

Dmitri A Rusakov

List of Publications by Year in descending order

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171
papers

11,164
citations

25034

57
h-index

34986

98
g-index

193
all docs

193
docs citations

193
times ranked

11404
citing authors

#	ARTICLE	IF	CITATIONS
1	Mitochondrial ROS control neuronal excitability and cell fate in frontotemporal dementia. <i>Alzheimer's and Dementia</i> , 2022, 18, 318-338.	0.8	27
2	K ⁺ efflux through postsynaptic NMDA receptors suppresses local astrocytic glutamate uptake. <i>Glia</i> , 2022, 70, 961-974.	4.9	14
3	Obituary for Professor Michael G. Stewart: Life in neurosciences. <i>Brain Research Bulletin</i> , 2022, 180, 147-149.	3.0	0
4	Remembering Mike Stewart. <i>Neuropharmacology</i> , 2022, 207, 108962.	4.1	0
5	Fluorescence lifetime imaging reveals regulation of presynaptic Ca ²⁺ by glutamate uptake and mGluRs, but not somatic voltage in cortical neurons. <i>Journal of Neurochemistry</i> , 2021, 156, 48-58.	3.9	2
6	Release probability increases towards distal dendrites boosting high-frequency signal transfer in the rodent hippocampus. <i>ELife</i> , 2021, 10, .	6.0	10
7	Rapid recycling of glutamate transporters on the astroglial surface. <i>ELife</i> , 2021, 10, .	6.0	24
8	Conductance of porous media depends on external electric fields. <i>Biophysical Journal</i> , 2021, 120, 1431-1442.	0.5	5
9	Genetically engineered MAPT 10+16 mutation causes pathophysiological excitability of human iPSC-derived neurons related to 4R tau-induced dementia. <i>Cell Death and Disease</i> , 2021, 12, 716.	6.3	11
10	Buffering by Transporters Can Spare Geometric Hindrance in Controlling Glutamate Escape. <i>Frontiers in Cellular Neuroscience</i> , 2021, 15, 707813.	3.7	5
11	Synaptic environment and extrasynaptic glutamate signals: The quest continues. <i>Neuropharmacology</i> , 2021, 195, 108688.	4.1	16
12	Biodegradable Microcapsules Loaded with Nerve Growth Factor Enable Neurite Guidance and Synapse Formation. <i>Pharmaceutics</i> , 2021, 13, 25.	4.5	9
13	Imaging tripartite synapses using super-resolution microscopy. <i>Methods</i> , 2020, 174, 81-90.	3.8	25
14	Astrocytes regulate brain extracellular pH via a neuronal activity-dependent bicarbonate shuttle. <i>Nature Communications</i> , 2020, 11, 5073.	12.8	72
15	Extracellular GABA waves regulate coincidence detection in excitatory circuits. <i>Journal of Physiology</i> , 2020, 598, 4047-4062.	2.9	12
16	LTP Induction Boosts Glutamate Spillover by Driving Withdrawal of Perisynaptic Astroglia. <i>Neuron</i> , 2020, 108, 919-936.e11.	8.1	159
17	Poly(lactic Acid)-Based Patterned Matrixes for Site-Specific Delivery of Neuropeptides On-Demand: Functional NGF Effects on Human Neuronal Cells. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020, 8, 497.	4.1	8
18	Local Resting Ca ²⁺ Controls the Scale of Astroglial Ca ²⁺ Signals. <i>Cell Reports</i> , 2020, 30, 3466-3477.e4.	6.4	38

