Laurent Venance

List of Publications by Year
in descending order

84 papers	5,204 citations	87888 38 h-index	98798 67 g-index
92 all docs	92 docs citations	92 times ranked	4942 citing authors

#	Article	IF	Citations
1	Striatum expresses region-specific plasticity consistent with distinct memory abilities. Cell Reports, 2022, 38, 110521.	6.4	11
2	Extracellular and intracellular components ofÂtheÂimpedance of neural tissue. Biophysical Journal, 2022, 121, 869-885.	0.5	5
3	Editorial: Thalamic Interactions With the Basal Ganglia: Thalamostriatal System and Beyond. Frontiers in Systems Neuroscience, 2022, 16, 883094.	2.5	3
4	Cerebellar stimulation prevents Levodopa-induced dyskinesia in mice and normalizes activity in a motor network. Nature Communications, 2022, 13, .	12.8	7
5	Intracellular Properties of Deep-Layer Pyramidal Neurons in Frontal Eye Field of Macaque Monkeys. Frontiers in Synaptic Neuroscience, 2021, 13, 725880.	2.5	6
6	Npas4 regulates medium spiny neuron physiology and gates cocaineâ€induced hyperlocomotion. EMBO Reports, 2021, 22, e51882.	4.5	14
7	BDNF Controls Bidirectional Endocannabinoid Plasticity at Corticostriatal Synapses. Cerebral Cortex, 2020, 30, 197-214.	2.9	20
8	Engrams of Fast Learning. Frontiers in Cellular Neuroscience, 2020, 14, 575915.	3.7	9
9	Deep brain stimulation-guided optogenetic rescue of parkinsonian symptoms. Nature Communications, 2020, 11, 2388.	12.8	37
10	Concurrent Thalamostriatal and Corticostriatal Spike-Timing-Dependent Plasticity and Heterosynaptic Interactions Shape Striatal Plasticity Map. Cerebral Cortex, 2020, 30, 4381-4401.	2.9	14
11	Noise-Induced Synchronization and Antiresonance in Interacting Excitable Systems: Applications to Deep Brain Stimulation in Parkinsonâ€™s Disease. Physical Review X, 2020, 10, .	8.9	15
12	Circulating Triglycerides Gate Dopamine-Associated Behaviors through DRD2-Expressing Neurons. Cell Metabolism, 2020, 31, 773-790.e11.	16.2	52
13	Lights on Endocannabinoid-Mediated Synaptic Potentiation. Frontiers in Molecular Neuroscience, 2020, 13, 132.	2.9	23
14	Christian Giaume (November 1951â€"July 2019). Glia, 2020, 68, 1321-1328.	4.9	0
15	CYP46A1 gene therapy deciphers the role of brain cholesterol metabolism in Huntingtonâ€™s disease. Brain, 2019, 142, 2432-2450.	7.6	71
16	Control of Long-Term Plasticity by Glutamate Transporters. Frontiers in Synaptic Neuroscience, 2019, 11, 10.	2.5	45
17	Environmental enrichment shapes striatal spike-timing-dependent plasticity in vivo. Scientific Reports, 2019, 9, 19451.	3.3	8
18	Encoding of Odor Fear Memories in the Mouse Olfactory Cortex. Current Biology, 2019, 29, 367-380.e4.	3.9	52

