

# Christian Lscher

## List of Publications by Citations

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113  
papers

13,008  
citations

56  
h-index

114  
g-index

130  
ext. papers

15,198  
ext. citations

14.3  
avg, IF

6.88  
L-index

#	Paper	IF	Citations
113	Drug-evoked synaptic plasticity in addiction: from molecular changes to circuit remodeling. <i>Neuron</i> , <b>2011</b> , 69, 650-63	13.9	715
112	Role of AMPA receptor cycling in synaptic transmission and plasticity. <i>Neuron</i> , <b>1999</b> , 24, 649-58	13.9	600
111	G protein-coupled inwardly rectifying K <sup>+</sup> channels (GIRKs) mediate postsynaptic but not presynaptic transmitter actions in hippocampal neurons. <i>Neuron</i> , <b>1997</b> , 19, 687-95	13.9	596
110	Cocaine triggered AMPA receptor redistribution is reversed in vivo by mGluR-dependent long-term depression. <i>Nature Neuroscience</i> , <b>2006</b> , 9, 636-41	25.5	546
109	Synaptic plasticity and dynamic modulation of the postsynaptic membrane. <i>Nature Neuroscience</i> , <b>2000</b> , 3, 545-50	25.5	540
108	NMDA receptor-dependent long-term potentiation and long-term depression (LTP/LTD). <i>Cold Spring Harbor Perspectives in Biology</i> , <b>2012</b> , 4,	10.2	531
107	Cocaine-evoked synaptic plasticity: persistence in the VTA triggers adaptations in the NAc. <i>Nature Neuroscience</i> , <b>2009</b> , 12, 1036-41	25.5	475
106	Group 1 mGluR-dependent synaptic long-term depression: mechanisms and implications for circuitry and disease. <i>Neuron</i> , <b>2010</b> , 65, 445-59	13.9	455
105	Epilepsy, hyperalgesia, impaired memory, and loss of pre- and postsynaptic GABA(B) responses in mice lacking GABA(B(1)). <i>Neuron</i> , <b>2001</b> , 31, 47-58	13.9	441
104	Emerging roles for G protein-gated inwardly rectifying potassium (GIRK) channels in health and disease. <i>Nature Reviews Neuroscience</i> , <b>2010</b> , 11, 301-15	13.5	412
103	GABA neurons of the VTA drive conditioned place aversion. <i>Neuron</i> , <b>2012</b> , 73, 1173-83	13.9	394
102	Dynamin-dependent endocytosis of ionotropic glutamate receptors. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>1999</b> , 96, 14112-7	11.5	350
101	Reversal of cocaine-evoked synaptic potentiation resets drug-induced adaptive behaviour. <i>Nature</i> , <b>2011</b> , 481, 71-5	50.4	316
100	Bi-directional effects of GABA(B) receptor agonists on the mesolimbic dopamine system. <i>Nature Neuroscience</i> , <b>2004</b> , 7, 153-9	25.5	280
99	Contrasting forms of cocaine-evoked plasticity control components of relapse. <i>Nature</i> , <b>2014</b> , 509, 459-64	50.4	259
98	Neural bases for addictive properties of benzodiazepines. <i>Nature</i> , <b>2010</b> , 463, 769-74	50.4	252
97	Ventral tegmental area GABA projections pause accumbal cholinergic interneurons to enhance associative learning. <i>Nature</i> , <b>2012</b> , 492, 452-6	50.4	236

