Timothy H Murphy

List of Publications by Year
in descending order

174 papers	16,694 citations	17776 65 h-index	19470 122 g-index
183 all docs	183 docs citations	183 times ranked	17632 citing authors

#	Article	IF	Citations
1	Altered cortical processing of sensory input in Huntington disease mouse models. Neurobiology of Disease, 2022, 169, 105740.	2.1	9
2	Gamma frequency activation of inhibitory neurons in the acute phase after stroke attenuates vascular and behavioral dysfunction. Cell Reports, 2021, 34, 108696.	2.9	26
3	A three-dimensional virtual mouse generates synthetic training data for behavioral analysis. Nature Methods, 2021, 18, 378-381.	9.0	39
4	MesoNet allows automated scaling and segmentation of mouse mesoscale cortical maps using machine learning. Nature Communications, 2021, 12, 5992.	5.8	26
5	Uncovering the effect of different brain regions on behavioral classification using recurrent neural networks. , 2021, 2021, 6602-6607.		2
6	PiDose: an open-source system for accurate and automated oral drug administration to group-housed mice. Scientific Reports, 2020, 10, 11584.	1.6	10
7	Stress impacts sensory variability through cortical sensory activity motifs. Translational Psychiatry, 2020, 10, 20.	2.4	6
8	Real-Time Selective Markerless Tracking of Forepaws of Head Fixed Mice Using Deep Neural Networks. ENeuro, 2020, 7, ENEURO.0096-20.2020.	0.9	28
9	Automated task training and longitudinal monitoring of mouse mesoscale cortical circuits using home cages. ELife, 2020, 9, .	2.8	22
10	LFP clustering in cortex reveals a taxonomy of Up states and near-millisecond, ordered phase-locking in cortical neurons. Journal of Neurophysiology, 2019, 122, 1794-1809.	0.9	0
11	Podocalyxin is required for maintaining bloodâ€“brain barrier function during acute inflammation. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 4518-4527.	3.3	30
12	Cortex-wide Computations in Complex Decision Making in Mice. Neuron, 2019, 104, 631-633.	3.8	0
13	Peripheral Nerve Ligation Elicits Widespread Alterations in Cortical Sensory Evoked and Spontaneous Activity. Scientific Reports, 2019, 9, 15341.	1.6	4
14	Longitudinal monitoring of mesoscopic cortical activity in a mouse model of microinfarcts reveals dissociations with behavioral and motor function. Journal of Cerebral Blood Flow and Metabolism, 2019, 39, 1486-1500.	2.4	21
15	Comparison between transgenic and AAV-PHP.eB-mediated expression of GCaMP6s using in vivo wide-field functional imaging of brain activity. Neurophotonics, 2019, 6, 1.	1.7	17
16	High-Throughput Electrophysiological, Behavioral, or Social Event Triggered Imaging of Mouse Mesoscale Brain Activity. , 2019, , .		0
17	Individualized tracking of self-directed motor learning in group-housed mice performing a skilled lever positioning task in the home cage. Journal of Neurophysiology, 2018, 119, 337-346.	0.9	19
18	Executive dysfunction and blockage of brain microvessels in a rat model of vascular cognitive impairment. Journal of Cerebral Blood Flow and Metabolism, 2018, 38, 1727-1740.	2.4	9

#	Article	IF	Citations
19	Recent progress in translational research on neurovascular and neurodegenerative disorders. Restorative Neurology and Neuroscience, 2017, 35, 87-103.	0.4	16
20	Automating mouse weighing in group homecages with Raspberry Pi micro-computers. Journal of Neuroscience Methods, 2017, 285, 1-5.	1.3	14
21	Cost effective raspberry pi-based radio frequency identification tagging of mice suitable for automated in vivo imaging. Journal of Neuroscience Methods, 2017, 276, 79-83.	1.3	19
22	Mesoscale brain explorer, a flexible python-based image analysis and visualization tool. Neurophotonics, 2017, 4, 031210.	1.7	19