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19	Bridging the gap between striatal plasticity and learning. Current Opinion in Neurobiology, 2019, 54, 104-112.	4.2	52
20	I13â€…Striatal regulation of cholesterol metabolism by CYP46A1 is associated with multiple benefits in huntingtonâ€™s disease knock-in mice models. , 2018, , .		0
21	Interplay of multiple pathways and activity-dependent rules in STDP. PLoS Computational Biology, 2018, 14, e1006184.	3.2	9
22	Modulation of Spike-Timing Dependent Plasticity: Towards the Inclusion of a Third Factor in Computational Models. Frontiers in Computational Neuroscience, 2018, 12, 49.	2.1	57
23	Endocannabinoid-LTP Mediated by CB1 and TRPV1 Receptors Encodes for Limited Occurrences of Coincident Activity in Neocortex. Frontiers in Cellular Neuroscience, 2018, 12, 182.	3.7	20
24	Dopamineâ€"endocannabinoid interactions mediate spike-timing-dependent potentiation in the striatum. Nature Communications, 2018, 9, 4118.	12.8	29
25	Robustness of STDP to spike timing jitter. Scientific Reports, 2018, 8, 8139.	3.3	22
26	Deletion of <i>Maged1</i> in mice abolishes locomotor and reinforcing effects of cocaine. EMBO Reports, 2018, 19, .	4.5	16
27	Region-specific and state-dependent action of striatal GABAergic interneurons. Nature Communications, 2018, 9, 3339.	12.8	40
28	Magnitude and behavior of cross-talk effects in multichannel electrophysiology experiments. Journal of Neurophysiology, 2017, 118, 574-594.	1.8	9
29	Developmental control of spike-timing-dependent plasticity by tonic GABAergic signaling in striatum. Neuropharmacology, 2017, 121, 261-277.	4.1	19
30	Astrocytes gate Hebbian synaptic plasticity in the striatum. Nature Communications, 2016, 7, 13845.	12.8	56
31	Intracellular Impedance Measurements Reveal Non-ohmic Properties of the Extracellular Medium around Neurons. Biophysical Journal, 2016, 110, 234-246.	0.5	48
32	Endocannabinoid dynamics gate spike-timing dependent depression and potentiation. ELife, 2016, 5, e13185.	6.0	54
33	A concurrent excitation and inhibition of dopaminergic subpopulations in response to nicotine. Scientific Reports, 2015, 5, 8184.	3.3	29
34	Endocannabinoids mediate bidirectional striatal spikeâ€timingâ€dependent plasticity. Journal of Physiology, 2015, 593, 2833-2849.	2.9	63
35	Presynaptic adenosine <scp>A_{2A}</scp> receptors dampen cannabinoid <scp>CB</scp>₁ receptorâ€mediated inhibition of corticostriatal glutamatergic transmission. British Journal of Pharmacology, 2015, 172, 1074-1086.	5.4	45
36	Optogenetic activation of septal cholinergic neurons suppresses sharp wave ripples and enhances theta oscillations in the hippocampus. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 13535-13540.	7.1	297

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37	Microscale impedance measurements suggest that ionic diffusion is implicated in generating extracellular potentials. BMC Neuroscience, 2014, 15, .	1.9	2
38	Microscale Inhomogeneity of Brain Tissue Distorts Electrical Signal Propagation. Journal of Neuroscience, 2013, 33, 2821-2827.	3.6	23
39	GABAergic Circuits Control Spike-Timing-Dependent Plasticity. Journal of Neuroscience, 2013, 33, 9353-9363.	3.6	108
40	Gap Junctions in the Basal Ganglia. , 2013, , 149-163.		0
41	The Effects of NMDA Subunit Composition on Calcium Influx and Spike Timing-Dependent Plasticity in Striatal Medium Spiny Neurons. PLoS Computational Biology, 2012, 8, e1002493.	3.2	53
42	Preservation of the hyperdirect pathway of basal ganglia in a rodent brain slice. Neuroscience, 2012, 215, 31-41.	2.3	17
43	Polymodal activation of the endocannabinoid system in the extended amygdala. Nature Neuroscience, 2011, 14, 1542-1547.	14.8	154
44	Spike-timing dependent plasticity in striatal interneurons. Neuropharmacology, 2011, 60, 780-788.	4.1	41
45	Spike frequency adaptation is developmentally regulated in substantia nigra pars compacta dopaminergic neurons. Neuroscience, 2011, 192, 1-10.	2.3	18
46	Contribution of astrocytic glutamate and GABA uptake to corticostriatal information processing. Journal of Physiology, 2011, 589, 2301-2319.	2.9	73
47	Subthalamic nucleus highâ€frequency stimulation generates a concomitant synaptic excitationâ€"inhibition in substantia nigra pars reticulata. Journal of Physiology, 2011, 589, 4189-4207.	2.9	34
48	Cannabinoids inhibit the synaptic uptake of adenosine and dopamine in the rat and mouse striatum. European Journal of Pharmacology, 2011, 655, 38-45.	3.5	64
49	Distinct coincidence detectors govern the corticostriatal spike timing-dependent plasticity. Journal of Physiology, 2010, 588, 3045-3062.	2.9	105
50	Spike-timing dependent plasticity in the striatum. Frontiers in Synaptic Neuroscience, 2010, 2, 6.	2.5	47
51	Asymmetric spike-timing dependent plasticity of striatal nitric oxide-synthase interneurons. Neuroscience, 2009, 160, 744-754.	2.3	38
52	Electrical coupling between hippocampal astrocytes in rat brain slices. Neuroscience Research, 2009, 63, 236-243.	1.9	46
53	Brief Subthreshold Events Can Act as Hebbian Signals for Long-Term Plasticity. PLoS ONE, 2009, 4, e6557.	2.5	23
54	Cellâ€specific spikeâ€timingâ€dependent plasticity in GABAergic and cholinergic interneurons in corticostriatal rat brain slices. Journal of Physiology, 2008, 586, 265-282.	2.9	82