96	Rapid synthesis and synaptic insertion of GluR2 for mGluR-LTD in the ventral tegmental area. <i>Science</i> , <b>2007</b> , 317, 530-3	33.3	218
95	Cocaine disinhibits dopamine neurons by potentiation of GABA transmission in the ventral tegmental area. <i>Science</i> , <b>2013</b> , 341, 1521-5	33.3	205
94	Hooked on benzodiazepines: GABAA receptor subtypes and addiction. <i>Trends in Neurosciences</i> , <b>2011</b> , 34, 188-97	13.3	205
93	Glutamate receptors on dopamine neurons control the persistence of cocaine seeking. <i>Neuron</i> , <b>2008</b> , 59, 497-508	13.9	193
92	Pheromone detection mediated by a V1r vomeronasal receptor. <i>Nature Neuroscience</i> , <b>2002</b> , 5, 1261-2	25.5	192
91	Addiction therapy. Refining deep brain stimulation to emulate optogenetic treatment of synaptic pathology. <i>Science</i> , <b>2015</b> , 347, 659-64	33.3	175
90	RGS2 modulates coupling between GABAB receptors and GIRK channels in dopamine neurons of the ventral tegmental area. <i>Nature Neuroscience</i> , <b>2007</b> , 10, 1559-68	25.5	169
89	Sufficiency of Mesolimbic Dopamine Neuron Stimulation for the Progression to Addiction. <i>Neuron</i> , <b>2015</b> , 88, 1054-1066	13.9	166
88	In vivo reprogramming of circuit connectivity in postmitotic neocortical neurons. <i>Nature Neuroscience</i> , <b>2013</b> , 16, 193-200	25.5	145
87	Accumbal D1R Neurons Projecting to Lateral Hypothalamus Authorize Feeding. <i>Neuron</i> , <b>2015</b> , 88, 553-64	13.9	144
86	The mechanistic classification of addictive drugs. <i>PLoS Medicine</i> , <b>2006</b> , 3, e437	11.6	142
85	Cocaine inverts rules for synaptic plasticity of glutamate transmission in the ventral tegmental area. <i>Nature Neuroscience</i> , <b>2011</b> , 14, 414-6	25.5	134
84	Pathological circuit function underlying addiction and anxiety disorders. <i>Nature Neuroscience</i> , <b>2014</b> , 17, 1635-43	25.5	130
83	The Emergence of a Circuit Model for Addiction. <i>Annual Review of Neuroscience</i> , <b>2016</b> , 39, 257-76	17	129
82	Hippocampal Somatostatin Interneurons Control the Size of Neuronal Memory Ensembles. <i>Neuron</i> , <b>2016</b> , 89, 1074-85	13.9	125
81	Monitoring glutamate release during LTP with glial transporter currents. <i>Neuron</i> , <b>1998</b> , 21, 435-41	13.9	118
80	Mechanisms of synaptic depression triggered by metabotropic glutamate receptors. <i>Cellular and Molecular Life Sciences</i> , <b>2008</b> , 65, 2913-23	10.3	113
79	The Molecular Basis of Drug Addiction: Linking Epigenetic to Synaptic and Circuit Mechanisms. <i>Neuron</i> , <b>2019</b> , 102, 48-59	13.9	106

78	The transition to compulsion in addiction. <i>Nature Reviews Neuroscience</i> , <b>2020</b> , 21, 247-263	13.5	104
77	Convergence of Reinforcing and Anhedonic Cocaine Effects in the Ventral Pallidum. <i>Neuron</i> , <b>2016</b> , 92, 214-226	13.9	101
76	Methamphetamine-evoked depression of GABA(B) receptor signaling in GABA neurons of the VTA. <i>Neuron</i> , <b>2012</b> , 73, 978-89	13.9	99
75	Optogenetics: 10 years after ChR2 in neurons--views from the community. <i>Nature Neuroscience</i> , <b>2015</b> , 18, 1202-12	25.5	98
74	mGluRs induce a long-term depression in the ventral tegmental area that involves a switch of the subunit composition of AMPA receptors. <i>European Journal of Neuroscience</i> , <b>2005</b> , 21, 1280-8	3.5	97
73	SHANK3 controls maturation of social reward circuits in the VTA. <i>Nature Neuroscience</i> , <b>2016</b> , 19, 926-934	25.5	87
72	Drug-driven AMPA receptor redistribution mimicked by selective dopamine neuron stimulation. <i>PLoS ONE</i> , <b>2010</b> , 5, e15870	3.7	87
71	Expression of cocaine-evoked synaptic plasticity by GluN3A-containing NMDA receptors. <i>Neuron</i> , <b>2013</b> , 80, 1025-38	13.9	86
70	The mesoSPIM initiative: open-source light-sheet microscopes for imaging cleared tissue. <i>Nature Methods</i> , <b>2019</b> , 16, 1105-1108	21.6	83
69	Modality-specific thalamocortical inputs instruct the identity of postsynaptic L4 neurons. <i>Nature</i> , <b>2014</b> , 511, 471-4	50.4	82
68	Dopamine neurons projecting to medial shell of the nucleus accumbens drive heroin reinforcement. <i>ELife</i> , <b>2018</b> , 7,	8.9	79
67	Restless AMPA receptors: implications for synaptic transmission and plasticity. <i>Trends in Neurosciences</i> , <b>2001</b> , 24, 665-70	13.3	76
66	Stochastic synaptic plasticity underlying compulsion in a model of addiction. <i>Nature</i> , <b>2018</b> , 564, 366-371	50.4	71
65	Temporally precise labeling and control of neuromodulatory circuits in the mammalian brain. <i>Nature Methods</i> , <b>2017</b> , 14, 495-503	21.6	68
64	Synaptic plasticity and addiction: learning mechanisms gone awry. <i>Neuropharmacology</i> , <b>2011</b> , 61, 1052-9	5.5	63
63	Projection of the Gr̃beberg ganglion to the mouse olfactory bulb. <i>European Journal of Neuroscience</i> , <b>2006</b> , 23, 2887-94	3.5	63
62	Desensitization of mu-opioid receptor-evoked potassium currents: initiation at the receptor, expression at the effector. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2002</b> , 99, 4674-9	11.5	63
61	Biomarkers for closed-loop deep brain stimulation in Parkinson disease and beyond. <i>Nature Reviews Neurology</i> , <b>2019</b> , 15, 343-352	15	61

