Heiko J Luhmann

List of Publications by Year
in descending order

231 papers	14,124 citations	17440 63 h-index	27406 106 g-index
238 all docs	238 docs citations	238 times ranked	12874 citing authors

#	Article	IF	Citations
1	Layer- and cell-type-specific differences in neural activity in mouse barrel cortex during a whisker detection task. Cerebral Cortex, 2023, 33, 1361-1382.	2.9	4
2	Translational Model of Cortical Premotor-Motor Networks. Cerebral Cortex, 2022, 32, 2621-2634.	2.9	1
3	Early brain activity: Translations between bedside and laboratory. Progress in Neurobiology, 2022, 213, 102268.	5.7	13
4	OUP accepted manuscript. Cerebral Cortex, 2022, , .	2.9	1
5	Identification of a Developmental Switch in Information Transfer between Whisker S1 and S2 Cortex in Mice. Journal of Neuroscience, 2022, 42, 4435-4448.	3.6	4
6	A comment on â€œThe growth of cognition: Free energy minimization and the embryogenesis of cortical computationâ€• Physics of Life Reviews, 2021, 36, 71-73.	2.8	1
7	Functional and directed connectivity of the cortico-limbic network in mice in vivo. Brain Structure and Function, 2021, 226, 685-700.	2.3	5
8	Coincident glutamatergic depolarizations enhance GABAA receptor-dependent Cl- influx in mature and suppress Cl- efflux in immature neurons. PLoS Computational Biology, 2021, 17, e1008573.	3.2	13
9	Rapid nucleus-scale reorganization of chromatin in neurons enables transcriptional adaptation for memory consolidation. PLoS ONE, 2021, 16, e0244038.	2.5	9
10	Optogenetically Controlled Activity Pattern Determines Survival Rate of Developing Neocortical Neurons. International Journal of Molecular Sciences, 2021, 22, 6575.	4.1	13
11	Presynaptic GABAB receptorâ€“mediated network excitation in the medial prefrontal cortex of Tsc2+/-â€‰mice. Pflugers Archiv European Journal of Physiology, 2021, 473, 1261-1271.	2.8	11
12	TRESK channel contributes to depolarization-induced shunting inhibition and modulates epileptic seizures. Cell Reports, 2021, 36, 109404.	6.4	8
13	Effects of Mutations in TSC Genes on Neurodevelopment and Synaptic Transmission. International Journal of Molecular Sciences, 2021, 22, 7273.	4.1	15
14	Clustering and control for adaptation uncovers time-warped spike time patterns in cortical networks in vivo. Scientific Reports, 2021, 11, 15066.	3.3	5
15	Pathology-selective antiepileptic effects in the focal freeze-lesion rat model of malformation of cortical development. Experimental Neurology, 2021, 343, 113776.	4.1	4
16	Modelling the spatial and temporal constrains of the GABAergic influence on neuronal excitability. PLoS Computational Biology, 2021, 17, e1009199.	3.2	6
17	Neurophysiology of the Developing Cerebral Cortex: What We Have Learned and What We Need to Know. Frontiers in Cellular Neuroscience, 2021, 15, 814012.	3.7	6
18	Cell type specific impact of cannabinoid receptor signaling in somatosensory barrel map formation in mice. Journal of Comparative Neurology, 2020, 528, 7-17.	1.6	4

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19	Transient cortical circuits match spontaneous and sensory-driven activity during development. Science, 2020, 370, .	12.6	168
20	Cajalâ€“Retzius and subplate cells: transient cortical neurons and circuits with long-term impact. , 2020, , 485-505.		1
21	Haploinsufficiency of Tsc2 Leads to Hyperexcitability of Medial Prefrontal Cortex via Weakening of Tonic GABAB Receptor-mediated Inhibition. Cerebral Cortex, 2020, 30, 6313-6324.	2.9	8
