Christian Hansel

List of Publications by Year
in descending order

42 papers	4,194 citations	186265 28 h-index	265206 42 g-index
43 all docs	43 docs citations	43 times ranked	3149 citing authors

#	Article	IF	Citations
1	Beyond parallel fiber LTD: the diversity of synaptic and non-synaptic plasticity in the cerebellum. Nature Neuroscience, 2001, 4, 467-475.	14.8	557
2	Expression of a Protein Kinase C Inhibitor in Purkinje Cells Blocks Cerebellar LTD and Adaptation of the Vestibulo-Ocular Reflex. Neuron, 1998, 20, 495-508.	8.1	383
3	Bidirectional Parallel Fiber Plasticity in the Cerebellum under Climbing Fiber Control. Neuron, 2004, 44, 691-700.	8.1	381
4	Synaptic Memories Upside Down: Bidirectional Plasticity at Cerebellar Parallel Fiber-Purkinje Cell Synapses. Neuron, 2006, 52, 227-238.	8.1	349
5	Long-Term Depression of the Cerebellar Climbing Fiberâ€“Purkinje Neuron Synapse. Neuron, 2000, 26, 473-482.	8.1	213
6	Î±CaMKII Is Essential for Cerebellar LTD and Motor Learning. Neuron, 2006, 51, 835-843.	8.1	203
7	Toward a Neurocentric View of Learning. Neuron, 2017, 95, 19-32.	8.1	172
8	Cerebellar plasticity and motor learning deficits in a copy-number variation mouse model of autism. Nature Communications, 2014, 5, 5586.	12.8	144
9	A Role for Protein Phosphatases 1, 2A, and 2B in Cerebellar Long-Term Potentiation. Journal of Neuroscience, 2005, 25, 10768-10772.	3.6	142
10	The Making of a Complex Spike: Ionic Composition and Plasticity. Annals of the New York Academy of Sciences, 2002, 978, 359-390.	3.8	139
11	Intrinsic Plasticity Complements Long-Term Potentiation in Parallel Fiber Input Gain Control in Cerebellar Purkinje Cells. Journal of Neuroscience, 2010, 30, 13630-13643.	3.6	139
12	Relation Between Dendritic Ca2+Levels and the Polarity of Synaptic Long-term Modifications in Rat Visual Cortex Neurons. European Journal of Neuroscience, 1997, 9, 2309-2322.	2.6	124
13	Cerebellar associative sensory learning defects in five mouse autism models. ELife, 2015, 4, e06085.	6.0	120
14	Î²CaMKII controls the direction of plasticity at parallel fiberâ€“Purkinje cell synapses. Nature Neuroscience, 2009, 12, 823-825.	14.8	116
15	Purkinje Cell NMDA Receptors Assume a Key Role in Synaptic Gain Control in the Mature Cerebellum. Journal of Neuroscience, 2010, 30, 15330-15335.	3.6	90
16	SK2 Channel Modulation Contributes to Compartment-Specific Dendritic Plasticity in Cerebellar Purkinje Cells. Neuron, 2012, 75, 108-120.	8.1	88
17	LTD-like molecular pathways in developmental synaptic pruning. Nature Neuroscience, 2016, 19, 1299-1310.	14.8	79
18	Alcohol Impairs Long-Term Depression at the Cerebellar Parallel Fiberâ€“Purkinje Cell Synapse. Journal of Neurophysiology, 2008, 100, 3167-3174.	1.8	70

