Charles J Heckman

List of Publications by Year
in descending order

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167 papers	8,621 citations	43973 48 h-index	58464 82 g-index
174 all docs	174 docs citations	174 times ranked	4284 citing authors

#	Article	IF	Citations
1	Recovery of motoneuron and locomotor function after spinal cord injury depends on constitutive activity in 5-HT2C receptors. Nature Medicine, 2010, 16, 694-700.	15.2	353
2	Persistent inward currents in motoneuron dendrites: Implications for motor output. Muscle and Nerve, 2005, 31, 135-156.	1.0	347
3	Motor Unit. , 2012, 2, 2629-2682.		317
4	Bistability in Spinal Motoneurons In Vivo: Systematic Variations in Persistent Inward Currents. Journal of Neurophysiology, 1998, 80, 583-593.	0.9	289
5	Adjustable Amplification of Synaptic Input in the Dendrites of Spinal Motoneurons In Vivo. Journal of Neuroscience, 2000, 20, 6734-6740.	1.7	240
6	Bistability in Spinal Motoneurons In Vivo: Systematic Variations in Rhythmic Firing Patterns. Journal of Neurophysiology, 1998, 80, 572-582.	0.9	226
7	Persistent Inward Currents in Spinal Motoneurons and Their Influence on Human Motoneuron Firing Patterns. Neuroscientist, 2008, 14, 264-275.	2.6	224
8	Hyperexcitable dendrites in motoneurons and their neuromodulatory control during motor behavior. Trends in Neurosciences, 2003, 26, 688-695.	4.2	210
9	Increased persistent Na+current and its effect on excitability in motoneurones cultured from mutant SOD1 mice. Journal of Physiology, 2005, 563, 843-854.	1.3	200
10	Motoneuron excitability: The importance of neuromodulatory inputs. Clinical Neurophysiology, 2009, 120, 2040-2054.	0.7	185
11	Hyperexcitability of Cultured Spinal Motoneurons From Presymptomatic ALS Mice. Journal of Neurophysiology, 2004, 91, 571-575.	0.9	168
12	Motor Neuron Rescue in Spinal Muscular Atrophy Mice Demonstrates That Sensory-Motor Defects Are a Consequence, Not a Cause, of Motor Neuron Dysfunction. Journal of Neuroscience, 2012, 32, 3818-3829.	1.7	168
13	Influence of voltage-sensitive dendritic conductances on bistable firing and effective synaptic current in cat spinal motoneurons in vivo. Journal of Neurophysiology, 1996, 76, 2107-2110.	0.9	143
14	Progressive recruitment of contralesional corticoâ€reticulospinal pathways drives motor impairment post stroke. Journal of Physiology, 2018, 596, 1211-1225.	1.3	135
15	Computer simulation of the steady-state input-output function of the cat medial gastrocnemius motoneuron pool. Journal of Neurophysiology, 1991, 65, 952-967.	0.9	134
16	Analysis of effective synaptic currents generated by homonymous Ia afferent fibers in motoneurons of the cat. Journal of Neurophysiology, 1988, 60, 1946-1966.	0.9	130
17	Enhancement of Bistability in Spinal Motoneurons In Vivo by the Noradrenergic Î±1 Agonist Methoxamine. Journal of Neurophysiology, 1999, 81, 2164-2174.	0.9	130
18	Motoneuron Excitability and Muscle Spasms Are Regulated by 5-HT_{2B}and 5-HT_{2C}Receptor Activity. Journal of Neurophysiology, 2011, 105, 731-748.	0.9	130

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19	Adult spinal motoneurones are not hyperexcitable in a mouse model of inherited amyotrophic lateral sclerosis. Journal of Physiology, 2014, 592, 1687-1703.	1.3	128
20	Essential role of the persistent sodium current in spike initiation during slowly rising inputs in mouse spinal neurones. Journal of Physiology, 2006, 574, 819-834.	1.3	125
21	Essential Role of a Fast Persistent Inward Current in Action Potential Initiation and Control of Rhythmic Firing. Journal of Neurophysiology, 2001, 85, 472-475.	0.9	124
22	Altered postnatal maturation of electrical properties in spinal motoneurons in a mouse model of amyotrophic lateral sclerosis. Journal of Physiology, 2011, 589, 2245-2260.	1.3	120