23	Automated touch sensing in the mouse tapered beam test using Raspberry Pi. Journal of Neuroscience Methods, 2017, 291, 221-226.	1.3	15
24	Targeted ischemic stroke induction and mesoscopic imaging assessment of blood flow and ischemic depolarization in awake mice. Neurophotonics, 2017, 4, 1.	1.7	35
25	A Visual Guide to Sorting Electrophysiological Recordings Using 'SpikeSorter'. Journal of Visualized Experiments, 2017, , .	0.2	5
26	Enhancing the alignment of the preclinical and clinical stroke recovery research pipeline: Consensus-based core recommendations from the Stroke Recovery and Rehabilitation Roundtable translational working group. International Journal of Stroke, 2017, 12, 462-471.	2.9	82
27	Enhancing the Alignment of the Preclinical and Clinical Stroke Recovery Research Pipeline: Consensus-Based Core Recommendations From the Stroke Recovery and Rehabilitation Roundtable Translational Working Group. Neurorehabilitation and Neural Repair, 2017, 31, 699-707.	1.4	64
28	Good Vibrations: Resting-State Functional Connectivity Reflects Entrainment of Vasomotion. Neuron, 2017, 96, 716-717.	3.8	2
29	Cortical functional hyperconnectivity in a mouse model of depression and selective network effects of ketamine. Brain, 2017, 140, 2210-2225.	3.7	48
30	Mesoscale Mapping of Mouse Cortex Reveals Frequency-Dependent Cycling between Distinct Macroscale Functional Modules. Journal of Neuroscience, 2017, 37, 7513-7533.	1.7	139
31	Mapping cortical mesoscopic networks of single spiking cortical or sub-cortical neurons. ELife, 2017, 6, .	2.8	108
32	An Automated Home-Cage System to Assess Learning and Performance of a Skilled Motor Task in a Mouse Model of Huntingtonâ€™s Disease. ENeuro, 2017, 4, ENEURO.0141-17.2017.	0.9	26
33	Large Scale Cortical Functional Networks Associated with Slow-Wave and Spindle-Burst-Related Spontaneous Activity. Frontiers in Neural Circuits, 2016, 10, 103.	1.4	25
34	Real-time imaging of glutamate clearance reveals normal striatal uptake in Huntington disease mouse models. Nature Communications, 2016, 7, 11251.	5.8	91
35	Re-Establishment of Cortical Motor Output Maps and Spontaneous Functional Recovery via Spared Dorsolaterally Projecting Corticospinal Neurons after Dorsal Column Spinal Cord Injury in Adult Mice. Journal of Neuroscience, 2016, 36, 4080-4092.	1.7	84
36	Intact skull chronic windows for mesoscopic wide-field imaging in awake mice. Journal of Neuroscience Methods, 2016, 267, 141-149.	1.3	165

#	Article	IF	Citations
37	Altered Cortical Dynamics and Cognitive Function upon Haploinsufficiency of the Autism-Linked Excitatory Synaptic Suppressor MDGA2. Neuron, 2016, 91, 1052-1068.	3.8	70
38	High-throughput automated home-cage mesoscopic functional imaging of mouse cortex. Nature Communications, 2016, 7, 11611.	5.8	81
39	Resolution of High-Frequency Mesoscale Intracortical Maps Using the Genetically Encoded Glutamate Sensor iGluSnFR. Journal of Neuroscience, 2016, 36, 1261-1272.	1.7	88
40	Special Section Guest Editorial:Special Section on Light Microscopy of Connectivity. Neurophotonics, 2015, 2, 041401.	1.7	0
41	A Mouse Model of Small-Vessel Disease that Produces Brain-Wide-Identified Microocclusions and Regionally Selective Neuronal Injury. Journal of Cerebral Blood Flow and Metabolism, 2015, 35, 734-738.	2.4	43
42	Optogenetic Stimulation of GABA Neurons can Decrease Local Neuronal Activity While Increasing Cortical Blood Flow. Journal of Cerebral Blood Flow and Metabolism, 2015, 35, 1579-1586.	2.4	108
43	Mesoscale infraslow spontaneous membrane potential fluctuations recapitulate high-frequency activity cortical motifs. Nature Communications, 2015, 6, 7738.	5.8	81
