Dmitri A Rusakov

List of Publications by Year
in descending order

171	11,164	25034	34986
papers	citations	57 h-index	98 g-index

193	193	193	11404
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Long-term potentiation depends on release of d-serine from astrocytes. Nature, 2010, 463, 232-236.	27.8	1,140
2	Astrocytes mediate neurovascular signaling to capillary pericytes but not to arterioles. Nature Neuroscience, 2016, 19, 1619-1627.	14.8	435
3	Extrasynaptic Glutamate Diffusion in the Hippocampus: Ultrastructural Constraints, Uptake, and Receptor Activation. Journal of Neuroscience, 1998, 18, 3158-3170.	3.6	405
4	A genetically encoded fluorescent sensor for in vivo imaging of GABA. Nature Methods, 2019, 16, 763-770.	19.0	242
5	Anti-Hebbian Long-Term Potentiation in the Hippocampal Feedback Inhibitory Circuit. Science, 2007, 315, 1262-1266.	12.6	219
6	Fluorescence lifetime imaging (FLIM): Basic concepts and some recent developments. Medical Photonics, 2015, 27, 3-40.	3.8	208
7	Molecular signals of plasticity at the tetrapartite synapse. Current Opinion in Neurobiology, 2011, 21, 353-359.	4.2	204
8	Electrochemical Nanoprobes for Single-Cell Analysis. ACS Nano, 2014, 8, 875-884.	14.6	195
9	Presynaptic, extrasynaptic and axonal GABAA receptors in the CNS: where and why?. Progress in Biophysics and Molecular Biology, 2005, 87, 33-46.	2.9	193
10	Activation of AMPA, Kainate, and Metabotropic Receptors at Hippocampal Mossy Fiber Synapses. Neuron, 1998, 21, 561-570.	8.1	187
11	The Extracellular Matrix Molecule Hyaluronic Acid Regulates Hippocampal Synaptic Plasticity by Modulating Postsynaptic L-Type Ca2+ Channels. Neuron, 2010, 67, 116-128.	8.1	184
12	Zinc Dynamics and Action at Excitatory Synapses. Neuron, 2014, 82, 1101-1114.	8.1	184
13	Extracellular Ca2+ Depletion Contributes to Fast Activity-Dependent Modulation of Synaptic Transmission in the Brain. Neuron, 2003, 37, 287-297.	8.1	183
14	Cannabinoid- and lysophosphatidylinositol-sensitive receptor GPR55 boosts neurotransmitter release at central synapses. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 5193-5198.	7.1	182
15	Repeated confocal imaging of individual dendritic spines in the living hippocampal slice: evidence for changes in length and orientation associated with chemically induced LTP. Journal of Neuroscience, 1995, 15, 5560-5573.	3.6	181
16	NR2B-Containing Receptors Mediate Cross Talk among Hippocampal Synapses. Journal of Neuroscience, 2004, 24, 4767-4777.	3.6	179
17	Geometric and viscous components of the tortuosity of the extracellular space in the brain. Proceedings of the National Academy of Sciences of the United States of America, 1998, 95, 8975-8980.	7.1	169
18	NGF and Neurotrophin-3 Both Activate TrkA on Sympathetic Neurons but Differentially Regulate Survival and Neuritogenesis. Journal of Cell Biology, 1997, 136, 375-388.	5.2	163

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19	LTP Induction Boosts Glutamate Spillover by Driving Withdrawal of Perisynaptic Astroglia. Neuron, 2020, 108, 919-936.e11.	8.1	159
20	Disentangling calcium-driven astrocyte physiology. Nature Reviews Neuroscience, 2015, 16, 226-233.	10.2	152
21	Astrocytic GABA transporter activity modulates excitatory neurotransmission. Nature Communications, 2016, 7, 13572.	12.8	144
22	GABAA Receptors at Hippocampal Mossy Fibers. Neuron, 2003, 39, 961-973.	8.1	142
23	The optimal height of the synaptic cleft. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 1823-1828.	7.1	139
24	Bassoon Specifically Controls Presynaptic P/Q-type Ca2+ Channels via RIM-Binding Protein. Neuron, 2014, 82, 181-194.	8.1	139
25	Receptor Actions of Synaptically Released Glutamate: The Role of Transporters on the Scale from Nanometers to Microns. Biophysical Journal, 2008, 95, 4584-4596.	0.5	134