23	Intrinsic electrical properties of spinal motoneurons vary with joint angle. Nature Neuroscience, 2007, 10, 363-369.	7.1	114
24	Active properties of motoneurone dendrites: diffuse descending neuromodulation, focused local inhibition. Journal of Physiology, 2008, 586, 1225-1231.	1.3	111
25	Hypoexcitability precedes denervation in the large fast-contracting motor units in two unrelated mouse models of ALS. ELife, 2018, 7, .	2.8	111
26	Origins of Abnormal Excitability in Biceps Brachii Motoneurons of Spastic-Paretic Stroke Survivors. Journal of Neurophysiology, 2009, 102, 2026-2038.	0.9	101
27	Serotonin Affects Movement Gain Control in the Spinal Cord. Journal of Neuroscience, 2014, 34, 12690-12700.	1.7	98
28	Robust and accurate decoding of motoneuron behaviour and prediction of the resulting force output. Journal of Physiology, 2018, 596, 2643-2659.	1.3	98
29	Hill muscle model errors during movement are greatest within the physiologically relevant range of motor unit firing rates. Journal of Biomechanics, 2003, 36, 211-218.	0.9	91
30	Nonlinear Input-Output Functions of Motoneurons. Physiology, 2020, 35, 31-39.	1.6	87
31	Active Dendritic Integration of Inhibitory Synaptic Inputs In Vivo. Journal of Neurophysiology, 2003, 90, 3617-3624.	0.9	81
32	Effects of exercise training on Î±-motoneurons. Journal of Applied Physiology, 2006, 101, 1228-1236.	1.2	81
33	Computer simulations of the effects of different synaptic input systems on motor unit recruitment. Journal of Neurophysiology, 1993, 70, 1827-1840.	0.9	80
34	Influence of Active Dendritic Currents on Input-Output Processing in Spinal Motoneurons In Vivo. Journal of Neurophysiology, 2003, 89, 27-39.	0.9	78
35	Fast Kinetics, High-Frequency Oscillations, and Subprimary Firing Range in Adult Mouse Spinal Motoneurons. Journal of Neuroscience, 2009, 29, 11246-11256.	1.7	78
36	Force From Cat Soleus Muscle During Imposed Locomotor-Like Movements: Experimental Data Versus Hill-Type Model Predictions. Journal of Neurophysiology, 1997, 77, 1538-1552.	0.9	76

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37	Contribution of intrinsic properties and synaptic inputs to motoneuron discharge patterns: a simulation study. Journal of Neurophysiology, 2012, 107, 808-823.	0.9	76
38	Evidence for Increased Activation of Persistent Inward Currents in Individuals With Chronic Hemiparetic Stroke. Journal of Neurophysiology, 2008, 100, 3236-3243.	0.9	72
39	Persistent inward currents in spinal motoneurons: Important for normal function but potentially harmful after spinal cord injury and in amyotrophic lateral sclerosis. Clinical Neurophysiology, 2010, 121, 1669-1679.	0.7	70
40	Progressive Changes in Synaptic Inputs to Motoneurons in Adult Sacral Spinal Cord of a Mouse Model of Amyotrophic Lateral Sclerosis. Journal of Neuroscience, 2009, 29, 15031-15038.	1.7	69
41	eGFP Expression underUCHL1Promoter Genetically Labels Corticospinal Motor Neurons and a Subpopulation of Degeneration-Resistant Spinal Motor Neurons in an ALS Mouse Model. Journal of Neuroscience, 2013, 33, 7890-7904.	1.7	69
42	Restoration of extensor excitability in the acute spinal cat by the 5-HT2 agonist DOI. Journal of Neurophysiology, 1996, 75, 620-628.	0.9	67
43	Persistent inward currents in rat ventral horn neurones. Journal of Physiology, 2007, 580, 507-522.	1.3	66
44	Paradoxical Effect of QX-314 on Persistent Inward Currents and Bistable Behavior in Spinal Motoneurons In Vivo. Journal of Neurophysiology, 1999, 82, 2518-2527.	0.9	65
45	Decorrelating Actions of Renshaw Interneurons on the Firing of Spinal Motoneurons Within a Motor Nucleus: A Simulation Study. Journal of Neurophysiology, 1998, 80, 309-323.	0.9	61
46	The potential for understanding the synaptic organization of human motor commands via the firing patterns of motoneurons. Journal of Neurophysiology, 2017, 118, 520-531.	0.9	61
