

Sonia Cortassa

List of Publications by Year in descending order

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140
papers

7,461
citations

71004

43
h-index

64407

83
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148
all docs

148
docs citations

148
times ranked

8719
citing authors

#	ARTICLE	IF	CITATIONS
1	Computational modeling of mitochondrial K ⁺ - and H ⁺ -driven ATP synthesis. Journal of Molecular and Cellular Cardiology, 2022, 165, 9-18.	0.9	7
2	ATP synthase K ⁺ - and H ⁺ -fluxes drive ATP synthesis and enable mitochondrial K ⁺ -uniporter function: II. Ion and ATP synthase flux regulation. Function, 2022, 3, zqac001.	1.1	20
3	ATP Synthase K ⁺ - and H ⁺ -Fluxes Drive ATP Synthesis and Enable Mitochondrial K ⁺ -uniporter Function: I. Characterization of Ion Fluxes. Function, 2022, 3, zqab065.	1.1	25
4	Setting the Record Straight: A New Twist on the Chemiosmotic Mechanism of Oxidative Phosphorylation. Function, 2022, 3, .	1.1	8
5	Age-dependent impact of two exercise training regimens on genomic and metabolic remodeling in skeletal muscle and liver of male mice. , 2022, 8, .		6
6	Mitochondrial Ca ²⁺ , redox environment and ROS emission in heart failure: Two sides of the same coin?. Journal of Molecular and Cellular Cardiology, 2021, 151, 113-125.	0.9	24
7	Mitochondrial health is enhanced in rats with higher vs. lower intrinsic exercise capacity and extended lifespan. Npj Aging and Mechanisms of Disease, 2021, 7, 1.	4.5	20
8	From chronology to the biology of aging, and its tuning by mitochondrial health: overview of the Bioenergetics, Mitochondria, and Metabolism subgroup symposium at the 2021 Virtual 65th Annual Meeting of the Biophysical Society. Biophysical Reviews, 2021, 13, 311-314.	1.5	1
9	Metabolic remodelling of glucose, fatty acid and redox pathways in the heart of type 2 diabetic mice. Journal of Physiology, 2020, 598, 1393-1415.	1.3	34
10	K ⁺ -Driven ATP Synthesis in Isolated Heart Mitochondria. Biophysical Journal, 2020, 118, 129a.	0.2	1
11	Diabetes Increases the Vulnerability of the Cardiac Mitochondrial Network to Criticality. Frontiers in Physiology, 2020, 11, 175.	1.3	8
12	Mitochondrial ATP Synthase Utilizes Both K ⁺ and H ⁺ Conductances to Drive ATP Synthesis. Biophysical Journal, 2020, 118, 441a.	0.2	1
13	Systems Biology of Control and Regulation of Substrate Selection in Cytoplasmic and Mitochondrial Catabolic Networks. Biophysical Journal, 2019, 116, 132a.	0.2	0
14	Control and Regulation of Substrate Selection in Cytoplasmic and Mitochondrial Catabolic Networks. A Systems Biology Analysis. Frontiers in Physiology, 2019, 10, 201.	1.3	20
15	Systemic Metabolomics and Mitochondrial Energetics in High- Compared to Low-Running Capacity Rats as a Function of Age. Biophysical Journal, 2019, 116, 271a-272a.	0.2	0
16	Nicotinamide Improves Aspects of Healthspan, but Not Lifespan, in Mice. Cell Metabolism, 2018, 27, 667-676.e4.	7.2	242
17	Enhanced Respiratory Reserve Sustained by Lipid Oxidation and Autophagy Underlie Extended Lifespan in High- Compared to Low-Running Capacity Rats. Biophysical Journal, 2018, 114, 661a.	0.2	0
18	Mitochondrial Chaos: Redox-Energetic Behavior at the Edge. Biophysical Journal, 2018, 114, 334a.	0.2	0