44	Network analysis of mesoscale optical recordings to assess regional, functional connectivity. Neurophotonics, 2015, 2, 041405.	1.7	17
45	Two-Photon Imaging of Neuronal Structural Plasticity in Mice during and after Ischemia. Cold Spring Harbor Protocols, 2015, 2015, pdb.prot087486.	0.2	13
46	COX-2-Derived Prostaglandin E2 Produced by Pyramidal Neurons Contributes to Neurovascular Coupling in the Rodent Cerebral Cortex. Journal of Neuroscience, 2015, 35, 11791-11810.	1.7	85
47	Neocortical Rebound Depolarization Enhances Visual Perception. PLoS Biology, 2015, 13, e1002231.	2.6	41
48	Optogenetic Mapping after Stroke Reveals Network-Wide Scaling of Functional Connections and Heterogeneous Recovery of the Peri-Infarct. Journal of Neuroscience, 2014, 34, 16455-16466.	1.7	92
49	Stroke and the Connectome: How Connectivity Guides Therapeutic Intervention. Neuron, 2014, 83, 1354-1368.	3.8	170
50	Mesoscale Transcranial Spontaneous Activity Mapping in GCaMP3 Transgenic Mice Reveals Extensive Reciprocal Connections between Areas of Somatomotor Cortex. Journal of Neuroscience, 2014, 34, 15931-15946.	1.7	155
51	Prolonged Deficits in Parvalbumin Neuron Stimulation-Evoked Network Activity Despite Recovery of Dendritic Structure and Excitability in the Somatosensory Cortex following Global Ischemia in Mice. Journal of Neuroscience, 2014, 34, 14890-14900.	1.7	25
52	Ministrokes in Channelrhodopsin-2 Transgenic Mice Reveal Widespread Deficits in Motor Output Despite Maintenance of Cortical Neuronal Excitability. Journal of Neuroscience, 2014, 34, 1094-1104.	1.7	26
53	Motor maps and the cortical control of movement. Current Opinion in Neurobiology, 2014, 24, 88-94.	2.0	18
54	Removing the brakes on post-stroke plasticity drives recovery from the intact hemisphere and spinal cord. Brain, 2014, 137, 648-650.	3.7	4

#	Article	IF	Citations
55	A dynamic model for delta rhythm fit to high-frequency cortical activity data shows discrete functional connectivity in mouse cortex. BMC Neuroscience, 2014, 15, .	0.8	0
56	Spontaneous cortical activity alternates between motifs defined by regional axonal projections. Nature Neuroscience, 2013, 16, 1426-1435.	7.1	346
57	Displacement of Sensory Maps and Disorganization of Motor Cortex After Targeted Stroke in Mice. Stroke, 2013, 44, 2300-2306.	1.0	101
58	Resistance of Optogenetically Evoked Motor Function to Global Ischemia and Reperfusion in Mouse in Vivo. Journal of Cerebral Blood Flow and Metabolism, 2013, 33, 1148-1152.	2.4	13
59	Improved methods for chronic light-based motor mapping in mice: automated movement tracking with accelerometers, and chronic EEG recording in a bilateral thin-skull preparation. Frontiers in Neural Circuits, 2013, 7, 123.	1.4	31
60	Optogenetic approaches for functional mouse brain mapping. Frontiers in Neuroscience, 2013, 7, 54.	1.4	49
61	Moderate Or Deep Local Hypothermia Does Not Prevent the Onset of Ischemia-Induced Dendritic Damage. Journal of Cerebral Blood Flow and Metabolism, 2012, 32, 437-442.	2.4	7
62	Voltage-Sensitive Dye Imaging Reveals Dynamic Spatiotemporal Properties of Cortical Activity after Spontaneous Muscle Twitches in the Newborn Rat. Journal of Neuroscience, 2012, 32, 10982-10994.	1.7	42
63	Incidental Findings in Neuroimaging Research: A Framework for Anticipating the Next Frontier. Journal of Empirical Research on Human Research Ethics, 2012, 7, 53-57.	0.6	12
64	Optogenetic Analysis of Neuronal Excitability during Global Ischemia Reveals Selective Deficits in Sensory Processing following Reperfusion in Mouse Cortex. Journal of Neuroscience, 2012, 32, 13510-13519.	1.7	24