22	NKCC-1 mediated Clâ¯ uptake in immature CA3 pyramidal neurons is sufficient to compensate phasic GABAergic inputs. Scientific Reports, 2020, 10, 18399.	3.3	5
23	Ryanodine receptor- and sodium-calcium exchanger-mediated spontaneous calcium activity in immature oligodendrocytes in cultures. Neuroscience Letters, 2020, 732, 134913.	2.1	4
24	Can we understand human brain development from experimental studies in rodents?. Pediatrics International, 2020, 62, 1139-1144.	0.5	6
25	Spikeâ€wave discharges in absence epilepsy: segregation of electrographic components reveals distinct pathways of seizure activity. Journal of Physiology, 2020, 598, 2397-2414.	2.9	25
26	Unraveling In Vivo Brain Transport of Proteinâ€Coated Fluorescent Nanodiamonds. Small, 2019, 15, e1902992.	10.0	35
27	Taurine potentiates the anticonvulsive effect of the <scp>GABA_A</scp> agonist muscimol and pentobarbital in the immature mouse hippocampus. Epilepsia, 2019, 60, 464-474.	5.1	11
28	Gadd45Î± modulates aversive learning through postâ€transcriptional regulation of memoryâ€related <scp>mRNA</scp> s. EMBO Reports, 2019, 20, .	4.5	11
29	Interactions between Membrane Resistance, GABA-A Receptor Properties, Bicarbonate Dynamics and Clâ¯-Transport Shape Activity-Dependent Changes of Intracellular Clâ¯ Concentration. International Journal of Molecular Sciences, 2019, 20, 1416.	4.1	16
30	Temporal refinement of sensoryâ€evoked activity across layers in developing mouse barrel cortex. European Journal of Neuroscience, 2019, 50, 2955-2969.	2.6	10
31	Allopregnanolone augments epileptiform activity of an in-vitro mouse hippocampal preparation in the first postnatal week. Epilepsy Research, 2019, 157, 106196.	1.6	3
32	Coincident Activation of Glutamate Receptors Enhances GABAA Receptor-Induced Ionic Plasticity of the Intracellular Clâ¯-Concentration in Dissociated Neuronal Cultures. Frontiers in Cellular Neuroscience, 2019, 13, 497.	3.7	6
33	Brain Delivery of Multifunctional Dendrimer Protein Bioconjugates. Advanced Science, 2018, 5, 1700897.	11.2	44
34	Î±2 isoform of Na+,K+-ATPase via Na+,Ca2+ exchanger modulates myelin basic protein synthesis in oligodendrocyte lineage cells in vitro. Cell Calcium, 2018, 73, 1-10.	2.4	14
35	Neuronal Activity Patterns in the Developing Barrel Cortex. Neuroscience, 2018, 368, 256-267.	2.3	114
36	Autism Related Neuroligin-4 Knockout Impairs Intracortical Processing but not Sensory Inputs in Mouse Barrel Cortex. Cerebral Cortex, 2018, 28, 2873-2886.	2.9	24

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37	Giant Depolarizing Potentials Trigger Transient Changes in the Intracellular Cl- Concentration in CA3 Pyramidal Neurons of the Immature Mouse Hippocampus. Frontiers in Cellular Neuroscience, 2018, 12, 420.	3.7	19
38	The Superior Function of the Subplate in Early Neocortical Development. Frontiers in Neuroanatomy, 2018, 12, 97.	1.7	60
39	Synaptic phospholipids as a new target for cortical hyperexcitability and E/I balance in psychiatric disorders. Molecular Psychiatry, 2018, 23, 1699-1710.	7.9	33
40	Development of the whisker-to-barrel cortex system. Current Opinion in Neurobiology, 2018, 53, 29-34.	4.2	27
41	Combining Optogenetics with MEA, Depth-Resolved LFPs and Assessing the Scope of Optogenetic Network Modulation. Neuromethods, 2018, , 133-152.	0.3	5