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19	High Intrinsic Aerobic Endurance Capacity Preserves Cardiomyocyte Quality Control, Mitochondrial Fitness and Lifespan. <i>Biophysical Journal</i> , 2018, 114, 662a.	0.2	0
20	Mitochondrial chaotic dynamics: Redox-energetic behavior at the edge of stability. <i>Scientific Reports</i> , 2018, 8, 15422.	1.6	22
21	Metabolic and molecular framework for the enhancement of endurance by intermittent food deprivation. <i>FASEB Journal</i> , 2018, 32, 3844-3858.	0.2	45
22	Computational Modeling of Mitochondrial Function from a Systems Biology Perspective. <i>Methods in Molecular Biology</i> , 2018, 1782, 249-265.	0.4	9
23	Temporal metabolic partitioning of the yeast and protist cellular networks: the cell is a global scale-invariant (fractal or self-similar) multioscillator. <i>Journal of Biomedical Optics</i> , 2018, 24, 1.	1.4	11
24	Substrate Selection and Its Impact on Mitochondrial Respiration and Redox. <i>Biological and Medical Physics Series</i> , 2017, , 349-375.	0.3	7
25	Quantitative Modeling of Pyruvate Dehydrogenase and its Impact in Substrate Selection, Mitochondrial Respiration and Redox. <i>Biophysical Journal</i> , 2017, 112, 439a.	0.2	0
26	Mitochondrial Respiration and ROS Emission From \hat{I}^2 -Oxidation in the Heart: An Experimental Computational Study. <i>Biophysical Journal</i> , 2017, 112, 132a.	0.2	0
27	Network dynamics: quantitative analysis of complex behavior in metabolism, organelles, and cells, from experiments to models and back. <i>Wiley Interdisciplinary Reviews: Systems Biology and Medicine</i> , 2017, 9, e1352.	6.6	38
28	Mitochondrial respiration and ROS emission during \hat{I}^2 -oxidation in the heart: An experimental-computational study. <i>PLoS Computational Biology</i> , 2017, 13, e1005588.	1.5	51
29	Mitochondrial health, the epigenome and healthspan. <i>Clinical Science</i> , 2016, 130, 1285-1305.	1.8	57
30	Effects of Sex, Strain, and Energy Intake on Hallmarks of Aging in Mice. <i>Cell Metabolism</i> , 2016, 23, 1093-1112.	7.2	360
31	Impaired mitochondrial energy supply coupled to increased H ₂ O ₂ emission under energy/redox stress leads to myocardial dysfunction during Type 2 diabetes. <i>Clinical Science</i> , 2015, 129, 561-574.	1.8	37
32	Systems Biology of the Fluxome. <i>Processes</i> , 2015, 3, 607-618.	1.3	11
33	Restoring redox balance enhances contractility in heart trabeculae from type 2 diabetic rats exposed to high glucose. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2015, 308, H291-H302.	1.5	42
34	Protective Mechanisms of Mitochondria and Heart Function in Diabetes. <i>Antioxidants and Redox Signaling</i> , 2015, 22, 1563-1586.	2.5	59
35	From Metabolomics to Fluxomics: A Computational Procedure to Translate Metabolite Profiles into Metabolic Fluxes. <i>Biophysical Journal</i> , 2015, 108, 163-172.	0.2	76
36	Reversal of Mitochondrial Transhydrogenase Causes Oxidative Stress in Heart Failure. <i>Cell Metabolism</i> , 2015, 22, 472-484.	7.2	307

