

Alexander Nikolaevich Gorban

List of Publications by Year in descending order

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199
papers

5,384
citations

81743

39
h-index

123241

61
g-index

208
all docs

208
docs citations

208
times ranked

3802
citing authors

#	ARTICLE	IF	CITATIONS
1	A random six-phase switch regulates pneumococcal virulence via global epigenetic changes. Nature Communications, 2014, 5, 5055.	5.8	264
2	Method of invariant manifold for chemical kinetics. Chemical Engineering Science, 2003, 58, 4751-4768.	1.9	208
3	Single-cell trajectories reconstruction, exploration and mapping of omics data with STREAM. Nature Communications, 2019, 10, 1903.	5.8	198
4	Limits of the Turbine Efficiency for Free Fluid Flow. Journal of Energy Resources Technology, Transactions of the ASME, 2001, 123, 311-317.	1.4	168
5	Maximum Entropy Principle for Lattice Kinetic Equations. Physical Review Letters, 1998, 81, 6-9.	2.9	145
6	Invariant Manifolds for Physical and Chemical Kinetics. Lecture Notes in Physics, 2005, , .	0.3	129
7	Constructive methods of invariant manifolds for kinetic problems. Physics Reports, 2004, 396, 197-403.	10.3	128
8	PRINCIPAL MANIFOLDS AND GRAPHS IN PRACTICE: FROM MOLECULAR BIOLOGY TO DYNAMICAL SYSTEMS. International Journal of Neural Systems, 2010, 20, 219-232.	3.2	102
9	Kinetic signatures of microRNA modes of action. Rna, 2012, 18, 1635-1655.	1.6	99
10	Approximation with random bases: Pro et Contra. Information Sciences, 2016, 364-365, 129-145.	4.0	93
11	Robust simplifications of multiscale biochemical networks. BMC Systems Biology, 2008, 2, 86.	3.0	90
12	Blessing of dimensionality: mathematical foundations of the statistical physics of data. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2018, 376, 20170237.	1.6	89
13	Correlations, risk and crisis: From physiology to finance. Physica A: Statistical Mechanics and Its Applications, 2010, 389, 3193-3217.	1.2	86
14	Reduction of dynamical biochemical reactions networks in computational biology. Frontiers in Genetics, 2012, 3, 131.	1.1	78
15	Entropy: The Markov Ordering Approach. Entropy, 2010, 12, 1145-1193.	1.1	75
16	Invariant grids for reaction kinetics. Physica A: Statistical Mechanics and Its Applications, 2004, 333, 106-154.	1.2	70
17	Method of invariant manifolds and regularization of acoustic spectra. Transport Theory and Statistical Physics, 1994, 23, 559-632.	0.4	67
18	Independent Component Analysis for Unraveling the Complexity of Cancer Omics Datasets. International Journal of Molecular Sciences, 2019, 20, 4414.	1.8	62

