Louis Ãric Trudeau

List of Publications by Year
in descending order

105 papers	6,653 citations	66343 42 h-index	69250 77 g-index
121 all docs	121 docs citations	121 times ranked	8431 citing authors

#	Article	IF	Citations
1	Parkinsonâ€™s Disease-Related Proteins PINK1 and Parkin Repress Mitochondrial Antigen Presentation. Cell, 2016, 166, 314-327.	28.9	429
2	Î²-Lactamase protein fragment complementation assays as in vivo and in vitro sensors of proteinâ€“protein interactions. Nature Biotechnology, 2002, 20, 619-622.	17.5	397
3	Elevated Mitochondrial Bioenergetics and Axonal Arborization Size Are Key Contributors to the Vulnerability of Dopamine Neurons. Current Biology, 2015, 25, 2349-2360.	3.9	351
4	Intestinal infection triggers Parkinsonâ€™s disease-like symptoms in Pink1âˆ'/âˆ' mice. Nature, 2019, 571, 565-569.	27.8	347
5	From glutamate co-release to vesicular synergy: vesicular glutamate transporters. Nature Reviews Neuroscience, 2011, 12, 204-216.	10.2	321
6	On Cell Loss and Selective Vulnerability of Neuronal Populations in Parkinson's Disease. Frontiers in Neurology, 2018, 9, 455.	2.4	272
7	Direct Modulation of the Secretory Machinery Underlies PKA-Dependent Synaptic Facilitation in Hippocampal Neurons. Neuron, 1996, 17, 789-797.	8.1	213
8	GDNF enhances the synaptic efficacy of dopaminergic neurons in culture. European Journal of Neuroscience, 2000, 12, 3172-3180.	2.6	148
9	Dopamine neurons in culture express VGLUT2 explaining their capacity to release glutamate at synapses in addition to dopamine. Journal of Neurochemistry, 2004, 88, 1398-1405.	3.9	143
10	Effects of Serine 129 Phosphorylation on Î±-Synuclein Aggregation, Membrane Association, and Internalization. Journal of Biological Chemistry, 2016, 291, 4374-4385.	3.4	136
11	VGLUT2 in dopamine neurons is required for psychostimulant-induced behavioral activation. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 389-394.	7.1	123
12	The multilingual nature of dopamine neurons. Progress in Brain Research, 2014, 211, 141-164.	1.4	121
13	Human mesenchymal stromal cell-secreted lactate induces M2-macrophage differentiation by metabolic reprogramming. Oncotarget, 2016, 7, 30193-30210.	1.8	116
14	The role of neurotensin in central nervous system pathophysiology: what is the evidence?. Journal of Psychiatry and Neuroscience, 2006, 31, 229-45.	2.4	112
15	Glutamate in dopamine neurons: Synaptic versus diffuse transmission. Brain Research Reviews, 2008, 58, 290-302.	9.0	104
16	Developmental and Target-Dependent Regulation of Vesicular Glutamate Transporter Expression by Dopamine Neurons. Journal of Neuroscience, 2008, 28, 6309-6318.	3.6	100
17	Enhanced Sucrose and Cocaine Self-Administration and Cue-Induced Drug Seeking after Loss of VGLUT2 in Midbrain Dopamine Neurons in Mice. Journal of Neuroscience, 2011, 31, 12593-12603.	3.6	92
18	The dual dopamineâ€glutamate phenotype of growing mesencephalic neurons regresses in mature rat brain. Journal of Comparative Neurology, 2009, 517, 873-891.	1.6	90

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19	Chondroitin Sulfate Inhibits the Nuclear Translocation of Nuclear Factorâ€Î°B in Interleukinâ€1Î²â€Stimulated Chondrocytes. Basic and Clinical Pharmacology and Toxicology, 2008, 102, 59-65.	2.5	89
20	Modulation of an early step in the secretory machinery in hippocampal nerve terminals. Proceedings of the National Academy of Sciences of the United States of America, 1998, 95, 7163-7168.	7.1	78
21	Glutamate co-transmission as an emerging concept in monoamine neuron function. Journal of Psychiatry and Neuroscience, 2004, 29, 296-310.	2.4	78
