Ryszard Rudnicki

List of Publications by Year
in descending order

81	1,326	430442	377514
papers	citations	18 h-index	34 g-index

85	85	85	530
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Long-time behaviour of a stochastic preyâ€“predator model. Stochastic Processes and Their Applications, 2003, 108, 93-107.	0.4	166
2	Influence of stochastic perturbation on preyâ€“predator systems. Mathematical Biosciences, 2007, 206, 108-119.	0.9	133
3	Global stability in a delayed partial differential equation describing cellular replication. Journal of Mathematical Biology, 1994, 33, 89-109.	0.8	80
4	Continuous Markov Semigroups and Stability of Transport Equations. Journal of Mathematical Analysis and Applications, 2000, 249, 668-685.	0.5	78
5	Stability of Markov Semigroups and Applications to Parabolic Systems. Journal of Mathematical Analysis and Applications, 1997, 215, 56-74.	0.5	65
6	Modeling Complex Neutrophil Dynamics in the Grey Collie. Journal of Theoretical Biology, 2000, 204, 505-519.	0.8	63
7	Asymptotic behavior of distributions of mRNA and protein levels in a model of stochastic gene expression. Journal of Mathematical Analysis and Applications, 2007, 333, 753-769.	0.5	45
8	A new criterion for the global stability of simultaneous cell replication and maturation processes. Journal of Mathematical Biology, 1999, 38, 195-219.	0.8	44
9	Asynchronous Exponential Growth of a General Structured Population Model. Acta Applicandae Mathematicae, 2012, 119, 149-166.	0.5	39
10	Approximation of delays in biochemical systems. Mathematical Biosciences, 2005, 198, 190-216.	0.9	34
11	Invariant measures for the flow of a first order partial differential equation. Ergodic Theory and Dynamical Systems, 1985, 5, 437-443.	0.4	31
12	The diffusion in the quantum Smoluchowski equation. Physica A: Statistical Mechanics and Its Applications, 2005, 351, 60-68.	1.2	31
13	Piecewise Deterministic Processes in Biological Models. SpringerBriefs in Applied Sciences and Technology, 2017, , .	0.2	28
14	Strong ergodic properties of a first-order partial differential equation. Journal of Mathematical Analysis and Applications, 1988, 133, 14-26.	0.5	27
15	Fragmentation-Coagulation Models of Phytoplankton. Bulletin of the Polish Academy of Sciences Mathematics, 2006, 54, 175-191.	0.4	26
16	Chaos for some infinite-dimensional dynamical systems. Mathematical Methods in the Applied Sciences, 2004, 27, 723-738.	1.2	23
17	Further comments on "Vector norms as Lyapunov functions for linear systems". IEEE Transactions on Automatic Control, 1998, 43, 289-291.	3.6	22
18	Phytoplankton dynamics. Comptes Rendus - Biologies, 2004, 327, 961-969.	0.1	22

