

# Sergiy M Korogod

## List of Publications by Year in descending order

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60  
papers

599  
citations

758635

12  
h-index

676716

22  
g-index

60  
all docs

60  
docs citations

60  
times ranked

495  
citing authors

#	ARTICLE	IF	CITATIONS
1	Trpm5 channels encode bistability of spinal motoneurons and ensure motor control of hindlimbs in mice. <i>Nature Communications</i> , 2021, 12, 6815.	5.8	8
2	Adverse Modulation of the Firing Patterns of Cold Receptors by Volatile Anesthetics Affecting Activation of TRPM8 Channels: a Modeling Study. <i>Neurophysiology</i> , 2020, 52, 324-333.	0.2	2
3	Perturbed Ca <sup>2+</sup> -dependent signaling of DYT2 hippocalin mutant as mechanism of autosomal recessive dystonia. <i>Neurobiology of Disease</i> , 2019, 132, 104529.	2.1	5
4	Role of the Plasma Membrane Ca <sup>2+</sup> -ATPase Pump in the Regulation of Rhythm Generation by an Interstitial Cell of Cajal: A Computational Study. <i>Neurophysiology</i> , 2019, 51, 312-321.	0.2	2
5	Kv1.2 Channels Promote Nonlinear Spiking Motoneurons for Powering Up Locomotion. <i>Cell Reports</i> , 2018, 22, 3315-3327.	2.9	27
6	Editorial: Structure-Related Intrinsic Electrical States and Firing Patterns of Neurons With Active Dendrites. <i>Frontiers in Cellular Neuroscience</i> , 2018, 12, 229.	1.8	0
7	Hypoxic Depression of Pacemaker Activity of Interstitial Cells of Cajal: A Threat of Gastrointestinal Dysmotility and Necrosis. A Simulation Study. <i>Neurophysiology</i> , 2018, 50, 76-82.	0.2	2
8	Hypothermic Suppression of Epileptiform Bursting Activity of a Hippocampal Granule Neuron Possessing Thermosensitive TRP Channels (a Model Study: Biophysical and Clinical Aspects). <i>Neurophysiology</i> , 2017, 49, 8-18.	0.2	2
9	Temperature Deactivation of the Depolarizing TRP Current as a Mechanism of Hypothermia-Related Inhibition of Neuronal Activity: a Model Study. <i>Neurophysiology</i> , 2016, 48, 324-331.	0.2	1
10	Impact of the Ratio of Metabotropic and Ionotropic Components of Parasympathetic Action on the Excitability of a Urinary Bladder Smooth Muscle Cell: a Simulation Study. <i>Neurophysiology</i> , 2016, 48, 2-10.	0.2	0
11	Biophysical Processes in a Urinary Bladder Detrusor Smooth Muscle Cell during Rehabilitation Stimulation of Parasympathetic Efferents: a Simulation Study. <i>Neurophysiology</i> , 2016, 48, 156-165.	0.2	0
12	Dynamic excitation states and firing patterns are controlled by sodium channel kinetics in myenteric neurons: a simulation study. <i>Channels</i> , 2014, 8, 536-543.	1.5	6
13	Specialized Functions of Nav1.5 and Nav1.9 Channels in Electrogenesis of Myenteric Neurons in Intact Mouse Ganglia. <i>Journal of Neuroscience</i> , 2014, 34, 5233-5244.	1.7	39
14	Biophysical Mechanism of Parasympathetic Excitation of Urinary Bladder Smooth Muscle Cells: a Simulation Study. <i>Neurophysiology</i> , 2014, 46, 293-299.	0.2	6
15	Organization of Activity of Hippocampal Pyramidal Neurons under Coactivation of Dendritic Glutamate- and GABA-Sensitive Receptors: a Simulation Study. <i>Neurophysiology</i> , 2014, 46, 99-107.	0.2	3
16	Mathematical Model of the Calcium-Dependent Chloride Current in a Smooth Muscle Cell. <i>Neurophysiology</i> , 2013, 45, 369-378.	0.2	5
17	Conversion of Electrical and Synaptic Actions into Impulse Discharge Patterns in Purkinje Neurons with Active Dendrites: A Simulation Study. <i>Neurophysiology</i> , 2012, 44, 187-200.	0.2	3
18	Impulse Coding of Electrical and Synaptic Input Actions by Nucl. Abducens Motoneurons with Active Dendrites: A Simulation Study. <i>Neurophysiology</i> , 2012, 44, 89-97.	0.2	3