42	Barrel Cortex Function Special Issue Editorial. Neuroscience, 2018, 368, 1-2.	2.3	4
43	Neocortical Layer 6B as a Remnant of the Subplate - A Morphological Comparison. Cerebral Cortex, 2017, 27, bhv279.	2.9	56
44	Layer-Specific Refinement of Sensory Coding in Developing Mouse Barrel Cortex. Cerebral Cortex, 2017, 27, 4835-4850.	2.9	62
45	NKCC1-Mediated GABAergic Signaling Promotes Postnatal Cell Death in Neocortical Cajalâ€“Retzius Cells. Cerebral Cortex, 2017, 27, bhw004.	2.9	45
46	Synaptic Phospholipid Signaling Modulates Axon Outgrowth via Glutamate-dependent Ca2+-mediated Molecular Pathways. Cerebral Cortex, 2017, 27, 131-145.	2.9	11
47	Optogenetic Modulation of a Minor Fraction of Parvalbumin-Positive Interneurons Specifically Affects Spatiotemporal Dynamics of Spontaneous and Sensory-Evoked Activity in Mouse Somatosensory Cortex in Vivo. Cerebral Cortex, 2017, 27, 5784-5803.	2.9	37
48	Homeostatic interplay between electrical activity and neuronal apoptosis in the developing neocortex. Neuroscience, 2017, 358, 190-200.	2.3	49
49	Modulation of Neocortical Development by Early Neuronal Activity: Physiology and Pathophysiology. Frontiers in Cellular Neuroscience, 2017, 11, 379.	3.7	63
50	Electrical activity controls area-specific expression of neuronal apoptosis in the mouse developing cerebral cortex. ELife, 2017, 6, .	6.0	91
51	Spindle Bursts in Neonatal Rat Cerebral Cortex. Neural Plasticity, 2016, 2016, 1-11.	2.2	49
52	Spontaneous Neuronal Activity in Developing Neocortical Networks: From Single Cells to Large-Scale Interactions. Frontiers in Neural Circuits, 2016, 10, 40.	2.8	201
53	Review of imaging network activities in developing rodent cerebral cortex in vivo. Neurophotonics, 2016, 4, 031202.	3.3	18
54	Propagation of spontaneous slow-wave activity across columns and layers of the adult rat barrel cortex in vivo. Brain Structure and Function, 2016, 221, 4429-4449.	2.3	30

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55	Plasticity-Related Gene 1 Affects Mouse Barrel Cortex Function via Strengthening of Glutamatergic Thalamocortical Transmission. Cerebral Cortex, 2016, 26, 3260-3272.	2.9	24
56	Precise Somatotopic Thalamocortical Axon Guidance Depends on LPA-Mediated PRG-2/Radixin Signaling. Neuron, 2016, 92, 126-142.	8.1	15
57	Intracellular ion signaling influences myelin basic protein synthesis in oligodendrocyte precursor cells. Cell Calcium, 2016, 60, 322-330.	2.4	36
58	Molecular cause and functional impact of altered synaptic lipid signaling due to a prgâ€1 gene <scp>SNP</scp>. EMBO Molecular Medicine, 2016, 8, 25-38.	6.9	40
59	MOBP levels are regulated by Fyn kinase and affect the morphological differentiation of oligodendrocytes. Journal of Cell Science, 2016, 129, 930-42.	2.0	26
60	Mild systemic inflammation and moderate hypoxia transiently alter neuronal excitability in mouse somatosensory cortex. Neurobiology of Disease, 2016, 88, 29-43.	4.4	9
61	A critical role for VEGF and VEGFR2 in NMDA receptor synaptic function and fear-related behavior. Molecular Psychiatry, 2016, 21, 1768-1780.	7.9	68
62	Models of cortical malformationâ€"Chemical and physical. Journal of Neuroscience Methods, 2016, 260, 62-72.	2.5	47
63	Cannabinoid receptor-interacting protein Crip1a modulates CB1 receptor signaling in mouse hippocampus. Brain Structure and Function, 2016, 221, 2061-2074.	2.3	33
