Aleksey V Zaitsev

List of Publications by Year
in descending order

92	2,084	257357 24	276775 41
papers	citations	h-index	g-index

96	96	96	2270
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Localization of Calcium-binding Proteins in Physiologically and Morphologically Characterized Interneurons of Monkey Dorsolateral Prefrontal Cortex. Cerebral Cortex, 2005, 15, 1178-1186.	1.6	158
2	Cluster Analysisâ€“Based Physiological Classification and Morphological Properties of Inhibitory Neurons in Layers 2â€“3 of Monkey Dorsolateral Prefrontal Cortex. Journal of Neurophysiology, 2005, 94, 3009-3022.	0.9	120
3	Properties of Excitatory Synaptic Responses in Fast-spiking Interneurons and Pyramidal Cells from Monkey and Rat Prefrontal Cortex. Cerebral Cortex, 2006, 16, 541-552.	1.6	118
4	Interneuron Diversity in Layers 2â€“3 of Monkey Prefrontal Cortex. Cerebral Cortex, 2009, 19, 1597-1615.	1.6	117
5	Parvalbumin-Positive Basket Interneurons in Monkey and Rat Prefrontal Cortex. Journal of Neurophysiology, 2008, 100, 2348-2360.	0.9	104
6	P/Q-Type, But Not N-Type, Calcium Channels Mediate GABA Release From Fast-Spiking Interneurons to Pyramidal Cells in Rat Prefrontal Cortex. Journal of Neurophysiology, 2007, 97, 3567-3573.	0.9	92
7	Functional Maturation of Excitatory Synapses in Layer 3 Pyramidal Neurons during Postnatal Development of the Primate Prefrontal Cortex. Cerebral Cortex, 2008, 18, 626-637.	1.6	75
8	Astrocytic Atrophy Following Status Epilepticus Parallels Reduced Ca2+ Activity and Impaired Synaptic Plasticity in the Rat Hippocampus. Frontiers in Molecular Neuroscience, 2018, 11, 215.	1.4	73
9	Electrophysiological Differences Between Neurogliaform Cells From Monkey and Rat Prefrontal Cortex. Journal of Neurophysiology, 2007, 97, 1030-1039.	0.9	64
10	Electrophysiological classes of layer 2/3 pyramidal cells in monkey prefrontal cortex. Journal of Neurophysiology, 2012, 108, 595-609.	0.9	61
11	Changes of AMPA receptor properties in the neocortex and hippocampus following pilocarpine-induced status epilepticus in rats. Neuroscience, 2016, 327, 146-155.	1.1	57
12	Electrophysiological Heterogeneity of Fast-Spiking Interneurons: Chandelier versus Basket Cells. PLoS ONE, 2013, 8, e70553.	1.1	57
13	Nâ€methylâ€Dâ€aspartate receptor channel blockers prevent pentylenetetrazoleâ€induced convulsions and morphological changes in rat brain neurons. Journal of Neuroscience Research, 2015, 93, 454-465.	1.3	50
14	Status epilepticus impairs synaptic plasticity in rat hippocampus and is followed by changes in expression of NMDA receptors. Biochemistry (Moscow), 2017, 82, 282-290.	0.7	50
15	Minimal model of interictal and ictal discharges â€œEpileptor-2â€• PLoS Computational Biology, 2018, 14, e1006186.	1.5	50
16	Alterations in Properties of Glutamatergic Transmission in the Temporal Cortex and Hippocampus Following Pilocarpine-Induced Acute Seizures in Wistar Rats. Frontiers in Cellular Neuroscience, 2017, 11, 264.	1.8	38
17	GABA Transporter GAT1 Prevents Spillover at Proximal and Distal GABA Synapses Onto Primate Prefrontal Cortex Neurons. Journal of Neurophysiology, 2009, 101, 533-547.	0.9	35
18	Status epilepticus alters hippocampal long-term synaptic potentiation in a rat lithium-pilocarpine model. NeuroReport, 2016, 27, 1191-1195.	0.6	33

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19	Impairments in cognitive functions and emotional and social behaviors in a rat lithium-pilocarpine model of temporal lobe epilepsy. Behavioural Brain Research, 2019, 372, 112044.	1.2	33