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37	Palmitate Re-Directs Glucose Utilization in Type 2 Diabetic Hearts, Improving Function: A Metabolomic-Fluxomic Study. <i>Biophysical Journal</i> , 2015, 108, 315a.	0.2	0
38	Rhythms, Clocks and Deterministic Chaos in Unicellular Organisms. , 2015, , 367-399.		4
39	Biochemistry, Chaotic Dynamics, Noise, and Fractal Space in. , 2015, , 1-22.		0
40	Mitochondrial and cellular mechanisms for managing lipid excess. <i>Frontiers in Physiology</i> , 2014, 5, 282.	1.3	202
41	Complex oscillatory redox dynamics with signaling potential at the edge between normal and pathological mitochondrial function. <i>Frontiers in Physiology</i> , 2014, 5, 257.	1.3	24
42	Mitochondrial Reactive Oxygen Species (ROS) and Arrhythmias. , 2014, , 1047-1076.		4
43	Redox-Optimized ROS Balance and the relationship between mitochondrial respiration and ROS. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2014, 1837, 287-295.	0.5	129
44	Effects of Regional Mitochondrial Depolarization on Electrical Propagation. <i>Circulation: Arrhythmia and Electrophysiology</i> , 2014, 7, 143-151.	2.1	60
45	Effect of Isoflurane on Myocardial Energetic and Oxidative Stress in Cardiac Muscle from Zucker Diabetic Fatty Rat. <i>Journal of Pharmacology and Experimental Therapeutics</i> , 2014, 349, 21-28.	1.3	7
46	Function of metabolic and organelle networks in crowded and organized media. <i>Frontiers in Physiology</i> , 2014, 5, 523.	1.3	13
47	Dynamics of Mitochondrial Redox and Energy Networks: Insights from an Experimentalâ€“Computational Synergy. <i>Springer Series in Biophysics</i> , 2014, , 115-144.	0.4	4
48	Integrating Mitochondrial Energetics, Redox and ROS Metabolic Networks: A Two-Compartment Model. <i>Biophysical Journal</i> , 2013, 104, 332-343.	0.2	94
49	A Computational Model of Reactive Oxygen Species and Redox Balance in Cardiac Mitochondria. <i>Biophysical Journal</i> , 2013, 105, 1045-1056.	0.2	55
50	Redox-Dependent Differential Optimization of Contractile Work in Cardiac Muscle from Diabetic Rat under Hyperglycemia. <i>Biophysical Journal</i> , 2013, 104, 303a.	0.2	1
51	Integrating Mitochondrial Energetics, Redox and Ros Metabolic Networks: A Two-Compartment Model. <i>Biophysical Journal</i> , 2013, 104, 657a.	0.2	1
52	Aldose Reductase Inhibition or Activation of Transketolase Offset Adverse Metabolic Remodeling Improving Function in Type 2 Diabetes Myocytes Exposed to Hyperglycemia. <i>Biophysical Journal</i> , 2013, 104, 159a.	0.2	1
53	Mechanistic Electron Transport Chain Model Explains ROS Production in Different Respiratory Modes. <i>Biophysical Journal</i> , 2013, 104, 304a-305a.	0.2	0
54	Bioenergetics of Contractile Function in Heart Trabeculae from Diabetic Rats. <i>Biophysical Journal</i> , 2012, 102, 571a.	0.2	1

