Aleksey Malyshev

List of Publications by Year
in descending order

35 papers	552 citations	687363 13 h-index	677142 22 g-index
37 all docs	37 docs citations	37 times ranked	666 citing authors

#	Article	IF	Citations
1	Ultrafast Population Encoding by Cortical Neurons. Journal of Neuroscience, 2011, 31, 12171-12179.	3.6	87
2	Correlations and Synchrony in Threshold Neuron Models. Physical Review Letters, 2010, 104, 058102.	7.8	73
3	Fast Computations in Cortical Ensembles Require Rapid Initiation of Action Potentials. Journal of Neuroscience, 2013, 33, 2281-2292.	3.6	69
4	Chloride conducting light activated channel GtACR2 can produce both cessation of firing and generation of action potentials in cortical neurons in response to light. Neuroscience Letters, 2017, 640, 76-80.	2.1	56
5	Estimating short-term synaptic plasticity from pre- and postsynaptic spiking. PLoS Computational Biology, 2017, 13, e1005738.	3.2	34
6	Sodium action potentials in placozoa: Insights into behavioral integration and evolution of nerveless animals. Biochemical and Biophysical Research Communications, 2020, 532, 120-126.	2.1	22
7	Synaptic facilitation in Helix neurons depends upon postsynaptic calcium and nitric oxide. Neuroscience Letters, 1999, 261, 65-68.	2.1	18
8	Synaptic contact between mechanosensory neuron and withdrawal interneuron in terrestrial snail is mediated by l-glutamate-like transmitter. Neuroscience Letters, 2003, 341, 237-240.	2.1	18
9	Genetically encoded calcium indicator with NTnC-like design and enhanced fluorescence contrast and kinetics. BMC Biotechnology, 2018, 18, 10.	3.3	16
10	Distinct Heterosynaptic Plasticity in Fast Spiking and Non-Fast-Spiking Inhibitory Neurons in Rat Visual Cortex. Journal of Neuroscience, 2019, 39, 6865-6878.	3.6	16
11	Advantages and Limitations of the Use of Optogenetic Approach in Studying Fast-Scale Spike Encoding. PLoS ONE, 2015, 10, e0122286.	2.5	16
12	Differential effects of serotonergic and peptidergic cardioexcitatory neurons on the heart activity in the pteropod mollusc, Clione limacina. Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 1999, 185, 551-560.	1.6	15
13	Onset Dynamics of Action Potentials in Rat Neocortical Neurons and Identified Snail Neurons: Quantification of the Difference. PLoS ONE, 2008, 3, e1962.	2.5	15
14	Cannabinoid regulation in identified synapse of terrestrial snail. European Journal of Neuroscience, 2007, 26, 3207-3214.	2.6	14
15	Participation of GABA in establishing behavioral hierarchies in the terrestrial snail. Experimental Brain Research, 2001, 141, 340-348.	1.5	10
16	Dependence of calcium influx in neocortical cells on temporal structure of depolarization, number of spikes, and blockade of NMDA receptors. Journal of Neuroscience Research, 2004, 76, 481-487.	2.9	10
17	Energyâ€efficient encoding by shifting spikes in neocortical neurons. European Journal of Neuroscience, 2013, 38, 3181-3188.	2.6	10
18	Encoding of High Frequencies Improves with Maturation of Action Potential Generation in Cultured Neocortical Neurons. Frontiers in Cellular Neuroscience, 2017, 11, 28.	3.7	10

#	Article	IF	Citations
19	Impaired Fear Extinction Due to a Deficit in Ca2+ Influx Through L-Type Voltage-Gated Ca2+ Channels in Mice Deficient for Tenascin-C. Frontiers in Integrative Neuroscience, 2017, 11, 16.	2.1	9
20	Dependence of synaptic facilitation postsynaptically induced in snail neurones on season and serotonin level. NeuroReport, 1997, 8, 1179-1182.	1.2	8
21	Neural control of heartbeat during two antagonistic behaviors: whole body withdrawal and escape swimming in the Mollusk Clione limacina. Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 2008, 194, 899-906.	1.6	8
22	Buccal neurons activate ciliary beating in the foregut of the pteropod mollusk Clione limacina. Journal of Experimental Biology, 2009, 212, 2969-2976.	1.7	4
23	Intracellular Localization of the HCS2 Gene Products in Identified Snail Neurons In Vivo and In Vitro. Cellular and Molecular Neurobiology, 2006, 26, 127-144.	3.3	3
24	Modulation of the amplitude of Î³-band activity by stimulus phase enhances signal encoding. European Journal of Neuroscience, 2011, 33, 1223-1239.	2.6	3
25	An analysis of the effect of the internal ribosome entry site of the encephalomyocarditis virus on the expression of the second gene in the bicistronic matrix in neurons of primary hippocampal cultures. Neurochemical Journal, 2017, 11, 277-281.	0.5	2
26	Enhanced Non-Associative Long-Term Potentiation in Immature Granule Cells in the Dentate Gyrus of Adult Rats. Frontiers in Synaptic Neuroscience, 2022, 14, .	2.5	2
27	Serotonergic cerebral cells control activity of cilia in the foregut of the pteropod mollusk Clione limacina. Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 2011, 197, 25-32.	1.6	1
28	Changes in Intracellular Calcium Ion Concentrations during Generation of High-Amplitude EPSP in Neurons in the Common Snail. Neuroscience and Behavioral Physiology, 2014, 44, 681-686.	0.4	1
29	More Light on the Brain: 30 Years Later. Neuroscience and Behavioral Physiology, 2019, 49, 159-162.	0.4	1
30	An Optogenetic Approach to Studies of the Mechanisms of Heterosynaptic Plasticity in Neocortical Neurons. Neuroscience and Behavioral Physiology, 2019, 49, 208-215.	0.4	1
31	Glutamatergic Synapses between Functionally Identified Neurons in the Helix Snail. Neurophysiology, 2002, 34, 181-181.	0.3	0
32	The Role of Dendrosomatic Transmitter Release in Interneuronal Communication. Neuroscience and Behavioral Physiology, 2013, 43, 617-622.	0.4	0
33	Expression of Channelrhodopsin-2 Using in Suspension Electroporation for Studying the Monosynaptic Transmission in Neuronal Culture. BioNanoScience, 2016, 6, 329-331.	3.5	0
34	Bicistronic Construct for Optogenetic Prosthesis of Ganglion Cell Receptive Field of Degenerative Retina. Doklady Biochemistry and Biophysics, 2019, 486, 184-186.	0.9	0
35	Central Targeting of Channelrhodopsin2 by the Motif of Potassium Channel Kv2.1 Can be Altered Due to Overexpression of the Construct. BioNanoScience, 2021, 11, 408-416.	3.5	0