65	Distinct Cortical Circuit Mechanisms for Complex Forelimb Movement and Motor Map Topography. Neuron, 2012, 74, 397-409.	3.8	138
66	Dendritic Spines and Pre-Synaptic Boutons Are Stable Despite Local Deep Hypothermic Challenge and Re-Warming In Vivo. PLoS ONE, 2012, 7, e36305.	1.1	6
67	In vivo Large-Scale Cortical Mapping Using Channelrhodopsin-2 Stimulation in Transgenic Mice Reveals Asymmetric and Reciprocal Relationships between Cortical Areas. Frontiers in Neural Circuits, 2012, 6, 11.	1.4	139
68	Towards a circuit mechanism for movement tuning in motor cortex. Frontiers in Neural Circuits, 2012, 6, 127.	1.4	10
69	Hemodynamic Responses Evoked by Neuronal Stimulation via Channelrhodopsin-2 Can Be Independent of Intracortical Glutamatergic Synaptic Transmission. PLoS ONE, 2012, 7, e29859.	1.1	49
70	Postsynaptic TrkC and Presynaptic PTPÏƒ Function as a Bidirectional Excitatory Synaptic Organizing Complex. Neuron, 2011, 69, 287-303.	3.8	184
71	Proteins That Promote Filopodia Stability, but Not Number, Lead to More Axonal-Dendritic Contacts. PLoS ONE, 2011, 6, e16998.	1.1	20
72	Glial Laminar Cortical Architecture Matches Metabolic Demand. Journal of Cerebral Blood Flow and Metabolism, 2011, 31, 793-794.	2.4	0

#	Article	IF	Citations
73	Automated and quantitative image analysis of ischemic dendritic blebbing using in vivo 2-photon microscopy data. Journal of Neuroscience Methods, 2011, 195, 222-231.	1.3	17
74	Targeted mini-strokes produce changes in interhemispheric sensory signal processing that are indicative of disinhibition within minutes. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, E183-91.	3.3	132
75	Longitudinal in vivo Imaging Reveals Balanced and Branch-Specific Remodeling of Mature Cortical Pyramidal Dendritic Arbors after Stroke. Journal of Cerebral Blood Flow and Metabolism, 2010, 30, 783-791.	2.4	105
76	Controlled enzymatic production of astrocytic hydrogen peroxide protects neurons from oxidative stress via an Nrf2-independent pathway. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 17385-17390.	3.3	129
77	Mirrored Bilateral Slow-Wave Cortical Activity within Local Circuits Revealed by Fast Bihemispheric Voltage-Sensitive Dye Imaging in Anesthetized and Awake Mice. Journal of Neuroscience, 2010, 30, 3745-3751.	1.7	243
78	In Vivo 2-Photon Imaging of Fine Structure in the Rodent Brain. Stroke, 2010, 41, S117-23.	1.0	52
79	Early Increase in Extrasynaptic NMDA Receptor Signaling and Expression Contributes to Phenotype Onset in Huntington's Disease Mice. Neuron, 2010, 65, 178-190.	3.8	448
80	Early Increase in Extrasynaptic NMDA Receptor Signaling and Expression Contributes to Phenotype Onset in Huntington's Disease Mice. Neuron, 2010, 65, 436.	3.8	2
81	Imaging rapid redistribution of sensory-evoked depolarization through existing cortical pathways after targeted stroke in mice. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 11759-11764.	3.3	54
82	Reversible Cyclosporin A-sensitive Mitochondrial Depolarization Occurs within Minutes of Stroke Onset in Mouse Somatosensory Cortex in Vivo. Journal of Biological Chemistry, 2009, 284, 36109-36117.	1.6	53
83	In VivoVoltage-Sensitive Dye Imaging in Adult Mice Reveals That Somatosensory Maps Lost to Stroke Are Replaced over Weeks by New Structural and Functional Circuits with Prolonged Modes of Activation within Both the Peri-Infarct Zone and Distant Sites. Journal of Neuroscience, 2009, 29, 1719-1734.	1.7	283
84	Automated light-based mapping of motor cortex by photoactivation of channelrhodopsin-2 transgenic mice. Nature Methods, 2009, 6, 219-224.	9.0	227