64	Traumatic brain injury results in rapid pericyte loss followed by reactive pericytosis in the cerebral cortex. Scientific Reports, 2015, 5, 13497.	3.3	81
65	Control of cortical neuronal migration by glutamate and GABA. Frontiers in Cellular Neuroscience, 2015, 9, 4.	3.7	119
66	Response: Ã¢â‚¬Å“Commentary: Comparison of spike parameters from optically identified GABAergic and glutamatergic neurons in sparse cortical culturesÃ¢â‚¬Â• Frontiers in Cellular Neuroscience, 2015, 9, 224.	3.7	0
67	Oligodendroglial Argonaute protein Ago2 associates with molecules of the Mbp mRNA localization machinery and is a downstream target of Fyn kinase. Frontiers in Cellular Neuroscience, 2015, 9, 328.	3.7	9
68	High Stimulus-Related Information in Barrel Cortex Inhibitory Interneurons. PLoS Computational Biology, 2015, 11, e1004121.	3.2	23
69	SncRNA715 Inhibits Schwann Cell Myelin Basic Protein Synthesis. PLoS ONE, 2015, 10, e0136900.	2.5	8
70	Long-range intralaminar noise correlations in the barrel cortex. Journal of Neurophysiology, 2015, 113, 3410-3420.	1.8	4
71	Methylxanthine-evoked perturbation of spontaneous and evoked activities in isolated newborn rat hippocampal networks. Neuroscience, 2015, 301, 106-120.	2.3	11
72	A Polyphenylene Dendrimer Drug Transporter with Precisely Positioned Amphiphilic Surface Patches. Advanced Healthcare Materials, 2015, 4, 377-384.	7.6	28

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73	Glutamatergic system controls synchronization of spontaneous neuronal activity in the murine neonatal entorhinal cortex. Pflugers Archiv European Journal of Physiology, 2015, 467, 1565-1575.	2.8	16
74	GABA transporters control GABAergic neurotransmission in the mouse subplate. Neuroscience, 2015, 304, 217-227.	2.3	11
75	Monitoring brain activity in preterms: mathematics helps to predict clinical outcome: Figure 1. Brain, 2015, 138, 2114-2116.	7.6	7
76	Laminar and Columnar Structure of Sensory-Evoked Multineuronal Spike Sequences in Adult Rat Barrel Cortex In Vivo. Cerebral Cortex, 2015, 25, 2001-2021.	2.9	82
77	Oligodendroglial p130Cas Is a Target of Fyn Kinase Involved in Process Formation, Cell Migration and Survival. PLoS ONE, 2014, 9, e89423.	2.5	14
78	Taurine activates GABAergic networks in the neocortex of immature mice. Frontiers in Cellular Neuroscience, 2014, 8, 26.	3.7	16
79	Activity-dependent endogenous taurine release facilitates excitatory neurotransmission in the neocortical marginal zone of neonatal rats. Frontiers in Cellular Neuroscience, 2014, 8, 33.	3.7	17
80	BDNF-induced nitric oxide signals in cultured rat hippocampal neurons: time course, mechanism of generation, and effect on neurotrophin secretion. Frontiers in Cellular Neuroscience, 2014, 8, 323.	3.7	24
81	Sensory-Evoked and Spontaneous Gamma and Spindle Bursts in Neonatal Rat Motor Cortex. Journal of Neuroscience, 2014, 34, 10870-10883.	3.6	84
82	Comment on â€œLocal impermeant anions establish the neuronal chloride concentrationâ€• Science, 2014, 345, 1130-1130.	12.6	15
83	Malformations of Cortical Development and Neocortical Focus. International Review of Neurobiology, 2014, 114, 35-61.	2.0	11
84	Resonance properties of GABAergic interneurons in immature GAD67-GFP mouse neocortex. Brain Research, 2014, 1548, 1-11.	2.2	10
85	Early GABAergic circuitry in the cerebral cortex. Current Opinion in Neurobiology, 2014, 26, 72-78.	4.2	76
