Opinion in Systems Biology, 2018, 9, 11-21.	1.3	22
118	Molecular Dynamics Simulations Reveal that Tyr-317 Phosphorylation Reduces Shc Binding Affinity for Phosphotyrosyl Residues of Epidermal Growth Factor Receptor. Biophysical Journal, 2009, 96, 2278-2288.	0.2	21
119	Formation of Intracellular Concentration Landscapes by Multisite Protein Modification. Biophysical Journal, 2010, 99, 59-66.	0.2	21
120	Network-based identification of feedback modules that control RhoA activity and cell migration. Journal of Molecular Cell Biology, 2015, 7, 242-252.	1.5	20
121	Control of mitochondrial oxidative phosphorylation. Journal of Theoretical Biology, 1984, 107, 179-188.	0.8	19
122	Control in channelled pathways. A matrix method calculating the enzyme control coefficients. Biophysical Chemistry, 1995, 53, 247-258.	1.5	19
123	The APC Network Regulates the Removal of Mutated Cells from Colonic Crypts. Cell Reports, 2014, 7, 94-103.	2.9	19
124	Systems biology-embedded target validation: improving efficacy in drug discovery. Wiley Interdisciplinary Reviews: Systems Biology and Medicine, 2014, 6, 1-11.	6.6	19
125	Engineering a Living Cell to Desired Metabolite Concentrations and Fluxes: Pathways with Multifunctional Enzymes. Metabolic Engineering, 2000, 2, 1-13.	3.6	18
126	Control theory of metabolic channelling. Molecular and Cellular Biochemistry, 1994, 133-134, 313-331.	1.4	17

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127	Molecular Control Analysis: Control within Proteins and Molecular Processes. Journal of Theoretical Biology, 1996, 182, 389-396.	0.8	17
128	A systematic analysis of signaling reactivation and drug resistance. Cell Reports, 2021, 35, 109157.	2.9	17
129	Control theory of group transfer pathways. Biochimica Et Biophysica Acta - Bioenergetics, 1995, 1229, 256-274.	0.5	16
130	Paradoxical control properties of enzymes within pathways: can activation cause an enzyme to have increased control?. Biochemical Journal, 1996, 314, 753-760.	1.7	16
131	Versatility of Cooperative Transcriptional Activation: A Thermodynamical Modeling Analysis for Greater-Than-Additive and Less-Than-Additive Effects. PLoS ONE, 2012, 7, e34439.	1.1	16
132	Control of the G-protein cascade dynamics by GDP dissociation inhibitors. Molecular BioSystems, 2013, 9, 2454.	2.9	16
133	New insights into RAS biology reinvigorate interest in mathematical modeling of RAS signaling. Seminars in Cancer Biology, 2019, 54, 162-173.	4.3	16
134	Dramatic changes in control properties that accompany channelling and metabolite sequestration. FEBS Letters, 1993, 336, 381-384.	1.3	15
135	The function of ATP/ADP translocator in the regulation of mitochondrial respiration during development of heart ischemic injury. Biochimica Et Biophysica Acta - Bioenergetics, 1993, 1142, 175-180.	0.5	15
136	Control analysis of metabolic systems involving quasi-equilibrium reactions. Biochimica Et Biophysica Acta - General Subjects, 1998, 1379, 337-352.	1.1	15
137	Mammalian protein expression noise: scaling principles and the implications for knockdown experiments. Molecular BioSystems, 2012, 8, 3068.	2.9	15
138	SARAH Domain-Mediated MST2-RASSF Dimeric Interactions. PLoS Computational Biology, 2016, 12, e1005051.	1.5	15
139	Subtleties in control by metabolic channelling and enzyme organization. Molecular and Cellular Biochemistry, 1998, 184, 311-320.	1.4	14
140	Cellular information transfer regarded from a stoichiometry and control analysis perspective. BioSystems, 2000, 55, 73-81.	0.9	14