22	Presynaptic Î¼-opioid receptors regulate a late step of the secretory process in rat ventral tegmental area GABAergic neurons. Neuropharmacology, 2002, 42, 1065-1078.	4.1	75
23	Glutamate Corelease Promotes Growth and Survival of Midbrain Dopamine Neurons. Journal of Neuroscience, 2012, 32, 17477-17491.	3.6	75
24	Lmx1a and Lmx1b regulate mitochondrial functions and survival of adult midbrain dopaminergic neurons. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E4387-96.	7.1	75
25	D2 Receptors Inhibit the Secretory Process Downstream From Calcium Influx in Dopaminergic Neurons: Implication of K⁺ Channels. Journal of Neurophysiology, 2002, 87, 1046-1056.	1.8	74
26	Enhanced glutamatergic phenotype of mesencephalic dopamine neurons after neonatal 6-hydroxydopamine lesion. Neuroscience, 2008, 156, 59-70.	2.3	74
27	Neurotensin polyplex as an efficient carrier for delivering the human GDNF gene into nigral dopamine neurons of hemiparkinsonian rats. Molecular Therapy, 2006, 14, 857-865.	8.2	68
28	MCL-1Matrix maintains neuronal survival by enhancing mitochondrial integrity and bioenergetic capacity under stress conditions. Cell Death and Disease, 2020, 11, 321.	6.3	68
29	Role of Kv1 Potassium Channels in Regulating Dopamine Release and Presynaptic D2 Receptor Function. PLoS ONE, 2011, 6, e20402.	2.5	67
30	Critical Roles for the Netrin Receptor Deleted in Colorectal Cancer in Dopaminergic Neuronal Precursor Migration, Axon Guidance, and Axon Arborization. Neuroscience, 2010, 169, 932-949.	2.3	63
31	Somatodendritic Dopamine Release Requires Synaptotagmin 4 and 7 and the Participation of Voltage-gated Calcium Channels. Journal of Biological Chemistry, 2011, 286, 23928-23937.	3.4	62
32	Neuronal vulnerability in Parkinson disease: Should the focus be on axons and synaptic terminals?. Movement Disorders, 2019, 34, 1406-1422.	3.9	62
33	Increased vulnerability of nigral dopamine neurons after expansion of their axonal arborization size through D2 dopamine receptor conditional knockout. PLoS Genetics, 2019, 15, e1008352.	3.5	62
34	Role of Calcium in Neurotensin-Evoked Enhancement in Firing in Mesencephalic Dopamine Neurons. Journal of Neuroscience, 2004, 24, 2566-2574.	3.6	61
35	Neuroinflammation is associated with changes in glial mGluR5 expression and the development of neonatal excitotoxic lesions. Glia, 2011, 59, 188-199.	4.9	60
36	Glutamate Cotransmission in Cholinergic, GABAergic and Monoamine Systems: Contrasts and Commonalities. Frontiers in Neural Circuits, 2018, 12, 113.	2.8	56

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37	Dopamine facilitates dendritic spine formation by cultured striatal medium spiny neurons through both D1 and D2 dopamine receptors. Neuropharmacology, 2013, 67, 432-443.	4.1	55
38	Chronic Exposure to Nerve Growth Factor Increases Acetylcholine and Glutamate Release from Cholinergic Neurons of the Rat Medial Septum and Diagonal Band of Broca via Mechanisms Mediated by p75^{NTR}. Journal of Neuroscience, 2008, 28, 1404-1409.	3.6	54
39	Evaluation of D1 and D2 Dopamine Receptor Segregation in the Developing Striatum Using BAC Transgenic Mice. PLoS ONE, 2013, 8, e67219.	2.5	53
40	Activation of Neurotransmitter Release in Hippocampal Nerve Terminals During Recovery From Intracellular Acidification. Journal of Neurophysiology, 1999, 81, 2627-2635.	1.8	50
41	Clozapine inhibits synaptic transmission at GABAergic synapses established by ventral tegmental area neurones in culture. Neuropharmacology, 2000, 39, 1536-1543.	4.1	50