26	Morphological plasticity of astroglia: Understanding synaptic microenvironment. Glia, 2015, 63, 2133-2151.	4.9	131
27	Asymmetry of Glia near Central Synapses Favors Presynaptically Directed Glutamate Escape. Biophysical Journal, 2002, 83, 125-134.	0.5	130
28	Interactions between brain mitochondria and cytoskeleton: Evidence for specialized outer membrane domains involved in the association of cytoskeleton-associated proteins to mitochondria in situ and in vitro. Microscopy Research and Technique, 1994, 27, 233-261.	2.2	119
29	Hippocampal synapses: do they talk to their neighbours?. Trends in Neurosciences, 1999, 22, 382-388.	8.6	115
30	Time-Resolved Imaging Reveals Heterogeneous Landscapes of Nanomolar Ca2+ in Neurons and Astroglia. Neuron, 2015, 88, 277-288.	8.1	108
31	5-HT₇R/G₁₂Signaling Regulates Neuronal Morphology and Function in an Age-Dependent Manner. Journal of Neuroscience, 2012, 32, 2915-2930.	3.6	107
32	Glia selectively approach synapses on thin dendritic spines. Philosophical Transactions of the Royal Society B: Biological Sciences, 2014, 369, 20140047.	4.0	105
33	Nanoscale-Targeted Patch-Clamp Recordings of Functional Presynaptic Ion Channels. Neuron, 2013, 79, 1067-1077.	8.1	103
34	Presynaptic GABAA receptors enhance transmission and LTP induction at hippocampal mossy fiber synapses. Nature Neuroscience, 2010, 13, 431-438.	14.8	102
35	The Role of Perisynaptic Glial Sheaths in Glutamate Spillover and Extracellular Ca2+ Depletion. Biophysical Journal, 2001, 81, 1947-1959.	0.5	99
36	Glutamate Transporter Studies Reveal the Pruning of Metabotropic Glutamate Receptors and Absence of AMPA Receptor Desensitization at Mature Calyx of Held Synapses. Journal of Neuroscience, 2005, 25, 8482-8497.	3.6	97

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37	Ultrastructural synaptic correlates of spatial learning in rat hippocampus. Neuroscience, 1997, 80, 69-77.	2.3	93
38	Main Determinants of Presynaptic Ca2+ Dynamics at Individual Mossy Fiber-CA3 Pyramidal Cell Synapses. Journal of Neuroscience, 2006, 26, 7071-7081.	3.6	92
39	Synaptic Remodeling Depends on Signaling between Serotonin Receptors and the Extracellular Matrix. Cell Reports, 2017, 19, 1767-1782.	6.4	92
40	Matrix metalloproteinaseâ€7 disrupts dendritic spines in hippocampal neurons through NMDA receptor activation. Journal of Neurochemistry, 2006, 97, 44-56.	3.9	87
41	GABAB Receptor Modulation of Feedforward Inhibition through Hippocampal Neurogliaform Cells. Journal of Neuroscience, 2008, 28, 6974-6982.	3.6	85
42	GABA-Independent GABA_AReceptor Openings Maintain Tonic Currents. Journal of Neuroscience, 2013, 33, 3905-3914.	3.6	85
43	Astroglial versus Neuronal D-Serine: Fact Checking. Trends in Neurosciences, 2017, 40, 517-520.	8.6	83
44	Differential Nanoscale Topography and Functional Role of GluN2-NMDA Receptor Subtypes at Glutamatergic Synapses. Neuron, 2018, 100, 106-119.e7.	8.1	83
45	Slow GABA Transient and Receptor Desensitization Shape Synaptic Responses Evoked by Hippocampal Neurogliaform Cells. Journal of Neuroscience, 2010, 30, 9898-9909.	3.6	82
46	Unveiling the Extracellular Space of the Brain: From Super-resolved Microstructure toIn VivoFunction. Journal of Neuroscience, 2018, 38, 9355-9363.	3.6	79
47	Synapses in hippocampus occupy only 1â€“2% of cell membranes and are spaced less than half-micron apart: a quantitative ultrastructural analysis with discussion of physiological implications. Neuropharmacology, 1998, 37, 513-521.	4.1	76
48	Dopamine elevates and lowers astroglial Ca²⁺ through distinct pathways depending on local synaptic circuitry. Glia, 2017, 65, 447-459.	4.9	75
49	Diversity of astroglial functions alludes to subcellular specialisation. Trends in Neurosciences, 2014, 37, 228-242.	8.6	74