86	Activation of glycine receptors modulates spontaneous epileptiform activity in the immature rat hippocampus. Journal of Physiology, 2014, 592, 2153-2168.	2.9	30
87	Cajalâ€“Retzius cells: Update on structural and functional properties of these mystic neurons that bridged the 20th century. Neuroscience, 2014, 275, 33-46.	2.3	60
88	Multifaceted effects of oligodendroglial exosomes on neurons: impact on neuronal firing rate, signal transduction and gene regulation. Philosophical Transactions of the Royal Society B: Biological Sciences, 2014, 369, 20130510.	4.0	232
89	Inhibition of different GABA transporter systems is required to attenuate epileptiform activity in the CA3 region of the immature rat hippocampus. Epilepsy Research, 2014, 108, 182-189.	1.6	5
90	Comparison of spike parameters from optically identified GABAergic and glutamatergic neurons in sparse cortical cultures. Frontiers in Cellular Neuroscience, 2014, 8, 460.	3.7	48

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91	A Neurovascular Bloodâ€“Brain Barrier In Vitro Model. Methods in Molecular Biology, 2014, 1135, 403-413.	0.9	27
92	Cajalâ€“Retzius and Subplate Cells. , 2013, , 843-856.		5
93	Barrel cortex function. Progress in Neurobiology, 2013, 103, 3-27.	5.7	304
94	An Alternative Pathway of Imiquimod-Induced Psoriasis-Like Skin Inflammation in the Absence of Interleukin-17 Receptor A Signaling. Journal of Investigative Dermatology, 2013, 133, 441-451.	0.7	143
95	Polymer Complexes in Biological Applications. Advances in Polymer Science, 2013, , 211-235.	0.8	1
96	LPS-Induced Microglial Secretion of TNFÎ± Increases Activity-Dependent Neuronal Apoptosis in the Neonatal Cerebral Cortex. Cerebral Cortex, 2013, 23, 1742-1755.	2.9	59
97	Thalamic Network Oscillations Synchronize Ontogenetic Columns in the Newborn Rat Barrel Cortex. Cerebral Cortex, 2013, 23, 1299-1316.	2.9	157
98	A Simple and Novel Method to Monitor Breathing and Heart Rate in Awake and Urethane-Anesthetized Newborn Rodents. PLoS ONE, 2013, 8, e62628.	2.5	46
99	Developmental Switch in Neurovascular Coupling in the Immature Rodent Barrel Cortex. PLoS ONE, 2013, 8, e80749.	2.5	29
100	A Novel In Vitro Model to Study Pericytes in the Neurovascular Unit of the Developing Cortex. PLoS ONE, 2013, 8, e81637.	2.5	23
101	Moderate Hypoxia Followed by Reoxygenation Results in Blood-Brain Barrier Breakdown via Oxidative Stress-Dependent Tight-Junction Protein Disruption. PLoS ONE, 2013, 8, e82823.	2.5	72
102	Role of tonic GABAergic currents during pre- and early postnatal rodent development. Frontiers in Neural Circuits, 2013, 7, 139.	2.8	57
103	Long-Term Potentiation in the Neonatal Rat Barrel Cortex In Vivo. Journal of Neuroscience, 2012, 32, 9511-9516.	3.6	43
104	Myelin Basic Protein synthesis is regulated by small nonâ€coding RNA 715. EMBO Reports, 2012, 13, 827-834.	4.5	31
105	Heterogeneous Nuclear Ribonucleoprotein (hnRNP) F Is a Novel Component of Oligodendroglial RNA Transport Granules Contributing to Regulation of Myelin Basic Protein (MBP) Synthesis. Journal of Biological Chemistry, 2012, 287, 1742-1754.	3.4	51
106	Volatile Anesthetics Influence Blood-Brain Barrier Integrity by Modulation of Tight Junction Protein Expression in Traumatic Brain Injury. PLoS ONE, 2012, 7, e50752.	2.5	84
107	Refuting the challenges of the developmental shift of polarity of GABA actions: GABA more exciting than ever!. Frontiers in Cellular Neuroscience, 2012, 6, 35.	3.7	139