42	Neurotensin Triggers Dopamine D2 Receptor Desensitization through a Protein Kinase C and Î²-Arrestin1-dependent Mechanism. Journal of Biological Chemistry, 2011, 286, 9174-9184.	3.4	50
43	NTS-Polyplex: a potential nanocarrier for neurotrophic therapy of Parkinson's disease. Nanomedicine: Nanotechnology, Biology, and Medicine, 2012, 8, 1052-1069.	3.3	49
44	Sirtuin 3 rescues neurons through the stabilisation of mitochondrial biogenetics in the virally-expressing mutant Î±-synuclein rat model of parkinsonism. Neurobiology of Disease, 2017, 106, 133-146.	4.4	48
45	Basal somatodendritic dopamine release requires snare proteins. Journal of Neurochemistry, 2006, 96, 1740-1749.	3.9	47
46	Culture of Postnatal Mesencephalic Dopamine Neurons on an Astrocyte Monolayer. Current Protocols in Neuroscience, 2008, 44, Unit 3.21.	2.6	46
47	Neurotensin regulates intracellular calcium in ventral tegmental area astrocytes: evidence for the involvement of multiple receptors. Neuroscience, 2000, 97, 293-302.	2.3	45
48	The endocannabinoid 2-arachidonoylglycerol inhibits long-term potentiation of glutamatergic synapses onto ventral tegmental area dopamine neurons in mice. European Journal of Neuroscience, 2011, 33, 1751-1760.	2.6	44
49	Contribution of Kv1.2 Voltage-gated Potassium Channel to D2 Autoreceptor Regulation of Axonal Dopamine Overflow. Journal of Biological Chemistry, 2011, 286, 9360-9372.	3.4	44
50	Bidirectional regulation of dopamine D2 and neurotensin NTS1 receptors in dopamine neurons. European Journal of Neuroscience, 2006, 24, 2789-2800.	2.6	43
51	Coordinated action of NSF and PKC regulates GABAB receptor signaling efficacy. EMBO Journal, 2006, 25, 2698-2709.	7.8	43
52	Dynamic SERS nanosensor for neurotransmitter sensing near neurons. Faraday Discussions, 2017, 205, 387-407.	3.2	42
53	Presynaptic action of neurotensin on dopamine release through inhibition of D2 receptor function. BMC Neuroscience, 2009, 10, 96.	1.9	41
54	Nestin-expressing neural stem cells identified in the scar following myocardial infarction. Journal of Cellular Physiology, 2005, 204, 51-62.	4.1	40

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55	On Cotransmission & Neurotransmitter Phenotype Plasticity. Molecular Interventions: Pharmacological Perspectives From Biology, Chemistry and Genomics, 2007, 7, 138-146.	3.4	40
56	Block Copolymer Brush Layer-Templated Gold Nanoparticles on Nanofibers for Surface-Enhanced Raman Scattering Optophysiology. ACS Applied Materials & Interfaces, 2019, 11, 4373-4384.	8.0	39
57	Ligand- and cell-dependent determinants of internalization and cAMP modulation by delta opioid receptor (DOR) agonists. Cellular and Molecular Life Sciences, 2014, 71, 1529-1546.	5.4	37
58	Presynaptic action of neurotensin on cultured ventral tegmental area dopaminergic neurones. Neuroscience, 2002, 111, 177-187.	2.3	36
59	Postsynaptic injection of calcium-independent phospholipase A2 inhibitors selectively increases AMPA receptor-mediated synaptic transmission. Hippocampus, 2004, 14, 319-325.	1.9	36
60	Normal Biogenesis and Cycling of Empty Synaptic Vesicles in Dopamine Neurons of Vesicular Monoamine Transporter 2 Knockout Mice. Molecular Biology of the Cell, 2005, 16, 306-315.	2.1	36
61	Ultrastructural characterization of the mesostriatal dopamine innervation in mice, including two mouse lines of conditional VGLUT2 knockout in dopamine neurons. European Journal of Neuroscience, 2012, 35, 527-538.	2.6	34
62	Use of TH-EGFP transgenic mice as a source of identified dopaminergic neurons for physiological studies in postnatal cell culture. Journal of Neuroscience Methods, 2005, 146, 1-12.	2.5	33