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19	Optical monitoring of glutamate release at multiple synapses in situ detects changes following LTP induction. <i>Molecular Brain</i> , 2020, 13, 39.	2.6	20
20	Noisy Synaptic Conductance: Bug or a Feature?. <i>Trends in Neurosciences</i> , 2020, 43, 363-372.	8.6	41
21	Serotonin 5-HT4 receptor boosts functional maturation of dendritic spines via RhoA-dependent control of F-actin. <i>Communications Biology</i> , 2020, 3, 76.	4.4	26
22	Maturation and phenotype of pathophysiological neuronal excitability of human cells in tau-related dementia. <i>Journal of Cell Science</i> , 2020, 133, .	2.0	17
23	Academia Europaea Position Paper on Translational Medicine: The Cycle Model for Translating Scientific Results into Community Benefits. <i>Journal of Clinical Medicine</i> , 2020, 9, 1532.	2.4	50
24	Multicolor Superresolution Microscopy: Revealing the Nano World of Astrocytes In Situ. <i>Neuromethods</i> , 2020, , 15-35.	0.3	0
25	Multiplexed calcium imaging of single-synapse activity and astroglial responses in the intact brain. <i>Neuroscience Letters</i> , 2019, 689, 26-32.	2.1	13
26	A genetically encoded fluorescent sensor for in vivo imaging of GABA. <i>Nature Methods</i> , 2019, 16, 763-770.	19.0	242
27	Glutamate Imaging Reveals Multiple Sites of Stochastic Release in the CA3 Giant Mossy Fiber Boutons. <i>Frontiers in Cellular Neuroscience</i> , 2019, 13, 243.	3.7	8
28	Polymer microchamber arrays for geometry-controlled drug release: a functional study in human cells of neuronal phenotype. <i>Biomaterials Science</i> , 2019, 7, 2358-2371.	5.4	24
29	Multiplex imaging relates quantal glutamate release to presynaptic Ca ²⁺ homeostasis at multiple synapses in situ. <i>Nature Communications</i> , 2019, 10, 1414.	12.8	66
30	Extreme statistics may govern avalanche-type biological reactions. <i>Physics of Life Reviews</i> , 2019, 28, 85-87.	2.8	14
31	A Method to Visualize the Nanoscopic Morphology of Astrocytes In Vitro and In Situ. <i>Methods in Molecular Biology</i> , 2019, 1938, 69-84.	0.9	3
32	Monitoring intracellular nanomolar calcium using fluorescence lifetime imaging. <i>Nature Protocols</i> , 2018, 13, 581-597.	12.0	42
33	Nano-engineered microcapsules boost the treatment of persistent pain. <i>Drug Delivery</i> , 2018, 25, 435-447.	5.7	18
34	Monitoring Ca ²⁺ elevations in individual astrocytes upon local release of amyloid beta in acute brain slices. <i>Brain Research Bulletin</i> , 2018, 136, 85-90.	3.0	8
35	Differential Nanoscale Topography and Functional Role of GluN2-NMDA Receptor Subtypes at Glutamatergic Synapses. <i>Neuron</i> , 2018, 100, 106-119.e7.	8.1	83
36	Unveiling the Extracellular Space of the Brain: From Super-resolved Microstructure to In Vivo Function. <i>Journal of Neuroscience</i> , 2018, 38, 9355-9363.	3.6	79

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37	Disentangling astroglial physiology with a realistic cell model in silico. <i>Nature Communications</i> , 2018, 9, 3554.	12.8	65
38	Astrocytic Atrophy Following Status Epilepticus Parallels Reduced Ca ²⁺ Activity and Impaired Synaptic Plasticity in the Rat Hippocampus. <i>Frontiers in Molecular Neuroscience</i> , 2018, 11, 215.	2.9	73
39	An optical sensor to monitor dynamics of extracellular glycine. <i>Nature Chemical Biology</i> , 2018, 14, 835-836.	8.0	2
40	Probing nano-organization of astroglia with multi-color super-resolution microscopy. <i>Journal of Neuroscience Research</i> , 2017, 95, 2159-2171.	2.9	22
41	Nanoscale diffusion in the synaptic cleft and beyond measured with time-resolved fluorescence anisotropy imaging. <i>Scientific Reports</i> , 2017, 7, 42022.	3.3	65
42	Dopamine elevates and lowers astroglial Ca ²⁺ through distinct pathways depending on local synaptic circuitry. <i>Glia</i> , 2017, 65, 447-459.	4.9	75
43	Synaptic Remodeling Depends on Signaling between Serotonin Receptors and the Extracellular Matrix. <i>Cell Reports</i> , 2017, 19, 1767-1782.	6.4	92
44	Astroglial versus Neuronal D-Serine: Fact Checking. <i>Trends in Neurosciences</i> , 2017, 40, 517-520.	8.6	83
45	Fluorescence Lifetime Imaging. , 2017, , 353-405.		3
46	Monitoring single-synapse glutamate release and presynaptic calcium concentration in organised brain tissue. <i>Cell Calcium</i> , 2017, 64, 102-108.	2.4	34
47	Electrodifusion phenomena in neuroscience: a neglected companion. <i>Nature Reviews Neuroscience</i> , 2017, 18, 598-612.	10.2	72
48	The Nanoworld of the Tripartite Synapse: Insights from Super-Resolution Microscopy. <i>Frontiers in Cellular Neuroscience</i> , 2017, 11, 374.	3.7	38
49	ARACHNE: A neural-neuroglial network builder with remotely controlled parallel computing. <i>PLoS Computational Biology</i> , 2017, 13, e1005467.	3.2	16
50	Astrocytic GABA transporter activity modulates excitatory neurotransmission. <i>Nature Communications</i> , 2016, 7, 13572.	12.8	144
51	Astrocytes mediate neurovascular signaling to capillary pericytes but not to arterioles. <i>Nature Neuroscience</i> , 2016, 19, 1619-1627.	14.8	435
52	Time-Resolved Imaging Reveals Heterogeneous Landscapes of Nanomolar Ca ²⁺ in Neurons and Astroglia. <i>Neuron</i> , 2015, 88, 277-288.	8.1	108
53	Disentangling calcium-driven astrocyte physiology. <i>Nature Reviews Neuroscience</i> , 2015, 16, 226-233.	10.2	152
54	Hippocampal circuit dysfunction in the Tc1 mouse model of Down syndrome. <i>Nature Neuroscience</i> , 2015, 18, 1291-1298.	14.8	32

