Andrey A Polezhaev

List of Publications by Year
in descending order

42	438	858243 12	843174 20
papers	citations	h-index	g-index

47	47	47	254
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Modeling of wave patterns at the combustion front. Izvestiya Vysshikh Uchebnykh Zavedeniy Prikladnaya Nelineynaya Dinamika, 2021, 29, 538-548.	0.1	1
2	Combustion wave in a two-layer solid fuel system. Applied Mathematical Modelling, 2020, 77, 1082-1094.	2.2	3
3	Mathematical modeling of spatiotemporal patterns formed at a traveling reaction front. Chaos, 2020, 30, 083147.	1.0	1
4	Widening the criteria for emergence of Turing patterns. Chaos, 2020, 30, 033106.	1.0	4
5	Investigation of the mechanism of emergence of autowave structures at the reaction front. Physical Review E, 2019, 99, 042215.	0.8	2
6	Spirals, Their Types and Peculiarities. The Frontiers Collection, 2019, , 91-112.	0.1	2
7	Study of the Mechanism of the Autowave Structure Formation at the Reaction Front. Bulletin of the Lebedev Physics Institute, 2018, 45, 165-169.	0.1	3
8	Propagation of combustion waves in the shellâ€"core energetic materials with external heat losses. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2017, 473, 20160937.	1.0	0
9	Pattern formation in a reaction-diffusion system of Fitzhugh-Nagumo type before the onset of subcritical Turing bifurcation. Physical Review E, 2017, 95, 052208.	0.8	13
10	Stabilization of combustion wave through the competitive endothermic reaction. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2015, 471, 20150293.	1.0	5
11	On the Mechanisms for Formation of Segmented Waves in Active Media. Communications in Computer and Information Science, 2014, , 341-348.	0.4	0
12	Analysing the stability of premixed rich hydrogenâ€"air flame with the use of two-step models. Combustion and Flame, 2013, 160, 1060-1069.	2.8	14
13	Bistability of flame propagation in a model with competing exothermic reactions. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2013, 469, 20130315.	1.0	10
14	Stability of combustion waves in the Zeldovichâ€"LiÃ±Ã¡n model. Combustion and Flame, 2012, 159, 1185-1196.	2.8	11
15	Oscillatory thermal-diffusive instability of combustion waves in a model with chain-branching reaction and heat loss. Combustion Theory and Modelling, 2011, 15, 385-407.	1.0	12
16	Pulsating instabilities in the Zeldovichâ€"LiÃ±Ã¡n model. Journal of Mathematical Chemistry, 2011, 49, 1054-1070.	0.7	1
17	Autowaves in the Model of Infiltrative Tumour Growth with Migration-Proliferation Dichotomy. Mathematical Modelling of Natural Phenomena, 2011, 6, 27-38.	0.9	14
18	Period doubling and chaotic transient in a model of chain-branching combustion wave propagation. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2010, 466, 2747-2769.	1.0	19

#	Article	IF	Citations
19	PULSATING INSTABILITIES OF COMBUSTION WAVES IN A CHAIN-BRANCHING REACTION MODEL. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2009, 19, 873-887.	0.7	11
20	Travelling Waves in a Two-Step Chain Branching Model with Heat Loss. Chemical Product and Process Modeling, 2009, 4, .	0.5	0
21	Autowaves in a model of invasive tumor growth. Biophysics (Russian Federation), 2009, 54, 232-237.	0.2	6
22	The effect of Lewis number variation on combustion waves in a model with chain-branching reaction. Journal of Mathematical Chemistry, 2008, 44, 816-830.	0.7	15
23	Spatial patterns formed by chemotactic bacteria Escherichia coli. International Journal of Developmental Biology, 2006, 50, 309-314.	0.3	35
24	Transition from an excitable to an oscillatory statein Dictyostelium discoideum. IET Systems Biology, 2005, 152, 75.	2.0	5
25	Light-triggered pH Banding Profile in Chara Cells Revealed with a Scanning pH Microprobe and its Relation to Self-Organization Phenomena. Journal of Theoretical Biology, 2001, 212, 275-294.	0.8	42
26	The Role of Cell Motility in Metastatic Cell Dominance Phenomenon: Analysis by a Mathematical Model. Journal of Theoretical Medicine, 2000, 3, 63-77.	0.5	5
27	Destabilization of cell aggregation under nonstationary conditions. Physical Review E, 1998, 58, 6328-6332.	0.8	6
28	Catastrophic extinction, noiseâ€stabilized turbulence and unpredictability of competition in a modified Volterraâ€“Lotka model. Chaos, 1996, 6, 78-86.	1.0	2
29	Phase waves in oscillatory media. Physica D: Nonlinear Phenomena, 1995, 84, 253-259.	1.3	3
30	MATHEMATICAL MODELLING OF THE MECHANISM OF VERTEBRATE SOMITIC SEGMENTATION. Journal of Biological Systems, 1995, 03, 1041-1051.	0.5	6
31	Complexity of precipitation patterns: Comparison of simulation with experiment. Chaos, 1994, 4, 631-636.	1.0	53
32	Nonlinear dynamics of the distributed biochemical systems functioning in the dissipative structure formation mode. Biological Cybernetics, 1992, 68, 53-62.	0.6	5
33	A mathematical model of the mechanism of vertebrate somitic segmentation. Journal of Theoretical Biology, 1992, 156, 169-181.	0.8	16
34	A model of pattern formation by precipitation. Physica D: Nonlinear Phenomena, 1991, 54, 160-170.	1.3	48
35	Mathematical modelling of intercellular regulation causing the formation of spatial structures in bacterial colonies. Journal of Theoretical Biology, 1988, 135, 323-341.	0.8	12
36	On the possibility of reduction of dissipative structure models to a simple form. BioSystems, 1985, 18, 185-192.	0.9	0

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37	Cell surface and cell division. Cell Biophysics, 1982, 4, 143-161.	0.4	8
38	On the possible mechanism of cell cycle synchronization. Biological Cybernetics, 1981, 41, 81-89.	0.6	1
39	On kinetics of phase transitions in cell membranes. BioSystems, 1981, 13, 171-179.	0.9	4
40	Influence of temperature on cell membranes and cell cycles of mammals. BioSystems, 1979, 11, 287-294.	0.9	2
41	Hysteresis effects in hydrocarbon oxidation reactions. Bulletin of the Academy of Sciences of the USSR Division of Chemical Science, 1979, 28, 1122-1125.	0.0	0
42	A mathematical model of periodic processes in membranes (with application to cell cycle regulation). BioSystems, 1977, 9, 187-193.	0.9	38