47	Tendon vibration-induced inhibition of human and cat triceps surae group I reflexes: Evidence of selective Ib afferent fiber activation. Experimental Neurology, 1986, 94, 333-347.	2.0	58
48	Computer simulations of motoneuron firing rate modulation. Journal of Neurophysiology, 1993, 69, 1005-1008.	0.9	57
49	Computer simulations of the effects of different synaptic input systems on the steady-state input-output structure of the motoneuron pool. Journal of Neurophysiology, 1994, 71, 1727-1739.	0.9	57
50	Intrinsic excitability of human motoneurons in biceps brachii versus triceps brachii. Journal of Neurophysiology, 2015, 113, 3692-3699.	0.9	57
51	Dissecting the Functional Consequences of De Novo DNA Methylation Dynamics in Human Motor Neuron Differentiation and Physiology. Cell Stem Cell, 2018, 22, 559-574.e9.	5.2	53
52	Contribution of intrinsic motoneuron properties to discharge hysteresis and its estimation based on paired motor unit recordings: a simulation study. Journal of Neurophysiology, 2015, 114, 184-198.	0.9	50
53	Doublet potentiation during eccentric and concentric contractions of cat soleus muscle. Journal of Applied Physiology, 1997, 82, 1219-1228.	1.2	49
54	How different afferent inputs control motoneuron discharge and the output of the motoneuron pool. Current Opinion in Neurobiology, 1993, 3, 1028-1034.	2.0	48

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55	Disturbances of motor unit rate modulation are prevalent in muscles of spastic-paretic stroke survivors. Journal of Neurophysiology, 2014, 111, 2017-2028.	0.9	46
56	Gain control mechanisms in spinal motoneurons. Frontiers in Neural Circuits, 2014, 8, 81.	1.4	45
57	Synaptic control of the shape of the motoneuron pool input-output function. Journal of Neurophysiology, 2017, 117, 1171-1184.	0.9	45
58	Analysis of Ia-inhibitory synaptic input to cat spinal motoneurons evoked by vibration of antagonist muscles. Journal of Neurophysiology, 1991, 66, 1888-1893.	0.9	44
59	The calcium binding proteins calbindin, parvalbumin, and calretinin have specific patterns of expression in the gray matter of cat spinal cord. Journal of Neurocytology, 2005, 34, 369-385.	1.6	44
60	Evidence from Computer Simulations for Alterations in the Membrane Biophysical Properties and Dendritic Processing of Synaptic Inputs in Mutant Superoxide Dismutase-1 Motoneurons. Journal of Neuroscience, 2010, 30, 5544-5558.	1.7	44
61	Impact of parameter selection on estimates of motoneuron excitability using paired motor unit analysis. Journal of Neural Engineering, 2020, 17, 016063.	1.8	44
62	O-Antigen Modulates Infection-Induced Pain States. PLoS ONE, 2012, 7, e41273.	1.1	43
63	Physiology of the motor neuron and the motor unit. Handbook of Clinical Neurophysiology, 2004, 4, 119-147.	0.0	42
64	Locomotor-related V3 interneurons initiate and coordinate muscles spasms after spinal cord injury. Journal of Neurophysiology, 2019, 121, 1352-1367.	0.9	41
65	Extra Forces Evoked during Electrical Stimulation of the Muscle or Its Nerve Are Generated and Modulated by a Length-Dependent Intrinsic Property of Muscle in Humans and Cats. Journal of Neuroscience, 2011, 31, 5579-5588.	1.7	38
66	Estimates of persistent inward currents are reduced in upper limb motor units of older adults. Journal of Physiology, 2021, 599, 4865-4882.	1.3	38
67	Measuring dendritic distribution of membrane proteins. Journal of Neuroscience Methods, 2006, 156, 257-266.	1.3	37
68	Movementâ€related receptive fields of spinal motoneurones with active dendrites. Journal of Physiology, 2008, 586, 1581-1593.	1.3	35
69	Summation of Excitatory and Inhibitory Synaptic Inputs by Motoneurons With Highly Active Dendrites. Journal of Neurophysiology, 2008, 99, 1643-1652.	0.9	35
70	Absence of <scp>UCHL</scp> 1 function leads to selective motor neuropathy. Annals of Clinical and Translational Neurology, 2016, 3, 331-345.	1.7	33