108	Dopaminergic modulation of lowâ€Mg²⁺â€induced epileptiform activity in the intact hippocampus of the newborn mouse in vitro. Journal of Neuroscience Research, 2012, 90, 2020-2033.	2.9	6

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109	Activityâ€dependent survival of developing neocortical neurons depends on PI3K signalling. Journal of Neurochemistry, 2012, 120, 495-501.	3.9	17
110	Phasic GABA_Aâ€receptor activation is required to suppress epileptiform activity in the CA3 region of the immature rat hippocampus. Epilepsia, 2012, 53, 888-896.	5.1	19
111	Resonance properties of different neuronal populations in the immature mouse neocortex. European Journal of Neuroscience, 2012, 36, 2753-2762.	2.6	15
112	Intact In Vitro Preparations of the Neonatal Rodent Cortex: Analysis of Cellular Properties and Network Activity. Neuromethods, 2012, , 301-314.	0.3	12
113	Caspase-3 Contributes to ZO-1 and Cl-5 Tight-Junction Disruption in Rapid Anoxic Neurovascular Unit Damage. PLoS ONE, 2011, 6, e16760.	2.5	75
114	Glycine receptors influence radial migration in the embryonic mouse neocortex. NeuroReport, 2011, 22, 509-513.	1.2	21
115	Electrical activity patterns and the functional maturation of the neocortex. European Journal of Neuroscience, 2011, 34, 1677-1686.	2.6	116
116	The expression mechanism of the residual LTP in the CA1 region of BDNF k.o. mice is insensitive to NO synthase inhibition. Brain Research, 2011, 1391, 14-23.	2.2	10
117	Activity-dependent scaling of GABAergic excitation by dynamic Clâ^' changes in Cajalâ€“Retzius cells. Pflugers Archiv European Journal of Physiology, 2011, 461, 557-565.	2.8	26
118	Effect of depolarizing GABA_A-mediated membrane responses on excitability of Cajal-Retzius cells in the immature rat neocortex. Journal of Neurophysiology, 2011, 106, 2034-2044.	1.8	38
119	Pro-Inflammatory Effects of Interleukin-17A on Vascular Smooth Muscle Cells Involve NAD(P)H-Oxidase Derived Reactive Oxygen Species. Journal of Vascular Research, 2011, 48, 52-58.	1.4	68
120	Control of Programmed Cell Death by Distinct Electrical Activity Patterns. Cerebral Cortex, 2011, 21, 1192-1202.	2.9	62
121	Allostatic regulation of neuronal excitability by transient ischemia. Journal of Cerebral Blood Flow and Metabolism, 2011, 31, 1821-1822.	4.3	0
122	Fine-tuning DNA/albumin polyelectrolyte interactions to produce the efficient transfection agent cBSA-147. Biomaterials, 2010, 31, 8789-8801.	11.4	63
123	In vivo imaging of dopamine receptors in a model of temporal lobe epilepsy. Epilepsia, 2010, 51, 415-422.	5.1	43
124	Intrinsic activation of GABA_A receptors suppresses epileptiform activity in the cerebral cortex of immature mice. Epilepsia, 2010, 51, 1483-1492.	5.1	14
125	Inhibition of myosin light chain kinase reduces brain edema formation after traumatic brain injury. Journal of Neurochemistry, 2010, 112, 1015-1025.	3.9	52
126	Selfâ€organization of repetitive spike patterns in developing neuronal networks in vitro. European Journal of Neuroscience, 2010, 32, 1289-1299.	2.6	75

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127	Spontaneous Epileptic Manifestations in a DCX Knockdown Model of Human Double Cortex. Cerebral Cortex, 2010, 20, 2694-2701.	2.9	30
128	Cellular mechanisms of ILâ€17â€induced bloodâ€brain barrier disruption. FASEB Journal, 2010, 24, 1023-1034.	0.5	389