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55	What yeast and cardiomyocytes share: ultradian oscillatory redox mechanisms of cellular coherence and survival. <i>Integrative Biology (United Kingdom)</i> , 2012, 4, 65-74.	0.6	33
56	Glutathione/thioredoxin systems modulate mitochondrial H ₂ O ₂ emission: An experimental-computational study. <i>Journal of General Physiology</i> , 2012, 139, 479-491.	0.9	180
57	Mitochondrial network energetics in the heart. <i>Wiley Interdisciplinary Reviews: Systems Biology and Medicine</i> , 2012, 4, 599-613.	6.6	25
58	Evidence for Chaos in Mitochondrial Dynamics. <i>Biophysical Journal</i> , 2012, 102, 572a.	0.2	0
59	GSH or Palmitate Preserves Mitochondrial Energetic/Redox Balance, Preventing Mechanical Dysfunction in Metabolically Challenged Myocytes/Hearts From Type 2 Diabetic Mice. <i>Diabetes</i> , 2012, 61, 3094-3105.	0.3	77
60	Computational Modeling of Mitochondrial Function. <i>Methods in Molecular Biology</i> , 2012, 810, 311-326.	0.4	21
61	Sodium Effects on Calcium Dynamics in Mitochondrial Ion Circuits. <i>Biophysical Journal</i> , 2011, 100, 461a.	0.2	0
62	Regional Mitochondrial Depolarization Causes Spontaneous Ventricular Arrhythmia in Cardiac Tissue. <i>Biophysical Journal</i> , 2011, 100, 435a-436a.	0.2	0
63	Mitochondrial Energetics, pH Regulation, and Ion Dynamics: A Computational-Experimental Approach. <i>Biophysical Journal</i> , 2011, 100, 2894-2903.	0.2	63
64	Alterations in Mitochondrial State 4 \uparrow 3 Transition Underlie Stress-Induced Energetic-Redox Imbalance and Myocyte Dysfunction in Diabetic Mice. <i>Biophysical Journal</i> , 2011, 100, 292a.	0.2	0
65	Mitochondrial Ca ²⁺ influx and efflux rates in guinea pig cardiac mitochondria: Low and high affinity effects of cyclosporine A. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , 2011, 1813, 1373-1381.	1.9	51
66	Integrative modeling of the cardiac ventricular myocyte. <i>Wiley Interdisciplinary Reviews: Systems Biology and Medicine</i> , 2011, 3, 392-413.	6.6	30
67	Metabolic control analysis applied to mitochondrial networks. , 2011, 2011, 4673-6.		1
68	Energetic performance is improved by specific activation of K ⁺ fluxes through KCa channels in heart mitochondria. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2010, 1797, 71-80.	0.5	81
69	Redox-optimized ROS balance: A unifying hypothesis. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2010, 1797, 865-877.	0.5	316
70	Redox-optimized mitochondrial ROS balance. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2010, 1797, 3.	0.5	0
71	A Reaction-Diffusion Model of ROS-Induced ROS Release in a Mitochondrial Network. <i>PLoS Computational Biology</i> , 2010, 6, e1000657.	1.5	131
72	Calcium sensitivity, force frequency relationship and cardiac troponin I: Critical role of PKA and PKC phosphorylation sites. <i>Journal of Molecular and Cellular Cardiology</i> , 2010, 48, 943-953.	0.9	48

