Bogdan Nowakowski

List of Publications by Year
in descending order

41	421	759055 12	794469 19
papers	citations	h-index	g-index

41	41	41	228
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	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
2	The influence of gas phase composition on the process of Auâ€“Hg amalgam formation. Applied Surface Science, 2003, 206, 78-89.	3.1	28
3	Fluctuation-induced and Nonequilibrium-induced Bifurcations in a Thermochemical System. Molecular Simulation, 2004, 30, 773-780.	0.9	27
4	Do the internal fluctuations blur or enhance axial segmentation?. Europhysics Letters, 2011, 94, 48004.	0.7	23
5	Different description levels of chemical wave front and propagation speed selection. Journal of Chemical Physics, 1999, 111, 6190-6196.	1.2	22
6	Stochastic transitions through unstable limit cycles in a model of bistable thermochemical system. Physical Chemistry Chemical Physics, 2008, 10, 289-296.	1.3	22
7	Thermal explosion near bifurcation: stochastic features of ignition. Physica A: Statistical Mechanics and Its Applications, 2002, 311, 80-96.	1.2	19
8	Master equation simulations of a model of a thermochemical system. Physical Review E, 2003, 68, 036218.	0.8	18
9	Microscopic simulation of a wave front: Chemically induced perturbation of particle velocity distribution. Europhysics Letters, 1998, 41, 455-460.	0.7	17
10	Brownian coagulation of aerosol particles by Monte Carlo simulation. Journal of Colloid and Interface Science, 1981, 83, 614-622.	5.0	15
11	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
12	The thermalized Fokkerâ€“Planck equation. Journal of Chemical Physics, 1993, 98, 8963-8969.	1.2	13
13	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
14	Macroscopic effects of the perturbation of the particle velocity distribution in a trigger wave. Physical Review E, 2000, 62, 3156-3166.	0.8	12
15	Enhanced sensitivity of a thermochemical system to microscopic perturbations. Physica A: Statistical Mechanics and Its Applications, 2004, 331, 409-421.	1.2	12
16	Perturbation of particle velocity distribution in a bistable chemical system. Physica A: Statistical Mechanics and Its Applications, 1999, 271, 87-101.	1.2	11
17	Solution of the Fokker-Planck equation for reactive Rayleigh gas. Physical Review E, 1996, 53, 2964-2967.	0.8	9
18	Multipeak Distributions of First Passage Times in Bistable Dynamics in a Model of a Thermochemical System. ChemPhysChem, 2006, 7, 502-507.	1.0	9

#	Article	IF	Citations
19	Coherence resonances in an excitable thermochemical system with multiple stationary states. Physical Chemistry Chemical Physics, 2010, 12, 13224.	1.3	9
20	Nanoscale Turing structures. Journal of Chemical Physics, 2014, 141, 124106.	1.2	9
21	Modeling somite scaling in small embryos in the framework of Turing patterns. Physical Review E, 2016, 93, 042402.	0.8	9
22	Discrimination of time-dependent inflow properties with a cooperative dynamical system. Chaos, 2015, 25, 103115.	1.0	8
23	Coherence resonances in excitable thermochemical systems induced by scaled reaction heat. European Physical Journal B, 2011, 84, 137-145.	0.6	7
24	Coherence resonances in an autonomous thermochemical model with internal fluctuations. Europhysics Letters, 2005, 71, 530-535.	0.7	5
25	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
26	Scaling of submicrometric Turing patterns in concentrated growing systems. Physical Review E, 2018, 98, .	0.8	5
27	Fisher-Kolmogorov-Petrovskii-Piskunov wave front as a sensor of perturbed diffusion in concentrated systems. Physical Review E, 2019, 99, 022205.	0.8	5
28	Sensitivity of an exothermic chemical wave front to a departure from local equilibrium. Journal of Chemical Physics, 2007, 127, 174712.	1.2	4
29	Effect of a Local Source or Sink of Inhibitor on Turing Patterns. Communications in Theoretical Physics, 2014, 62, 622-630.	1.1	4
30	Reaction-diffusion scheme for the clock and wavefront mechanism of pattern formation. European Physical Journal B, 2014, 87, 1.	0.6	4
31	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
32	Information resonance in a model excitable system. European Physical Journal B, 2013, 86, 1.	0.6	2
33	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
34	How many enzyme molecules are needed for discrimination oriented applications?. Physical Chemistry Chemical Physics, 2016, 18, 20518-20527.	1.3	1
35	Minimum size for a nanoscale temperature discriminator based on a thermochemical system. Physical Chemistry Chemical Physics, 2016, 18, 4952-4960.	1.3	1
36	Sensing Parameters of a Time Dependent Inflow with an Enzymatic Reaction. Emergence, Complexity and Computation, 2017, , 85-104.	0.2	1

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37	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
38	Nonstandard reaction kinetics: microscopic simulations of system with product removal. Chemical Physics, 2001, 270, 287-292.	0.9	0
39	Nonlinear hydrodynamic corrections to supersonic Fâ€“KPP wave fronts. Physica D: Nonlinear Phenomena, 2012, 241, 461-471.	1.3	0
40	DSMC simulations of Turing patterns in concentrated growing systems. AIP Conference Proceedings, 2019, , .	0.3	0
41	Elimination of fast variables in stochastic nonlinear kinetics. Physical Chemistry Chemical Physics, 2020, 22, 20801-20814.	1.3	0