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19	Long-term depression of climbing fiber-evoked calcium transients in Purkinje cell dendrites. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 2878-2883.	7.1	64
20	Activity-Dependent Plasticity of Spike Pauses in Cerebellar Purkinje Cells. Cell Reports, 2016, 14, 2546-2553.	6.4	60
21	SK2 channels in cerebellar Purkinje cells contribute to excitability modulation in motor-learningâ€“specific memory traces. PLoS Biology, 2020, 18, e3000596.	5.6	54
22	Climbing Fiber-Evoked Endocannabinoid Signaling Heterosynaptically Suppresses Presynaptic Cerebellar Long-Term Potentiation. Journal of Neuroscience, 2006, 26, 8289-8294.	3.6	53
23	SK2 channel expression and function in cerebellar Purkinje cells. Journal of Physiology, 2011, 589, 3433-3440.	2.9	50
24	Muscarinic acetylcholine receptor activation blocks long-term potentiation at cerebellar parallel fiber-Purkinje cell synapses via cannabinoid signaling. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 11181-11186.	7.1	42
25	Calcium threshold shift enables frequency-independent control of plasticity by an instructive signal. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 13221-13226.	7.1	40
26	Ethanol affects NMDA receptor signaling at climbing fiber-Purkinje cell synapses in mice and impairs cerebellar LTD. Journal of Neurophysiology, 2013, 109, 1333-1342.	1.8	39
27	Intrinsic Excitability Increase in Cerebellar Purkinje Cells after Delay Eye-Blink Conditioning in Mice. Journal of Neuroscience, 2020, 40, 2038-2046.	3.6	34
28	Cerebellar Long-Term Potentiation. International Review of Neurobiology, 2014, 117, 39-51.	2.0	32
29	Behavioral Tests for Mouse Models of Autism: An Argument for the Inclusion of Cerebellum-Controlled Motor Behaviors. Neuroscience, 2021, 462, 303-319.	2.3	30
30	Synaptic Plasticity and Calcium Signaling in Purkinje Cells of the Central Cerebellar Lobes of Mormyrid Fish. Journal of Neuroscience, 2007, 27, 13499-13512.	3.6	29
31	Non-Hebbian spike-timing-dependent plasticity in cerebellar circuits. Frontiers in Neural Circuits, 2012, 6, 124.	2.8	28
32	Synaptic Potential and Plasticity of an SK2 Channel Gate Regulate Spike Burst Activity in Cerebellar Purkinje Cells. IScience, 2018, 1, 49-54.	4.1	26
33	Complex spike clusters and falseâ€positive rejection in a cerebellar supervised learning rule. Journal of Physiology, 2019, 597, 4387-4406.	2.9	24
34	Asymmetries in Cerebellar Plasticity and Motor Learning. Cerebellum, 2016, 15, 87-92.	2.5	17
35	Muscarinic Modulation of SK2-Type K⁺Channels Promotes Intrinsic Plasticity in L2/3 Pyramidal Neurons of the Mouse Primary Somatosensory Cortex. ENeuro, 2020, 7, ENEURO.0453-19.2020.	1.9	14
36	Reading the Clock: How Purkinje Cells Decode the Phase of Olivary Oscillations. Neuron, 2009, 62, 308-309.	8.1	13

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37	Enhanced AMPA receptor function promotes cerebellar long-term depression rather than potentiation. Learning and Memory, 2014, 21, 662-667.	1.3	12
38	When the B-team runs plasticity: GluR2 receptor trafficking in cerebellar long-term potentiation. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 18245-18246.	7.1	10
39	Why is synaptic plasticity not enough?. Neurobiology of Learning and Memory, 2020, 176, 107336.	1.9	5
40	Sensory Over-responsivity and Aberrant Plasticity in Cerebellar Cortex in a Mouse Model of Syndromic Autism. Biological Psychiatry Global Open Science, 2022, 2, 450-459.	2.2	4
41	The calcium sensor, rather than the route of calcium entry, defines cerebellar plasticity pathways. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	3
42	Part II. J. C. Eccles, R. Llinas and K. Sasaki, The Excitatory Synaptic Action of Climbing Fibres on the Purkinje Cells of the Cerebellum, J Physiol, 182: 268-296, 1966: the Rise of the Complex Spike. Cerebellum, 2021, 20, 330-339.	2.5	1