85	Plasticity during stroke recovery: from synapse to behaviour. Nature Reviews Neuroscience, 2009, 10, 861-872.	4.9	1,509
86	Simple and cost-effective hardware and software for functional brain mapping using intrinsic optical signal imaging. Journal of Neuroscience Methods, 2009, 182, 211-218.	1.3	52
87	Remapping the Somatosensory Cortex after Stroke: Insight from Imaging the Synapse to Network. Neuroscientist, 2009, 15, 507-524.	2.6	65
88	Hardware and methodology for targeting single brain arterioles for photothrombotic stroke on an upright microscope. Journal of Neuroscience Methods, 2008, 170, 35-44.	1.3	52
89	Two-Photon Imaging during Prolonged Middle Cerebral Artery Occlusion in Mice Reveals Recovery of Dendritic Structure after Reperfusion. Journal of Neuroscience, 2008, 28, 11970-11979.	1.7	121
90	Paralemmin-1, a Modulator of Filopodia Induction Is Required for Spine Maturation. Molecular Biology of the Cell, 2008, 19, 2026-2038.	0.9	54

#	Article	IF	Citations
91	In Vivo Calcium Imaging Reveals Functional Rewiring of Single Somatosensory Neurons after Stroke. Journal of Neuroscience, 2008, 28, 6592-6606.	1.7	158
92	Rapid Morphologic Plasticity of Peri-Infarct Dendritic Spines After Focal Ischemic Stroke. Stroke, 2008, 39, 1286-1291.	1.0	157
93	Two-Photon Imaging of Stroke OnsetIn VivoReveals That NMDA-Receptor Independent Ischemic Depolarization Is the Major Cause of Rapid Reversible Damage to Dendrites and Spines. Journal of Neuroscience, 2008, 28, 1756-1772.	1.7	246
94	Livin' on the Edge: Imaging Dendritic Spine Turnover in the Peri-Infarct Zone during Ischemic Stroke and Recovery. Neuroscientist, 2008, 14, 139-146.	2.6	61
95	Imaging the Impact of Cortical Microcirculation on Synaptic Structure and Sensory-Evoked Hemodynamic Responses In Vivo. PLoS Biology, 2007, 5, e119.	2.6	171
96	Extensive Turnover of Dendritic Spines and Vascular Remodeling in Cortical Tissues Recovering from Stroke. Journal of Neuroscience, 2007, 27, 4101-4109.	1.7	330
97	Rapid Astrocyte Calcium Signals Correlate with Neuronal Activity and Onset of the Hemodynamic Response In Vivo. Journal of Neuroscience, 2007, 27, 6268-6272.	1.7	199
98	Differential regulation of cell proliferation in neurogenic zones in mice lacking cystine transport by xCT. Biochemical and Biophysical Research Communications, 2007, 364, 528-533.	1.0	20
99	Action-Potential-Independent GABAergic Tone Mediated by Nicotinic Stimulation of Immature Striatal Miniature Synaptic Transmission. Journal of Neurophysiology, 2007, 98, 581-593.	0.9	19
100	Effective release rates at single rat Schaffer collateral-CA1 synapses during sustained theta-burst activity revealed by optical imaging. Journal of Physiology, 2007, 582, 583-595.	1.3	7
101	Fine Mapping of the Spatial Relationship between Acute Ischemia and Dendritic Structure Indicates Selective Vulnerability of Layer V Neuron Dendritic Tufts within Single Neuronsin Vivo. Journal of Cerebral Blood Flow and Metabolism, 2007, 27, 1185-1200.	2.4	71
102	Nrf2 gene deletion fails to alter psychostimulant-induced behavior or neurotoxicity. Brain Research, 2007, 1127, 26-35.	1.1	17
103	Dopamine activates Nrf2-regulated neuroprotective pathways in astrocytes and meningeal cells. Journal of Neurochemistry, 2006, 101, 109-119.	2.1	48
104	Two-photon Imaging of Glutathione Levels in Intact Brain Indicates Enhanced Redox Buffering in Developing Neurons and Cells at the Cerebrospinal Fluid and Blood-Brain Interface. Journal of Biological Chemistry, 2006, 281, 17420-17431.	1.6	79
105	Cystine/Glutamate Exchange Modulates Glutathione Supply for Neuroprotection from Oxidative Stress and Cell Proliferation. Journal of Neuroscience, 2006, 26, 10514-10523.	1.7	269