#	ARTICLE	IF	CITATIONS
19	Selection Theorem for Systems with Inheritance. <i>Mathematical Modelling of Natural Phenomena</i> , 2007, 2, 1-45.	0.9	58
20	Asymptotology of chemical reaction networks. <i>Chemical Engineering Science</i> , 2010, 65, 2310-2324.	1.9	58
21	Short-Wave Limit of Hydrodynamics: A Soluble Example. <i>Physical Review Letters</i> , 1996, 77, 282-285.	2.9	57
22	General approach to constructing models of the Boltzmann equation. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1994, 206, 401-420.	1.2	56
23	Law of the Minimum Paradoxes. <i>Bulletin of Mathematical Biology</i> , 2011, 73, 2013-2044.	0.9	56
24	Stability and stabilization of the lattice Boltzmann method. <i>Physical Review E</i> , 2007, 75, 036711.	0.8	55
25	Quasichemical Models of Multicomponent Nonlinear Diffusion. <i>Mathematical Modelling of Natural Phenomena</i> , 2011, 6, 184-262.	0.9	55
26	Corrections and enhancements of quasi-equilibrium states. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2001, 96, 203-219.	1.0	54
27	The Michaelis-Menten-Stueckelberg Theorem. <i>Entropy</i> , 2011, 13, 966-1019.	1.1	54
28	Multivariate Gaussian and Student-t process regression for multi-output prediction. <i>Neural Computing and Applications</i> , 2020, 32, 3005-3028.	3.2	53
29	Dynamic correction to moment approximations. <i>Physical Review E</i> , 1998, 57, 1668-1672.	0.8	52
30	Correction of AI systems by linear discriminants: Probabilistic foundations. <i>Information Sciences</i> , 2018, 466, 303-322.	4.0	51
31	Elastic Principal Graphs and Manifolds and their Practical Applications. <i>Computing (Vienna/New York)</i> , 2005, 75, 359-379.	3.2	50
32	Extended detailed balance for systems with irreversible reactions. <i>Chemical Engineering Science</i> , 2011, 66, 5388-5399.	1.9	48
33	SOM: Stochastic initialization versus principal components. <i>Information Sciences</i> , 2016, 364-365, 213-221.	4.0	48
34	How Deep Should be the Depth of Convolutional Neural Networks: a Backyard Dog Case Study. <i>Cognitive Computation</i> , 2020, 12, 388-397.	3.6	48
35	Hydrodynamics from Grad's equations: What can we learn from exact solutions?. <i>Annalen Der Physik</i> , 2002, 11, 783-833.	0.9	47
36	Principal Graphs and Manifolds. , 2010, , 28-59.		46

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37	The unreasonable effectiveness of small neural ensembles in high-dimensional brain. <i>Physics of Life Reviews</i> , 2019, 29, 55-88.	1.5	46
38	Quasi-equilibrium lattice Boltzmann method. <i>European Physical Journal B</i> , 2007, 56, 135-139.	0.6	45
39	Robust and Scalable Learning of Complex Intrinsic Dataset Geometry via ElPiGraph. <i>Entropy</i> , 2020, 22, 296.	1.1	45
40	Thermodynamic parameterization. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1992, 190, 393-404.	1.2	43
41	Hilbert's 6th Problem: exact and approximate hydrodynamic manifolds for kinetic equations. <i>Bulletin of the American Mathematical Society</i> , 2013, 51, 187-246.	0.8	43
42	Modeling Working Memory in a Spiking Neuron Network Accompanied by Astrocytes. <i>Frontiers in Cellular Neuroscience</i> , 2021, 15, 631485.	1.8	43
43	Automatic short answer grading and feedback using text mining methods. <i>Procedia Computer Science</i> , 2020, 169, 726-743.	1.2	42
44	Stochastic separation theorems. <i>Neural Networks</i> , 2017, 94, 255-259.	3.3	41
45	Dynamic and thermodynamic models of adaptation. <i>Physics of Life Reviews</i> , 2021, 37, 17-64.	1.5	41
46	Nonequilibrium entropy limiters in lattice Boltzmann methods. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2008, 387, 385-406.	1.2	40
47	Scikit-Dimension: A Python Package for Intrinsic Dimension Estimation. <i>Entropy</i> , 2021, 23, 1368.	1.1	40
48	Reduced description in the reaction kinetics. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2000, 275, 361-379.	1.2	39
49	Family of additive entropy functions out of thermodynamic limit. <i>Physical Review E</i> , 2003, 67, 016104.	0.8	39
50	Handling missing data in large healthcare dataset: A case study of unknown trauma outcomes. <i>Computers in Biology and Medicine</i> , 2016, 75, 203-216.	3.9	39
51	Approximation of continuous functions of several variables by an arbitrary nonlinear continuous function of one variable, linear functions, and their superpositions. <i>Applied Mathematics Letters</i> , 1998, 11, 45-49.	1.5	37
52	Dynamical modeling of microRNA action on the protein translation process. <i>BMC Systems Biology</i> , 2010, 4, 13.	3.0	37
53	Model reduction in chemical dynamics: slow invariant manifolds, singular perturbations, thermodynamic estimates, and analysis of reaction graph. <i>Current Opinion in Chemical Engineering</i> , 2018, 21, 48-59.	3.8	37
54	Chapter 3 Dynamic and Static Limitation in Multiscale Reaction Networks, Revisited. <i>Advances in Chemical Engineering</i> , 2008, , 103-173.	0.5	36