20	Transient Morphological Alterations in the Hippocampus After Pentylenetetrazole-Induced Seizures in Rats. Neurochemical Research, 2018, 43, 1671-1682.	1.6	32
21	Prenatal hypoxia produces memory deficits associated with impairment of long-term synaptic plasticity in young rats. Neurobiology of Learning and Memory, 2019, 164, 107066.	1.0	28
22	Alterations in mRNA expression of glutamate receptor subunits and excitatory amino acid transporters following pilocarpine-induced seizures in rats. Neuroscience Letters, 2018, 686, 94-100.	1.0	27
23	Inhibition of the slow afterhyperpolarization restores the classical spike timing-dependent plasticity rule obeyed in layer 2/3 pyramidal cells of the prefrontal cortex. Journal of Neurophysiology, 2012, 107, 205-215.	0.9	26
24	Derivatives of Piperazines as Potential Therapeutic Agents for Alzheimerâ€™s Disease. Molecular Pharmacology, 2019, 95, 337-348.	1.0	26
25	Synaptic Conductances during Interictal Discharges in Pyramidal Neurons of Rat Entorhinal Cortex. Frontiers in Cellular Neuroscience, 2016, 10, 233.	1.8	25
26	Computational model of interictal discharges triggered by interneurons. PLoS ONE, 2017, 12, e0185752.	1.1	21
27	Changes in Functional Properties of Rat Hippocampal Neurons Following Pentylenetetrazole-induced Status Epilepticus. Neuroscience, 2019, 399, 103-116.	1.1	20
28	Impairment of exploratory behavior and spatial memory in adolescent rats in lithium-pilocarpine model of temporal lobe epilepsy. Doklady Biological Sciences, 2015, 463, 175-177.	0.2	19
29	Seizure-Induced Potentiation of AMPA Receptor-Mediated Synaptic Transmission in the Entorhinal Cortex. Frontiers in Cellular Neuroscience, 2018, 12, 486.	1.8	19
30	Anakinra Reduces Epileptogenesis, Provides Neuroprotection, and Attenuates Behavioral Impairments in Rats in the Lithiumâ€“Pilocarpine Model of Epilepsy. Pharmaceuticals, 2020, 13, 340.	1.7	19
31	Functional properties and shortâ€term dynamics of unidirectional and reciprocal synaptic connections between layer 2/3 pyramidal cells and fastâ€spiking interneurons in juvenile rat prefrontal cortex. European Journal of Neuroscience, 2013, 38, 2988-2998.	1.2	18
32	Multiplex qPCR assay for assessment of reference gene expression stability in rat tissues/samples. Molecular and Cellular Probes, 2020, 53, 101611.	0.9	18
33	Neurobiology, Functions, and Relevance of Excitatory Amino Acid Transporters (EAATs) to Treatment of Refractory Epilepsy. CNS Drugs, 2020, 34, 1089-1103.	2.7	17
34	Early Life Febrile Seizures Impair Hippocampal Synaptic Plasticity in Young Rats. International Journal of Molecular Sciences, 2021, 22, 8218.	1.8	17
35	Specific mechanism of useâ€dependent channel block of calciumâ€permeable AMPA receptors provides activityâ€dependent inhibition of glutamatergic neurotransmission. Journal of Physiology, 2011, 589, 1587-1601.	1.3	16
36	Transient Switching of NMDA-Dependent Long-Term Synaptic Potentiation in CA3-CA1 Hippocampal Synapses to mGluR1-Dependent Potentiation After Pentylenetetrazole-Induced Acute Seizures in Young Rats. Cellular and Molecular Neurobiology, 2019, 39, 287-300.	1.7	16

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37	Impairments of Long-Term Synaptic Plasticity in the Hippocampus of Young Rats during the Latent Phase of the Lithium-Pilocarpine Model of Temporal Lobe Epilepsy. International Journal of Molecular Sciences, 2021, 22, 13355.	1.8	16