141	Feedforward regulation of mRNA stability by prolonged extracellular signalâ€regulated kinase activity. FEBS Journal, 2015, 282, 613-629.	2.2	14
142	Silence on the relevant literature and errors in implementation. Nature Biotechnology, 2015, 33, 336-339.	9.4	14
143	Inhaled multi-walled carbon nanotubes differently modulate global gene and protein expression in rat lungs. Nanotoxicology, 2021, 15, 238-256.	1.6	14
144	Channeling macrophage polarization by rocaglates increases macrophage resistance to Mycobacterium tuberculosis. IScience, 2021, 24, 102845.	1.9	14

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145	MST2-RASSF proteinâ€"protein interactions through SARAH domains. Briefings in Bioinformatics, 2016, 17, 593-602.	3.2	13
146	Probing the Heterogeneity of Protein Kinase Activation in Cells by Super-resolution Microscopy. ACS Nano, 2017, 11, 249-257.	7.3	13
147	Impact of measurement noise, experimental design, and estimation methods on Modular Response Analysis based network reconstruction. Scientific Reports, 2018, 8, 16217.	1.6	13
148	Rate limitation within a single enzyme is directly related to enzyme intermediate levels. FEBS Letters, 1994, 349, 131-134.	1.3	12
149	Occurrence of paradoxical or sustained control by an enzyme when overexpressed: necessary conditions and experimental evidence with regard to hepatic glucokinase. Biochemical Journal, 2001, 355, 787-793.	1.7	11
150	Mechanistic and modular approaches to modeling and inference of cellular regulatory networks. , 0, , 143-159.		11
151	An Integrative Computational Approach for a Prioritization of Key Transcription Regulators Associated With Nanomaterial-Induced Toxicity. Toxicological Sciences, 2019, 171, 303-314.	1.4	10
152	Can Systems Biology Advance Clinical Precision Oncology?. Cancers, 2021, 13, 6312.	1.7	10
153	Elusive control. Journal of Bioenergetics and Biomembranes, 1995, 27, 491-497.	1.0	9
154	Strong control on the transit time in metabolic channelling. FEBS Letters, 1996, 389, 123-125.	1.3	9
155	Steady-State Characterization of Systems with Moiety-Conservations Made Easy: Matrix Equations of Metabolic Control Analysis and Biochemical System Theory. Journal of Theoretical Biology, 1996, 178, 1-6.	0.8	9
156	Navigating the Multilayered Organization of Eukaryotic Signaling: A New Trend in Data Integration. PLoS Computational Biology, 2014, 10, e1003385.	1.5	9
157	Signalling mechanisms regulating phenotypic changes in breast cancer cells. Bioscience Reports, 2015, 35, .	1.1	9
158	Transcriptionally inducible Pleckstrin homology-like domain, family A, member 1, attenuates ErbB receptor activity by inhibiting receptor oligomerization. Journal of Biological Chemistry, 2018, 293, 2206-2218.	1.6	9
159	Mapping connections in signaling networks with ambiguous modularity. Npj Systems Biology and Applications, 2019, 5, 19.	1.4	9
160	Mechanisms Generating Ultrasensitivity, Bistability, and Oscillations in Signal Transduction. , 2007, , 282-299.		9
161	Ubiquitin chain specific autoâ€ubiquitination triggers sustained oscillation, bistable switches and excitable firing. IET Systems Biology, 2014, 8, 282-292.	0.8	8
162	Mitogen-Inducible Gene-6 Mediates Feedback Inhibition from Mutated BRAF towards the Epidermal Growth Factor Receptor and Thereby Limits Malignant Transformation. PLoS ONE, 2015, 10, e0129859.	1.1	8

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163	Modeling cell line-specific recruitment of signaling proteins to the insulin-like growth factor 1 receptor. PLoS Computational Biology, 2019, 15, e1006706.	1.5	8