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55	Reciprocal relations between kinetic curves. <i>Europhysics Letters</i> , 2011, 93, 20004.	0.7	36
56	High-Dimensional Brain in a High-Dimensional World: Blessing of Dimensionality. <i>Entropy</i> , 2020, 22, 82.	1.1	35
57	Functional CT imaging for identification of the spatial determinants of small-airways disease in adults with asthma. <i>Journal of Allergy and Clinical Immunology</i> , 2019, 144, 83-93.	1.5	34
58	Coupling of the model reduction technique with the lattice Boltzmann method for combustion simulations. <i>Combustion and Flame</i> , 2010, 157, 1833-1849.	2.8	33
59	High-Dimensional Brain: A Tool for Encoding and Rapid Learning of Memories by Single Neurons. <i>Bulletin of Mathematical Biology</i> , 2019, 81, 4856-4888.	0.9	32
60	Evolution of adaptation mechanisms: Adaptation energy, stress, and oscillating death. <i>Journal of Theoretical Biology</i> , 2016, 405, 127-139.	0.8	31
61	The Five Factor Model of Personality and Evaluation of Drug Consumption Risk. <i>Studies in Classification, Data Analysis, and Knowledge Organization</i> , 2017, , 231-242.	0.1	31
62	Ehrenfest's argument extended to a formalism of nonequilibrium thermodynamics. <i>Physical Review E</i> , 2001, 63, 066124.	0.8	30
63	Topological grammars for data approximation. <i>Applied Mathematics Letters</i> , 2007, 20, 382-386.	1.5	30
64	Maximum Entropy Method in Analysis of Genetic Text and Measurement of its Information Content. <i>Open Systems and Information Dynamics</i> , 1998, 5, 265-278.	0.5	29
65	Structure and approximations of the chapman-enskog expansion for the linearized grad equations. <i>Transport Theory and Statistical Physics</i> , 1992, 21, 101-117.	0.4	28
66	Thermodynamics in the limit of irreversible reactions. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2013, 392, 1318-1335.	1.2	28
67	Combustion simulation via lattice Boltzmann and reduced chemical kinetics. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2009, 2009, P06013.	0.9	27
68	Three Waves of Chemical Dynamics. <i>Mathematical Modelling of Natural Phenomena</i> , 2015, 10, 1-5.	0.9	26
69	Scattering rates versus moments: Alternative Grad equations. <i>Physical Review E</i> , 1996, 54, R3109-R3112.	0.8	25
70	Stabilization of the lattice Boltzmann method using the Ehrenfest's coarse-graining idea. <i>Physical Review E</i> , 2006, 74, 037703.	0.8	25
71	Mathematical Modeling of microRNA-Mediated Mechanisms of Translation Repression. <i>Advances in Experimental Medicine and Biology</i> , 2013, 774, 189-224.	0.8	25
72	Enhancement of the stability of lattice Boltzmann methods by dissipation control. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2014, 414, 285-299.	1.2	25

