Necmettin Yildirim

List of Publications by Year
in descending order

24 papers	734 citations	1040056 9 h-index	677142 22 g-index
24 all docs	24 docs citations	24 times ranked	840 citing authors

#	Article	IF	Citations
1	Î²2-Adrenergic Receptor Signaling and Desensitization Elucidated by Quantitative Modeling of Real Time cAMP Dynamics. Journal of Biological Chemistry, 2008, 283, 2949-2961.	3.4	217
2	Feedback Regulation in the Lactose Operon: A Mathematical Modeling Study and Comparison with Experimental Data. Biophysical Journal, 2003, 84, 2841-2851.	0.5	201
3	Dynamics and bistability in a reduced model of thelacoperon. Chaos, 2004, 14, 279-292.	2.5	80
4	Regulators of G Protein Signaling and Transient Activation of Signaling. Journal of Biological Chemistry, 2003, 278, 46506-46515.	3.4	66
5	An improvement on Fibonacci search method in optimization theory. Applied Mathematics and Computation, 2004, 147, 893-901.	2.2	34
6	Modeling operon dynamics: the tryptophan and lactose operons as paradigms. Comptes Rendus - Biologies, 2004, 327, 211-224.	0.2	31
7	Parameter estimation of nonlinear models in biochemistry: a comparative study on optimization methods. Applied Mathematics and Computation, 2003, 140, 29-36.	2.2	20
8	Combined computational and experimental analysis reveals mitogen-activated protein kinaseâ€“mediated feedback phosphorylation as a mechanism for signaling specificity. Molecular Biology of the Cell, 2012, 23, 3899-3910.	2.1	17
9	Mathematical Modeling of RGS and G-Protein Regulation in Yeast. Methods in Enzymology, 2004, 389, 383-398.	1.0	12
10	An analysis of the kinetics of unstable enzymatic systems using MAPLE. Applied Mathematics and Computation, 2000, 112, 41-48.	2.2	7
11	Mathematical modeling of the low and high affinity arabinose transport systems in Escherichia coli. Molecular BioSystems, 2012, 8, 1319.	2.9	7
12	Derivation of conservation relationships for metabolic networks using MAPLE. Applied Mathematics and Computation, 2000, 112, 255-263.	2.2	6
13	Title is missing!. Journal of Mathematical Chemistry, 2002, 31, 121-130.	1.5	6
14	Application of GrÃ¶bner Bases theory to derive rate equations for enzyme catalysed reactions with two or more substrates or products. Applied Mathematics and Computation, 2003, 137, 67-76.	2.2	6
15	Deterministic and Stochastic Simulation and Analysis of Biochemical Reaction Networks. Methods in Enzymology, 2011, 487, 371-395.	1.0	4
16	Dynamics matter: differences and similarities between alternatively designed mechanisms. Molecular BioSystems, 2014, 10, 1948-1957.	2.9	4
17	Mathematical modeling deciphers the benefits of alternatively-designed conserved activatory and inhibitory gene circuits. Molecular BioSystems, 2015, 11, 2017-2030.	2.9	4
18	Mathematical modeling reveals differential regulation of MAPK activity by phosphatase proteins in the yeast pheromone response pathway. Molecular BioSystems, 2017, 13, 1323-1335.	2.9	4

#	Article	IF	Citations
19	Quasi-Steady State Kinetics of Simple Sequential Multienzyme Reactions with Single Substrates. Journal of Mathematical Chemistry, 2002, 32, 271-280.	1.5	3
20	Metabolic control analysis of trio enzymes system. Applied Mathematics and Computation, 2005, 170, 948-957.	2.2	3
21	Use of symbolic and numeric computation techniques in analysis of biochemical reaction networks. International Journal of Quantum Chemistry, 2006, 106, 256-265.	2.0	1
22	Differential transcriptional regulation byÂalternatively designed mechanisms: AÂmathematical modeling approach. In Silico Biology, 2017, 12, 95-127.	0.9	1
23	Response analysis in biochemical chain reactions with negative feedforward and feedbackward loops. Journal of Mathematical Chemistry, 2011, 49, 576-591.	1.5	0
24	A new mathematical model for the enzymatic kinetic resolution of racemates. Journal of Mathematical Chemistry, 2013, 51, 1532-1547.	1.5	0