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73	Calcium Sensitivity, Force Frequency Relation and Cardiac Troponin I: Critical Role of PKA and PKC Phosphorylation Sites. <i>Biophysical Journal</i> , 2010, 98, 356a.	0.2	0
74	Altered Mitochondrial Energetics and Increased ROS Generation Act Synergistically to Dampen β_2 -Adrenergic Stimulated Contractility in the Diabetic Heart. <i>Biophysical Journal</i> , 2010, 98, 549a.	0.2	0
75	Control and Regulation of Integrated Mitochondrial Function in Metabolic and Transport Networks. <i>International Journal of Molecular Sciences</i> , 2009, 10, 1500-1513.	1.8	25
76	From mitochondrial dynamics to arrhythmias. <i>International Journal of Biochemistry and Cell Biology</i> , 2009, 41, 1940-1948.	1.2	106
77	Control and Regulation of Mitochondrial Energetics in an Integrated Model of Cardiomyocyte Function. <i>Biophysical Journal</i> , 2009, 96, 2466-2478.	0.2	70
78	Modeling Cardiac Action Potential Shortening Driven by Oxidative Stress-Induced Mitochondrial Oscillations in Guinea Pig Cardiomyocytes. <i>Biophysical Journal</i> , 2009, 97, 1843-1852.	0.2	77
79	Control and Regulation of Mitochondrial Energetics in an Integrated Model of Cardiomyocyte Function. <i>Biophysical Journal</i> , 2009, 96, 242a.	0.2	0
80	Energetic Performance is Improved by Specific Activation of K ⁺ Fluxes through K _{Ca} Channels in Heart Mitochondria. <i>Biophysical Journal</i> , 2009, 96, 476a.	0.2	0
81	Mitochondrial Energetics During Transients Following Substrate And Ca ²⁺ Additions. Modeling And Experimental Studies. <i>Biophysical Journal</i> , 2009, 96, 243a-244a.	0.2	0
82	Effects Of Mitochondrial Depolarization On Cardiac Electrical Activity In An Integrated Multiscale Model Of The Myocardium. <i>Biophysical Journal</i> , 2009, 96, 663a-664a.	0.2	1
83	Biochemistry, Chaotic Dynamics, Noise, and Fractal Space in. , 2009, , 476-489.		7
84	Is There a Mitochondrial Clock?. , 2008, , 129-144.		5
85	From mitochondrial ion channels to arrhythmias in the heart: computational techniques to bridge the spatio-temporal scales. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2008, 366, 3381-3409.	1.6	126
86	The Scale-Free Dynamics of Eukaryotic Cells. <i>PLoS ONE</i> , 2008, 3, e3624.	1.1	66
87	Mitochondrial Oscillations in Physiology and Pathophysiology. <i>Advances in Experimental Medicine and Biology</i> , 2008, 641, 98-117.	0.8	113
88	Sequential Opening of Mitochondrial Ion Channels as a Function of Glutathione Redox Thiol Status. <i>Journal of Biological Chemistry</i> , 2007, 282, 21889-21900.	1.6	185
89	Single and cell population respiratory oscillations in yeast: A 2-photon scanning laser microscopy study. <i>FEBS Letters</i> , 2007, 581, 8-14.	1.3	50
90	Diallyl disulphide depletes glutathione in <i>Candida albicans</i> : oxidative stress-mediated cell death studied by two-photon microscopy. <i>Yeast</i> , 2007, 24, 695-706.	0.8	69

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91	Mitochondrial Ion Channels in Cardiac Function and Dysfunction. Novartis Foundation Symposium, 2007, 287, 140-156.	1.2	18
92	A Computational Model Integrating Electrophysiology, Contraction, and Mitochondrial Bioenergetics in the Ventricular Myocyte. Biophysical Journal, 2006, 91, 1564-1589.	0.2	198
93	The Fundamental Organization of Cardiac Mitochondria as a Network of Coupled Oscillators. Biophysical Journal, 2006, 91, 4317-4327.	0.2	121
94	Mitochondrial criticality: A new concept at the turning point of life or death. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2006, 1762, 232-240.	1.8	135
95	Fluorescent measurement of the intracellular pH during sporulation of <i>Saccharomyces cerevisiae</i> . FEMS Microbiology Letters, 2006, 153, 17-23.	0.7	6
96	Elevated Cytosolic Na ⁺ Decreases Mitochondrial Ca ²⁺ Uptake During Excitation-Contraction Coupling and Impairs Energetic Adaptation in Cardiac Myocytes. Circulation Research, 2006, 99, 172-182.	2.0	335
97	Mitochondrial Ion Channels: Gatekeepers of Life and Death. Physiology, 2005, 20, 303-315.	1.6	218
98	Using models of the myocyte for functional interpretation of cardiac proteomic data. Journal of Physiology, 2005, 563, 73-81.	1.3	19
99	Allyl alcohol and garlic (<i>Allium sativum</i>) extract produce oxidative stress in <i>Candida albicans</i> . Microbiology (United Kingdom), 2005, 151, 3257-3265.	0.7	83
100	Percolation and criticality in a mitochondrial network. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 4447-4452.	3.3	216
101	The fractal architecture of cytoplasmic organization: Scaling, kinetics and emergence in metabolic networks. Molecular and Cellular Biochemistry, 2004, 256, 169-184.	1.4	49
102	A Mitochondrial Oscillator Dependent on Reactive Oxygen Species. Biophysical Journal, 2004, 87, 2060-2073.	0.2	206
103	Ultrasensitive behavior in the synthesis of storage polysaccharides in cyanobacteria. Planta, 2003, 216, 969-975.	1.6	35
104	An Integrated Model of Cardiac Mitochondrial Energy Metabolism and Calcium Dynamics. Biophysical Journal, 2003, 84, 2734-2755.	0.2	345
105	Synchronized Whole Cell Oscillations in Mitochondrial Metabolism Triggered by a Local Release of Reactive Oxygen Species in Cardiac Myocytes. Journal of Biological Chemistry, 2003, 278, 44735-44744.	1.6	476
106	Coherent and robust modulation of a metabolic network by cytoskeletal organization and dynamics. Biophysical Chemistry, 2002, 97, 213-231.	1.5	29
107	I. Spatio-temporal patterns of soil microbial and enzymatic activities in an agricultural soil. Applied Soil Ecology, 2001, 18, 239-254.	2.1	136
108	Why Homeodynamics, Not Homeostasis?. Scientific World Journal, The, 2001, 1, 133-145.	0.8	115