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73	Quasi-equilibrium closure hierarchies for the Boltzmann equation. Physica A: Statistical Mechanics and Its Applications, 2006, 360, 325-364.	1.2	24
74	Uniqueness of thermodynamic projector and kinetic basis of molecular individualism. Physica A: Statistical Mechanics and Its Applications, 2004, 336, 391-432.	1.2	23
75	Duality in nonextensive statistical mechanics. Physical Review E, 2002, 65, 036128.	0.8	22
76	Relaxational trajectories: global approximations. Physica A: Statistical Mechanics and Its Applications, 1996, 231, 648-672.	1.2	21
77	The general approximation theorem. , 0, , .		21
78	The Blessing of Dimensionality: Separation Theorems in the Thermodynamic Limit**The work is partially supported by Innovate UK, Technology Strategy Board, Knowledge Transfer Partnership grant KTP009890. IFAC-PapersOnLine, 2016, 49, 64-69.	0.5	21
79	Fractional Norms and Quasinorms Do Not Help to Overcome the Curse of Dimensionality. Entropy, 2020, 22, 1105.	1.1	21
80	Title is missing!. Open Systems and Information Dynamics, 2000, 7, 1-17.	0.5	20
81	Irreversibility in the short memory approximation. Physica A: Statistical Mechanics and Its Applications, 2003, 327, 399-424.	1.2	20
82	Codon usage trajectories and 7-cluster structure of 143 complete bacterial genomic sequences. Physica A: Statistical Mechanics and Its Applications, 2005, 353, 365-387.	1.2	20
83	Dynamical robustness of biological networks with hierarchical distribution of time scales. IET Systems Biology, 2007, 1, 238-246.	0.8	20
84	Knowledge Transfer Between Artificial Intelligence Systems. Frontiers in Neurorobotics, 2018, 12, 49.	1.6	20
85	Trajectories, bifurcations, and pseudo-time in large clinical datasets: applications to myocardial infarction and diabetes data. GigaScience, 2020, 9, .	3.3	20
86	Astrocytes mediate analogous memory in a multi-layer neuron-astrocyte network. Neural Computing and Applications, 2022, 34, 9147-9160.	3.2	20
87	Description of nonisothermal reactions in terms of Marcelin-de-Donder kinetics and its generalizations. Reaction Kinetics and Catalysis Letters, 1982, 20, 261-265.	0.6	19
88	One-trial correction of legacy AI systems and stochastic separation theorems. Information Sciences, 2019, 484, 237-254.	4.0	19
89	Fast and user-friendly non-linear principal manifold learning by method of elastic maps. , 2015, , .		18
90	On Adversarial Examples and Stealth Attacks in Artificial Intelligence Systems. , 2020, , .		18

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91	Fluorescence-based assay as a new screening tool for toxic chemicals. <i>Scientific Reports</i> , 2016, 6, 33922.	1.6	17
92	Hilbert's sixth problem: the endless road to rigour. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2018, 376, 20170238.	1.6	16
93	Application of the method of elastic maps in analysis of genetic texts. , 0, , .		15
94	Efficient simulations of detailed combustion fields via the lattice Boltzmann method. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 2011, 21, 494-517.	1.6	15
95	Maxallent : Maximizers of all entropies and uncertainty of uncertainty. <i>Computers and Mathematics With Applications</i> , 2013, 65, 1438-1456.	1.4	15
96	General H-theorem and Entropies that Violate the Second Law. <i>Entropy</i> , 2014, 16, 2408-2432.	1.1	14
97	Detailed balance in micro- and macrokinetics and micro-distinguishability of macro-processes. <i>Results in Physics</i> , 2014, 4, 142-147.	2.0	14
98	Elastic Maps and Nets for Approximating Principal Manifolds and Their Application to Microarray Data Visualization. <i>Lecture Notes in Computational Science and Engineering</i> , 2008, , 96-130.	0.1	14
99	Marcelin-de Donder kinetics near equilibrium. <i>Reaction Kinetics and Catalysis Letters</i> , 1979, 12, 19-23.	0.6	13
100	The Filling of Gaps in Geophysical Time Series by Artificial Neural Networks. <i>Radiocarbon</i> , 2001, 43, 365-371.	0.8	13
101	Macroscopic dynamics through coarse-graining: A solvable example. <i>Physical Review E</i> , 2002, 65, 026116.	0.8	13
102	Order-disorder separation: Geometric revision. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2007, 374, 85-102.	1.2	13
103	Macroscopic clusters induced by diffusion in catalytic oxidation reactions. <i>Chemical Engineering Science</i> , 1980, 35, 2351-2352.	1.9	12
104	Self-Organizing Approach for Automated Gene Identification. <i>Open Systems and Information Dynamics</i> , 2003, 10, 321-333.	0.5	12
105	General Laws of Adaptation to Environmental Factors: from Ecological Stress to Financial Crisis. <i>Mathematical Modelling of Natural Phenomena</i> , 2009, 4, 1-53.	0.9	12
106	Fast construction of correcting ensembles for legacy Artificial Intelligence systems: Algorithms and a case study. <i>Information Sciences</i> , 2019, 485, 230-247.	4.0	12
107	Invariant sets for kinetic equations. <i>Reaction Kinetics and Catalysis Letters</i> , 1979, 10, 187-190.	0.6	11
108	Thermodynamic Tree: The Space of Admissible Paths. <i>SIAM Journal on Applied Dynamical Systems</i> , 2013, 12, 246-278.	0.7	11