50	Astrocytic Atrophy Following Status Epilepticus Parallels Reduced Ca2+ Activity and Impaired Synaptic Plasticity in the Rat Hippocampus. Frontiers in Molecular Neuroscience, 2018, 11, 215.	2.9	73
51	Electrodiffusion phenomena in neuroscience: a neglected companion. Nature Reviews Neuroscience, 2017, 18, 598-612.	10.2	72
52	Astrocytes regulate brain extracellular pH via a neuronal activity-dependent bicarbonate shuttle. Nature Communications, 2020, 11, 5073.	12.8	72
53	Shaping the synaptic signal: molecular mobility inside and outside the cleft. Trends in Neurosciences, 2011, 34, 359-369.	8.6	71
54	Electric Fields Due to Synaptic Currents Sharpen Excitatory Transmission. Science, 2008, 319, 1845-1849.	12.6	69

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55	Target-Cell Specificity of Kainate Autoreceptor and Ca²⁺-Store-Dependent Short-Term Plasticity at Hippocampal Mossy Fiber Synapses. Journal of Neuroscience, 2008, 28, 13139-13149.	3.6	69
56	Retrograde Synaptic Signaling Mediated by K+ Efflux through Postsynaptic NMDA Receptors. Cell Reports, 2013, 5, 941-951.	6.4	68
57	Deletion of the betaineâ€“GABA transporter (BGT1; slc6a12) gene does not affect seizure thresholds of adult mice. Epilepsy Research, 2011, 95, 70-81.	1.6	66
58	Multiplex imaging relates quantal glutamate release to presynaptic Ca2+ homeostasis at multiple synapses in situ. Nature Communications, 2019, 10, 1414.	12.8	66
59	Morphological changes associated with stages of memory formation in the chick following passive avoidance training. Behavioural Brain Research, 1995, 66, 21-28.	2.2	65
60	Nanoscale diffusion in the synaptic cleft and beyond measured with time-resolved fluorescence anisotropy imaging. Scientific Reports, 2017, 7, 42022.	3.3	65
61	Disentangling astroglial physiology with a realistic cell model in silico. Nature Communications, 2018, 9, 3554.	12.8	65
62	Astrocytes as Regulators of Synaptic Function. Neuroscientist, 2011, 17, 513-523.	3.5	62
63	Central synapses release a resource-efficient amount of glutamate. Nature Neuroscience, 2013, 16, 10-12.	14.8	62
64	Analog Modulation of Mossy Fiber Transmission Is Uncoupled from Changes in Presynaptic Ca²⁺. Journal of Neuroscience, 2008, 28, 7765-7773.	3.6	60
65	Independent Regulation of Basal Neurotransmitter Release Efficacy by Variable Ca2+ Influx and Bouton Size at Small Central Synapses. PLoS Biology, 2012, 10, e1001396.	5.6	58
66	Tonic GABA _A conductance bidirectionally controls interneuron firing pattern and synchronization in the CA3 hippocampal network. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 504-509.	7.1	56
67	Extracellular glutamate diffusion determines the occupancy of glutamate receptors at CA1 synapses in the hippocampus. Philosophical Transactions of the Royal Society B: Biological Sciences, 1999, 354, 395-402.	4.0	55
68	Backpropagating Action Potentials Enable Detection of Extrasynaptic Glutamate by NMDA Receptors. Cell Reports, 2012, 1, 495-505.	6.4	54
69	AMPA receptor-mediated presynaptic inhibition at cerebellar GABAergic synapses: a characterization of molecular mechanisms. European Journal of Neuroscience, 2004, 19, 2464-2474.	2.6	51
70	Ca2+-Dependent Mechanisms of Presynaptic Control at Central Synapses. Neuroscientist, 2006, 12, 317-326.	3.5	50
71	Academia Europaea Position Paper on Translational Medicine: The Cycle Model for Translating Scientific Results into Community Benefits. Journal of Clinical Medicine, 2020, 9, 1532.	2.4	50
72	Spike-Driven Glutamate Electrodiffusion Triggers Synaptic Potentiation via a Homer-Dependent mGluR-NMDAR Link. Neuron, 2013, 77, 528-541.	8.1	49