71	Can Ib axons be selectively activated by electrical stimuli in human subjects?. Experimental Neurology, 1984, 86, 576-582.	2.0	32
72	Design and evaluation of a chronic EMG multichannel detection system for long-term recordings of hindlimb muscles in behaving mice. Journal of Electromyography and Kinesiology, 2013, 23, 531-539.	0.7	32

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73	Summation of Forces From Multiple Motor Units in the Cat Soleus Muscle. Journal of Neurophysiology, 2003, 89, 738-744.	0.9	31
74	Adult Mouse Motor Units Develop Almost All of Their Force in the Subprimary Range: A New All-or-None Strategy for Force Recruitment?. Journal of Neuroscience, 2011, 31, 15188-15194.	1.7	31
75	Pushâ€“Pull Control of Motor Output. Journal of Neuroscience, 2012, 32, 4592-4599.	1.7	31
76	Effect of prolonged riluzole exposure on cultured motoneurons in a mouse model of ALS. Journal of Neurophysiology, 2012, 107, 484-492.	0.9	30
77	Hyperexcitability in synaptic and firing activities of spinal motoneurons in an adult mouse model of amyotrophic lateral sclerosis. Neuroscience, 2017, 362, 33-46.	1.1	30
78	Relative Strengths and Distributions of Different Sources of Synaptic Input to the Motoneurone Pool. Advances in Experimental Medicine and Biology, 2002, 508, 207-212.	0.8	30
79	Effect of velocity and mechanical history on the forces of motor units in the cat medial gastrocnemius muscle. Journal of Neurophysiology, 1992, 68, 1503-1515.	0.9	29
80	In vitro sacral cord preparation and motoneuron recording from adult mice. Journal of Neuroscience Methods, 2006, 156, 31-36.	1.3	29
81	Neuromodulatory Inputs to Motoneurons Contribute to the Loss of Independent Joint Control in Chronic Moderate to Severe Hemiparetic Stroke. Frontiers in Neurology, 2018, 9, 470.	1.1	28
82	Alterations in synaptic input to motoneurons during partial spinal cord injury. Medicine and Science in Sports and Exercise, 1994, 26, 1480???1490.	0.2	26
83	Altered activation patterns by triceps surae stretch reflex pathways in acute and chronic spinal cord injury. Journal of Neurophysiology, 2011, 106, 1669-1678.	0.9	26
84	Scaling of Motor Output, From Mouse to Humans. Physiology, 2019, 34, 5-13.	1.6	25
85	Interactions between focused synaptic inputs and diffuse neuromodulation in the spinal cord. Annals of the New York Academy of Sciences, 2010, 1198, 35-41.	1.8	24
86	NMDA induces persistent inward and outward currents that cause rhythmic bursting in adult rodent motoneurons. Journal of Neurophysiology, 2012, 108, 2991-2998.	0.9	24
87	Inability to increase the neural drive to muscle is associated with task failure during submaximal contractions. Journal of Neurophysiology, 2020, 124, 1110-1121.	0.9	24
88	Resistance training with instability is more effective than resistance training in improving spinal inhibitory mechanisms in Parkinsonâ€™s disease. Journal of Applied Physiology, 2017, 122, 1-10.	1.2	23
89	PICs in motoneurons do not scale with the size of the animal: a possible mechanism for faster speed of muscle contraction in smaller species. Journal of Neurophysiology, 2017, 118, 93-102.	0.9	23
90	Constitutive activity of 5-HT2C receptors is present after incomplete spinal cord injury but is not modified after chronic SSRI or baclofen treatment. Journal of Neurophysiology, 2017, 118, 2944-2952.	0.9	23

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91	Differences in estimated persistent inward currents between ankle flexors and extensors in humans. Journal of Neurophysiology, 2020, 124, 525-535.	0.9	23
92	Decerebrate mammalian preparations: unalleviated or fully alleviated pain? A review and opinion. Contemporary Topics in Laboratory Animal Science, 2005, 44, 34-6.	0.2	23
93	Expression of L-type calcium channel Î±1-1.2 and Î±1-1.3 subunits on rat sacral motoneurons following chronic spinal cord injury. Neuroscience, 2007, 145, 751-763.	1.1	22