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109	A statistical model of aggregate fragmentation. <i>New Journal of Physics</i> , 2014, 16, 013031.	1.2	11
110	Generalized Mass Action Law and Thermodynamics of Nonlinear Markov Processes. <i>Mathematical Modelling of Natural Phenomena</i> , 2015, 10, 16-46.	0.9	11
111	Personality Traits and Drug Consumption. , 2019, , .		11
112	Leaders Do Not Look Back, or Do They?. <i>Mathematical Modelling of Natural Phenomena</i> , 2015, 10, 212-231.	0.9	10
113	Beyond Navier-Stokes equations: capillarity of ideal gas. <i>Contemporary Physics</i> , 2017, 58, 70-90.	0.8	10
114	Two-step approximation of space-independent relaxation. <i>Transport Theory and Statistical Physics</i> , 1999, 28, 271-296.	0.4	9
115	Invariant Grids: Method of Complexity Reduction in Reaction Networks. <i>Complexus</i> , 2004, 2, 110-127.	0.7	9
116	Computational diagnosis and risk evaluation for canine lymphoma. <i>Computers in Biology and Medicine</i> , 2014, 53, 279-290.	3.9	9
117	Multiscale principal component analysis. <i>Journal of Physics: Conference Series</i> , 2014, 490, 012081.	0.3	9
118	Learning optimization for decision tree classification of non-categorical data with information gain impurity criterion. , 2014, , .		9
119	General stochastic separation theorems with optimal bounds. <i>Neural Networks</i> , 2021, 138, 33-56.	3.3	9
120	Demystification of Few-shot and One-shot Learning. , 2021, , .		9
121	Blessing of dimensionality at the edge and geometry of few-shot learning. <i>Information Sciences</i> , 2021, 564, 124-143.	4.0	9
122	High-Dimensional Separability for One- and Few-Shot Learning. <i>Entropy</i> , 2021, 23, 1090.	1.1	9
123	Basic Types of Coarse-Graining. , 2006, , 117-176.		9
124	Exploring Automated Pottery Identification [Arch-I-Scan]. <i>Internet Archaeology</i> , 2018, , .	0.0	9
125	Seven clusters in genomic triplet distributions. <i>In Silico Biology</i> , 2003, 3, 471-82.	0.4	9
126	Dynamics of chemical reactions and nonphysical steady states. <i>Reaction Kinetics and Catalysis Letters</i> , 1980, 15, 245-250.	0.6	8