60	In utero exposure to cocaine delays postnatal synaptic maturation of glutamatergic transmission in the VTA. <i>Nature Neuroscience</i> , <b>2011</b> , 14, 1439-46	25.5	61
59	Cell-Type Specific Insertion of GluA2-Lacking AMPARs with Cocaine Exposure Leading to Sensitization, Cue-Induced Seeking, and Incubation of Craving. <i>Neuropsychopharmacology</i> , <b>2016</b> , 41, 1779-89	8.7	58
58	Psychostimulant effect of dopaminergic treatment and addictions in Parkinson's disease. <i>Movement Disorders</i> , <b>2017</b> , 32, 1566-1573	7	56
57	Drug-evoked synaptic plasticity causing addictive behavior. <i>Journal of Neuroscience</i> , <b>2013</b> , 33, 17641-6	6.6	56
56	D1R/GluN1 complexes in the striatum integrate dopamine and glutamate signalling to control synaptic plasticity and cocaine-induced responses. <i>Molecular Psychiatry</i> , <b>2014</b> , 19, 1295-304	15.1	55
55	Absence and rescue of morphine withdrawal in GIRK/Kir3 knock-out mice. <i>Journal of Neuroscience</i> , <b>2008</b> , 28, 4069-77	6.6	55
54	Photolysis of caged compounds characterized by ratiometric confocal microscopy: a new approach to homogeneously control and measure the calcium concentration in cardiac myocytes. <i>Cell Calcium</i> , <b>1996</b> , 19, 255-66	4	53
53	Gene cluster lock after pheromone receptor gene choice. <i>EMBO Journal</i> , <b>2007</b> , 26, 3423-30	13	49
52	A comparison of striatal-dependent behaviors in wild-type and hemizygous <i>Drd1a</i> and <i>Drd2</i> BAC transgenic mice. <i>Journal of Neuroscience</i> , <b>2012</b> , 32, 9119-23	6.6	42
51	Retinal input directs the recruitment of inhibitory interneurons into thalamic visual circuits. <i>Neuron</i> , <b>2014</b> , 81, 1057-1069	13.9	41
50	Drug-evoked synaptic plasticity: beyond metaplasticity. <i>Current Opinion in Neurobiology</i> , <b>2013</b> , 23, 553-8	7.6	41
49	Endogenous RGS proteins enhance acute desensitization of GABA(B) receptor-activated GIRK currents in HEK-293T cells. <i>Pflugers Archiv European Journal of Physiology</i> , <b>2005</b> , 450, 61-73	4.6	41
48	A cross-modal genetic framework for the development and plasticity of sensory pathways. <i>Nature</i> , <b>2016</b> , 538, 96-98	50.4	39
47	VTA Projection Neurons Releasing GABA and Glutamate in the Dentate Gyrus. <i>ENeuro</i> , <b>2016</b> , 3,	3.9	36
46	Morphine- and CaMKII-dependent enhancement of GIRK channel signaling in hippocampal neurons. <i>Journal of Neuroscience</i> , <b>2010</b> , 30, 13419-30	6.6	35
45	beta-Arrestin2, interacting with phosphodiesterase 4, regulates synaptic release probability and presynaptic inhibition by opioids. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2005</b> , 102, 3034-9	11.5	35
44	Addictive drugs modulate GIRK-channel signaling by regulating RGS proteins. <i>Trends in Pharmacological Sciences</i> , <b>2008</b> , 29, 544-9	13.2	34
43	Cocaine Exposure Enhances the Activity of Ventral Tegmental Area Dopamine Neurons via Calcium-Impermeable NMDARs. <i>Journal of Neuroscience</i> , <b>2016</b> , 36, 10759-10768	6.6	31

