

# Marat Akhmet

## List of Publications by Year in descending order

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122  
papers

2,204  
citations

201575

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276775

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131  
docs citations

131  
times ranked

459  
citing authors

#	ARTICLE	IF	CITATIONS
1	Dynamics of Shunting Inhibitory Cellular Neural Networks with Variable Two-Component Passive Decay Rates and Poisson Stable Inputs. <i>Symmetry</i> , 2022, 14, 1162.	1.1	6
2	Dynamics of a Recurrent Neural Network with Impulsive Effects and Piecewise Constant Argument. <i>Lecture Notes on Data Engineering and Communications Technologies</i> , 2021, , 540-552.	0.5	0
3	Unpredictable Oscillations for Hopfield-Type Neural Networks with Delayed and Advanced Arguments. <i>Mathematics</i> , 2021, 9, 571.	1.1	15
4	Abstract similarity, fractals and chaos. <i>Discrete and Continuous Dynamical Systems - Series B</i> , 2021, 26, 2479.	0.5	0
5	Modulo Periodic Poisson Stable Solutions of Quasilinear Differential Equations. <i>Entropy</i> , 2021, 23, 1535.	1.1	11
6	Nonautonomous Bifurcations in Nonlinear Impulsive Systems. <i>Differential Equations and Dynamical Systems</i> , 2020, 28, 177-190.	0.5	3
7	Discontinuous Almost Periodic Solutions. <i>Advances in Dynamics, Patterns, Cognition</i> , 2020, , 85-101.	0.2	0
8	Differential Equations with Functional Response on Piecewise Constant Argument. <i>Advances in Dynamics, Patterns, Cognition</i> , 2020, , 143-175.	0.2	0
9	SICNN with Chaotic/Almost Periodic Postsynaptic Currents. <i>Advances in Dynamics, Patterns, Cognition</i> , 2020, , 265-307.	0.2	0
10	Homoclinic Chaos and Almost Periodicity. <i>Advances in Dynamics, Patterns, Cognition</i> , 2020, , 243-263.	0.2	0
11	Almost Periodicity, Chaos, and Asymptotic Equivalence. <i>Advances in Dynamics, Patterns, Cognition</i> , 2020, , .	0.2	12
12	Generalities for Impulsive Systems. <i>Advances in Dynamics, Patterns, Cognition</i> , 2020, , 43-67.	0.2	0
13	Inertial Neural Networks with Unpredictable Oscillations. <i>Mathematics</i> , 2020, 8, 1797.	1.1	10
14	Unpredictable Solutions of Linear Impulsive Systems. <i>Mathematics</i> , 2020, 8, 1798.	1.1	9
15	Strongly Unpredictable Oscillations of Hopfield-Type Neural Networks. <i>Mathematics</i> , 2020, 8, 1791.	1.1	7
16	Shunting inhibitory cellular neural networks with strongly unpredictable oscillations. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2020, 89, 105287.	1.7	19
17	Quasilinear differential equations with strongly unpredictable solutions. <i>Carpathian Journal of Mathematics</i> , 2020, 36, 341-349.	0.4	13
18	Almost Periodicity in Chaos. <i>Advances in Dynamics, Patterns, Cognition</i> , 2020, , 223-242.	0.2	0