164	Modeling of Receptor Tyrosine Kinase Signaling: Computational and Experimental Protocols. Methods in Molecular Biology, 2017, 1636, 417-453.	0.4	8
165	Catching transcriptional regulation by thermostatistical modeling. Physical Biology, 2012, 9, 045007.	0.8	7
166	An Integrated Bayesian Framework for Identifying Phosphorylation Networks in Stimulated Cells. Advances in Experimental Medicine and Biology, 2012, 736, 59-80.	0.8	7
167	Bimodal Protein Distributions in Heterogeneous Oscillating Systems. Lecture Notes in Computer Science, 2012, , 17-28.	1.0	7
168	How to reveal various aspects of regulation in group-transfer pathways. Biochimica Et Biophysica Acta - Bioenergetics, 1995, 1229, 275-289.	0.5	6
169	Modular interaction strengths in regulatory networks; an example. Molecular Biology Reports, 2002, 29, 57-61.	1.0	6
170	Systems medicine: opportunities and challenges for systems biology approaches. FEBS Journal, 2013, 280, 5937-5937.	2.2	4
171	Subtleties in control by metabolic channelling and enzyme organization. , 1998, , 311-320.		4
172	Kinetic models of coupling between H+ and Na+-translocation and ATP synthesis/hydrolysis by F0F1-ATPases: Can a cell utilize both $$Delta ar mu _{H^ + } $$ and $$Delta ar mu _{Na^ + } $$ for ATP synthesis underin vivo conditions using the same enzyme?. Journal of Bioenergetics and Biomembranes, 1993, 25, 285-295.	1.0	3
173	Direct Transfer of Control and Multidrug Resistance. , 1996, , 283-292.		3
174	On the personalised modelling of cancer signalling * *Supported by EU FP7 grant â€œSynSignalâ€•(No.) Tj ETQq0 0 0 rgBT /Overlock 10	0.5	2
175	Systems biology approaches to macromolecules: the role of dynamic protein assemblies in information processing. Current Opinion in Structural Biology, 2021, 67, 61-68.	2.6	2
176	Spatio-temporal dynamics of protein modification cascades. SEB Experimental Biology Series, 2008, 61, 141-59.	0.1	2
177	Modeling the Nonlinear Dynamics of Intracellular Signaling Networks. Bio-protocol, 2021, 11, e4089.	0.2	1
178	Metabolic Control From The Back Benches: Biochemistry Towards Biocomplexity. , 2000, , 235-242.		1
179	News. IET Systems Biology, 2005, 152, 53.	2.0	1
180	Sum of the Flux Control Coefficients: What is it Equal to in Different Systems?. , 1993, , 205-210.		1

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181	Phosphorylation of RAF Kinase Dimers Drives Conformational Changes that Facilitate Transactivation. Angewandte Chemie, 2016, 128, 995-998.	1.6	0
182	Three-factor models versus time series models: quantifying time-dependencies of interactions between stimuli in cell biology and psychobiology for short longitudinal data. Mathematical Medicine and Biology, 2016, 34, dqw001.	0.8	0
183	Reengineering protein-phosphorylation switches. Science, 2021, 373, 25-26.	6.0	0
184	Multiâ€scale modeling of neuronal adaptation mediated by angiotensin II in the central regulation of blood pressure. FASEB Journal, 2008, 22, 756.2.	0.2	0
185	Understanding Cell Fate Decisions by Identifying Crucial System Dynamics. SIMAI Springer Series, 2012, , 83-104.	0.4	0
186	A dynamic model of the hypoxiaâ€inducible factor (HIF) network. FASEB Journal, 2013, 27, 717.12.	0.2	0
187	Control theory of metabolic channelling. , 1994, , 313-331.		0
188	Employing Systems Biology to Quantify Receptor Tyrosine Kinase Signaling in Time and Space. , 2007, , 300-318.		0
189	Relationship Between Dimensionality and Convergence of Optimization Algorithms: A Comparison Between Data-Driven Normalization and Scaling Factor-Based Methods Using PEPSSBI. Methods in Molecular Biology, 2022, 2385, 91-115.	0.4	0