42	Optogenetic dissection of neural circuitry: from synaptic causalities to blue prints for novel treatments of behavioral diseases. <i>Current Opinion in Neurobiology</i> , <b>2015</b> , 35, 95-100	7.6	30
41	Two distinct forms of desensitization of G-protein coupled inwardly rectifying potassium currents evoked by alkaloid and peptide mu-opioid receptor agonists. <i>Molecular and Cellular Neurosciences</i> , <b>2003</b> , 24, 517-23	4.8	29
40	Firing modes of dopamine neurons drive bidirectional GIRK channel plasticity. <i>Journal of Neuroscience</i> , <b>2014</b> , 34, 5107-14	6.6	28
39	Cocaine-evoked synaptic plasticity of excitatory transmission in the ventral tegmental area. <i>Cold Spring Harbor Perspectives in Medicine</i> , <b>2013</b> , 3, a012013	5.4	27
38	Homeostatic Plasticity in the Hippocampus Facilitates Memory Extinction. <i>Cell Reports</i> , <b>2018</b> , 22, 1451-1461	6.6	25
37	Ribosomal Protein S6 Phosphorylation Is Involved in Novelty-Induced Locomotion, Synaptic Plasticity and mRNA Translation. <i>Frontiers in Molecular Neuroscience</i> , <b>2017</b> , 10, 419	6.1	20
36	Social transmission of food safety depends on synaptic plasticity in the prefrontal cortex. <i>Science</i> , <b>2019</b> , 364, 991-995	33.3	19
35	Short pulse width in subthalamic stimulation in Parkinson's disease: a randomized, double-blind study. <i>Movement Disorders</i> , <b>2018</b> , 33, 169-173	7	19
34	Drug-evoked plasticity: do addictive drugs reopen a critical period of postnatal synaptic development?. <i>Frontiers in Molecular Neuroscience</i> , <b>2012</b> , 5, 75	6.1	19
33	Effects of the cell type-specific ablation of the cAMP-responsive transcription factor in noradrenergic neurons on locus coeruleus firing and withdrawal behavior after chronic exposure to morphine. <i>Journal of Neurochemistry</i> , <b>2010</b> , 115, 563-73	6	18
32	Is there a way to curb benzodiazepine addiction?. <i>Swiss Medical Weekly</i> , <b>2011</b> , 141, w13277	3.1	18
31	Targeting VGLUT2 in Mature Dopamine Neurons Decreases Mesoaccumbal Glutamatergic Transmission and Identifies a Role for Glutamate Co-release in Synaptic Plasticity by Increasing Baseline AMPA/NMDA Ratio. <i>Frontiers in Neural Circuits</i> , <b>2018</b> , 12, 64	3.5	18
30	Periaqueductal efferents to dopamine and GABA neurons of the VTA. <i>PLoS ONE</i> , <b>2018</b> , 13, e0190297	3.7	16
29	Depression of Accumbal to Lateral Hypothalamic Synapses Gates Overeating. <i>Neuron</i> , <b>2020</b> , 107, 158-172	4.9	15
28	Aberrant habit formation in the Sapap3-knockout mouse model of obsessive-compulsive disorder. <i>Scientific Reports</i> , <b>2019</b> , 9, 12061	4.9	15
27	Context-Dependent Multiplexing by Individual VTA Dopamine Neurons. <i>Journal of Neuroscience</i> , <b>2020</b> , 40, 7489-7509	6.6	15
26	Bi-directional effect of increasing doses of baclofen on reinforcement learning. <i>Frontiers in Behavioral Neuroscience</i> , <b>2011</b> , 5, 40	3.5	12
25	Applications of two-photon microscopy in the neurosciences. <i>Frontiers in Bioscience - Landmark</i> , <b>2005</b> , 10, 2263-78	2.8	12