63	Segregation of dopamine and glutamate release sites in dopamine neuron axons: regulation by striatal target cells. FASEB Journal, 2019, 33, 400-417.	0.5	32
64	Neuronal calcium sensor-1 deletion in the mouse decreases motivation and dopamine release in the nucleus accumbens. Behavioural Brain Research, 2016, 301, 213-225.	2.2	31
65	Comparative analysis of Parkinson's diseaseâ€"associated genes in mice reveals altered survival and bioenergetics of Parkin-deficient dopamine neurons. Journal of Biological Chemistry, 2018, 293, 9580-9593.	3.4	30
66	Expression of D2 receptor isoforms in cultured neurons reveals equipotent autoreceptor function. Neuropharmacology, 2006, 50, 595-605.	4.1	28
67	Chronic activation of the D2 dopamine autoreceptor inhibits synaptogenesis in mesencephalic dopaminergic neurons <i>in vitro</i>. European Journal of Neuroscience, 2008, 28, 1480-1490.	2.6	28
68	Metabolomics and In-Silico Analysis Reveal Critical Energy Deregulations in Animal Models of Parkinsonâ€™s Disease. PLoS ONE, 2013, 8, e69146.	2.5	26
69	VGluT2 Expression in Dopamine Neurons Contributes to Postlesional Striatal Reinnervation. Journal of Neuroscience, 2020, 40, 8262-8275.	3.6	26
70	Unaltered Striatal Dopamine Release Levels in Young Parkin Knockout, Pink1 Knockout, DJ-1 Knockout and LRRK2 R1441G Transgenic Mice. PLoS ONE, 2014, 9, e94826.	2.5	26
71	Axonal Segregation and Role of the Vesicular Glutamate Transporter VGLUT3 in Serotonin Neurons. Frontiers in Neuroanatomy, 2016, 10, 39.	1.7	25
72	Contact-dependent regulation of N-type calcium channel subunits during synaptogenesis. , 1998, 35, 198-208.		24

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73	Neurotensin inhibits glutamate-mediated synaptic inputs onto ventral tegmental area dopamine neurons through the release of the endocannabinoid 2-AG. Neuropharmacology, 2012, 63, 983-991.	4.1	24
74	A mitochondrial contribution to anti-inflammatory shear stress signaling in vascular endothelial cells. Journal of Cell Biology, 2022, 221, .	5.2	23
75	M3-like muscarinic receptors mediate Ca2+ influx in rat mesencephalic GABAergic neurones through a protein kinase C-dependent mechanism. Neuropharmacology, 2005, 48, 796-809.	4.1	22
76	Oleic Acid in the Ventral Tegmental Area Inhibits Feeding, Food Reward, and Dopamine Tone. Neuropsychopharmacology, 2018, 43, 607-616.	5.4	21
77	Impact of basic FGF expression in astrocytes on dopamine neuron synaptic function and development. European Journal of Neuroscience, 2006, 23, 608-616.	2.6	18
78	Regulation of rat mesencephalic GABAergic neurones through muscarinic receptors. Journal of Physiology, 2004, 556, 429-445.	2.9	17
79	Histamine H 3 Receptors Decrease Dopamine Release in the Ventral Striatum by Reducing the Activity of Striatal Cholinergic Interneurons. Neuroscience, 2018, 376, 188-203.	2.3	17
80	Chronic activation of the D2 autoreceptor inhibits both glutamate and dopamine synapse formation and alters the intrinsic properties of mesencephalic dopamine neurons <i>in vitro</i>. European Journal of Neuroscience, 2010, 32, 1433-1441.	2.6	16
81	Characterization of a Human Point Mutation of VGLUT3 (p.A211V) in the Rodent Brain Suggests a Nonuniform Distribution of the Transporter in Synaptic Vesicles. Journal of Neuroscience, 2017, 37, 4181-4199.	3.6	15
82	Optimizing NTS-Polyplex as a Tool for Gene Transfer to Cultured Dopamine Neurons. PLoS ONE, 2012, 7, e51341.	2.5	15
83	Characterization of the intestinal microbiota during <i>Citrobacter rodentium</i> infection in a mouse model of infection-triggered Parkinsonâ€™s disease. Gut Microbes, 2020, 12, 1830694.	9.8	14