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55	Fluorescence lifetime imaging (FLIM): Basic concepts and some recent developments. Medical Photonics, 2015, 27, 3-40.	3.8	208
56	Morphological plasticity of astroglia: Understanding synaptic microenvironment. Glia, 2015, 63, 2133-2151.	4.9	131
57	Efficient Integration of Synaptic Events by NMDA Receptors in Three-Dimensional Neuropil. Biophysical Journal, 2015, 108, 2457-2464.	0.5	21
58	Synaptic GABA release prevents GABA transporter type-1 reversal during excessive network activity. Nature Communications, 2015, 6, 6597.	12.8	31
59	Fluorescence Lifetime Imaging (FLIM): Basic Concepts and Recent Applications. Springer Series in Chemical Physics, 2015, , 119-188.	0.2	9
60	Fluorescence Lifetime Imaging. , 2015, , 1-50.		1
61	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
62	Neuronal adaptation involves rapid expansion of the action potential initiation site. Nature Communications, 2014, 5, 3817.	12.8	22
63	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
64	Brain circuitry outside the synaptic cleft. Philosophical Transactions of the Royal Society B: Biological Sciences, 2014, 369, 20130591.	4.0	7
65	Glia selectively approach synapses on thin dendritic spines. Philosophical Transactions of the Royal Society B: Biological Sciences, 2014, 369, 20140047.	4.0	105
66	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
67	Bassoon Specifically Controls Presynaptic P/Q-type Ca ²⁺ Channels via RIM-Binding Protein. Neuron, 2014, 82, 181-194.	8.1	139
68	Diversity of astroglial functions alludes to subcellular specialisation. Trends in Neurosciences, 2014, 37, 228-242.	8.6	74
69	Electrochemical Nanoprobes for Single-Cell Analysis. ACS Nano, 2014, 8, 875-884.	14.6	195
70	Zinc Dynamics and Action at Excitatory Synapses. Neuron, 2014, 82, 1101-1114.	8.1	184
71	Fluorescence Lifetime Imaging. , 2014, , 1-50.		4
72	Monitoring Nanoscale Mobility of Small Molecules in Organized Brain Tissue with Time-Resolved Fluorescence Anisotropy Imaging. Neuromethods, 2014, , 125-143.	0.3	2