94	Motoneuron Intrinsic Properties, but Not Their Receptive Fields, Recover in Chronic Spinal Injury. Journal of Neuroscience, 2013, 33, 18806-18813.	1.7	22
95	Systematic variation in effects of serotonin and norepinephrine on repetitive firing properties of ventral horn neurons. Neuroscience, 2005, 134, 803-815.	1.1	21
96	Reduction in postsynaptic inhibition during maintained electrical stimulation of different nerves in the cat hindlimb. Journal of Neurophysiology, 1994, 71, 2281-2293.	0.9	19
97	Chapter 4 Synaptic Integration in Bistable Motoneurons. Progress in Brain Research, 1999, 123, 49-56.	0.9	19
98	Effect of fluoxetine on disease progression in a mouse model of ALS. Journal of Neurophysiology, 2014, 111, 2164-2176.	0.9	19
99	5-HT_{1D}receptors inhibit the monosynaptic stretch reflex by modulating C-fiber activity. Journal of Neurophysiology, 2019, 121, 1591-1608.	0.9	19
100	Spinal Interneurons That Receive Input From Muscle Afferents Are Differentially Modulated by Dorsolateral Descending Systems. Journal of Neurophysiology, 2001, 85, 1005-1008.	0.9	18
101	Time Course of Alterations in Adult Spinal Motoneuron Properties in the SOD1(G93A) Mouse Model of ALS. ENeuro, 2021, 8, ENEURO.0378-20.2021.	0.9	18
102	Characterization of motor units in behaving adult mice shows a wide primary range. Journal of Neurophysiology, 2014, 112, 543-551.	0.9	16
103	Changes in motoneuron afterhyperpolarization duration in stroke survivors. Journal of Neurophysiology, 2014, 112, 1447-1456.	0.9	16
104	Whole Muscle Length-Tension Properties Vary With Recruitment and Rate Modulation in Areflexive Cat Soleus. Journal of Neurophysiology, 2001, 85, 1033-1038.	0.9	15
105	Active Conductances in Motoneuron Dendrites Enhance Movement Capabilities. Exercise and Sport Sciences Reviews, 2003, 31, 96-101.	1.6	15
106	Synaptic integration in motoneurons with hyper-excitable dendrites. Canadian Journal of Physiology and Pharmacology, 2004, 82, 549-555.	0.7	15
107	High-density surface EMG decomposition allows for recording of motor unit discharge from proximal and distal flexion synergy muscles simultaneously in individuals with stroke. , 2014, 2014, 5340-4.		15
108	Soma size and Ca_v1.3 channel expression in vulnerable and resistant motoneuron populations of the SOD1^{G93A}mouse model of ALS. Physiological Reports, 2014, 2, e12113.	0.7	15

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109	Cross-Frequency Coupling in Descending Motor Pathways: Theory and Simulation. Frontiers in Systems Neuroscience, 2019, 13, 86.	1.2	15
110	Cutaneous inputs from the back abolish locomotor-like activity and reduce spastic-like activity in the adult cat following complete spinal cord injury. Experimental Neurology, 2012, 235, 588-598.	2.0	14
111	Asymmetry in Signal Propagation between the Soma and Dendrites Plays a Key Role in Determining Dendritic Excitability in Motoneurons. PLoS ONE, 2014, 9, e95454.	1.1	14
112	An action potential-driven model of soleus muscle activation dynamics for locomotor-like movements. Journal of Neural Engineering, 2015, 12, 046025.	1.8	14
113	The essential and downstream common proteins of amyotrophic lateral sclerosis: A protein-protein interaction network analysis. PLoS ONE, 2017, 12, e0172246.	1.1	14
114	Altered Neuromodulatory Drive May Contribute to Exaggerated Tonic Vibration Reflexes in Chronic Hemiparetic Stroke. Frontiers in Human Neuroscience, 2018, 12, 131.	1.0	14
115	Properties of Motor Units of Elbow and Ankle Muscles Decomposed Using High-Density Surface EMG. , 2019, 2019, 3874-3878.		14
116	The role of voltage-sensitive dendritic conductances in generating bistable firing patterns in motoneurons. Journal of Physiology (Paris), 1999, 93, 97-100.	2.1	13
117	Recruitment of Cat Motoneurons in the Absence of Homonymous Afferent Feedback. Journal of Neurophysiology, 2001, 86, 616-628.	0.9	13