129	The Subplate and Early Cortical Circuits. Annual Review of Neuroscience, 2010, 33, 23-48.	10.7	409
130	CRP-induced levels of oxidative stress are higher in brain than aortic endothelial cells. Cytokine, 2010, 50, 117-120.	3.2	24
131	GABAC receptors are functionally expressed in the intermediate zone and regulate radial migration in the embryonic mouse neocortex. Neuroscience, 2010, 167, 124-134.	2.3	41
132	Electrophysiological and morphological properties of Cajalâ€“Retzius cells with different ontogenetic origins. Neuroscience, 2010, 167, 724-734.	2.3	32
133	Cortical GABAergic neurons: stretching it remarks, main conclusions and discussion. Frontiers in Neuroanatomy, 2010, 4, 7.	1.7	11
134	Subplate cells: amplifiers of neuronal activity in the developing cerebral cortex. Frontiers in Neuroanatomy, 2009, 3, 19.	1.7	90
135	Cellular Mechanisms of Subplate-Driven and Cholinergic Input-Dependent Network Activity in the Neonatal Rat Somatosensory Cortex. Cerebral Cortex, 2009, 19, 89-105.	2.9	86
136	Three Patterns of Oscillatory Activity Differentially Synchronize Developing Neocortical Networks In Vivo. Journal of Neuroscience, 2009, 29, 9011-9025.	3.6	251
137	Mechanisms of C-Reactive Protein-Induced Bloodâ€“Brain Barrier Disruption. Stroke, 2009, 40, 1458-1466.	2.0	106
138	Oxidative stress upregulates the NMDA receptor on cerebrovascular endothelium. Free Radical Biology and Medicine, 2009, 47, 1212-1220.	2.9	100
139	Local circuits targeting parvalbumin-containing interneurons in layer IV of rat barrel cortex. Brain Structure and Function, 2009, 214, 1-13.	2.3	43
140	Studying the Neurovascular Unit: An Improved Bloodâ€“Brain Barrier Model. Journal of Cerebral Blood Flow and Metabolism, 2009, 29, 1879-1884.	4.3	25
141	Stimulus-induced gamma activity in the electrocorticogram of freely moving rats: The neuronal signature of novelty detection. Behavioural Brain Research, 2009, 199, 350-354.	2.2	11
142	MK801 blocks hypoxic bloodâ€“brain-barrier disruption and leukocyte adhesion. Neuroscience Letters, 2009, 449, 168-172.	2.1	44
143	Impaired calcium homeostasis in aged hippocampal neurons. Neuroscience Letters, 2009, 451, 119-123.	2.1	40
144	A novel miniature telemetric system for recording EEG activity in freely moving rats. Journal of Neuroscience Methods, 2008, 168, 119-126.	2.5	38

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145	Fluvastatin prevents glutamate-induced blood-brain-barrier disruption in vitro. Life Sciences, 2008, 82, 1281-1287.	4.3	45
146	Pathway-specificity in N-methyl-d-aspartate receptor-mediated synaptic inputs onto subplate neurons. Neuroscience, 2008, 153, 1092-1102.	2.3	32
147	Novel Fluorescent Coreâ€“Shell Nanocontainers for Cell Membrane Transport. Biomacromolecules, 2008, 9, 1381-1389.	5.4	61
148	The Functional Role of the Second NPXY Motif of the LRP1 Î²-Chain in Tissue-type Plasminogen Activator-mediated Activation of N-Methyl-D-aspartate Receptors. Journal of Biological Chemistry, 2008, 283, 12004-12013.	3.4	89
149	Activity-Dependent Regulation of Neuronal Apoptosis in Neonatal Mouse Cerebral Cortex. Cerebral Cortex, 2008, 18, 1335-1349.	2.9	117
150	Glycine Receptors Mediate Excitation of Subplate Neurons in Neonatal Rat Cerebral Cortex. Journal of Neurophysiology, 2008, 100, 698-707.	1.8	34
151	Kinetic Properties of Cl^{â^'}Uptake Mediated by Na⁺-Dependent K⁺-2Cl^{â^'}Cotransport in Immature Rat Neocortical Neurons. Journal of Neuroscience, 2007, 27, 8616-8627.	3.6	150