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19	Dependence of Transformation of Intrinsic Rhythmic Impulse Activity of Neurons on Spatio-Temporal Organization of Synaptic Actions on Dendrites: A Simulation Study. <i>Neurophysiology</i> , 2012, 43, 425-431.	0.2	1
20	Structure-Dependent Electrical and Concentration Processes in the Dendrites of Pyramidal Neurons of Superficial Neocortical Layers: Model Study. <i>Neurophysiology</i> , 2011, 43, 77-89.	0.2	9
21	Spatial heterogeneity of passive electrical transfer properties of neuronal dendrites due to their metrical asymmetry. <i>Biological Cybernetics</i> , 2011, 105, 305-317.	0.6	7
22	Remote Modulation of Current Transfer from Dendritic Glutamatergic Synapses by GABA-ergic Synapses of the Somatic Zone of Motoneurons: a Simulation Study. <i>Neurophysiology</i> , 2010, 42, 148-156.	0.2	0
23	Impact of Geometrical Characteristics of the Organellar Store and Organelle-Free Cytosol on Intracellular Calcium Dynamics in the Dendrite: a Simulation Study. <i>Neurophysiology</i> , 2009, 41, 16-27.	0.2	7
24	Comparative Model Analysis of Calcium Exchange between the Cytosol and Stores of Mitochondria or Endoplasmic Reticulum. <i>Neurophysiology</i> , 2009, 41, 307-318.	0.2	3
25	The International School "Problems of Experimental, Clinical, and Theoretical Neurosciences" (Dnepropetrovsk, May 2-4, 2008). <i>Neurophysiology</i> , 2008, 40, 215-216.	0.2	0
26	Nature of Electrical Tristability in a Neuron Model with Bistable Asymmetrical Dendrites. <i>Neurophysiology</i> , 2008, 40, 412-416.	0.2	5
27	Charge Transfer Effectiveness as an Electrotonic Indicator of the Structural Differences between Samples of Dendritic Morphology. <i>Neurophysiology</i> , 2008, 40, 422-425.	0.2	3
28	Parameter sensitivity of distributed transfer properties of neuronal dendrites: a passive cable approximation. <i>Biological Cybernetics</i> , 2008, 98, 87-100.	0.6	7
29	Inflammatory Mediators Increase Nav1.9 Current and Excitability in Nociceptors through a Coincident Detection Mechanism. <i>Journal of General Physiology</i> , 2008, 131, 211-225.	0.9	148
30	Electric fields of synaptic currents could influence diffusion of charged neurotransmitter molecules. <i>Synapse</i> , 2004, 51, 270-278.	0.6	21
31	Heterogeneous synaptic covering and differential charge transfer sensitivity among the dendrites of a reconstructed abducens motor neurone: Correlations between electron microscopic and computer simulation data. <i>Journal of Neurocytology</i> , 2003, 32, 5-24.	1.6	8
32	Theoretical estimation of the capacity of intracellular calcium stores in the Bergmann glial cell. <i>Pflügers Archiv European Journal of Physiology</i> , 2002, 443, 643-651.	1.3	4
33	Spatial reconfiguration of charge transfer effectiveness in active bistable dendritic arborizations. <i>European Journal of Neuroscience</i> , 2002, 16, 2260-2270.	1.2	12
34	Title is missing!. <i>Neurophysiology</i> , 2002, 34, 168-170.	0.2	1
35	Title is missing!. <i>Neurophysiology</i> , 2002, 34, 219-221.	0.2	0
36	Imaging stochastic spatial variability of active channel clusters during excitation of single neurons. <i>Neuroscience Research</i> , 2001, 39, 431-446.	1.0	15