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73	Branching of active dendritic spines as a mechanism for controlling synaptic efficacy. Neuroscience, 1996, 75, 315-323.	2.3	44
74	Modulation of Presynaptic Ca2+ Entry by AMPA Receptors at Individual GABAergic Synapses in the Cerebellum. Journal of Neuroscience, 2005, 25, 4930-4940.	3.6	43
75	Monitoring intracellular nanomolar calcium using fluorescence lifetime imaging. Nature Protocols, 2018, 13, 581-597.	12.0	42
76	Noisy Synaptic Conductance: Bug or a Feature?. Trends in Neurosciences, 2020, 43, 363-372.	8.6	41
77	Increased immunogold labelling of neural cell adhesion molecule isoforms in synaptic active zones of the chick striatum 5â€“6 hours after one-trial passive avoidance training. Neuroscience, 1997, 82, 1-5.	2.3	39
78	Monitoring local synaptic activity with astrocytic patch pipettes. Nature Protocols, 2012, 7, 2171-2179.	12.0	39
79	The Nanoworld of the Tripartite Synapse: Insights from Super-Resolution Microscopy. Frontiers in Cellular Neuroscience, 2017, 11, 374.	3.7	38
80	Local Resting Ca2+ Controls the Scale of Astroglial Ca2+ Signals. Cell Reports, 2020, 30, 3466-3477.e4.	6.4	38
81	CaMKII translocation requires local NMDA receptor-mediated Ca2+ signaling. EMBO Journal, 2006, 25, 5873-5883.	7.8	36
82	Tridimensional organization of Purkinje neuron cisternal stacks, a specialized endoplasmic reticulum subcompartment rich in inositol 1,4,5-trisphosphate receptors. Journal of Neurocytology, 1993, 22, 273-282.	1.5	34
83	Quantification of dendritic spine populations using image analysis and a tilting disector. Journal of Neuroscience Methods, 1995, 60, 11-21.	2.5	34
84	Extracellular diffusivity determines contribution of high-versus low-affinity receptors to neural signaling. NeuroImage, 2005, 25, 101-111.	4.2	34
85	Moderate AMPA receptor clustering on the nanoscale can efficiently potentiate synaptic current. Philosophical Transactions of the Royal Society B: Biological Sciences, 2014, 369, 20130167.	4.0	34
86	Monitoring single-synapse glutamate release and presynaptic calcium concentration in organised brain tissue. Cell Calcium, 2017, 64, 102-108.	2.4	34
87	Expression of long-term potentiation in aged rats involves perforated synapses but dendritic spine branching results from high-frequency stimulation alone. Hippocampus, 2004, 14, 255-264.	1.9	32
88	Hippocampal circuit dysfunction in the Tc1 mouse model of Down syndrome. Nature Neuroscience, 2015, 18, 1291-1298.	14.8	32
89	Perisynaptic asymmetry of glia: new insights into glutamate signalling. Trends in Neurosciences, 2002, 25, 492-494.	8.6	31
90	Heterogeneity and Specificity of Presynaptic Ca2+ Current Modulation by mGluRs at Individual Hippocampal Synapses. Cerebral Cortex, 2004, 14, 748-758.	2.9	31

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91	Characterization of AMPA Receptors Targeted by the Climbing Fiber Transmitter Mediating Presynaptic Inhibition of GABAergic Transmission at Cerebellar Interneuron-Purkinje Cell Synapses. Journal of Neuroscience, 2006, 26, 2278-2289.	3.6	31
92	Synaptic GABA release prevents GABA transporter type-1 reversal during excessive network activity. Nature Communications, 2015, 6, 6597.	12.8	31
93	Mitochondrial ROS control neuronal excitability and cell fate in frontotemporal dementia. Alzheimer's and Dementia, 2022, 18, 318-338.	0.8	27
94	NMDA Receptor Activation: Two Targets for Two Co-Agonists. Neurochemical Research, 2013, 38, 1156-1162.	3.3	26
95	Serotonin 5-HT4 receptor boosts functional maturation of dendritic spines via RhoA-dependent control of F-actin. Communications Biology, 2020, 3, 76.	4.4	26
96	Reduction in spine density associated with long-term potentiation in the dentate gyrus suggests a spine fusion-and-branching model of potentiation. , 1997, 7, 489-500.		25