38	Mathematical model of Na-K-Cl homeostasis in ictal and interictal discharges. PLoS ONE, 2019, 14, e0213904.	1.1	15
39	Reference Gene Validation in the Brain Regions of Young Rats after Pentylenetetrazole-Induced Seizures. Biomedicines, 2020, 8, 239.	1.4	14
40	Cephalosporin antibiotics are weak blockers of GABAa receptor-mediated synaptic transmission in rat brain slices. Biochemical and Biophysical Research Communications, 2018, 499, 868-874.	1.0	13
41	Ceftriaxone Treatment Affects EAAT2 Expression and Glutamatergic Neurotransmission and Exerts a Weak Anticonvulsant Effect in Young Rats. International Journal of Molecular Sciences, 2019, 20, 5852.	1.8	13
42	Exposure to bacterial lipopolysaccharide in early life affects the expression of ionotropic glutamate receptor genes and is accompanied by disturbances in long-term potentiation and cognitive functions in young rats. Brain, Behavior, and Immunity, 2020, 90, 3-15.	2.0	13
43	Calcium-permeable AMPA receptors are essential to the synaptic plasticity induced by epileptiform activity in rat hippocampal slices. Biochemical and Biophysical Research Communications, 2020, 529, 1145-1150.	1.0	12
44	A simple Markov model of sodium channels with a dynamic threshold. Journal of Computational Neuroscience, 2014, 37, 181-191.	0.6	11
45	Functional properties of GABA synaptic inputs onto GABA neurons in monkey prefrontal cortex. Journal of Neurophysiology, 2015, 113, 1850-1861.	0.9	11
46	Morphofunctional changes in field CA1 of the rat hippocampus after pentylenetetrazole and lithium-pilocarpine induced seizures. Journal of Evolutionary Biochemistry and Physiology, 2014, 50, 531-538.	0.2	10
47	Presynaptic GABAB receptors underlie the antiepileptic effect of low-frequency electrical stimulation in the 4-aminopyridine model of epilepsy in brain slices of young rats. Brain Stimulation, 2020, 13, 1387-1395.	0.7	10
48	Short-Term Epileptiform Activity Potentiates Excitatory Synapses but Does Not Affect Intrinsic Membrane Properties of Pyramidal Neurons in the Rat Hippocampus In Vitro. Biomedicines, 2021, 9, 1374.	1.4	10
49	Ï‰-Tbo-IT1â€“New Inhibitor of Insect Calcium Channels Isolated from Spider Venom. Scientific Reports, 2015, 5, 17232.	1.6	9
50	The domain of neuronal firing on a plane of input current and conductance. Journal of Computational Neuroscience, 2015, 39, 217-233.	0.6	9
51	NMDAR-independent hippocampal long-term depression impairment after status epilepticus in a lithium-pilocarpine model of temporal lobe epilepsy. Synapse, 2017, 71, e21982.	0.6	9
52	Spatial propagation of interictal discharges along the cortex. Biochemical and Biophysical Research Communications, 2019, 508, 1245-1251.	1.0	9
53	Alterations in mRNA and Protein Expression of Glutamate Receptor Subunits Following Pentylenetetrazole-induced Acute Seizures in Young Rats. Neuroscience, 2021, 468, 1-15.	1.1	9
54	Properties of spontaneous and miniature excitatory postsynaptic currents in neurons of the rat prefrontal cortex. Journal of Evolutionary Biochemistry and Physiology, 2014, 50, 506-514.	0.2	8

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55	Acute Changes in Electrophysiological Properties of Cortical Regular-Spiking Cells Following Seizures in a Rat Lithiumâ€“Pilocarpine Model. Neuroscience, 2018, 379, 202-215.	1.1	8
56	Memantine attenuates cognitive impairments after status epilepticus induced in a lithiumâ€“pilocarpine model. Doklady Biological Sciences, 2016, 470, 224-227.	0.2	7