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19	Almost Periodic Solutions of Retarded SICNN with Functional Response on Piecewise Constant Argument. <i>Advances in Dynamics, Patterns, Cognition</i> , 2020, , 177-200.	0.2	0
20	Bohr and Bochner Discontinuities. <i>Advances in Dynamics, Patterns, Cognition</i> , 2020, , 103-121.	0.2	0
21	Global Weather and Climate in the Light of El Niño-Southern Oscillation. <i>Advances in Dynamics, Patterns, Cognition</i> , 2020, , 139-172.	0.2	0
22	Unpredictability in Topological Dynamics. <i>Advances in Dynamics, Patterns, Cognition</i> , 2020, , 57-79.	0.2	0
23	The Unpredictable Point and Poincaré Chaos. <i>Advances in Dynamics, Patterns, Cognition</i> , 2020, , 15-23.	0.2	0
24	Li-Yorke Chaos in Hybrid Systems on a Time Scale. <i>Advances in Dynamics, Patterns, Cognition</i> , 2020, , 109-124.	0.2	0
25	Fractals: Dynamics in the Geometry. <i>Advances in Dynamics, Patterns, Cognition</i> , 2020, , 173-202.	0.2	0
26	Homoclinic and Heteroclinic Motions in Economic Models. <i>Advances in Dynamics, Patterns, Cognition</i> , 2020, , 125-137.	0.2	0
27	Strongly Unpredictable Solutions. <i>Advances in Dynamics, Patterns, Cognition</i> , 2020, , 97-108.	0.2	1
28	Unpredictable Solutions of Hyperbolic Linear Equations. <i>Advances in Dynamics, Patterns, Cognition</i> , 2020, , 81-95.	0.2	0
29	Unpredictability in Bebutov Dynamics. <i>Advances in Dynamics, Patterns, Cognition</i> , 2020, , 25-40.	0.2	0
30	Abstract Similarity, Fractals, and Chaos. <i>Advances in Dynamics, Patterns, Cognition</i> , 2020, , 203-221.	0.2	3
31	A Novel Deterministic Chaos and Discrete Random Processes. , 2020, , .		1
32	Generation of fractals as Duffing equation orbits. <i>Chaos</i> , 2019, 29, 053113.	1.0	4
33	Unpredictable solutions of linear differential and discrete equations. <i>Turkish Journal of Mathematics</i> , 2019, 43, 2377-2389.	0.3	14
34	Domain-Structured Chaos in a Hopfield Neural Network. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2019, 29, 1950205.	0.7	10
35	Extension of sea surface temperature unpredictability. <i>Ocean Dynamics</i> , 2019, 69, 145-156.	0.9	4
36	Neural Networks with Poincaré Chaos. , 2019, , .		0

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37	Non-autonomous equations with unpredictable solutions. Communications in Nonlinear Science and Numerical Simulation, 2018, 59, 657-670.	1.7	31
38	A Hopfield neural network with multi-compartmental activation. Neural Computing and Applications, 2018, 29, 815-822.	3.2	5
39	Exponential stability of periodic solutions of recurrent neural networks with functional dependence on piecewise constant argument. Turkish Journal of Mathematics, 2018, 42, 272-292.	0.3	9
40	Mapping Fatou-Julia Iterations. , 2018, , .		0
41	A singularly perturbed differential equation with piecewise constant argument of generalized type. Turkish Journal of Mathematics, 2018, 42, 1680-1685.	0.3	4
42	Perturbed Li-Yorke homoclinic chaos. Electronic Journal of Qualitative Theory of Differential Equations, 2018, , 1-18.	0.2	2
43	Almost Periodicity in Chaos. Discontinuity, Nonlinearity, and Complexity, 2018, 7, 15-29.	0.1	6
44	Periodic motions generated from non-autonomous grazing dynamics. Communications in Nonlinear Science and Numerical Simulation, 2017, 49, 48-62.	1.7	3
45	Poincaré chaos and unpredictable functions. Communications in Nonlinear Science and Numerical Simulation, 2017, 48, 85-94.	1.7	39
46	Chattering as a singular problem. Nonlinear Dynamics, 2017, 90, 2797-2812.	2.7	3
47	Non-autonomous grazing phenomenon. Nonlinear Dynamics, 2017, 87, 1973-1984.	2.7	2
48	Existence of unpredictable solutions and chaos. Turkish Journal of Mathematics, 2017, 41, 254-266.	0.3	23
49	Persistence of Li-Yorke chaos in systems with relay. Electronic Journal of Qualitative Theory of Differential Equations, 2017, , 1-18.	0.2	3
50	Unpredictable points and chaos. Communications in Nonlinear Science and Numerical Simulation, 2016, 40, 1-5.	1.7	44
51	Discontinuous dynamics with grazing points. Communications in Nonlinear Science and Numerical Simulation, 2016, 38, 218-242.	1.7	10
52	Almost periodic solutions of retarded SICNNs with functional response on piecewise constant argument. Neural Computing and Applications, 2016, 27, 2483-2495.	3.2	6
53	Economic Models with Exogenous Continuous/Discrete Shocks. Nonlinear Physical Science, 2016, , 265-310.	0.2	0
54	Li-Yorke chaos generation by SICNNs with chaotic/almost periodic postsynaptic currents. Neurocomputing, 2016, 173, 580-594.	3.5	13