97	Imaging tripartite synapses using super-resolution microscopy. Methods, 2020, 174, 81-90.	3.8	25
98	Re-structuring of synapses 24 hours after induction of long-term potentiation in the dentate gyrus of the rat hippocampus in vivo. Neuroscience, 2000, 100, 221-227.	2.3	24
99	Regulation of rhythm genesis by volume-limited, astroglia-like signals in neural networks. Philosophical Transactions of the Royal Society B: Biological Sciences, 2014, 369, 20130614.	4.0	24
100	Polymer microchamber arrays for geometry-controlled drug release: a functional study in human cells of neuronal phenotype. Biomaterials Science, 2019, 7, 2358-2371.	5.4	24
101	Rapid recycling of glutamate transporters on the astroglial surface. ELife, 2021, 10, .	6.0	24
102	d-Serine: A key to synaptic plasticity?. International Journal of Biochemistry and Cell Biology, 2012, 44, 587-590.	2.8	23
103	Sub-millisecond ligand probing of cell receptors with multiple solution exchange. Nature Protocols, 2013, 8, 1299-1306.	12.0	23
104	Neuronal adaptation involves rapid expansion of the action potential initiation site. Nature Communications, 2014, 5, 3817.	12.8	22
105	Probing nanoâ€organization of astroglia with multiâ€color superâ€resolution microscopy. Journal of Neuroscience Research, 2017, 95, 2159-2171.	2.9	22
106	Electric fields of synaptic currents could influence diffusion of charged neurotransmitter molecules. Synapse, 2004, 51, 270-278.	1.2	21
107	A Peptide Mimetic Targeting Trans-Homophilic NCAM Binding Sites Promotes Spatial Learning and Neural Plasticity in the Hippocampus. PLoS ONE, 2011, 6, e23433.	2.5	21
108	Efficient Integration of Synaptic Events by NMDA Receptors in Three-Dimensional Neuropil. Biophysical Journal, 2015, 108, 2457-2464.	0.5	21

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109	Optical monitoring of glutamate release at multiple synapses in situ detects changes following LTP induction. Molecular Brain, 2020, 13, 39.	2.6	20
110	A tortuous and viscous route to understanding diffusion in the brain. Trends in Neurosciences, 1998, 21, 469-470.	8.6	19
111	Synaptic plasticity and Ca²⁺ signalling in astrocytes. Neuron Glia Biology, 2010, 6, 141-146.	1.6	19
112	Nano-engineered microcapsules boost the treatment of persistent pain. Drug Delivery, 2018, 25, 435-447.	5.7	18
113	Maturation and phenotype of pathophysiological neuronal excitability of human cells in tau-related dementia. Journal of Cell Science, 2020, 133, .	2.0	17
114	Comment on "Role of NMDA Receptor Subtypes in Governing the Direction of Hippocampal Synaptic Plasticity". Science, 2004, 305, 1912b-1912b.	12.6	16
115	ARACHNE: A neural-neuroglial network builder with remotely controlled parallel computing. PLoS Computational Biology, 2017, 13, e1005467.	3.2	16
116	Synaptic environment and extrasynaptic glutamate signals: The quest continues. Neuropharmacology, 2021, 195, 108688.	4.1	16
117	Spatial re-arrangement of the vesicle apparatus in forebrain synapses of chicks 30 min after passive avoidance training. Neuroscience Letters, 1993, 154, 13-16.	2.1	14
118	Glutamate escape from a tortuous synaptic cleft of the hippocampal mossy fibre synapse. Neurochemistry International, 2004, 45, 479-484.	3.8	14
119	Extreme statistics may govern avalanche-type biological reactions. Physics of Life Reviews, 2019, 28, 85-87.	2.8	14
120	K⁺ efflux through postsynaptic <scp>NMDA</scp> receptors suppresses local astrocytic glutamate uptake. Glia, 2022, 70, 961-974.	4.9	14
121	Lateral patterns of the neural cell adhesion molecule on the surface of hippocampal cells developing in vitro. Neuroscience, 1993, 55, 491-498.	2.3	13
122	Multiplexed calcium imaging of single-synapse activity and astroglial responses in the intact brain. Neuroscience Letters, 2019, 689, 26-32.	2.1	13
