Janos Toth

List of Publications by Year in descending order

33 papers	379 citations	840776 11 h-index	794594 19 g-index
34 all docs	34 docs citations	34 times ranked	218 citing authors

#	Article	IF	Citations
1	Automatic kinetic model generation and selection based on concentration versus time curves. International Journal of Chemical Kinetics, 2020, 52, 109-123.	1.6	3
2	Two Nested Limit Cycles in Two-Species Reactions. Mathematics, 2020, 8, 1658.	2.2	2
3	Realizations of kinetic differential equations. Mathematical Biosciences and Engineering, 2020, 17, 862-892.	1.9	12
4	On three genetic repressilator topologies. Reaction Kinetics, Mechanisms and Catalysis, 2019, 126, 3-30.	1.7	7
5	Controllability and reachability of reactions with temperature and inflow control. Fuel, 2018, 211, 906-911.	6.4	11
6	Time-Dependent Behavior of the Concentrations. , 2018, , 149-216.		0
7	Graphs of Reactions. , 2018, , 19-37.		0
8	Reaction Kinetics: Exercises, Programs and Theorems. , 2018, , .		11
9	Stationary Points. , 2018, , 115-147.		0
10	Qualitative analysis of a closed-loop model of tumor growth control. , 2018, , .		10
11	Global controllability of chemical reactions. Journal of Mathematical Chemistry, 2016, 54, 1327-1350.	1.5	14
12	Structural analysis of combustion mechanisms. Journal of Mathematical Chemistry, 2015, 53, 86-110.	1.5	2
13	An online benchmark system for image processing algorithms. , 2014, , .		2
14	An online system for algorithm benchmarking. , 2014, , .		0
15	Quadratic first integrals of kinetic differential equations. Journal of Mathematical Chemistry, 2014, 52, 93-114.	1.5	6
16	Cognitive visualization for the design of complex systems. , 2013, , .		1
17	An ensemble-based collaborative framework to support customized user needs. , 2012, , .		3
18	Microscopic reversibility or detailed balance in ion channel models. Journal of Mathematical Chemistry, 2012, 50, 1179-1199.	1.5	11

#	Article	IF	Citations
19	Detailed balance in ion channels: Application of Feinbergâ€™s theorem. Reaction Kinetics and Catalysis Letters, 2009, 96, 263-267.	0.6	8
20	n-Dimensional ratio-dependent predator-prey systems with memory. Differential Equations and Dynamical Systems, 2009, 17, 17-35.	1.0	10
21	Master Equations and Path-Integral Formulation of Variational Principles for Reactions. , 2005, , 315-338.		3
22	Decomposition of the permanganate/oxalic acid overall reaction to elementary steps based on integer programming theory. Physical Chemistry Chemical Physics, 2004, 6, 1236-1242.	2.8	21
23	No limit cycle in two species second order kinetics. Bulletin Des Sciences Mathematiques, 2003, 127, 222-230.	1.0	10
24	Variational nonequilibrium thermodynamics of reaction-diffusion systems. III. Progress variables and dissipation of energy and information. Journal of Chemical Physics, 2001, 115, 680-690.	3.0	8
25	Information potential and transition to criticality for certain two-species chemical systems. Physica A: Statistical Mechanics and Its Applications, 2000, 277, 455-468.	2.6	6
26	Variational nonequilibrium thermodynamics of reaction-diffusion systems. I. The information potential. Journal of Chemical Physics, 1999, 111, 7736-7747.	3.0	15
27	Variational nonequilibrium thermodynamics of reaction-diffusion systems. II. Path integrals, large fluctuations, and rate constants. Journal of Chemical Physics, 1999, 111, 7748-7757.	3.0	12
28	Dissipation of energy and of information in nonequilibrium reaction-diffusion systems. Physical Review E, 1998, 58, 5351-5354.	2.1	7
29	The Effect of Lumping and Expanding on Kinetic Differential Equations. SIAM Journal on Applied Mathematics, 1997, 57, 1531-1556.	1.8	66
30	Master Equation and Fokkerâ€“Planck Equation: Comparison of Entropy and of Rate Constants. Letters in Mathematical Physics, 1997, 40, 101-115.	1.1	11
31	Decay of the metastable state in a chemical system: Different predictions between discrete and continuous models. Letters in Mathematical Physics, 1996, 37, 285-292.	1.1	30
32	A general analysis of exact nonlinear lumping in chemical kinetics. Chemical Engineering Science, 1994, 49, 343-361.	3.8	63
33	Specification of oscillating chemical models starting from a given linearized form. Theoretica Chimica Acta, 1986, 70, 143-150.	0.8	11