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127	Additive generalization of the Boltzmann entropy. <i>Physical Review E</i> , 2003, 67, 067104.	0.8	8
128	Legendre integrators, post-processing and quasiequilibrium. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2004, 120, 149-167.	1.0	8
129	The Role of Thermodynamics in Model Reduction When Using Invariant Grids. <i>Communications in Computational Physics</i> , 2010, 8, 701-734.	0.7	8
130	Social stress drives the multi-wave dynamics of COVID-19 outbreaks. <i>Scientific Reports</i> , 2021, 11, 22497.	1.6	8
131	Modified Kirchhoff flow with a partially penetrable obstacle and its application to the efficiency of free flow turbines. <i>Mathematical and Computer Modelling</i> , 2002, 35, 1371-1375.	2.0	7
132	Allowed and forbidden regimes of entropy balance in lattice Boltzmann collisions. <i>Physical Review E</i> , 2012, 86, 025701.	0.8	7
133	Piece-wise quadratic approximations of arbitrary error functions for fast and robust machine learning. <i>Neural Networks</i> , 2016, 84, 28-38.	3.3	7
134	Coupling-modulated multi-stability and coherent dynamics in directed networks of heterogeneous nonlinear oscillators with modular topology. <i>IFAC-PapersOnLine</i> , 2016, 49, 62-67.	0.5	7
135	Theoretical aspects of peptide imprinting: screening of MIP (virtual) binding sites for their interactions with amino acids, di- and tripeptides. <i>Journal of the Chinese Advanced Materials Society</i> , 2018, 6, 301-310.	0.7	7
136	Local equivalence of reversible and general Markov kinetics. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2013, 392, 1111-1121.	1.2	6
137	Lyapunov-like Conditions of Forward Invariance and Boundedness for a Class of Unstable Systems. <i>SIAM Journal on Control and Optimization</i> , 2013, 51, 2306-2334.	1.1	6
138	Basic model of purposeful kinesis. <i>Ecological Complexity</i> , 2018, 33, 75-83.	1.4	6
139	Geometrical Complexity of Data Approximators. <i>Lecture Notes in Computer Science</i> , 2013, , 500-509.	1.0	6
140	Universal Lyapunov functions for non-linear reaction networks. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2019, 79, 104910.	1.7	5
141	Kernel Stochastic Separation Theorems and Separability Characterizations of Kernel Classifiers. , 2019, , .		5
142	Singularities of transient processes in dynamics and beyond. <i>Physics of Life Reviews</i> , 2020, 32, 46-49.	1.5	5
143	What can the randomness of missing values tell you about clinical practice in large data sets of children's vital signs?. <i>Pediatric Research</i> , 2021, 89, 16-21.	1.1	5
144	Transition states and entangled mass action law. <i>Results in Physics</i> , 2021, 22, 103922.	2.0	5

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145	The Mystery of Two Straight Lines in Bacterial Genome Statistics. Bulletin of Mathematical Biology, 2007, 69, 2429-2442.	0.9	4
146	Pseudo-outcrop Visualization of Borehole Images and Core Scans. Mathematical Geosciences, 2017, 49, 947-964.	1.4	4
147	Simple model of complex dynamics of activity patterns in developing networks of neuronal cultures. PLoS ONE, 2019, 14, e0218304.	1.1	4
148	Symphony of high-dimensional brain. Physics of Life Reviews, 2019, 29, 115-119.	1.5	4
149	Geometry of Irreversibility. , 2003, , 19-43.		4
150	Beyond The Concept of Manifolds: Principal Trees, Metro Maps, and Elastic Cubic Complexes. Lecture Notes in Computational Science and Engineering, 2008, , 219-237.	0.1	4
151	A Numerical Analyst's View of the Lattice Boltzmann Method. Springer Proceedings in Mathematics, 2011, , 127-150.	0.5	4
152	Astrocytes Organize Associative Memory. Studies in Computational Intelligence, 2020, , 384-391.	0.7	4
153	It is useful to analyze correlation graphs. Physics of Life Reviews, 2022, 40, 15-23.	1.5	4
154	Four basic symmetry types in the universal 7-cluster structure of microbial genomic sequences. In Silico Biology, 2005, 5, 265-82.	0.4	4
155	Computational diagnosis of canine lymphoma. Journal of Physics: Conference Series, 2014, 490, 012135.	0.3	3
156	Fast Sampling of Evolving Systems with Periodic Trajectories. Mathematical Modelling of Natural Phenomena, 2016, 11, 73-88.	0.9	3
157	Tackling Rare False-Positives in Face Recognition: A Case Study. , 2018, , .		3
158	Do Fractional Norms and Quasinorms Help to Overcome the Curse of Dimensionality?. , 2019, , .		3
159	Drug Use and Personality Profiles. , 2019, , 5-33.		3
160	Transient concentration extremum and conservatively perturbed equilibrium. Chemical Engineering Science, 2021, 231, 116295.	1.9	3
161	Coloring Panchromatic Nighttime Satellite Images: Comparing the Performance of Several Machine Learning Methods. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-15.	2.7	3
162	Self-Simplification in Darwin's Systems. Lecture Notes in Computational Science and Engineering, 2011, , 311-344.	0.1	3