106	Low threshold calcium currents in rat cerebellar Purkinje cell dendritic spines are mediated by T-type calcium channels. Journal of Physiology, 2005, 562, 257-269.	1.3	43
107	Induction of the Nrf2-driven Antioxidant Response Confers Neuroprotection during Mitochondrial Stress in Vivo. Journal of Biological Chemistry, 2005, 280, 22925-22936.	1.6	237
108	Rapid Reversible Changes in Dendritic Spine Structure In Vivo Gated by the Degree of Ischemia. Journal of Neuroscience, 2005, 25, 5333-5338.	1.7	252

#	Article	IF	Citations
109	A Small-Molecule-Inducible Nrf2-Mediated Antioxidant Response Provides Effective Prophylaxis against Cerebral Ischemia In Vivo. Journal of Neuroscience, 2005, 25, 10321-10335.	1.7	395
110	Coordinate regulation of glutathione metabolism in astrocytes by Nrf2. Biochemical and Biophysical Research Communications, 2005, 326, 371-377.	1.0	57
111	Enhanced Striatal NR2B-Containing N-Methyl-d-Aspartate Receptor-Mediated Synaptic Currents in a Mouse Model of Huntington Disease. Journal of Neurophysiology, 2004, 92, 2738-2746.	0.9	107
112	Site within N-Methyl-d-aspartate Receptor Pore Modulates Channel Gating. Molecular Pharmacology, 2004, 65, 157-164.	1.0	29
113	Regulation of Dendritic Branching and Filopodia Formation in Hippocampal Neurons by Specific Acylated Protein Motifs. Molecular Biology of the Cell, 2004, 15, 2205-2217.	0.9	80
114	Competition between Phasic and Asynchronous Release for Recovered Synaptic Vesicles at Developing Hippocampal Autaptic Synapses. Journal of Neuroscience, 2004, 24, 420-433.	1.7	138
115	Optical Postsynaptic Measurement of Vesicle Release Rates for Hippocampal Synapses Undergoing Asynchronous Release during Train Stimulation. Journal of Neuroscience, 2004, 24, 9076-9086.	1.7	15
116	Selective Reduction of Weak Synaptic Activity Awakens Dormant Synapses. Neuron, 2004, 44, 743-744.	3.8	0
117	Ca 2+ -independent spine dynamics in cultured hippocampal neurons. Molecular and Cellular Neurosciences, 2004, 25, 334-344.	1.0	7
118	Decoding of synaptic voltage waveforms by specific classes of recombinant highâ€threshold Ca 2+ channels. Journal of Physiology, 2003, 553, 473-488.	1.3	30
119	Activity-dependent synapse development: changing the rules. Nature Neuroscience, 2003, 6, 9-11.	7.1	20
120	Role of NR2B-type NMDA receptors in selective neurodegeneration in Huntington disease. Neurobiology of Aging, 2003, 24, 1113-1121.	1.5	97
121	Mind-altering miniature neurotransmitter release?. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 5589-5590.	3.3	5
122	NF-E2-related Factor-2 Mediates Neuroprotection against Mitochondrial Complex I Inhibitors and Increased Concentrations of Intracellular Calcium in Primary Cortical Neurons. Journal of Biological Chemistry, 2003, 278, 37948-37956.	1.6	279
123	Miniature Transmitter Release: Accident of Nature or Careful Design?. Science Signaling, 2003, 2003, pe54-pe54.	1.6	26
124	Developmental Decrease in NMDA Receptor Desensitization Associated with Shift to Synapse and Interaction with Postsynaptic Density-95. Journal of Neuroscience, 2003, 23, 11244-11254.	1.7	66
125	Coordinate Regulation of Glutathione Biosynthesis and Release by Nrf2-Expressing Glia Potently Protects Neurons from Oxidative Stress. Journal of Neuroscience, 2003, 23, 3394-3406.	1.7	684
126	AMPA Receptor-Mediated Miniature Synaptic Calcium Transients in GluR2 Null Mice. Journal of Neurophysiology, 2002, 88, 29-40.	0.9	7

#	Article	IF	Citations
127	Okadaic Acid Induces Hyperphosphorylation of Ï„ Independently of Mitogen-Activated Protein Kinase Activation. Journal of Neurochemistry, 2002, 68, 106-111.	2.1	20