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55	Chaos Generation in Continuous/Discrete-Time Models. <i>Nonlinear Physical Science</i> , 2016, , 183-264.	0.2	1
56	Replication of Chaos in Neural Networks, Economics and Physics. <i>Nonlinear Physical Science</i> , 2016, , .	0.2	25
57	Chaos by Neural Networks. <i>Nonlinear Physical Science</i> , 2016, , 311-405.	0.2	1
58	Input-Output Mechanism of the Discrete Chaos Extension. <i>Advances in Dynamics, Patterns, Cognition</i> , 2016, , 203-233.	0.2	4
59	Homoclinic and Heteroclinic Motions in Economic Models with Exogenous Shocks. <i>Applied Mathematics and Nonlinear Sciences</i> , 2016, 1, 1-10.	0.9	26
60	Impulsive SICNNs with chaotic postsynaptic currents. <i>Discrete and Continuous Dynamical Systems - Series B</i> , 2016, 21, 1119-1148.	0.5	7
61	Chaotification of Impulsive Systems. <i>Nonlinear Physical Science</i> , 2016, , 157-181.	0.2	0
62	Chaos Extension in Hyperbolic Systems. <i>Nonlinear Physical Science</i> , 2016, , 101-125.	0.2	0
63	The Prevalence of Weather Unpredictability. <i>Nonlinear Physical Science</i> , 2016, , 407-440.	0.2	0
64	Entrainment by Chaos. <i>Nonlinear Physical Science</i> , 2016, , 127-156.	0.2	2
65	Exogenous Versus Endogenous for Chaotic Business Cycles. <i>Discontinuity, Nonlinearity, and Complexity</i> , 2016, 5, 101-119.	0.1	2
66	Liã€“Yorke Chaos in Hybrid Systems on a Time Scale. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2015, 25, 1540024.	0.7	6
67	Extension of Lorenz Unpredictability. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2015, 25, 1550126.	0.7	9
68	Attraction of Liã€“Yorke chaos by retarded SICNNs. <i>Neurocomputing</i> , 2015, 147, 330-342.	3.5	15
69	Extension of spatiotemporal chaos in glow discharge-semiconductor systems. <i>Chaos</i> , 2014, 24, 043127.	1.0	6
70	Entrainment by Chaos. <i>Journal of Nonlinear Science</i> , 2014, 24, 411-439.	1.0	28
71	Neural Networks with Discontinuous/Impact Activations. <i>Advances in Dynamics, Patterns, Cognition</i> , 2014, , .	0.2	27
72	Chaotification of Impulsive Systems by Perturbations. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2014, 24, 1450078.	0.7	11