57	Administration of Bacterial Lipopolysaccharide during Early Postnatal Ontogenesis Induces Transient Impairment of Long-Term Synaptic Plasticity Associated with Behavioral Abnormalities in Young Rats. Pharmaceuticals, 2020, 13, 48.	1.7	7
58	Synaptic Dysfunction in Epilepsy. Journal of Evolutionary Biochemistry and Physiology, 2021, 57, 542-563.	0.2	7
59	MTEP, a Selective mGluR5 Antagonist, Had a Neuroprotective Effect but Did Not Prevent the Development of Spontaneous Recurrent Seizures and Behavioral Comorbidities in the Rat Lithiumâ€“Pilocarpine Model of Epilepsy. International Journal of Molecular Sciences, 2022, 23, 497.	1.8	7
60	Statistical models suggest presence of two distinct subpopulations of miniature EPSCs in fast-spiking interneurons of rat prefrontal cortex. Neuroscience, 2015, 301, 508-519.	1.1	6
61	Presynaptic serotonergic modulation of spontaneous and miniature synaptic activity in frog lumbar motoneurons. Journal of Evolutionary Biochemistry and Physiology, 2016, 52, 359-368.	0.2	5
62	Status epilepticus induced by pentylenetetrazole increases short-term synaptic facilitation in the hippocampus of juvenile rats. Doklady Biological Sciences, 2017, 477, 207-209.	0.2	5
63	Presynaptic serotonin 5-HT1B/D receptor-mediated inhibition of glycinergic transmission to the frog spinal motoneurons. Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 2018, 204, 329-337.	0.7	5
64	AMPAR-mediated Interictal Discharges in Neurons of Entorhinal Cortex: Experiment and Model. Doklady Biological Sciences, 2018, 479, 47-50.	0.2	5
65	Paradoxical Anticonvulsant Effect of Cefepime in the Pentylenetetrazole Model of Seizures in Rats. Pharmaceuticals, 2020, 13, 80.	1.7	5
66	Ictal wavefront propagation in slices and simulations with conductance-based refractory density model. PLoS Computational Biology, 2022, 18, e1009782.	1.5	5
67	Changes in Metabotropic Glutamate Receptor Gene Expression in Rat Brain in a Lithiumâ€“Pilocarpine Model of Temporal Lobe Epilepsy. International Journal of Molecular Sciences, 2022, 23, 2752.	1.8	5
68	Histological Characterization of Physiologically Determined Fast-Spiking Interneurons in Slices of Primate Dorsolateral Prefrontal Cortex. Neuromethods, 2012, , 159-181.	0.2	4
69	Early morphological and functional changes in the GABAergic system of hippocampus in the rat lithium-pilocarpine model of epilepsy. Doklady Biological Sciences, 2017, 472, 4-7.	0.2	4
70	The Role of GABAergic Interneurons in the Cortex and Hippocampus in the Development of Epilepsy. Neuroscience and Behavioral Physiology, 2017, 47, 913-922.	0.2	4
71	Photostimulation activates fast-spiking interneurons and pyramidal cells in the entorhinal cortex of Thy1-ChR2-YFP line 18 mice. Biochemical and Biophysical Research Communications, 2021, 580, 87-92.	1.0	4
72	Insertion of Calcium-Permeable AMPA Receptors during Epileptiform Activity In Vitro Modulates Excitability of Principal Neurons in the Rat Entorhinal Cortex. International Journal of Molecular Sciences, 2021, 22, 12174.	1.8	4

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73	Maternal Hypoxia Increases the Excitability of Neurons in the Entorhinal Cortex and Dorsal Hippocampus of Rat Offspring. Frontiers in Neuroscience, 2022, 16, 867120.	1.4	4
74	Effects of Ionotropic Glutamate Receptor Blockers on Pentylenetetrazole-Induced Seizures in Krushinskiiâ€“Molodkina Rats. Neuroscience and Behavioral Physiology, 2014, 44, 945-950.	0.2	3