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19	Chaoticity and invariant measures for a cell population model. Journal of Mathematical Analysis and Applications, 2012, 393, 151-165.	0.5	19
20	MARKOV SEMIGROUPS AND STABILITY OF THE CELL MATURITY DISTRIBUTION. Journal of Biological Systems, 2000, 08, 69-94.	0.5	17
21	Asymptotic decomposition of substochastic operators and semigroups. Journal of Mathematical Analysis and Applications, 2016, 436, 305-321.	0.5	17
22	SIZE DISTRIBUTION OF GENE FAMILIES IN A GENOME. Mathematical Models and Methods in Applied Sciences, 2014, 24, 697-717.	1.7	13
23	Asymptotic decomposition of substochastic semigroups and applications. Stochastics and Dynamics, 2018, 18, 1850001.	0.6	13
24	Piecewise Deterministic Markov Processes in Biological Models. Springer Proceedings in Mathematics and Statistics, 2015, , 235-255.	0.1	13
25	Asymptotical Stability in L1 of Parabolic Equations. Journal of Differential Equations, 1993, 102, 391-401.	1.1	12
26	Stochastic optimal growth with nonconvexities. Journal of Mathematical Economics, 2006, 42, 74-96.	0.4	12
27	A DISCRETE MODEL OF EVOLUTION OF SMALL PARALOG FAMILIES. Mathematical Models and Methods in Applied Sciences, 2007, 17, 933-955.	1.7	12
28	A model for the evolution of paralog families in genomes. Journal of Mathematical Biology, 2006, 53, 759-770.	0.8	11
29	Model of phenotypic evolution in hermaphroditic populations. Journal of Mathematical Biology, 2015, 70, 1295-1321.	0.8	11
30	Global stability of cellular populations with unequal division. , 2000, 8, 185-202.		11
31	Relative entropy and stability of stochastic semigroups. Annales Polonici Mathematici, 1991, 53, 139-145.	0.2	11
32	Asymptotic Similarity and Malthusian Growth in Autonomous and Nonautonomous Populations. Journal of Mathematical Analysis and Applications, 1994, 187, 548-566.	0.5	10
33	Box and Packing Dimensions of Typical Compact Sets. Monatshefte Fur Mathematik, 2000, 131, 223-226.	0.5	10
34	Stochastic Operators and Semigroups and Their Applications in Physics and Biology. Lecture Notes in Mathematics, 2015, , 255-318.	0.1	10
35	Nest site lottery revisited: towards a mechanistic model of population growth suppressed by the availability of nest sites. Journal of Theoretical Biology, 2017, 420, 279-289.	0.8	10
36	On Asymptotic Stability and Sweeping of Collisionless Kinetic Equations. Acta Applicandae Mathematicae, 2017, 147, 19-38.	0.5	10

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37	Limit theorems for stochastically perturbed dynamical systems. Journal of Applied Probability, 1995, 32, 459-469.	0.4	9
38	Randomly flashing diffusion: Asymptotic properties. Journal of Statistical Physics, 1996, 83, 1149-1164.	0.5	8
39	Finite volume effects in a model grain growth. Physica A: Statistical Mechanics and Its Applications, 2003, 325, 284-291.	1.2	8
40	On a stochastic gene expression with pre-mRNA, mRNA and protein contribution. Journal of Theoretical Biology, 2015, 387, 54-67.	0.8	8
41	Global Solvability of a Fragmentation-Coagulation Equation With Growth and Restricted Coagulation. Journal of Nonlinear Mathematical Physics, 2009, 16, 13.	0.8	7
42	On the typical structure of compact sets. Archiv Der Mathematik, 2001, 76, 119-126.	0.3	6
43	Chaoticity of the blood cell production system. Chaos, 2009, 19, 043112.	1.0	6
44	Models of population dynamics and their applications in genetics. Series on Advances in Mathematics for Applied Sciences, 2009, , 103-147.	0.0	6
45	Asymptotic properties of the Fokker-Planck equation. , 1995, , 517-521.		6
46	On a nonlinear age-structured model of semelparous species. Discrete and Continuous Dynamical Systems - Series B, 2014, 19, 2641-2656.	0.5	6
47	Asymptotic behaviour of a transport equation. Annales Polonici Mathematici, 1992, 57, 45-55.	0.2	6
48	Stability versus chaos for a partial differential equation. Chaos, Solitons and Fractals, 2002, 14, 607-612.	2.5	5
49	A Case Study of Genome Evolution: From Continuous to Discrete Time Model. Lecture Notes in Computer Science, 2004, , 1-24.	1.0	5
50	An ergodic theory approach to chaos. Discrete and Continuous Dynamical Systems, 2015, 35, 757-770.	0.5	5
51	On a one-dimensional analogue of the Smale horseshoe. Annales Polonici Mathematici, 1991, 54, 147-153.	0.2	5
52	Stability inL 1 of some integral operators. Integral Equations and Operator Theory, 1996, 24, 320-327.	0.4	4
53	On the Box Dimension of Typical Measures. Monatshefte Fur Mathematik, 2002, 136, 143-150.	0.5	4
54	Markov operators: applications to diffusion processes and population dynamics. Applicationes Mathematicae, 2000, 27, 67-79.	0.1	4