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73	Chaos in economic models with exogenous shocks. Journal of Economic Behavior and Organization, 2014, 106, 95-108.	1.0	26
74	Generation of cyclic/toroidal chaos by Hopfield neural networks. Neurocomputing, 2014, 145, 230-239.	3.5	28
75	Bifurcation of discontinuous limit cycles of the Van der Pol equation. Mathematics and Computers in Simulation, 2014, 95, 39-54.	2.4	8
76	Impulsive Differential Equations. Advances in Dynamics, Patterns, Cognition, 2014, , 67-83.	0.2	1
77	Equilibria of Neural Networks with Impact Activations and Piecewise Constant Argument. Advances in Dynamics, Patterns, Cognition, 2014, , 93-114.	0.2	1
78	Shunting inhibitory cellular neural networks with chaotic external inputs. Chaos, 2013, 23, 023112.	1.0	30
79	Replication of chaos. Communications in Nonlinear Science and Numerical Simulation, 2013, 18, 2626-2666.	1.7	47
80	Quasilinear retarded differential equations with functional dependence on piecewise constant argument. Communications on Pure and Applied Analysis, 2013, 13, 929-947.	0.4	15
81	Period-doubling route to chaos in shunting inhibitory cellular neural networks. , 2013, , .		1
82	Global exponential stability of neural networks with non-smooth and impact activations. Neural Networks, 2012, 34, 18-27.	3.3	17
83	Self-synchronization of the integrate-and-fire pacemaker model with continuous couplings. Nonlinear Analysis: Hybrid Systems, 2012, 6, 730-740.	2.1	6
84	Chaotic period-doubling and OGY control for the forced Duffing equation. Communications in Nonlinear Science and Numerical Simulation, 2012, 17, 1929-1946.	1.7	50
85	Nonlinear Hybrid Continuous/Discrete-Time Models. Atlantis Studies in Mathematics for Engineering and Science, 2011, , .	0.1	78
86	Method of Lyapunov functions for differential equations with piecewise constant delay. Journal of Computational and Applied Mathematics, 2011, 235, 4554-4560.	1.1	23
87	Stability in cellular neural networks with a piecewise constant argument. Journal of Computational and Applied Mathematics, 2010, 233, 2365-2373.	1.1	61
88	A prototype compartmental model of blood pressure distribution. Nonlinear Analysis: Real World Applications, 2010, 11, 1249-1257.	0.9	6
89	Differential equations with state-dependent piecewise constant argument. Nonlinear Analysis: Theory, Methods & Applications, 2010, 72, 4200-4210.	0.6	24
90	Stability analysis of recurrent neural networks with piecewise constant argument of generalized type. Neural Networks, 2010, 23, 805-811.	3.3	68

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91	Impulsive Hopfield-type neural network system with piecewise constant argument. <i>Nonlinear Analysis: Real World Applications</i> , 2010, 11, 2584-2593.	0.9	57
92	Homoclinical structure of the chaotic attractor. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2010, 15, 819-822.	1.7	18
93	Principles of Discontinuous Dynamical Systems. , 2010, , .		155
94	DYNAMICAL SYNTHESIS OF QUASI-MINIMAL SETS. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2009, 19, 2423-2427.	0.7	33
95	Bifurcation of three-dimensional discontinuous cycles. <i>Nonlinear Analysis: Theory, Methods &amp; Applications</i> , 2009, 71, e2090-e2102.	0.6	5
96	Differential equations on variable time scales. <i>Nonlinear Analysis: Theory, Methods &amp; Applications</i> , 2009, 70, 1175-1192.	0.6	31
97	The complex dynamics of the cardiovascular system. <i>Nonlinear Analysis: Theory, Methods &amp; Applications</i> , 2009, 71, e1922-e1931.	0.6	13
98	Bifurcation of a non-smooth planar limit cycle from a vertex. <i>Nonlinear Analysis: Theory, Methods &amp; Applications</i> , 2009, 71, e2723-e2733.	0.6	24
99	Liâ€Yorke chaos in the system with impacts. <i>Journal of Mathematical Analysis and Applications</i> , 2009, 351, 804-810.	0.5	59
100	Devaneyâ€™s chaos of a relay system. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2009, 14, 1486-1493.	1.7	53
101	SHADOWING AND DYNAMICAL SYNTHESIS. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2009, 19, 3339-3346.	0.7	14
102	Lyapunov-Razumikhin method for differential equations with piecewise constant argument. <i>Discrete and Continuous Dynamical Systems</i> , 2009, 25, 457-466.	0.5	41
103	On periodic solutions of differential equations with piecewise constant argument. <i>Computers and Mathematics With Applications</i> , 2008, 56, 2034-2042.	1.4	19
104	Periodic solutions of the hybrid system with small parameter. <i>Nonlinear Analysis: Hybrid Systems</i> , 2008, 2, 532-543.	2.1	17
105	Almost periodic solutions of differential equations with piecewise constant argument of generalized type. <i>Nonlinear Analysis: Hybrid Systems</i> , 2008, 2, 456-467.	2.1	34
106	Asymptotic behavior of solutions of differential equations with piecewise constant arguments. <i>Applied Mathematics Letters</i> , 2008, 21, 951-956.	1.5	27
107	Asymptotic behavior of linear impulsive integro-differential equations. <i>Computers and Mathematics With Applications</i> , 2008, 56, 1071-1081.	1.4	7
108	Stability of differential equations with piecewise constant arguments of generalized type. <i>Nonlinear Analysis: Theory, Methods &amp; Applications</i> , 2008, 68, 794-803.	0.6	76