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73	Retrograde Synaptic Signaling Mediated by K ⁺ Efflux through Postsynaptic NMDA Receptors. <i>Cell Reports</i> , 2013, 5, 941-951.	6.4	68
74	Sub-millisecond ligand probing of cell receptors with multiple solution exchange. <i>Nature Protocols</i> , 2013, 8, 1299-1306.	12.0	23
75	Central synapses release a resource-efficient amount of glutamate. <i>Nature Neuroscience</i> , 2013, 16, 10-12.	14.8	62
76	Spike-Driven Glutamate Electrodiffusion Triggers Synaptic Potentiation via a Homer-Dependent mGluR-NMDAR Link. <i>Neuron</i> , 2013, 77, 528-541.	8.1	49
77	Nanoscale-Targeted Patch-Clamp Recordings of Functional Presynaptic Ion Channels. <i>Neuron</i> , 2013, 79, 1067-1077.	8.1	103
78	GABA-Independent GABA _A Receptor Openings Maintain Tonic Currents. <i>Journal of Neuroscience</i> , 2013, 33, 3905-3914.	3.6	85
79	NMDA Receptor Activation: Two Targets for Two Co-Agonists. <i>Neurochemical Research</i> , 2013, 38, 1156-1162.	3.3	26
80	Cannabinoid- and lysophosphatidylinositol-sensitive receptor GPR55 boosts neurotransmitter release at central synapses. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 5193-5198.	7.1	182
81	Independent Regulation of Basal Neurotransmitter Release Efficacy by Variable Ca ²⁺ Influx and Bouton Size at Small Central Synapses. <i>PLoS Biology</i> , 2012, 10, e1001396.	5.6	58
82	Depletion of Extracellular Ca ²⁺ Prompts Astroglia to Moderate Synaptic Network Activity. <i>Science Signaling</i> , 2012, 5, pe4.	3.6	10
83	5-HT ₇ R/G ₁₂ Signaling Regulates Neuronal Morphology and Function in an Age-Dependent Manner. <i>Journal of Neuroscience</i> , 2012, 32, 2915-2930.	3.6	107
84	Monitoring local synaptic activity with astrocytic patch pipettes. <i>Nature Protocols</i> , 2012, 7, 2171-2179.	12.0	39
85	d-Serine: A key to synaptic plasticity?. <i>International Journal of Biochemistry and Cell Biology</i> , 2012, 44, 587-590.	2.8	23
86	Backpropagating Action Potentials Enable Detection of Extrasynaptic Glutamate by NMDA Receptors. <i>Cell Reports</i> , 2012, 1, 495-505.	6.4	54
87	Astroglial glutamate transporters trigger glutaminergic gliotransmission. <i>Journal of Physiology</i> , 2012, 590, 2187-2188.	2.9	8
88	Shaping the synaptic signal: molecular mobility inside and outside the cleft. <i>Trends in Neurosciences</i> , 2011, 34, 359-369.	8.6	71
89	A Peptide Mimetic Targeting Trans-Homophilic NCAM Binding Sites Promotes Spatial Learning and Neural Plasticity in the Hippocampus. <i>PLoS ONE</i> , 2011, 6, e23433.	2.5	21
90	Molecular signals of plasticity at the tetrapartite synapse. <i>Current Opinion in Neurobiology</i> , 2011, 21, 353-359.	4.2	204

