FrÃ©dÃ©ric Brocard

List of Publications by Year
in descending order

29 papers	1,170 citations	516710 16 h-index	642732 23 g-index
34 all docs	34 docs citations	34 times ranked	950 citing authors

#	Article	IF	Citations
1	The Persistent Sodium Current Generates Pacemaker Activities in the Central Pattern Generator for Locomotion and Regulates the Locomotor Rhythm. Journal of Neuroscience, 2008, 28, 8577-8589.	3.6	150
2	Perinatal development of lumbar motoneurons and their inputs in the rat. Brain Research Bulletin, 2000, 53, 635-647.	3.0	141
3	Initiation of locomotion in lampreys. Brain Research Reviews, 2008, 57, 172-182.	9.0	141
4	Contribution of Persistent Sodium Current to Locomotor Pattern Generation in Neonatal Rats. Journal of Neurophysiology, 2007, 98, 613-628.	1.8	99
5	Activity-Dependent Changes in Extracellular Ca2+ and K+ Reveal Pacemakers in the Spinal Locomotor-Related Network. Neuron, 2013, 77, 1047-1054.	8.1	97
6	Do Pacemakers Drive the Central Pattern Generator for Locomotion in Mammals?. Neuroscientist, 2010, 16, 139-155.	3.5	75
7	Cleavage of Na+ channels by calpain increases persistent Na+ current and promotes spasticity after spinal cord injury. Nature Medicine, 2016, 22, 404-411.	30.7	68
8	Emergence of Intrinsic Bursting in Trigeminal Sensory Neurons Parallels the Acquisition of Mastication in Weanling Rats. Journal of Neurophysiology, 2006, 96, 2410-2424.	1.8	62
9	Activation of 5-HT2A Receptors Restores KCC2 Function and Reduces Neuropathic Pain after Spinal Cord Injury. Neuroscience, 2018, 387, 48-57.	2.3	53
10	Sodium-Mediated Plateau Potentials in Lumbar Motoneurons of Neonatal Rats. Journal of Neuroscience, 2013, 33, 15626-15641.	3.6	43
11	Differential Plasticity of the GABAergic and Glycinergic Synaptic Transmission to Rat Lumbar Motoneurons after Spinal Cord Injury. Journal of Neuroscience, 2010, 30, 3358-3369.	3.6	38
12	Prochlorperazine Increases KCC2 Function and Reduces Spasticity after Spinal Cord Injury. Journal of Neurotrauma, 2017, 34, 3397-3406.	3.4	33
13	Kv1.2 Channels Promote Nonlinear Spiking Motoneurons for Powering Up Locomotion. Cell Reports, 2018, 22, 3315-3327.	6.4	27
14	The M-current works in tandem with the persistent sodium current to set the speed of locomotion. PLoS Biology, 2020, 18, e3000738.	5.6	26
15	Antidromic discharges of dorsal root afferents in the neonatal rat. Journal of Physiology (Paris), 1999, 93, 359-367.	2.1	24
16	Calpain fosters the hyperexcitability of motoneurons after spinal cord injury and leads to spasticity. ELife, 2019, 8, .	6.0	23
17	New channel lineup in spinal circuits governing locomotion. Current Opinion in Physiology, 2019, 8, 14-22.	1.8	14
18	Therapeutic Role of Neuregulin 1 Type III in SOD1-Linked Amyotrophic Lateral Sclerosis. Neurotherapeutics, 2020, 17, 1048-1060.	4.4	13

#	Article	IF	Citations
19	Sensitization of neonatal rat lumbar motoneuron by the inflammatory pain mediator bradykinin. ELife, 2015, 4, e06195.	6.0	11
20	Alteration of glycinergic receptor expression in lumbar spinal motoneurons is involved in the mechanisms underlying spasticity after spinal cord injury. Journal of Chemical Neuroanatomy, 2020, 106, 101787.	2.1	9
21	Trpm5 channels encode bistability of spinal motoneurons and ensure motor control of hindlimbs in mice. Nature Communications, 2021, 12, 6815.	12.8	8
22	Altered action potential waveform and shorter axonal initial segment in hiPSC-derived motor neurons with mutations in VRK1. Neurobiology of Disease, 2022, 164, 105609.	4.4	3
23	The M-current works in tandem with the persistent sodium current to set the speed of locomotion. , 2020, 18, e3000738.		0
24	The M-current works in tandem with the persistent sodium current to set the speed of locomotion. , 2020, 18, e3000738.		0
25	The M-current works in tandem with the persistent sodium current to set the speed of locomotion. , 2020, 18, e3000738.		0
26	The M-current works in tandem with the persistent sodium current to set the speed of locomotion. , 2020, 18, e3000738.		0
27	The M-current works in tandem with the persistent sodium current to set the speed of locomotion. , 2020, 18, e3000738.		0
28	The M-current works in tandem with the persistent sodium current to set the speed of locomotion. , 2020, 18, e3000738.		0
29	Calpain role in the pathophysiology of spasticity after spinal cord injury. , 2022, , 249-261.		0