123	Dendritic spines form 'collarsÊ¼ in hippocampal granule cells. NeuroReport, 1995, 6, 1557-1561.	1.2	12
124	Extracellular GABA waves regulate coincidence detection in excitatory circuits. Journal of Physiology, 2020, 598, 4047-4062.	2.9	12
125	Genetically engineered MAPT 10+16 mutation causes pathophysiological excitability of human iPSC-derived neurons related to 4R tau-induced dementia. Cell Death and Disease, 2021, 12, 716.	6.3	11
126	Cytoskeleton-mediated, age-dependent lateral topography of lectin-gold-labelled molecules on the plasma membrane of cultured neurons: A statistical view. Neuroscience, 1993, 52, 369-379.	2.3	10

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127	Electrodiffusion of synaptic receptors: a mechanism to modify synaptic efficacy?. , 2000, 35, 26-38.		10
128	Presynaptic fluctuations and release-independent depression. Nature Neuroscience, 2006, 9, 1091-1093.	14.8	10
129	Depletion of Extracellular Ca ²⁺ Prompts Astroglia to Moderate Synaptic Network Activity. Science Signaling, 2012, 5, pe4.	3.6	10
130	Release probability increases towards distal dendrites boosting high-frequency signal transfer in the rodent hippocampus. ELife, 2021, 10, .	6.0	10
131	Clustering and co-localization of immunogold double labelled neural cell adhesion molecule isoforms in chick forebrain. Neuroscience Letters, 1995, 183, 50-53.	2.1	9
132	Do extracellular Ca 2+ signals carry information through neural tissue?. Trends in Neurosciences, 2000, 23, 12-13.	8.6	9
133	Fluorescence Lifetime Imaging (FLIM): Basic Concepts and Recent Applications. Springer Series in Chemical Physics, 2015, , 119-188.	0.2	9
134	Biodegradable Microcapsules Loaded with Nerve Growth Factor Enable Neurite Guidance and Synapse Formation. Pharmaceutics, 2021, 13, 25.	4.5	9
135	The spatial pattern of the synaptic vesicular apparatus as a correlate of transmitter storage models. Neuroscience Letters, 1991, 131, 156-158.	2.1	8
136	Population trends in the fine spatial re-organization of synaptic elements in forebrain regions of chicks 0.5 and 24 hours after passive avoidance training. Neuroscience, 1995, 66, 291-307.	2.3	8
137	Astroglial glutamate transporters trigger glutaminergic gliotransmission. Journal of Physiology, 2012, 590, 2187-2188.	2.9	8
138	Monitoring Ca 2+ elevations in individual astrocytes upon local release of amyloid beta in acute brain slices. Brain Research Bulletin, 2018, 136, 85-90.	3.0	8
139	Glutamate Imaging Reveals Multiple Sites of Stochastic Release in the CA3 Giant Mossy Fiber Boutons. Frontiers in Cellular Neuroscience, 2019, 13, 243.	3.7	8
140	Polylactic Acid-Based Patterned Matrixes for Site-Specific Delivery of Neuropeptides On-Demand: Functional NGF Effects on Human Neuronal Cells. Frontiers in Bioengineering and Biotechnology, 2020, 8, 497.	4.1	8
141	Brain circuitry outside the synaptic cleft. Philosophical Transactions of the Royal Society B: Biological Sciences, 2014, 369, 20130591.	4.0	7
142	Quantal behaviour of synaptic transmission can be statistically examined using the Fourier line spectrum of the histogram of synaptic potentials. Neuroscience Letters, 1993, 163, 231-234.	2.1	6
143	Ca ²⁺ stores and use-dependent facilitation of presynaptic Ca ²⁺ signaling. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, E80; author reply E81.	7.1	6
144	Conductance of porous media depends on external electric fields. Biophysical Journal, 2021, 120, 1431-1442.	0.5	5

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145	Buffering by Transporters Can Spare Geometric Hindrance in Controlling Glutamate Escape. Frontiers in Cellular Neuroscience, 2021, 15, 707813.	3.7	5
146	Changes in the neural cell adhesion molecule patterns on the rat glial cell surfaces with development and contact formation in vitro. Neuroscience Letters, 1993, 154, 17-19.	2.1	4