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91	Deletion of the betaine GABA transporter (BGT1; slc6a12) gene does not affect seizure thresholds of adult mice. <i>Epilepsy Research</i> , 2011, 95, 70-81.	1.6	66
92	Astrocytes as Regulators of Synaptic Function. <i>Neuroscientist</i> , 2011, 17, 513-523.	3.5	62
93	Long-term potentiation depends on release of d-serine from astrocytes. <i>Nature</i> , 2010, 463, 232-236.	27.8	1,140
94	Presynaptic GABA _A receptors enhance transmission and LTP induction at hippocampal mossy fiber synapses. <i>Nature Neuroscience</i> , 2010, 13, 431-438.	14.8	102
95	Synaptic plasticity and Ca ²⁺ signalling in astrocytes. <i>Neuron Glia Biology</i> , 2010, 6, 141-146.	1.6	19
96	Slow GABA Transient and Receptor Desensitization Shape Synaptic Responses Evoked by Hippocampal Neurogliaform Cells. <i>Journal of Neuroscience</i> , 2010, 30, 9898-9909.	3.6	82
97	The Extracellular Matrix Molecule Hyaluronic Acid Regulates Hippocampal Synaptic Plasticity by Modulating Postsynaptic L-Type Ca ²⁺ Channels. <i>Neuron</i> , 2010, 67, 116-128.	8.1	184
98	Density functional and spectroscopic studies of nitrogen inversion in substituted dizocilpines. <i>Journal of Physical Organic Chemistry</i> , 2009, 22, 607-612.	1.9	1
99	Electric Fields Due to Synaptic Currents Sharpen Excitatory Transmission. <i>Science</i> , 2008, 319, 1845-1849.	12.6	69
100	Receptor Actions of Synaptically Released Glutamate: The Role of Transporters on the Scale from Nanometers to Microns. <i>Biophysical Journal</i> , 2008, 95, 4584-4596.	0.5	134
101	Ca ²⁺ stores and use-dependent facilitation of presynaptic Ca ²⁺ signaling. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, E80; author reply E81.	7.1	6
102	GABAB Receptor Modulation of Feedforward Inhibition through Hippocampal Neurogliaform Cells. <i>Journal of Neuroscience</i> , 2008, 28, 6974-6982.	3.6	85
103	Analog Modulation of Mossy Fiber Transmission Is Uncoupled from Changes in Presynaptic Ca ²⁺ . <i>Journal of Neuroscience</i> , 2008, 28, 7765-7773.	3.6	60
104	Target-Cell Specificity of Kainate Autoreceptor and Ca ²⁺ -Store-Dependent Short-Term Plasticity at Hippocampal Mossy Fiber Synapses. <i>Journal of Neuroscience</i> , 2008, 28, 13139-13149.	3.6	69
105	The optimal height of the synaptic cleft. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 1823-1828.	7.1	139
106	Anti-Hebbian Long-Term Potentiation in the Hippocampal Feedback Inhibitory Circuit. <i>Science</i> , 2007, 315, 1262-1266.	12.6	219
107	Matrix metalloproteinase-7 disrupts dendritic spines in hippocampal neurons through NMDA receptor activation. <i>Journal of Neurochemistry</i> , 2006, 97, 44-56.	3.9	87
108	Presynaptic fluctuations and release-independent depression. <i>Nature Neuroscience</i> , 2006, 9, 1091-1093.	14.8	10

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109	CaMKII translocation requires local NMDA receptor-mediated Ca ²⁺ signaling. <i>EMBO Journal</i> , 2006, 25, 5873-5883.	7.8	36
110	Ca ²⁺ -Dependent Mechanisms of Presynaptic Control at Central Synapses. <i>Neuroscientist</i> , 2006, 12, 317-326.	3.5	50
111	Main Determinants of Presynaptic Ca ²⁺ Dynamics at Individual Mossy Fiber-CA3 Pyramidal Cell Synapses. <i>Journal of Neuroscience</i> , 2006, 26, 7071-7081.	3.6	92
112	Characterization of AMPA Receptors Targeted by the Climbing Fiber Transmitter Mediating Presynaptic Inhibition of GABAergic Transmission at Cerebellar Interneuron-Purkinje Cell Synapses. <i>Journal of Neuroscience</i> , 2006, 26, 2278-2289.	3.6	31
113	Presynaptic, extrasynaptic and axonal GABA _A receptors in the CNS: where and why?. <i>Progress in Biophysics and Molecular Biology</i> , 2005, 87, 33-46.	2.9	193
114	Glutamate Transporter Studies Reveal the Pruning of Metabotropic Glutamate Receptors and Absence of AMPA Receptor Desensitization at Mature Calyx of Held Synapses. <i>Journal of Neuroscience</i> , 2005, 25, 8482-8497.	3.6	97
115	Modulation of Presynaptic Ca ²⁺ Entry by AMPA Receptors at Individual GABAergic Synapses in the Cerebellum. <i>Journal of Neuroscience</i> , 2005, 25, 4930-4940.	3.6	43
116	Extracellular diffusivity determines contribution of high-versus low-affinity receptors to neural signaling. <i>NeuroImage</i> , 2005, 25, 101-111.	4.2	34
117	Comment on "Role of NMDA Receptor Subtypes in Governing the Direction of Hippocampal Synaptic Plasticity". <i>Science</i> , 2004, 305, 1912b-1912b.	12.6	16
118	Heterogeneity and Specificity of Presynaptic Ca ²⁺ Current Modulation by mGluRs at Individual Hippocampal Synapses. <i>Cerebral Cortex</i> , 2004, 14, 748-758.	2.9	31
119	NR2B-Containing Receptors Mediate Cross Talk among Hippocampal Synapses. <i>Journal of Neuroscience</i> , 2004, 24, 4767-4777.	3.6	179
120	AMPA receptor-mediated presynaptic inhibition at cerebellar GABAergic synapses: a characterization of molecular mechanisms. <i>European Journal of Neuroscience</i> , 2004, 19, 2464-2474.	2.6	51
121	Electric fields of synaptic currents could influence diffusion of charged neurotransmitter molecules. <i>Synapse</i> , 2004, 51, 270-278.	1.2	21
122	Expression of long-term potentiation in aged rats involves perforated synapses but dendritic spine branching results from high-frequency stimulation alone. <i>Hippocampus</i> , 2004, 14, 255-264.	1.9	32
123	Glutamate escape from a tortuous synaptic cleft of the hippocampal mossy fibre synapse. <i>Neurochemistry International</i> , 2004, 45, 479-484.	3.8	14
124	Extracellular Ca ²⁺ Depletion Contributes to Fast Activity-Dependent Modulation of Synaptic Transmission in the Brain. <i>Neuron</i> , 2003, 37, 287-297.	8.1	183
125	GABA _A Receptors at Hippocampal Mossy Fibers. <i>Neuron</i> , 2003, 39, 961-973.	8.1	142
126	Asymmetry of Glia near Central Synapses Favors Presynaptically Directed Glutamate Escape. <i>Biophysical Journal</i> , 2002, 83, 125-134.	0.5	130