118	Differential modulation of crossed and uncrossed reflex pathways by clonidine in adult cats following complete spinal cord injury. Journal of Physiology, 2012, 590, 973-989.	1.3	13
119	Acyloxyacyl hydrolase modulates pelvic pain severity. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2018, 314, R353-R365.	0.9	13
120	Hyperexcitability precedes motoneuron loss in the Smn^{2B/â^'} mouse model of spinal muscular atrophy. Journal of Neurophysiology, 2019, 122, 1297-1311.	0.9	13
121	A computational approach for generating continuous estimates of motor unit discharge rates and visualizing population discharge characteristics. Journal of Neural Engineering, 2022, 19, 016007.	1.8	13
122	Chronic electromyograms in treadmill running SOD1 mice reveal early changes in muscle activation. Journal of Physiology, 2017, 595, 5387-5400.	1.3	12
123	Botulinum Toxin Conditioning Enhances Motor Axon Regeneration in Mouse and Human Preclinical Models. Neurorehabilitation and Neural Repair, 2018, 32, 735-745.	1.4	12
124	Estimates of persistent inward currents in tibialis anterior motor units during standing ramped contraction tasks in humans. Journal of Neurophysiology, 2021, 126, 264-274.	0.9	12
125	Changes in voluntary torque and electromyographic activity following oral baclofen. Muscle and Nerve, 2004, 30, 784-795.	1.0	11
126	Recording Intramuscular EMG Signals Using Surface Electrodes. , 0, , .		11

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127	Stronger is not always better: Could a bodybuilding dietary supplement lead to ALS?. Experimental Neurology, 2011, 228, 5-8.	2.0	11
128	Simultaneous Intracellular Recording of a Lumbar Motoneuron and the Force Produced by its Motor Unit in the Adult Mouse In vivo. Journal of Visualized Experiments, 2012, , e4312.	0.2	11
129	Reflex wind-up in early chronic spinal injury: plasticity of motor outputs. Journal of Neurophysiology, 2017, 117, 2065-2074.	0.9	11
130	Comparison of dendritic calcium transients in juvenile wild type and SOD1G93A mouse lumbar motoneurons. Frontiers in Cellular Neuroscience, 2015, 9, 139.	1.8	10
131	Excessive Homeostatic Gain in Spinal Motoneurons in a Mouse Model of Amyotrophic Lateral Sclerosis. Scientific Reports, 2020, 10, 9049.	1.6	10
132	Motor Unit Discharge Variability Is Increased in Mild-To-Moderate Parkinson's Disease. Frontiers in Neurology, 2020, 11, 477.	1.1	10
133	Potential involvement of intracellular pH in a mouse model of amyotrophic lateral sclerosis. Amyotrophic Lateral Sclerosis and Frontotemporal Degeneration, 2014, 15, 151-153.	1.1	9
134	Firing characteristics of deep dorsal horn neurons after acute spinal transection during administration of agonists for 5-HT_{1B/1D} and NMDA receptors. Journal of Neurophysiology, 2016, 116, 1644-1653.	0.9	9
135	5-HT1B/1D agonist CGS-12066B attenuates clasp knife reflex in the cat. Journal of Neurophysiology, 1995, 74, 453-456.	0.9	8
136	The transformation of synaptic to system plasticity in motor output from the sacral cord of the adult mouse. Journal of Neurophysiology, 2015, 114, 1987-2004.	0.9	8
137	Bursting interneurons in the deep dorsal horn develop increased excitability and sensitivity to serotonin after chronic spinal injury. Journal of Neurophysiology, 2020, 123, 1657-1670.	0.9	8
138	The Involvement of CaV1.3 Channels in Prolonged Root Reflexes and Its Potential as a Therapeutic Target in Spinal Cord Injury. Frontiers in Neural Circuits, 2021, 15, 642111.	1.4	8
139	Differences between steady-state and transient post-synaptic potentials elicited by stimulation of the sural nerve. Experimental Brain Research, 1992, 91, 167-70.	0.7	7
140	Properties of the motor unit action potential shape in proximal and distal muscles of the upper limb in healthy and post-stroke individuals. , 2016, 2016, 335-339.		6