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109	Involvement of Nitrogen Metabolism in the Triggering of Ethanol Fermentation in Aerobic Chemostat Cultures of <i>Saccharomyces cerevisiae</i> . <i>Metabolic Engineering</i> , 2001, 3, 250-264.	3.6	23
110	ULTRASENSITIVITY IN (SUPRA)MOLECULARLY ORGANIZED AND CROWDED ENVIRONMENTS. <i>Cell Biology International</i> , 2001, 25, 1091-1099.	1.4	17
111	Measurement of the glycogen synthetic pathway in permeabilized cells of cyanobacteria. <i>FEMS Microbiology Letters</i> , 2001, 194, 7-11.	0.7	12
112	A METHOD FOR QUANTIFYING RATES OF O ₂ CONSUMPTION AND CO ₂ PRODUCTION IN SOIL. <i>Soil Science</i> , 2001, 166, 68-77.	0.9	15
113	Dynamics of metabolism and its interactions with gene expression during sporulation in <i>Saccharomyces cerevisiae</i> . <i>Advances in Microbial Physiology</i> , 2000, 43, 75-115.	1.0	3
114	CHAOTIC DYNAMICS AND FRACTAL SPACE IN BIOCHEMISTRY: SIMPLICITY UNDERLIES COMPLEXITY. <i>Cell Biology International</i> , 2000, 24, 581-587.	1.4	35
115	Effects of Stress on Cellular Infrastructure and Metabolic Organization in Plant Cells. <i>International Review of Cytology</i> , 1999, 194, 239-273.	6.2	31
116	Quantitation of the Effects of Disruption of Catabolite (De)Repression Genes on the Cell Cycle Behavior of <i>Saccharomyces cerevisiae</i> . <i>Current Microbiology</i> , 1999, 38, 57-60.	1.0	8
117	Catabolite repression mutants of <i>Saccharomyces cerevisiae</i> show altered fermentative metabolism as well as cell cycle behavior in glucose-limited chemostat cultures. , 1998, 59, 203-213.		20
118	The onset of fermentative metabolism in continuous cultures depends on the catabolite repression properties of <i>saccharomyces cerevisiae</i> . <i>Enzyme and Microbial Technology</i> , 1998, 22, 705-712.	1.6	17
119	Modulation of sporulation and metabolic fluxes in <i>Saccharomyces cerevisiae</i> by 2 deoxy glucose. <i>Antonie Van Leeuwenhoek</i> , 1997, 72, 283-290.	0.7	6
120	Distributed control of the glycolytic flux in wild-type cells and catabolite repression mutants of <i>Saccharomyces cerevisiae</i> growing in carbon-limited chemostat cultures. <i>Enzyme and Microbial Technology</i> , 1997, 21, 596-602.	1.6	19
121	Metabolic Fluxes Regulate the Success of Sporulation in <i>Saccharomyces cerevisiae</i> . <i>Experimental Cell Research</i> , 1996, 222, 157-162.	1.2	7
122	Heterogeneous distribution and organization of cytoskeletal proteins drive differential modulation of metabolic fluxes. , 1996, 60, 271-278.		10
123	Metabolic rates during sporulation of <i>Saccharomyces cerevisiae</i> on acetate. <i>Antonie Van Leeuwenhoek</i> , 1996, 69, 257-265.	0.7	4
124	Fluxes of carbon, phosphorylation, and redox intermediates during growth of <i>saccharomyces cerevisiae</i> on different carbon sources. <i>Biotechnology and Bioengineering</i> , 1995, 47, 193-208.	1.7	86
125	Cell growth and differentiation from the perspective of dynamical organization of cellular and subcellular processes. <i>Progress in Biophysics and Molecular Biology</i> , 1995, 64, 55-79.	1.4	7
126	Carbon and Energetic Uncoupling Are Associated with Block of Division at Different Stages of the Cell Cycle in Several <i>cdc</i> Mutants of <i>Saccharomyces cerevisiae</i> . <i>Experimental Cell Research</i> , 1995, 217, 42-51.	1.2	15