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127	Perisynaptic asymmetry of glia: new insights into glutamate signalling. Trends in Neurosciences, 2002, 25, 492-494.	8.6	31
128	The Role of Perisynaptic Glial Sheaths in Glutamate Spillover and Extracellular Ca ²⁺ Depletion. Biophysical Journal, 2001, 81, 1947-1959.	0.5	99
129	Electrodifusion of synaptic receptors: a mechanism to modify synaptic efficacy?. , 2000, 35, 26-38.		10
130	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
131	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
132	Do extracellular Ca ²⁺ signals carry information through neural tissue?. Trends in Neurosciences, 2000, 23, 12-13.	8.6	9
133	Role of the synaptic microenvironment in functional modification of synaptic transmission. Neurophysiology, 1999, 31, 79-81.	0.3	3
134	Cell adhesion molecule (NCAM): Its role in the development and functioning of cultured hippocampal neurons. Neurophysiology, 1999, 31, 199-202.	0.3	1
135	Hippocampal synapses: do they talk to their neighbours?. Trends in Neurosciences, 1999, 22, 382-388.	8.6	115
136	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
137	A tortuous and viscous route to understanding diffusion in the brain. Trends in Neurosciences, 1998, 21, 469-470.	8.6	19
138	Activation of AMPA, Kainate, and Metabotropic Receptors at Hippocampal Mossy Fiber Synapses. Neuron, 1998, 21, 561-570.	8.1	187
139	Synapses in hippocampus occupy only 1% 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
140	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
141	Extrasynaptic Glutamate Diffusion in the Hippocampus: Ultrastructural Constraints, Uptake, and Receptor Activation. Journal of Neuroscience, 1998, 18, 3158-3170.	3.6	405
142	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
143	Ultrastructural synaptic correlates of spatial learning in rat hippocampus. Neuroscience, 1997, 80, 69-77.	2.3	93
144	Increased immunogold labelling of neural cell adhesion molecule isoforms in synaptic active zones of the chick striatum 5-6 hours after one-trial passive avoidance training. Neuroscience, 1997, 82, 1-5.	2.3	39