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37	Title is missing!. Neurophysiology, 2001, 33, 11-14.	0.2	0
38	Diffusion and Active Transport of NCAM within the Neuronal Plasma Membrane. Neurophysiology, 2001, 33, 140-147.	0.2	0
39	Electrodifusion of synaptic receptors: a mechanism to modify synaptic efficacy?. , 2000, 35, 26-38.		10
40	The problem of the morphological noise in reconstructed dendritic arborizations. Journal of Neuroscience Methods, 2000, 95, 83-93.	1.3	21
41	Electrical bistability in a neuron model with monostable dendritic and axosomatic membranes. Neurophysiology, 2000, 32, 73-76.	0.2	3
42	Effect of Voltage Drop within the Synaptic Cleft on the Current and Voltage Generated at a Single Synapse. Biophysical Journal, 2000, 78, 1119-1125.	0.2	22
43	Geometry-induced features of current transfer in neuronal dendrites with tonically activated conductances. Biological Cybernetics, 1998, 79, 231-240.	0.6	18
44	Transfer properties of neuronal dendrites with tonically activated conductances. Neurophysiology, 1998, 30, 203-207.	0.2	5
45	Electrical properties and morphology of motoneurons developing in dissociated unpurified co-culture of the embryonic rat brainstem, spinal cord, and hindlimb tissues. Neurophysiology, 1998, 30, 305-309.	0.2	1
46	Conditions of dominant effectiveness of distal sites of active uniform dendrites with distributed tonic inputs. Neurophysiology, 1998, 30, 310-315.	0.2	2
47	Calcium dynamics in a bergmann glial cell during metabotropic activation: a simulation study. Neurophysiology, 1998, 30, 320-324.	0.2	0
48	Geometry-induced inhomogeneity of distribution of cell adhesion molecules along branching processes. Neurophysiology, 1998, 30, 155-162.	0.2	1
49	Glutamatergically induced pattern of Ca <sup>2+</sup> driving potential as a mechanism of postsynaptic plasticity. Biophysical Journal, 1997, 73, 1655-1664.	0.2	1
50	The dendritic architecture of motoneurons: A case study. Neurophysiology, 1997, 29, 112-124.	0.2	4
51	Spatial electrical patterns in simulated neuronal dendrites. European Biophysics Journal, 1997, 26, 337-348.	1.2	0
52	Branching of active dendritic spines as a mechanism for controlling synaptic efficacy. Neuroscience, 1996, 75, 315-323.	1.1	44
53	Differential back-invasion of a single complex dendrite of an abducens motoneuron by N-methyl-d-aspartate-induced oscillations: a simulation study. Neuroscience, 1996, 75, 1153-1163.	1.1	15
54	Local mechanisms of phase-dependent postsynaptic modifications of NMDA-induced oscillations in the abducens motoneurons: a simulation study. Journal of Neurophysiology, 1996, 76, 1015-1024.	0.9	2

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55	Domains of calcium channels as dissipative structures in a simulated neuron. <i>Neurophysiology</i> , 1995, 26, 78-85.	0.2	1
56	Postsynaptic responses of lamina II neurons of the spinal cord of the cat to activation of primary afferent input. <i>Neurophysiology</i> , 1995, 26, 315-322.	0.2	0
57	Electrotonic Clusters in the Dendritic Arborization of Abducens Motoneurons of the Rat. <i>European Journal of Neuroscience</i> , 1994, 6, 1517-1527.	1.2	42
58	Stochastic Geometry and Electrotonic Architecture of Dendritic Arborization of Brain Stem Motoneuron. <i>European Journal of Neuroscience</i> , 1993, 5, 1485-1493.	1.2	39
59	Probable localization of synaptic inputs evoking generation of slow inhibitory postsynaptic potentials in pyramidal neurons: Simulation studies. <i>Neurophysiology</i> , 1992, 23, 551-556.	0.2	0
60	Synthesis of mathematical models of branching axons and dendrites. <i>Neurophysiology</i> , 1988, 20, 343-350.	0.2	3