Javier F Medina

List of Publications by Year
in descending order

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40 papers	3,945 citations	201674 27 h-index	302126 39 g-index
48 all docs	48 docs citations	48 times ranked	2584 citing authors

#	ARTICLE	IF	CITATIONS
1	Timing Mechanisms in the Cerebellum: Testing Predictions of a Large-Scale Computer Simulation. Journal of Neuroscience, 2000, 20, 5516-5525.	3.6	327
2	Computer simulation of cerebellar information processing. Nature Neuroscience, 2000, 3, 1205-1211.	14.8	316
3	Links from complex spikes to local plasticity and motor learning in the cerebellum of awake-behaving monkeys. Nature Neuroscience, 2008, 11, 1185-1192.	14.8	250
4	Parallels between cerebellum- and amygdala-dependent conditioning. Nature Reviews Neuroscience, 2002, 3, 122-131.	10.2	229
5	Inhibition of climbing fibres is a signal for the extinction of conditioned eyelid responses. Nature, 2002, 416, 330-333.	27.8	227
6	Precise Control of Movement Kinematics by Optogenetic Inhibition of Purkinje Cell Activity. Journal of Neuroscience, 2014, 34, 2321-2330.	3.6	214
7	A Mechanism for Savings in the Cerebellum. Journal of Neuroscience, 2001, 21, 4081-4089.	3.6	204
8	Climbing fibers encode a temporal-difference prediction error during cerebellar learning in mice. Nature Neuroscience, 2015, 18, 1798-1803.	14.8	193
9	Cerebellar granule cells acquire a widespread predictive feedback signal during motor learning. Nature Neuroscience, 2017, 20, 727-734.	14.8	182
10	Mechanisms of cerebellar learning suggested by eyelid conditioning. Current Opinion in Neurobiology, 2000, 10, 717-724.	4.2	178
11	Computational Principles of Supervised Learning in the Cerebellum. Annual Review of Neuroscience, 2018, 41, 233-253.	10.7	174
12	Cerebellar-Dependent Expression of Motor Learning during Eyeblink Conditioning in Head-Fixed Mice. Journal of Neuroscience, 2014, 34, 14845-14853.	3.6	155
13	Simulations of Cerebellar Motor Learning: Computational Analysis of Plasticity at the Mossy Fiber to Deep Nucleus Synapse. Journal of Neuroscience, 1999, 19, 7140-7151.	3.6	152
14	Variation, Signal, and Noise in Cerebellar Sensory-Motor Processing for Smooth-Pursuit Eye Movements. Journal of Neuroscience, 2007, 27, 6832-6842.	3.6	106
15	Chromatin remodeling inactivates activity genes and regulates neural coding. Science, 2016, 353, 300-305.	12.6	96
16	Dynamic modulation of activity in cerebellar nuclei neurons during pavlovian eyeblink conditioning in mice. ELife, 2017, 6, .	6.0	90
17	The multiple roles of Purkinje cells in sensori-motor calibration: to predict, teach and command. Current Opinion in Neurobiology, 2011, 21, 616-622.	4.2	80
18	The Representation of Time for Motor Learning. Neuron, 2005, 45, 157-167.	8.1	79

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19	Does Cerebellar LTD Mediate Motor Learning? Toward a Resolution without a Smoking Gun. Neuron, 1998, 20, 359-362.	8.1	76
20	Beyond â€œall-or-nothingâ€•climbing fibers: graded representation of teaching signals in Purkinje cells. Frontiers in Neural Circuits, 2013, 7, 115.	2.8	68
21	Coding of stimulus strength via analog calcium signals in Purkinje cell dendrites of awake mice. ELife, 2014, 3, e03663.	6.0	67
22	Encoding and Decoding of Learned Smooth-Pursuit Eye Movements in the Floccular Complex of the Monkey Cerebellum. Journal of Neurophysiology, 2009, 102, 2039-2054.	1.8	62
23	Sensory-Driven Enhancement of Calcium Signals in Individual Purkinje Cell Dendrites of Awake Mice. Cell Reports, 2014, 6, 792-798.	6.4	56
24	Adaptive Timing of Motor Output in the Mouse: The Role of Movement Oscillations in Eyelid Conditioning. Frontiers in Integrative Neuroscience, 2011, 5, 72.	2.1	51
25	Signal, Noise, and Variation in Neural and Sensory-Motor Latency. Neuron, 2016, 90, 165-176.	8.1	43
26	Mechanisms for motor timing in the cerebellar cortex. Current Opinion in Behavioral Sciences, 2016, 8, 53-59.	3.9	38
27	How and why neural and motor variation are related. Current Opinion in Neurobiology, 2015, 33, 110-116.	4.2	31
28	A cerebello-olivary signal for negative prediction error is sufficient to cause extinction of associative motor learning. Nature Neuroscience, 2020, 23, 1550-1554.	14.8	26
29	Teaching the cerebellum about reward. Nature Neuroscience, 2019, 22, 846-848.	14.8	21
30	P-sort: an open-source software for cerebellar neurophysiology. Journal of Neurophysiology, 2021, 126, 1055-1075.	1.8	19
31	Action-based organization of a cerebellar module specialized for predictive control of multiple body parts. Neuron, 2021, 109, 2981-2994.e5.	8.1	17
32	The Neural Code for Motor Control in the Cerebellum and Oculomotor Brainstem. ENeuro, 2014, 1, ENEURO.0004-14.2014.	1.9	17
33	Acquisition of Neural Learning in Cerebellum and Cerebral Cortex for Smooth Pursuit Eye Movements. Journal of Neuroscience, 2011, 31, 12716-12726.	3.6	14
34	Deleting Mecp2 from the cerebellum rather than its neuronal subtypes causes a delay in motor learning in mice. ELife, 2021, 10, .	6.0	14
35	A Recipe for Bidirectional Motor Learning: Using Inhibition to Cook Plasticity in the Vestibular Nuclei. Neuron, 2010, 68, 607-609.	8.1	12
36	Single-Unit Extracellular Recording from the Cerebellum During Eyeblink Conditioning in Head-Fixed Mice. Neuromethods, 2018, 134, 39-71.	0.3	12

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37	Immediate and after effects of transcranial direct-current stimulation in the mouse primary somatosensory cortex. Scientific Reports, 2021, 11, 3123.	3.3	12
38	Using Animal Models to Improve the Design and Application of Transcranial Electrical Stimulation in Humans. Current Behavioral Neuroscience Reports, 2018, 5, 125-135.	1.3	9
39	Bidirectional short-term plasticity during single-trial learning of cerebellar-driven eyelid movements in mice. Neurobiology of Learning and Memory, 2020, 170, 107097.	1.9	6
40	Dendritic Inhibition by Shh Signaling-Dependent Stellate Cell Pool Is Critical for Motor Learning. Journal of Neuroscience, 2022, 42, 5130-5143.	3.6	2