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109	Integral manifolds of differential equations with piecewise constant argument of generalized type. <i>Nonlinear Analysis: Theory, Methods &amp; Applications</i> , 2007, 66, 367-383.	0.6	83
110	Asymptotic equivalence of differential equations and asymptotically almost periodic solutions. <i>Nonlinear Analysis: Theory, Methods &amp; Applications</i> , 2007, 67, 1870-1877.	0.6	15
111	On the reduction principle for differential equations with piecewise constant argument of generalized type. <i>Journal of Mathematical Analysis and Applications</i> , 2007, 336, 646-663.	0.5	73
112	Control and optimal response problems for quasilinear impulsive integrodifferential equations. <i>European Journal of Operational Research</i> , 2006, 169, 1128-1147.	3.5	12
113	Perron's theorem for linear impulsive differential equations with distributed delay. <i>Journal of Computational and Applied Mathematics</i> , 2006, 193, 204-218.	1.1	35
114	The differential equations on time scales through impulsive differential equations. <i>Nonlinear Analysis: Theory, Methods &amp; Applications</i> , 2006, 65, 2043-2060.	0.6	41
115	Boundary value problems for higher order linear impulsive differential equations. <i>Journal of Mathematical Analysis and Applications</i> , 2006, 319, 139-156.	0.5	11
116	An impulsive ratio-dependent predator-prey system with diffusion. <i>Nonlinear Analysis: Real World Applications</i> , 2006, 7, 1255-1267.	0.9	76
117	The Sturm-Liouville operator on the space of functions with discontinuity conditions. <i>Computers and Mathematics With Applications</i> , 2006, 51, 889-896.	1.4	1
118	Perturbations and Hopf bifurcation of the planar discontinuous dynamical system. <i>Nonlinear Analysis: Theory, Methods &amp; Applications</i> , 2005, 60, 163-178.	0.6	52
119	On the smoothness of solutions of impulsive autonomous systems. <i>Nonlinear Analysis: Theory, Methods &amp; Applications</i> , 2005, 60, 311-324.	0.6	13
120	The principles of B-smooth discontinuous flows. <i>Computers and Mathematics With Applications</i> , 2005, 49, 981-995.	1.4	20
121	Existence and stability of almost-periodic solutions of quasi-linear differential equations with deviating argument. <i>Applied Mathematics Letters</i> , 2004, 17, 1177-1181.	1.5	10
122	On the general problem of stability for impulsive differential equations. <i>Journal of Mathematical Analysis and Applications</i> , 2003, 288, 182-196.	0.5	69