24	Projection-specific deficits in synaptic transmission in adult Sapap3-knockout mice. <i>Neuropsychopharmacology</i> , <b>2020</b> , 45, 2020-2029	8.7	8
23	Transitory alexia without agraphia in an HIV-positive patient suffering from toxoplasma encephalitis: a case report. <i>European Neurology</i> , <b>1992</b> , 32, 26-7	2.1	8
22	Consolidating the Circuit Model for Addiction. <i>Annual Review of Neuroscience</i> , <b>2021</b> , 44, 173-195	17	8
21	Synaptic mechanism underlying serotonin modulation of transition to cocaine addiction. <i>Science</i> , <b>2021</b> , 373, 1252-1256	33.3	8
20	Dyskinesia-inducing lead contacts optimize outcome of subthalamic stimulation in Parkinson's disease. <i>Movement Disorders</i> , <b>2019</b> , 34, 1728-1734	7	7
19	Optogenetically inspired deep brain stimulation: linking basic with clinical research. <i>Swiss Medical Weekly</i> , <b>2016</b> , 146, w14278	3.1	6
18	Mimicking synaptic effects of addictive drugs with selective dopamine neuron stimulation. <i>Channels</i> , <b>2011</b> , 5, 461-3	3	4
17	GABAB Receptor Functions in the Mesolimbic Dopamine System <b>2016</b> , 129-154		4
16	Cortico-striatal activity driving compulsive reward seeking		4
15	Modification of a consumer digital audio tape (DAT) for analog data recording. <i>Journal of Neuroscience Methods</i> , <b>1992</b> , 45, 155-8	3	3
14	Dynamic dichotomy of accumbal population activity underlies cocaine sensitization. <i>ELife</i> , <b>2021</b> , 10,	8.9	3
13	Drug-Evoked Synaptic Plasticity of Excitatory Transmission in the Ventral Tegmental Area. <i>Cold Spring Harbor Perspectives in Medicine</i> , <b>2021</b> , 11,	5.4	3
12	'Ups, downs, and sideways' of dopamine in drug addiction. <i>Trends in Neurosciences</i> , <b>2021</b> , 44, 593-594	13.3	3
11	Corticostriatal Activity Driving Compulsive Reward Seeking. <i>Biological Psychiatry</i> , <b>2021</b> , 90, 808-818	7.9	3
10	Dominique Muller (1956-2015). <i>Neuron</i> , <b>2015</b> , 87, 12-3	13.9	2
9	A deeply superficial brain stimulation. <i>Movement Disorders</i> , <b>2017</b> , 32, 1326	7	2
8	L'addiction: lorsque l'emballement des mécanismes d'apprentissage conduit à la perte du libre arbitre. <i>Psn</i> , <b>2009</b> , 7, 35-42		2
7	An unusual suspect in cocaine addiction. <i>EMBO Reports</i> , <b>2018</b> , 19,	6.5	1

6	Against addiction: light at the end of the tunnel?. <i>Journal of Physiology</i> , <b>2009</b> , 587, 3757	3.9	1
5	The perception of movements elicited by magnetic cortex stimulation depends on the site of stimulation. <i>Experimental Brain Research</i> , <b>1996</b> , 109, 154-7	2.3	1
4	VTA Dopamine Neurons Multiplex External with Internal Representations of Goal-Directed Action. <i>SSRN Electronic Journal</i> ,	1	1
3	Regulation of GluA1 phosphorylation by d-amphetamine and methylphenidate in the cerebellum. <i>Addiction Biology</i> , <b>2021</b> , 26, e12995	4.6	0
2	The Synapse <b>2013</b> , 145-162		
1	The future of clinical neuroscience: A view from the bench. <i>Clinical and Translational Neuroscience</i> , <b>2018</b> , 2, 2514183X1878131	0.9	