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55	Chemical transmission between dopaminergic neuron pairs. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 4904-4909.	7.1	55
56	Electrical Synapses in Basal Ganglia. Reviews in the Neurosciences, 2007, 18, 15-35.	2.9	12
57	Effects of acute dopamine depletion on the electrophysiological properties of striatal neurons. Neuroscience Research, 2007, 58, 305-316.	1.9	55
58	Connexin mRNA expression in single dopaminergic neurons of substantia nigra pars compacta. Neuroscience Research, 2006, 56, 419-426.	1.9	28
59	Electrical Synapses between Dopaminergic Neurons of the Substantia Nigra Pars Compacta. Journal of Neuroscience, 2005, 25, 291-298.	3.6	62
60	Functional mu opioid receptors are expressed in cholinergic interneurons of the rat dorsal striatum: territorial specificity and diurnal variation. European Journal of Neuroscience, 2005, 21, 3301-3309.	2.6	54
61	Contribution of gap junctional communication between tumor cells and astroglia to the invasion of the brain parenchyma by human glioblastomas. BMC Cell Biology, 2005, 6, 7.	3.0	131
62	Bidirectional Activity-Dependent Plasticity at Corticostriatal Synapses. Journal of Neuroscience, 2005, 25, 11279-11287.	3.6	207
63	Electrical Synapses between Output Neurones of the Striatum and between Neurones of the Substantia Nigra Pars Compacta. , 2005, , 493-502.		0
64	Endothelins regulate astrocyte gap junctions in rat hippocampal slices. European Journal of Neuroscience, 2004, 19, 1005-1015.	2.6	97
65	Electrical and chemical transmission between striatal GABAergic output neurones in rat brain slices. Journal of Physiology, 2004, 559, 215-230.	2.9	114
66	ATP-induced inhibition of gap junctional communication is enhanced by interleukin-1 Î² treatment in cultured astrocytes. Neuroscience, 2004, 126, 95-104.	2.3	53
67	Heterogeneity of spike frequency adaptation among medium spiny neurones from the rat striatum. Neuroscience, 2003, 122, 77-92.	2.3	28
68	Control and Plasticity of Intercellular Calcium Waves in Astrocytes: A Modeling Approach. Journal of Neuroscience, 2002, 22, 4850-4859.	3.6	210
69	Analysis of Connexin Expression in Brain Slices by Single-Cell Reverse Transcriptase Polymerase Chain Reaction. , 2001, 154, 143-157.		2
70	Sphingosine-1-phosphate induces proliferation of astrocytes: regulation by intracellular signalling cascades. European Journal of Neuroscience, 2001, 13, 2067-2076.	2.6	126
71	A further step in the characterization of neuronal gap junctions. NeuroReport, 2000, 11, F7-F8.	1.2	0
72	Connexin expression in electrically coupled postnatal rat brain neurons. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 10260-10265.	7.1	252

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73	Anandamide and WIN 55212-2 inhibit cyclic AMP formation through G-protein-coupled receptors distinct from CB1 cannabinoid receptors in cultured astrocytes. European Journal of Neuroscience, 1999, 11, 691-699.	2.6	81
74	Gap junctional communication and pharmacological heterogeneity in astrocytes cultured from the rat striatum. Journal of Physiology, 1998, 510, 429-440.	2.9	86
75	Intercellular calcium signaling and gap junctional communication in astrocytes. , 1998, 24, 50-64.		233
76	Intercellular calcium signaling and gap junctional communication in astrocytes. Glia, 1998, 24, 50-64.	4.9	8
77	Mechanism Involved in Initiation and Propagation of Receptor-Induced Intercellular Calcium Signaling in Cultured Rat Astrocytes. Journal of Neuroscience, 1997, 17, 1981-1992.	3.6	229
78	(R)-methanandamide inhibits receptor-induced calcium responses by depleting internal calcium stores in cultured astrocytes. Pflugers Archiv European Journal of Physiology, 1997, 434, 147-149.	2.8	18
79	Altered gap junctional communication, intercellular signaling, and growth in cultured astrocytes deficient in connexin43. , 1997, 49, 528-540.		139
80	Altered gap junctional communication, intercellular signaling, and growth in cultured astrocytes deficient in connexin43. Journal of Neuroscience Research, 1997, 49, 528-540.	2.9	3
81	Biosynthesis of an Endogenous Cannabinoid Precursor in Neurons and its Control by Calcium and cAMP. Journal of Neuroscience, 1996, 16, 3934-3942.	3.6	289
82	Characterization and Regulation of Gap Junction Channels in Cultured Astrocytes. Neuroscience Intelligence Unit, 1996, , 135-157.	0.5	6
83	Inhibition by anandamide of gap junctions and intercellular calcium signalling in striatal astrocytes. Nature, 1995, 376, 590-594.	27.8	350
84	Homotypic and Heterotypic Coupling Mediated by Gap Junctions During Glial Cell Differentiation In Vitro. European Journal of Neuroscience, 1995, 7, 451-461.	2.6	75