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163	Modeling Progression of Single Cell Populations Through the Cell Cycle as a Sequence of Switches. <i>Frontiers in Molecular Biosciences</i> , 2021, 8, 793912.	1.6	3
164	Schrödinger operator in an overfull set. <i>Europhysics Letters</i> , 1998, 42, 113-118.	0.7	2
165	Riabouchinsky flow with partially penetrable obstacle. <i>Mathematical and Computer Modelling</i> , 2002, 35, 1365-1370.	2.0	2
166	PCA and K-Means Decipher Genome. <i>Lecture Notes in Computational Science and Engineering</i> , 2008, , 309-323.	0.1	2
167	Collective dynamics: when one plus one does not make two. <i>Mathematical Medicine and Biology</i> , 2011, 28, 85-88.	0.8	2
168	Kinetic path summation, multi-sheeted extension of master equation, and evaluation of ergodicity coefficient. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2011, 390, 1009-1025.	1.2	2
169	Scene analysis assisting for AWB using binary decision trees and average image metrics. , 2014, , .		2
170	Directed cycles and multi-stability of coherent dynamics in systems of coupled nonlinear oscillators. <i>IFAC-PapersOnLine</i> , 2015, 48, 19-24.	0.5	2
171	Forward-Invariant Peeling in Chemical Dynamics: a Simple Case Study. <i>Mathematical Modelling of Natural Phenomena</i> , 2015, 10, 126-134.	0.9	2
172	Data analysis with arbitrary error measures approximated by piece-wise quadratic PQSQ functions. , 2018, , .		2
173	Mobility cost and degenerated diffusion in kinesis models. <i>Ecological Complexity</i> , 2018, 36, 16-21.	1.4	2
174	Short-term memory in neuron-astrocyte network. , 2020, , .		2
175	Basic, simple and extendable kinetic model of protein synthesis. <i>Mathematical Biosciences and Engineering</i> , 2019, 16, 6602-6622.	1.0	2
176	CNN-Based Spectral Super-Resolution of Panchromatic Night-Time Light Imagery: City-Size-Associated Neighborhood Effects. <i>Sensors</i> , 2021, 21, 7662.	2.1	2
177	High order orthogonal tensor networks: information capacity and reliability. , 0, , .		1
178	Nonarbitrary regularization of acoustic spectra. <i>Transport Theory and Statistical Physics</i> , 1993, 22, 121-124.	0.4	1
179	Technical note: On "solid liquid" limit of hydrodynamic equations. <i>Transport Theory and Statistical Physics</i> , 1995, 24, 1419-1421.	0.4	1
180	Invariance correction to Grad's equations: where to go beyond approximations?. <i>Continuum Mechanics and Thermodynamics</i> , 2005, 17, 311-335.	1.4	1

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181	Branching Principal Components: Elastic Graphs, Topological Grammars and Metro Maps. Neural Networks (IJCNN), International Joint Conference on, 2007, , .	0.0	1
182	Stable simulation of fluid flow with high-Reynolds number using Ehrenfestsâ€™ steps. Numerical Algorithms, 2007, 45, 389-408.	1.1	1
183	Further results on Lyapunov-like conditions of forward invariance and boundedness for a class of unstable systems. , 2014, , .		1
184	Is it possible to predict long-term success with k-NN? Case study of four market indices (FTSE100, DAX,) Tj ETQq0 0,0 rgBT /Qverlock 10	0.3	1
185	Simple model of complex bursting dynamics in developing networks of neuronal cultures. IFAC-PapersOnLine, 2016, 49, 68-73.	0.5	1
186	Efficiency of Shallow Cascades for Improving Deep Learning AI Systems. , 2018, , .		1
187	Bringing the Blessing of Dimensionality to the Edge. , 2019, , .		1
188	Modelling working memory in neuron-astrocyte network. , 2021, , .		1
189	Parametric response map registered CT feature and small airway physiology analysis in asthma. , 2017, , .		1
190	Universal Seven-Cluster Structure of Genome Fragment Distribution: Basic Symmetry in Triplet Frequencies. , 2006, , 153-163.		1
191	Simplest model of self-oscillations in association reactions. Reaction Kinetics and Catalysis Letters, 1985, 27, 153-155.	0.6	0
192	Jointly dissipative operators and their applications. Siberian Mathematical Journal, 1992, 33, 19-23.	0.2	0
193	Backpropagation of accuracy. , 0, , .		0
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