Rubin R Aliev

List of Publications by Year
in descending order

41 papers	1,917 citations	361413 20 h-index	276875 41 g-index
41 all docs	41 docs citations	41 times ranked	1602 citing authors

#	Article	IF	Citations
1	A simple two-variable model of cardiac excitation. Chaos, Solitons and Fractals, 1996, 7, 293-301.	5.1	640
2	Experimental and Theoretical Analysis of Phase Singularity Dynamics in Cardiac Tissue. Journal of Cardiovascular Electrophysiology, 2001, 12, 716-722.	1.7	136
3	Super-spiral structures in an excitable medium. Nature, 1991, 353, 740-742.	27.8	118
4	Cortical spreading depression induces oxidative stress in the trigeminal nociceptive system. Neuroscience, 2013, 253, 341-349.	2.3	117
5	Chemical Diode. The Journal of Physical Chemistry, 1996, 100, 13895-13897.	2.9	112
6	A Simple Nonlinear Model of Electrical Activity in the Intestine. Journal of Theoretical Biology, 2000, 204, 21-28.	1.7	87
7	Finding the optimal path with the aid of chemical wave. Physica D: Nonlinear Phenomena, 1997, 106, 247-254.	2.8	86
8	Three-dimensional twisted vortices in an excitable chemical medium. Nature, 1990, 345, 419-421.	27.8	67
9	Patchy environment as a factor of complex plankton dynamics. Physical Review E, 2001, 64, 021915.	2.1	47
10	Spiral waves in the homogeneous and inhomogeneous Belousov-Zhabotinskii reaction. The Journal of Physical Chemistry, 1992, 96, 732-736.	2.9	43
11	Numerical study on time delay for chemical wave transmission via an inactive gap. Chemical Physics Letters, 1997, 271, 355-360.	2.6	42
12	Hibernator Citellus undulatus maintains safe cardiac conduction and is protected against tachyarrhythmias during extreme hypothermia: Possible role of Cx43 and Cx45 up-regulation. Heart Rhythm, 2005, 2, 966-975.	0.7	41
13	Modeling of Heart Excitation Patterns caused by a Local Inhomogeneity. Journal of Theoretical Biology, 1996, 181, 33-40.	1.7	37
14	Disturbances of septohippocampal theta oscillations in the epileptic brain: Reasons and consequences. Experimental Neurology, 2013, 247, 314-327.	4.1	35
15	Electric current control of spiral wave dynamics. Physica D: Nonlinear Phenomena, 1992, 56, 229-234.	2.8	31
16	Attenuation of kainic acid-induced status epilepticus by inhibition of endocannabinoid transport and degradation in guinea pigs. Epilepsy Research, 2015, 111, 33-44.	1.6	29
17	An integral invariant for scroll rings in a reaction-diffusion system. Physica D: Nonlinear Phenomena, 1989, 36, 181-188.	2.8	27
18	Global Functional Connectivity Differences between Sleep-Like States in Urethane Anesthetized Rats Measured by fMRI. PLoS ONE, 2016, 11, e0155343.	2.5	24

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19	Critical conditions of chemical wave propagation in gel layers with an immobilized catalyst. Physica D: Nonlinear Phenomena, 1991, 50, 65-70.	2.8	21
20	Oscillation Phase Dynamics in the Belousov-Zhabotinsky Reaction. Implementation to Image Processing. The Journal of Physical Chemistry, 1994, 98, 3999-4002.	2.9	20
21	Dynamics of the Oscillation Phase Distribution in the BZ Reaction. The Journal of Physical Chemistry, 1994, 98, 9676-9681.	2.9	20
22	Endocannabinoid-dependent protection against kainic acid-induced long-term alteration of brain oscillations in guinea pigs. Brain Research, 2017, 1661, 1-14.	2.2	18
23	Multiple responses at the boundaries of the vulnerable window in the Belousov-Zhabotinsky reaction. Physical Review E, 1995, 52, 2287-2293.	2.1	12
24	Temperature as a factor affecting fluctuations and predictability of the abundance of lake bacterioplankton. Ecological Complexity, 2017, 32, 90-98.	2.9	12
25	Spatiotemporal Dynamics of Damped Propagation in Excitable Cardiac Tissue. Physical Review Letters, 2003, 91, 208104.	7.8	10
26	Study of the Effect of Acetylcholine on Intracellular Homeostasis of True Pacemaker Cells of Rabbit Sinus Node Using Computer Simulation. Doklady Biochemistry and Biophysics, 2005, 402, 236-239.	0.9	10
27	Bifurcation of vortices in the light-sensitive oscillatory Belousov-Zhabotinsky medium. Chemical Physics Letters, 1996, 257, 552-556.	2.6	9
28	Sleep-State Dependent Alterations in Brain Functional Connectivity under Urethane Anesthesia in a Rat Model of Early-Stage Parkinsonâ€™s Disease. ENeuro, 2019, 6, ENEURO.0456-18.2019.	1.9	9
29	Heart tissue simulations by means of chemical excitable media. Chaos, Solitons and Fractals, 1995, 5, 567-574.	5.1	8
30	Wavelet spectra of visual evoked potentials: Time course of delta, theta, alpha and beta bands. Neurocomputing, 2013, 121, 551-555.	5.9	8
31	Effects of fibroblastâ€myocyte coupling on the sinoatrial node activity: A computational study. International Journal for Numerical Methods in Biomedical Engineering, 2018, 34, e2966.	2.1	8
32	Change of the Shape of a Chemical Vortex Due To a Local Disturbance. Journal of Physical Chemistry A, 1997, 101, 1313-1316.	2.5	6
33	Study of the Effect of Acetylcholine on the Excitability of True Pacemaker Cells of Rabbit Sinus Node Using Computer Simulation. Doklady Biochemistry and Biophysics, 2005, 402, 223-225.	0.9	6
34	On the Phase Dynamics in the BZ Reaction. Journal of Physical Chemistry A, 1997, 101, 7691-7694.	2.5	5
35	Computer simulation of 3D electrical activity in the sinoatrial node. Russian Journal of Numerical Analysis and Mathematical Modelling, 2012, 26, .	0.6	4
36	Modelling of the electric field distribution in the brain during tDCS. Russian Journal of Numerical Analysis and Mathematical Modelling, 2016, 31, .	0.6	4

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37	Phase breaks and chaos in a chain of diffusively coupled oscillators. Chaos, Solitons and Fractals, 1995, 5, 439-445.	5.1	3
38	Action potential propagation and phase dynamics in the sinoatrial node. Russian Journal of Numerical Analysis and Mathematical Modelling, 2012, 27, .	0.6	2
39	Study of the Preautomatic Pause under Exposure to Acetylcholine in True Pacemaker Cells of Rabbit Sinus Node Using Computer Simulation. Doklady Biochemistry and Biophysics, 2005, 402, 251-253.	0.9	1
40	Computer simulations of reentrant activity in the rabbit sinoatrial node. International Journal for Numerical Methods in Biomedical Engineering, 2017, 33, e02792.	2.1	1
41	The typology of mechanisms of adaptation to the cognitive load on the variability of heart rate dynamics. Â^ksperimentalÊ¹naÃ¢ PsihologiÃ¢, 2018, 11, 78-93.	0.5	1