Bogdan Nowakowski

List of Publications by Year
in descending order

41 papers	421 citations	759055 12 h-index	794469 19 g-index
41 all docs	41 docs citations	41 times ranked	228 citing authors

#	Article	IF	Citations
1	Stochastic approach to Fisher and Kolmogorov, Petrovskii, and Piskunov wave fronts for species with different diffusivities in dilute and concentrated solutions. Physica A: Statistical Mechanics and Its Applications, 2020, 558, 124954.	1.2	1
2	Elimination of fast variables in stochastic nonlinear kinetics. Physical Chemistry Chemical Physics, 2020, 22, 20801-20814.	1.3	0
3	DSMC simulations of Turing patterns in concentrated growing systems. AIP Conference Proceedings, 2019, , .	0.3	0
4	Fisher-Kolmogorov-Petrovskii-Piskunov wave front as a sensor of perturbed diffusion in concentrated systems. Physical Review E, 2019, 99, 022205.	0.8	5
5	Stochastic transitions between attractors in a tristable thermochemical system: competition between stable states. Reaction Kinetics, Mechanisms and Catalysis, 2018, 123, 189-199.	0.8	3
6	Scaling of submicrometric Turing patterns in concentrated growing systems. Physical Review E, 2018, 98, .	0.8	5
7	Sensing Parameters of a Time Dependent Inflow with an Enzymatic Reaction. Emergence, Complexity and Computation, 2017, , 85-104.	0.2	1
8	Modeling somite scaling in small embryos in the framework of Turing patterns. Physical Review E, 2016, 93, 042402.	0.8	9
9	How many enzyme molecules are needed for discrimination oriented applications?. Physical Chemistry Chemical Physics, 2016, 18, 20518-20527.	1.3	1
10	New type of the source of travelling impulses in two-variable model of reactionâ€"diffusion system. Reaction Kinetics, Mechanisms and Catalysis, 2016, 118, 115-127.	0.8	2
11	Minimum size for a nanoscale temperature discriminator based on a thermochemical system. Physical Chemistry Chemical Physics, 2016, 18, 4952-4960.	1.3	1
12	Discrimination of time-dependent inflow properties with a cooperative dynamical system. Chaos, 2015, 25, 103115.	1.0	8
13	Nanoscale Turing structures. Journal of Chemical Physics, 2014, 141, 124106.	1.2	9
14	Effect of a Local Source or Sink of Inhibitor on Turing Patterns. Communications in Theoretical Physics, 2014, 62, 622-630.	1.1	4
15	Reaction-diffusion scheme for the clock and wavefront mechanism of pattern formation. European Physical Journal B, 2014, 87, 1.	0.6	4
16	Information resonance in a model excitable system. European Physical Journal B, 2013, 86, 1.	0.6	2
17	Distributions of first passage times in a bistable thermochemical system with a low temperature stationary state. European Physical Journal B, 2013, 86, 1.	0.6	5
18	Nonlinear hydrodynamic corrections to supersonic Fâ€"KPP wave fronts. Physica D: Nonlinear Phenomena, 2012, 241, 461-471.	1.3	0

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19	Do the internal fluctuations blur or enhance axial segmentation?. Europhysics Letters, 2011, 94, 48004.	0.7	23
20	Coherence resonances in excitable thermochemical systems induced by scaled reaction heat. European Physical Journal B, 2011, 84, 137-145.	0.6	7
21	Coherence resonances in an excitable thermochemical system with multiple stationary states. Physical Chemistry Chemical Physics, 2010, 12, 13224.	1.3	9
22	Stochastic transitions through unstable limit cycles in a model of bistable thermochemical system. Physical Chemistry Chemical Physics, 2008, 10, 289-296.	1.3	22
23	Sensitivity of an exothermic chemical wave front to a departure from local equilibrium. Journal of Chemical Physics, 2007, 127, 174712.	1.2	4
24	Multipeak Distributions of First Passage Times in Bistable Dynamics in a Model of a Thermochemical System. ChemPhysChem, 2006, 7, 502-507.	1.0	9
25	Coherence resonances in an autonomous thermochemical model with internal fluctuations. Europhysics Letters, 2005, 71, 530-535.	0.7	5
26	Master Equation Simulations of Bistable and Excitable Dynamics in a Model of a Thermochemical System. Journal of Physical Chemistry A, 2005, 109, 3134-3138.	1.1	14
27	Fluctuation-induced and Nonequilibrium-induced Bifurcations in a Thermochemical System. Molecular Simulation, 2004, 30, 773-780.	0.9	27
28	Enhanced sensitivity of a thermochemical system to microscopic perturbations. Physica A: Statistical Mechanics and Its Applications, 2004, 331, 409-421.	1.2	12
29	The influence of gas phase composition on the process of Auâ€“Hg amalgam formation. Applied Surface Science, 2003, 206, 78-89.	3.1	28
30	Master equation simulations of a model of a thermochemical system. Physical Review E, 2003, 68, 036218.	0.8	18
31	Thermal explosion near bifurcation: stochastic features of ignition. Physica A: Statistical Mechanics and Its Applications, 2002, 311, 80-96.	1.2	19
32	Nonstandard reaction kinetics: microscopic simulations of system with product removal. Chemical Physics, 2001, 270, 287-292.	0.9	0
33	Macroscopic effects of the perturbation of the particle velocity distribution in a trigger wave. Physical Review E, 2000, 62, 3156-3166.	0.8	12
34	Different description levels of chemical wave front and propagation speed selection. Journal of Chemical Physics, 1999, 111, 6190-6196.	1.2	22
35	Perturbation of particle velocity distribution in a bistable chemical system. Physica A: Statistical Mechanics and Its Applications, 1999, 271, 87-101.	1.2	11
36	Microscopic simulation of a wave front: Chemically induced perturbation of particle velocity distribution. Europhysics Letters, 1998, 41, 455-460.	0.7	17

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37	Solution of the Fokker-Planck equation for reactive Rayleigh gas. Physical Review E, 1996, 53, 2964-2967.	0.8	9
38	The kinetic theory of the effect of chemical reaction on diffusion of a trace gas. Journal of Chemical Physics, 1994, 100, 7602-7609.	1.2	12
39	The thermalized Fokkerâ€"Planck equation. Journal of Chemical Physics, 1993, 98, 8963-8969.	1.2	13
40	Brownian coagulation of aerosol particles by Monte Carlo simulation. Journal of Colloid and Interface Science, 1981, 83, 614-622.	5.0	15
41	Condensation rate of trace vapor on Knudsen aerosols from the solution of the Boltzmann equation. Journal of Colloid and Interface Science, 1979, 72, 113-122.	5.0	53