84	Amphetamine maintenance therapy during intermittent cocaine self-administration in rats attenuates psychomotor and dopamine sensitization and reduces addiction-like behavior. Neuropsychopharmacology, 2021, 46, 305-315.	5.4	14
85	Dopaminergic neurons establish a distinctive axonal arbor with a majority of nonâ€synaptic terminals. FASEB Journal, 2021, 35, e21791.	0.5	14
86	A novel dopamine transporter transgenic mouse line for identification and purification of midbrain dopaminergic neurons reveals midbrain heterogeneity. European Journal of Neuroscience, 2015, 42, 2438-2454.	2.6	13
87	Engineering immunoproteasome-expressing mesenchymal stromal cells: A potent cellular vaccine for lymphoma and melanoma in mice. Cell Reports Medicine, 2021, 2, 100455.	6.5	12
88	Editorial: Neuronal Co-transmission. Frontiers in Neural Circuits, 2019, 13, 19.	2.8	8
89	Implication of synaptotagmins 4 and 7 in activity-dependent somatodendritic dopamine release in the ventral midbrain. Open Biology, 2022, 12, 210339.	3.6	8
90	Pre- and postsynaptic actions of nifedipine at an identified cholinergic central synapse of Aplysia. Pflugers Archiv European Journal of Physiology, 1992, 422, 193-197.	2.8	7

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91	Glycine and D-serine improve the negative symptoms of schizophrenia. Evidence-Based Mental Health, 2005, 8, 82-82.	4.5	7
92	The 21-aminosteroid U74389G prevents the down-regulation and decrease in activity of CYP1A1, 1A2 and 3A6 induced by an inflammatory reaction. Biochemical Pharmacology, 2006, 71, 366-376.	4.4	7
93	Xanthine derivatives IBMX and S-9977-2 potentiate transmission at an Aplysia central cholinergic synapse. Brain Research, 1992, 586, 78-85.	2.2	6
94	Perturbation of synaptic vesicle delivery during neurotransmitter release triggered independently of calcium influx. Journal of Physiology, 2002, 542, 779-793.	2.9	6
95	Calcium-dependent, D2 receptor-independent induction of c-fos by haloperidol in dopamine neurons. Naunyn-Schmiedeberg's Archives of Pharmacology, 2003, 367, 480-489.	3.0	6
96	Neonatal 6â€OHDA lesion of the SNc induces striatal compensatory sprouting from surviving SNc dopaminergic neurons without VTA contribution. European Journal of Neuroscience, 2021, 54, 6618-6632.	2.6	6
97	Regulatory Roles for GTP-Binding Proteins in Nerve Terminals. Seminars in Neuroscience, 1998, 9, 220-231.	2.2	5
98	Homeostatic regulation of excitatory synapses on striatal medium spiny neurons expressing the D2 dopamine receptor. Brain Structure and Function, 2016, 221, 2093-2107.	2.3	5
99	A blueprint for performing SERS measurements in tissue with plasmonic nanofibers. Journal of Chemical Physics, 2020, 153, 124702.	3.0	4
100	Postnatally Derived Ventral Midbrain Dopamine Neuron Cultures as a Model System for Studying Neurotoxicity and Parkinson's Disease. , 2008, , 491-504.		2
101	Antipsychotiques, dopamine et glutamate, une relation Ã Ã©tablir. Sante Mentale Au Quebec, 0, 32, 191-199.	0.1	0
102	Ultrastructural characterization of the mesostriatal dopamine innervations in mice, including two mouse lines of conditional VGLUT2 knockout in dopamine neurons. European Journal of Neuroscience, 2012, 36, 2567-2570.	2.6	0
103	The challenging diversity of neurons in the ventral tegmental area: A commentary of Mirandaâ€Barrientos, J. et al., <i>Eur J Neurosci</i> 2021. European Journal of Neuroscience, 2021, 54, 4085-4087.	2.6	0
104	Glutamate Co-Release by Monoamine Neurons. , 2009, , 1-18.		0
105	On cell loss in Parkinsonâ€™s disease, and the citations that followed. Npj Parkinson's Disease, 2022, 8, 38.	5.3	0