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145	Subtle re-location of dendritic spine branches containing membrane with fast spiking mechanisms can alter synaptic efficacy. <i>Neurophysiology</i> , 1997, 29, 22-27.	0.3	0
146	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
147	Branching of active dendritic spines as a mechanism for controlling synaptic efficacy. <i>Neuroscience</i> , 1996, 75, 315-323.	2.3	44
148	Interaction between neurofilaments and mitochondria in cultured cells of the rat hippocampus. <i>Neurophysiology</i> , 1996, 27, 1-7.	0.3	1
149	Dendritic spines form 'collars' in hippocampal granule cells. <i>NeuroReport</i> , 1995, 6, 1557-1561.	1.2	12
150	Quantification of dendritic spine populations using image analysis and a tilting disector. <i>Journal of Neuroscience Methods</i> , 1995, 60, 11-21.	2.5	34
151	3-Dimensional morphometry of intact dendritic spines observed in thick sections using an electron microscope. <i>Journal of Neuroscience Methods</i> , 1995, 62, 73-82.	2.5	4
152	Repeated confocal imaging of individual dendritic spines in the living hippocampal slice: evidence for changes in length and orientation associated with chemically induced LTP. <i>Journal of Neuroscience</i> , 1995, 15, 5560-5573.	3.6	181
153	Morphological changes associated with stages of memory formation in the chick following passive avoidance training. <i>Behavioural Brain Research</i> , 1995, 66, 21-28.	2.2	65
154	Clustering and co-localization of immunogold double labelled neural cell adhesion molecule isoforms in chick forebrain. <i>Neuroscience Letters</i> , 1995, 183, 50-53.	2.1	9
155	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. <i>Neuroscience</i> , 1995, 66, 291-307.	2.3	8
156	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. <i>Microscopy Research and Technique</i> , 1994, 27, 233-261.	2.2	119
157	Tridimensional organization of Purkinje neuron cisternal stacks, a specialized endoplasmic reticulum subcompartment rich in inositol 1,4,5-trisphosphate receptors. <i>Journal of Neurocytology</i> , 1993, 22, 273-282.	1.5	34
158	Spatial re-arrangement of the vesicle apparatus in forebrain synapses of chicks 30 min after passive avoidance training. <i>Neuroscience Letters</i> , 1993, 154, 13-16.	2.1	14
159	Cytoskeleton-mediated, age-dependent lateral topography of lectin-gold-labelled molecules on the plasma membrane of cultured neurons: A statistical view. <i>Neuroscience</i> , 1993, 52, 369-379.	2.3	10
160	Lateral patterns of the neural cell adhesion molecule on the surface of hippocampal cells developing in vitro. <i>Neuroscience</i> , 1993, 55, 491-498.	2.3	13
161	Quantal behaviour of synaptic transmission can be statistically examined using the Fourier line spectrum of the histogram of synaptic potentials. <i>Neuroscience Letters</i> , 1993, 163, 231-234.	2.1	6
162	Changes in the neural cell adhesion molecule patterns on the rat glial cell surfaces with development and contact formation in vitro. <i>Neuroscience Letters</i> , 1993, 154, 17-19.	2.1	4

#	ARTICLE	IF	CITATIONS
163	Quantitative characteristics and reconstruction of the surface topography of histochemical markers on nerve cell plasmalemma. <i>Neurophysiology</i> , 1992, 23, 443-450.	0.3	2
164	The spatial pattern of the synaptic vesicular apparatus as a correlate of transmitter storage models. <i>Neuroscience Letters</i> , 1991, 131, 156-158.	2.1	8
165	Estimation of spatio-morphofunctional characteristics of presynaptic terminals in the lateral zone at the base of the dorsal horn. <i>Neurophysiology</i> , 1991, 22, 593-600.	0.3	0
166	Altered processes of vesicle recycling in hippocampal presynapses during modelling of glutamate neurotoxicity. <i>Neurophysiology</i> , 1991, 22, 607-613.	0.3	0
167	Geometrical characteristics of mitochondria and active presynaptic zones in the dorsal horn of the cat spinal cord. <i>Neurophysiology</i> , 1990, 21, 519-524.	0.3	0
168	Statistical estimation of the membrane area and numbers of active sites at presynaptic terminals. <i>Neurophysiology</i> , 1990, 22, 23-28.	0.3	1
169	Numerical characteristics of synaptic vesicular apparatus structure in the dorsal horn of the cat spinal cord. <i>Neurophysiology</i> , 1990, 21, 420-426.	0.3	0
170	Stereometric characteristics of ultrastructure of presynaptic terminals in the dorsal horn of the cat spinal cord. <i>Neurophysiology</i> , 1990, 21, 297-302.	0.3	1
171	Changes in the efficacy of transmission at synapses of the dorsal horn of the cat spinal cord observed during repetitive activation of cutaneous afferents. <i>Neurophysiology</i> , 1988, 19, 367-372.	0.3	1