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127	Spatio-temporal regulation of glycolysis and oxidative phosphorylation in vivo in tumor and yeast cells.. Cell Biology International, 1994, 18, 687-714.	1.4	23
128	Microtubular protein in its polymerized or nonpolymerized states differentially modulates in vitro and intracellular fluxes catalyzed by enzymes of carbon metabolism. Journal of Cellular Biochemistry, 1994, 55, 120-132.	1.2	30
129	Metabolic control analysis of glycolysis and branching to ethanol production in chemostat cultures of Saccharomyces cerevisiae under carbon, nitrogen, or phosphate limitations. Enzyme and Microbial Technology, 1994, 16, 761-770.	1.6	32
130	On the fractal nature of cytoplasm. FEBS Letters, 1994, 344, 1-4.	1.3	39
131	Altered topoisomerase activities may be involved in the regulation of DNA supercoiling in aerobic-anaerobic transitions in Escherichia coli. Molecular and Cellular Biochemistry, 1993, 126, 115-124.	1.4	18
132	An allometric interpretation of the spatio-temporal organization of molecular and cellular processes. Molecular and Cellular Biochemistry, 1993, 120, 1-13.	1.4	9
133	Fractal Organisation in Biological Macromolecular Lattices. Journal of Biomolecular Structure and Dynamics, 1992, 9, 1013-1024.	2.0	19
134	Linear nonequilibrium thermodynamics describes the dynamics of an autocatalytic system. Biophysical Journal, 1991, 60, 794-803.	0.2	34
135	Thermodynamic evaluation of energy metabolism in mixed substrate catabolism: Modeling studies of stationary and oscillatory states. Biotechnology and Bioengineering, 1991, 37, 197-204.	1.7	5
136	Thermodynamic and kinetic studies of a stoichiometric model of energetic metabolism under starvation conditions. FEMS Microbiology Letters, 1990, 66, 249-255.	0.7	12
137	Dynamical and hierarchical coupling. Biochimica Et Biophysica Acta - Bioenergetics, 1990, 1018, 142-146.	0.5	23
138	The regulation of plant cell growth: A bio-electromechanochemical model. Journal of Theoretical Biology, 1989, 138, 429-456.	0.8	8
139	Effect of phospholipids on the activity of sialosyl lactosylceramide (GM3): N-acetylgalactosaminyl transferase from chick embryo brain. Molecular and Cellular Biochemistry, 1989, 85, 9-17.	1.4	0
140	On the Network Properties of Mitochondria. , 0, , 111-135.		18