141	Exogenous neuromodulation of spinal neurons induces beta-band coherence during self-sustained discharge of hind limb motor unit populations. Journal of Applied Physiology, 2019, 127, 1034-1041.	1.2	6
142	Reconfiguration of the Electrical Properties of Motoneurons to Match the Diverse Demands of Motor Behavior. Advances in Experimental Medicine and Biology, 2014, 826, 33-40.	0.8	6
143	Characterization of the tendon vibration reflex response in hemi-spastic stroke individuals. , 2011, 2011, 2053-6.		5
144	Synchronous and asynchronous electrically evoked motor activities during wind-up stimulation are differentially modulated following an acute spinal transection. Journal of Neurophysiology, 2012, 108, 3322-3332.	0.9	5

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145	Changes in motor unit discharge patterns following strength training. Journal of Physiology, 2019, 597, 3509-3510.	1.3	5
146	Foundational dendritic processing that is independent of the cell type-specific structure in model primary neurons. Neuroscience Letters, 2015, 609, 203-209.	1.0	4
147	Analyzing Modeled Torque Profiles to Understand Scale-Dependent Active Muscle Responses in the Hip Joint. Biomimetics, 2022, 7, 17.	1.5	4
148	Effect of reversible dorsal cold block on the persistence of inhibition generated by spinal reflexes. Experimental Brain Research, 1995, 107, 205-14.	0.7	3
149	Three-dimensional moment and stiffness summation for muscles sharing a common tendon. , 0, , .		3
150	Neuromodulation impact on nonlinear firing behavior of a reduced model motoneuron with the active dendrite. Frontiers in Computational Neuroscience, 2014, 8, 110.	1.2	3
151	Slowly activating outward membrane currents generate input-output sub-harmonic cross frequency coupling in neurons. Journal of Theoretical Biology, 2021, 509, 110509.	0.8	3
152	Motor unit recruitment patterns during reflex compensation of muscle yield investigated by computer simulations. Biological Cybernetics, 1996, 75, 211-217.	0.6	2
153	The tight relationship between asymmetric signaling and locational excitability in motoneuron dendrites. Communicative and Integrative Biology, 2015, 8, e1110657.	0.6	2
154	Motor Unit Discharge Patterns in Response to Focal Tendon Vibration of the Lower Limb in Cats and Humans. Frontiers in Integrative Neuroscience, 2022, 16, 836757.	1.0	2
155	Hill muscle model performance during natural activation and electrical stimulation. , 0, , .		1
156	Using spike-triggered averaging to characterize motor unit twitch vectors in the first dorsal interosseous. , 2012, 2012, 3604-7.		1
157	Mapping 3D sensory inputs onto spinal interneurons. , 0, , .		0
158	Muscle contributions to limb stiffness and stability in three dimensions. , 0, , .		0
159	Data for spatial characterization of AC signal propagation over primary neuron dendrites. Data in Brief, 2016, 6, 341-344.	0.5	0
160	Reply from Jacob Graves McPherson, Albert Chen, Michael D. Ellis, Jun Yao, C. J. Heckman and Julius P. A. Dewald. Journal of Physiology, 2019, 597, 4413-4414.	1.3	0
161	Experimentally Modifiable Parameters and Their Relation to the Tonic Vibration Reflex in Chronic Hemiparetic Stroke. , 2019, 2019, 2302-2306.		0
162	It takes a circuit to develop a mature motoneuron. Journal of Physiology, 2020, 598, 5301-5302.	1.3	0

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163	Serotonin affects our perception of fatigue when performing submaximal efforts â€“ but is it all in our heads?. Journal of Physiology, 2020, 598, 2533-2534.	1.3	0
164	Spinal Mechanisms for Control of Muscle Length and Force. , 2008, , 443-478.		0
165	Computational Models of Motor Pools. , 2014, , 1-2.		0
166	Active Dendritic Conductances Influence the Relations Between Synaptic Input and the Current-Voltage Relation of Adult Spinal Motoneurons. , 1998, , 217-219.		0
167	Computational Models of Motor Pools. , 2022, , 911-912.		0