152	Model-specific effects of bumetanide on epileptiform activity in the in-vitro intact hippocampus of the newborn mouse. Neuropharmacology, 2007, 53, 524-533.	4.1	82
153	Changes in the expression of cation-Clâ^' cotransporters, NKCC1 and KCC2, during cortical malformation induced by neonatal freeze-lesion. Neuroscience Research, 2007, 59, 288-295.	1.9	40
154	A new technique for real-time analysis of caspase-3 dependent neuronal cell death. Journal of Neuroscience Methods, 2007, 161, 234-243.	2.5	12
155	Spatioâ€temporal dynamics of oscillatory network activity in the neonatal mouse cerebral cortex. European Journal of Neuroscience, 2007, 26, 1995-2004.	2.6	54
156	Inhibition of the myosin light chain kinase prevents hypoxia-induced blood-brain barrier disruption. Journal of Neurochemistry, 2007, 102, 501-507.	3.9	70
157	Activation of metabotropic glutamate receptors induces propagating network oscillations in the intact cerebral cortex of the newborn mouse. Neuropharmacology, 2006, 51, 848-857.	4.1	17
158	Fluvastatin stabilizes the bloodâ€“brain barrier in vitro by nitric oxide-dependent dephosphorylation of myosin light chains. Neuropharmacology, 2006, 51, 907-913.	4.1	25
159	Early patterns of electrical activity in the developing cerebral cortex of humans and rodents. Trends in Neurosciences, 2006, 29, 414-418.	8.6	417
160	Rapid developmental switch in the mechanisms driving early cortical columnar networks. E-Neuroforum, 2006, 12, 203-206.	0.1	0
161	Rapid developmental switch in the mechanisms driving early cortical columnar networks. Nature, 2006, 439, 79-83.	27.8	296
162	Early developmental alterations of low-Mg2+-induced epileptiform activity in the intact corticohippocampal formation of the newborn mouse in vitro. Brain Research, 2006, 1077, 170-177.	2.2	24

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163	Hypoosmolar conditions reduce extracellular volume fraction and enhance epileptiform activity in the CA3 region of the immature rat hippocampus. Journal of Neuroscience Research, 2006, 84, 119-129.	2.9	56
164	GABA-A Receptors Regulate Neocortical Neuronal Migration In Vitro and In Vivo. Cerebral Cortex, 2006, 17, 138-148.	2.9	118
165	The Cortical Freeze Lesion Model. , 2006, , 295-303.		4
166	Morphology, Electrophysiology and Functional Input Connectivity of Pyramidal Neurons Characterizes a Genuine Layer Va in the Primary Somatosensory Cortex. Cerebral Cortex, 2006, 16, 223-236.	2.9	133
167	CoCoDat: a database system for organizing and selecting quantitative data on single neurons and neuronal microcircuitry. Journal of Neuroscience Methods, 2005, 141, 291-308.	2.5	21
168	Optical release of caged glutamate for stimulation of neurons in the in vitro slice preparation. Journal of Biomedical Optics, 2005, 10, 011003.	2.6	17
169	Neuronal precursor-specific activity of a human doublecortin regulatory sequence. Journal of Neurochemistry, 2005, 92, 264-282.	3.9	87
170	Oxygen and glucose deprivation induces major dysfunction in the somatosensory cortex of the newborn rat. European Journal of Neuroscience, 2005, 22, 2295-2305.	2.6	26
171	Contralateral increase in thigmotactic scanning following unilateral barrel-cortex lesion in mice. Behavioural Brain Research, 2005, 157, 39-43.	2.2	17
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