147	3-Dimensional morphometry of intact dendritic spines observed in thick sections using an electron microscope. Journal of Neuroscience Methods, 1995, 62, 73-82.	2.5	4
148	Fluorescence Lifetime Imaging. , 2014, , 1-50.		4
149	Role of the synaptic microenvironment in functional modification of synaptic transmission. Neurophysiology, 1999, 31, 79-81.	0.3	3
150	Fluorescence Lifetime Imaging. , 2017, , 353-405.		3
151	A Method to Visualize the Nanoscopic Morphology of Astrocytes In Vitro and In Situ. Methods in Molecular Biology, 2019, 1938, 69-84.	0.9	3
152	Quantitative characteristics and reconstruction of the surface topography of histochemical markers on nerve cell plasmalemma. Neurophysiology, 1992, 23, 443-450.	0.3	2
153	An optical sensor to monitor dynamics of extracellular glycine. Nature Chemical Biology, 2018, 14, 835-836.	8.0	2
154	Fluorescence lifetime imaging reveals regulation of presynaptic Ca 2+ by glutamate uptake and mGluRs, but not somatic voltage in cortical neurons. Journal of Neurochemistry, 2021, 156, 48-58.	3.9	2
155	Monitoring Nanoscale Mobility of Small Molecules in Organized Brain Tissue with Time-Resolved Fluorescence Anisotropy Imaging. Neuromethods, 2014, , 125-143.	0.3	2
156	Changes in the efficacy of transmission at synapses of the dorsal horn of the cat spinal cord observed during repetitive activation of cutaneous afferents. Neurophysiology, 1988, 19, 367-372.	0.3	1
157	Statistical estimation of the membrane area and numbers of active sites at presynaptic terminals. Neurophysiology, 1990, 22, 23-28.	0.3	1
158	Stereometric characteristics of ultrastructure of presynaptic terminals in the dorsal horn of the cat spinal cord. Neurophysiology, 1990, 21, 297-302.	0.3	1
159	Interaction between neurofilaments and mitochondria in cultured cells of the rat hippocampus. Neurophysiology, 1996, 27, 1-7.	0.3	1
160	Cell adhesion molecule (NCAM): Its role in the development and functioning of cultured hippocampal neurons. Neurophysiology, 1999, 31, 199-202.	0.3	1
161	Density functional and spectroscopic studies of nitrogen inversion in substituted dizocilpines. Journal of Physical Organic Chemistry, 2009, 22, 607-612.	1.9	1
162	Fluorescence Lifetime Imaging. , 2015, , 1-50.		1

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163	Geometrical characteristics of mitochondria and active presynaptic zones in the dorsal horn of the cat spinal cord. Neurophysiology, 1990, 21, 519-524.	0.3	0
164	Numerical characteristics of synaptic vesicular apparatus structure in the dorsal horn of the cat spinal cord. Neurophysiology, 1990, 21, 420-426.	0.3	0
165	Estimation of spatio-morphofunctional characteristics of presynaptic terminals in the lateral zone at the base of the dorsal horn. Neurophysiology, 1991, 22, 593-600.	0.3	0
166	Altered processes of vesicle recycling in hippocampal presynapses during modelling of glutamate neurotoxicity. Neurophysiology, 1991, 22, 607-613.	0.3	0
167	Subtle re-location of dendritic spine branches containing membrane with fast spiking mechanisms can alter synaptic efficacy. Neurophysiology, 1997, 29, 22-27.	0.3	0
168	Changes in the topography of a number of outer membrane proteins in cultured neurons in conditions of selective lesioning of different elements of the cytoskeleton with neurotoxins. Neuroscience and Behavioral Physiology, 2000, 30, 513-520.	0.4	0
169	Multicolor Superresolution Microscopy: Revealing the Nano World of Astrocytes In Situ. Neuromethods, 2020, , 15-35.	0.3	0
170	Obituary for Professor Michael G. Stewart: Life in neurosciences. Brain Research Bulletin, 2022, 180, 147-149.	3.0	0
171	Remembering Mike Stewart. Neuropharmacology, 2022, 207, 108962.	4.1	0