128	Histochemical Detection of Quinone Reductase Activity In Situ Using LY 83583 Reduction and Oxidation. Journal of Neurochemistry, 2002, 70, 2156-2164.	2.1	27
129	Differential regulation of synaptic and extra-synaptic NMDA receptors. Nature Neuroscience, 2002, 5, 833-834.	7.1	156
130	xCT Cystine Transporter Expression in HEK293 Cells: Pharmacology and Localization. Biochemical and Biophysical Research Communications, 2001, 282, 1132-1137.	1.0	44
131	Changes in Agonist Concentration Dependence That Are a Function of Duration of Exposure SuggestN-Methyl-d-aspartate Receptor Nonsaturation during Synaptic Stimulation. Molecular Pharmacology, 2001, 59, 212-219.	1.0	27
132	A Calcium-Dependent Feedback Mechanism Participates in Shaping Single NMDA Miniature EPSCs. Journal of Neuroscience, 2001, 21, 1.1-9.	1.7	115
133	Modular Transport of Postsynaptic Density-95 Clusters and Association with Stable Spine Precursors during Early Development of Cortical Neurons. Journal of Neuroscience, 2001, 21, 9325-9333.	1.7	112
134	The antioxidant enzyme quinone reductase is up-regulated in vivo following cerebral ischemia. NeuroReport, 2001, 12, 1045-1048.	0.6	9
135	Preferential expression of antioxidant response element mediated gene expression in astrocytes. Journal of Neurochemistry, 2001, 76, 1670-1678.	2.1	65
136	Activation of Nuclear Calcium Dynamics by Synaptic Stimulation in Cultured Cortical Neurons. Journal of Neurochemistry, 2001, 73, 1075-1083.	2.1	35
137	Competitive Inhibition of NMDA Receptorâ€“Mediated Currents by Extracellular Calcium Chelators. Journal of Neurophysiology, 2000, 84, 693-697.	0.9	11
138	Vesicle number does not predict postsynaptic measures of miniature synaptic activity frequency in cultured cortical neurons. Neuroscience, 2000, 98, 1-7.	1.1	8
139	Correlation of Miniature Synaptic Activity and Evoked Release Probability in Cultures of Cortical Neurons. Journal of Neuroscience, 1999, 19, 6427-6438.	1.7	95
140	Ultrastructural Correlates of Quantal Synaptic Function at Single CNS Synapses. Journal of Neuroscience, 1999, 19, RC13-RC13.	1.7	34
141	Analysis of Multiquantal Transmitter Release From Single Cultured Cortical Neuron Terminals. Journal of Neurophysiology, 1999, 81, 1810-1817.	0.9	32
142	Behaviour of NMDA and AMPA receptor-mediated miniature EPSCs at rat cortical neuron synapses identified by calcium imaging. Journal of Physiology, 1999, 521, 113-122.	1.3	58
143	P/Q-type calcium channels mediate the activity-dependent feedback of syntaxin-1A. Nature, 1999, 401, 800-804.	13.7	142
144	Amplification of calcium signals at dendritic spines provides a method for CNS quantal analysis. Canadian Journal of Physiology and Pharmacology, 1999, 77, 651-659.	0.7	10

#	Article	IF	Citations
145	Reduction of H2O2-evoked, intracellular calcium increases in the rat N18-RE-105 neuronal cell line by pretreatment with an electrophilic antioxidant inducer. Neuroscience Letters, 1999, 273, 109-112.	1.0	11
146	Restriction of peroxidase-mediated antibody reactivity to single neurons by local hydrogen peroxide production. Neuroscience, 1999, 89, 279-290.	1.1	0
147	High Safety Factor for Action Potential Conduction Along Axons But Not Dendrites of Cultured Hippocampal and Cortical Neurons. Journal of Neurophysiology, 1998, 80, 2089-2101.	0.9	52
148	Activation of Endogenous Antioxidant Defenses in Neuronal Cells Prevents Free Radicalâ€Mediated Damage. Journal of Neurochemistry, 1998, 71, 69-77.	2.1	120
149	Ca2+ Imaging of CNS Axons in Culture Indicates Reliable Coupling between Single Action Potentials and Distal Functional Release Sites. Neuron, 1996, 16, 783-795.	3.8	95