75	Changes in the Expression of Genes of the Glutamate Transporter and Subunits of the NMDA and AMPA Receptors in the Rat Amygdala in the Lithiumâ€“Pilocarpine Model of Epilepsy. Neurochemical Journal, 2018, 12, 222-227.	0.2	3
76	Ceftriaxone Treatment Weakens Long-Term Synaptic Potentiation in the Hippocampus of Young Rats. International Journal of Molecular Sciences, 2021, 22, 8417.	1.8	3
77	Modulation of seizure-like events by the small conductance and ATP-sensitive potassium ion channels. Biochemical and Biophysical Research Communications, 2022, 623, 74-80.	1.0	3
78	The role of calcium-permeable AMPA receptors in disynaptic feedforward inhibition in the rat prefrontal cortex. Biochemistry (Moscow) Supplement Series A: Membrane and Cell Biology, 2012, 6, 198-205.	0.3	2
79	Classification and function of GABAergic interneurons of the mammalian cerebral cortex. Biochemistry (Moscow) Supplement Series A: Membrane and Cell Biology, 2013, 7, 245-259.	0.3	2
80	Delayed effect of prenatal exposure to hypoxia on the susceptibility of rats to electric seizures. Doklady Biological Sciences, 2015, 465, 271-273.	0.2	2
81	Different Effects of 5-HT1 and 5-HT2 Receptor Agonists on Excitability Modulation of Motoneurons in Frog Spinal Cord. Journal of Evolutionary Biochemistry and Physiology, 2019, 55, 284-292.	0.2	2
82	The NMDA Receptor Channel Blockers Memantine and IEM-1921 Decrease the Duration of Status Epilepticus in Wistar and Krushinskiiâ€“Molodkina Rats in a Lithium-Pilocarpine Model. Neuroscience and Behavioral Physiology, 2020, 50, 374-383.	0.2	2
83	Age-Dependent Generation of Epileptiform Activity in the 4-Aminopyridine Model with Slices of the Rat Entorhinal Cortex. Journal of Evolutionary Biochemistry and Physiology, 2021, 57, 230-240.	0.2	2
84	Anticonvulsant activities of antagonists of NMDA and calcium-permeable AMPA receptors in a model of maximum electroshock in rats. Neurochemical Journal, 2014, 8, 301-305.	0.2	1
85	Changes in Brain Electrical Activity on Formation of Status Epilepticus in a Lithium-Pilocarpine Model in Rats with Different Levels of Convulsive Readiness. Neuroscience and Behavioral Physiology, 2017, 47, 1019-1028.	0.2	1
86	Serotonin Modulates Differently the Functional Properties of Damaged and Intact Motoneurons in the Frog Spinal Cord. Doklady Biological Sciences, 2019, 484, 5-9.	0.2	1
87	The application of the self-probing primer PCR for quantitative expression analysis of R607Q (un)edited GluA2 AMPA receptor mRNA. Biochemical and Biophysical Research Communications, 2021, 569, 174-178.	1.0	1
88	Diagnosis of Mental Retardation in Children Using the Response Time Recording Method. Bio-Medical Engineering, 2000, 34, 295-296.	0.3	0
89	The study of the latent periods of visual object differentiation by different significant characteristics. Human Physiology, 2000, 26, 412-415.	0.1	0
90	Bioelectrical Activity in the Sleepâ€“Waking Cycle in Rats after Pilocarpine-Induced Status Epilepticus. Neuroscience and Behavioral Physiology, 2018, 48, 854-863.	0.2	0

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91	Glutamate Transporters (EAAT-1â€“3) as a Factor in the Pathogenesis and a Potential Therapeutic Target in Epilepsy. Neuroscience and Behavioral Physiology, 2020, 50, 777-786.	0.2	0
92	A Method for Assessing the Conributions of Different Types of Ionotropic Receptors to Postsynaptic Responses during Epileptiform Discharges In Vitro. Neuroscience and Behavioral Physiology, 2020, 50, 750-761.	0.2	0