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55	Dynamics of antibody levels: Asymptotic properties. Mathematical Methods in the Applied Sciences, 2020, 43, 10490-10499.	1.2	4
56	LONG-TIME ASYMPTOTICS FOR DIFFUSING CLUSTERS WITH POISSON GROWTH STATISTICS. Fractals, 1996, 04, 543-546.	1.8	3
57	Random walk with memory. Journal of Mathematical Physics, 1999, 40, 3072-3083.	0.5	3
58	Pointwise dimensions and RÃ©nyi dimensions. Proceedings of the American Mathematical Society, 2002, 130, 1981-1982.	0.4	3
59	Strangely sweeping one-dimensional diffusion. Annales Polonici Mathematici, 1993, 58, 37-45.	0.2	3
60	Stability of stochastic semigroups and applications to Stein's neuronal model. Discrete and Continuous Dynamical Systems - Series B, 2018, 23, 377-385.	0.5	3
61	Cell cycle length and longâ€time behavior of an ageâ€size model. Mathematical Methods in the Applied Sciences, 2022, 45, 5797-5820.	1.2	3
62	Asymptotic Analysis of a Semelparous Species Model. Fundamenta Informaticae, 2010, 103, 219-233.	0.3	2
63	Does a population with the highest turnover coefficient win competition?. Journal of Difference Equations and Applications, 0, , 1-13.	0.7	2
64	Biological Models. SpringerBriefs in Applied Sciences and Technology, 2017, , 1-32.	0.2	2
65	From nest site lottery to host lottery: continuous model of growth suppression driven by the availability of nest sites for newborns or hosts for parasites and its impact on the selection of life history strategies. Theory in Biosciences, 2020, 139, 171-188.	0.6	2
66	Reinforced walk on graphs and neural networks. Studia Mathematica, 2008, 189, 255-268.	0.4	2
67	Applications of stochastic semigroups to cell cycle models. Discrete and Continuous Dynamical Systems - Series B, 2019, 24, 2365-2381.	0.5	2
68	Stochastic semigroups and their applications to biological models. Demonstratio Mathematica, 2012, 45, .	0.6	1
69	Replicator dynamics for the game theoretic selection models based on state. Journal of Theoretical Biology, 2020, 526, 110540.	0.8	1
70	Stochastic Optimal Growth with Nonconvexities. , 2012, , 261-288.		1
71	Stability of iterates of Markov operators. Annales Polonici Mathematici, 1988, 48, 95-104.	0.2	1
72	A note on the convolution and the product inDâ€²andSâ€². International Journal of Mathematics and Mathematical Sciences, 1991, 14, 275-282.	0.3	0

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73	On convergence and asymptotic behaviour of semigroups of operators. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2020, 378, 20190613.	1.6	0
74	Strong and weak stability of some Markov operators. Colloquium Mathematicum, 2000, 84, 255-263.	0.2	0
75	Asymptotic Properties of Stochastic Semigroupsâ€"Applications. SpringerBriefs in Applied Sciences and Technology, 2017, , 129-147.	0.2	0
76	Operator Semigroups. SpringerBriefs in Applied Sciences and Technology, 2017, , 63-82.	0.2	0
77	Markov Processes. SpringerBriefs in Applied Sciences and Technology, 2017, , 33-62.	0.2	0
78	Stochastic Semigroups. SpringerBriefs in Applied Sciences and Technology, 2017, , 83-114.	0.2	0
79	Does assortative mating lead to a polymorphic population? A toy model justification. Discrete and Continuous Dynamical Systems - Series B, 2018, 23, 459-472.	0.5	0
80	One and two-phase cell cycle models. Biomath, 2019, 8, 1905261.	0.3	0
81	Asymptotic Properties of Stochastic Semigroups with Applications to Piecewise Deterministic Markov Processes. Springer Proceedings in Mathematics and Statistics, 2020, , 329-347.	0.1	0