150	Mapping miniature synaptic currents to single synapses using calcium imaging reveals heterogeneity in postsynaptic output. Neuron, 1995, 15, 159-168.	3.8	37
151	Deciphering the role of novel kinase cascades in neuronal signalling. Neurobiology of Aging, 1995, 16, 257-261.	1.5	13
152	Cyclic AMP and synaptic activity-dependent phosphorylation of AMPA- preferring glutamate receptors. Journal of Neuroscience, 1994, 14, 7585-7593.	1.7	114
153	Macromolecular synthesis inhibitors prevent oxidative stress-induced apoptosis in embryonic cortical neurons by shunting cysteine from protein synthesis to glutathione. Journal of Neuroscience, 1994, 14, 4385-4392.	1.7	254
154	Differential regulation of calcium/calmodulin-dependent protein kinase II and p42 MAP kinase activity by synaptic transmission. Journal of Neuroscience, 1994, 14, 1320-1331.	1.7	82
155	Visualization of quantal synaptic transmission by dendritic calcium imaging. Science, 1994, 263, 529-532.	6.0	80
156	Rapid Communication: Oxidative Stress Induces Apoptosis in Embryonic Cortical Neurons. Journal of Neurochemistry, 1994, 62, 376-379.	2.1	548
157	Activation of p42 Mitogen-Activated Protein Kinase by Glutamate Receptor Stimulation in Rat Primary Cortical Cultures. Journal of Neurochemistry, 1993, 61, 1626-1633.	2.1	140
158	Rapid communication between neurons and astrocytes in primary cortical cultures. Journal of Neuroscience, 1993, 13, 2672-2679.	1.7	119
159	Spontaneous synchronous synaptic calcium transients in cultured cortical neurons. Journal of Neuroscience, 1992, 12, 4834-4845.	1.7	164
160	Phosphoinositide Turnover Associated with Synaptic Transmission. Journal of Neurochemistry, 1992, 59, 2336-2339.	2.1	12
161	L-type voltage-sensitive calcium channels mediate synaptic activation of immediate early genes. Neuron, 1991, 7, 625-635.	3.8	420
162	7. The non-excitatory mechanisms of glutamate induced neurotoxicity. Epilepsy Research, 1991, 10, 41-48.	0.8	10

#	Article	IF	Citations
163	Enhanced NAD(P)H:Quinone Reductase Activity Prevents Glutamate Toxicity Produced by Oxidative Stress. Journal of Neurochemistry, 1991, 56, 990-995.	2.1	76
164	Synaptic Regulation of Immediate Early Gene Expression in Primary Cultures of Cortical Neurons. Journal of Neurochemistry, 1991, 57, 1862-1872.	2.1	85
165	Phosphoinositide-Linked Glutamate Receptors: Prominent Actions in Neurons and Glia. , 1991, , 143-152.		0
166	Immature cortical neurons are uniquely sensitive to glutamate toxicity by inhibition of cystine uptake. FASEB Journal, 1990, 4, 1624-1633.	0.2	398
167	Glutamate toxicity in immature cortical neurons precedes development of glutamate receptor currents. Developmental Brain Research, 1990, 57, 146-150.	2.1	93
168	Synaptic Regulation of Immediate-Early Genes in Brain. Cold Spring Harbor Symposia on Quantitative Biology, 1990, 55, 213-223.	2.0	63
169	Arachidonic Acid Metabolism in Glutamate Neurotoxicity. Annals of the New York Academy of Sciences, 1989, 559, 474-477.	1.8	26
170	Glutamate toxicity in a neuronal cell line involves inhibition of cystine transport leading to oxidative stress. Neuron, 1989, 2, 1547-1558.	3.8	935
171	Calcium-dependent glutamate cytotoxicity in a neuronal cell line. Brain Research, 1988, 444, 325-332.	1.1	82
172	Glutamate cytotoxicity in a neuronal cell line is blocked by membrane depolarization. Brain Research, 1988, 460, 155-160.	1.1	37
173	Characteristics of chloride-dependent incorporation of glutamate into brain membranes argue against a receptor binding site. Neuropharmacology, 1987, 26, 281-287.	2.0	61
174	Dicarboxylic Amino Acids Block Epileptiform Activity in Hippocampal Slice. Epilepsia, 1986, 27, 678-684.	2.6	7