David J Bennett

List of Publications by Year in descending order

50 papers	4,526 citations	147566 31 h-index	205818 48 g-index
53 all docs	53 docs citations	53 times ranked	2560 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	Persistent Sodium and Calcium Currents Cause Plateau Potentials in Motoneurons of Chronic Spinal Rats. Journal of Neurophysiology, 2003, 90, 857-869.	0.9	264
4	Role of Persistent Sodium and Calcium Currents in Motoneuron Firing and Spasticity in Chronic Spinal Rats. Journal of Neurophysiology, 2004, 91, 767-783.	0.9	259
5	Synaptic Activation of Plateaus in Hindlimb Motoneurons of Decerebrate Cats. Journal of Neurophysiology, 1998, 80, 2023-2037.	0.9	230
6	Plateau Potentials in Sacrocaudal Motoneurons of Chronic Spinal Rats, Recorded In Vitro. Journal of Neurophysiology, 2001, 86, 1955-1971.	0.9	212
7	Evidence for Plateau Potentials in Tail Motoneurons of Awake Chronic Spinal Rats With Spasticity. Journal of Neurophysiology, 2001, 86, 1972-1982.	0.9	204
8	Intrinsic Activation of Human Motoneurons: Possible Contribution to Motor Unit Excitation. Journal of Neurophysiology, 2002, 87, 1850-1858.	0.9	194
9	Implications of Positive Feedback in the Control of Movement. Journal of Neurophysiology, 1997, 77, 3237-3251.	0.9	160
10	Positive Force Feedback Control of Muscles. Journal of Neurophysiology, 1997, 77, 3226-3236.	0.9	152
11	Self-sustained firing of human motor units. Neuroscience Letters, 1998, 247, 13-16.	1.0	137
12	Pericytes impair capillary blood flow and motor function after chronic spinal cord injury. Nature Medicine, 2017, 23, 733-741.	15.2	134
13	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
14	Measurement of rigidity in Parkinson's disease. Movement Disorders, 1997, 12, 24-32.	2.2	121
15	Torques generated at the human elbow joint in response to constant position errors imposed during voluntary movements. Experimental Brain Research, 1993, 95, 488-98.	0.7	110
16	Intrinsic Activation of Human Motoneurons: Reduction of Motor Unit Recruitment Thresholds by Repeated Contractions. Journal of Neurophysiology, 2002, 87, 1859-1866.	0.9	106
17	Changes in sensory-evoked synaptic activation of motoneurons after spinal cord injury in man. Brain, 2008, 131, 1478-1491.	3.7	98
18	Recovery of neuronal and network excitability after spinal cord injury and implications for spasticity. Frontiers in Integrative Neuroscience, 2014, 8, 36.	1.0	98

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19	Short-Term Plasticity in Hindlimb Motoneurons of Decerebrate Cats. Journal of Neurophysiology, 1998, 80, 2038-2045.	0.9	97
20	Activity of Hindlimb Motor Units During Locomotion in the Conscious Rat. Journal of Neurophysiology, 2000, 83, 2002-2011.	0.9	92
21	Simulation of Dendritic CaV1.3 Channels in Cat Lumbar Motoneurons: Spatial Distribution. Journal of Neurophysiology, 2005, 94, 3961-3974.	0.9	82
22	Activation Patterns of Hindlimb Motor Units in the Awake Rat and Their Relation to Motoneuron Intrinsic Properties. Journal of Neurophysiology, 1999, 82, 709-717.	0.9	74
23	Eliciting inflammation enables successful rehabilitative training in chronic spinal cord injury. Brain, 2018, 141, 1946-1962.	3.7	74
24	Simulation of Ca2+persistent inward currents in spinal motoneurones: mode of activation and integration of synaptic inputs. Journal of Physiology, 2006, 570, 355-374.	1.3	67
25	Constitutively active 5-HT₂Î±₁ receptors facilitate muscle spasms after human spinal cord injury. Journal of Neurophysiology, 2013, 109, 1473-1484.	0.9	62
26	Catching a ball: contributions of intrinsic muscle stiffness, reflexes, and higher order responses. Canadian Journal of Physiology and Pharmacology, 1994, 72, 525-534.	0.7	61
27	Estimation of self-sustained activity produced by persistent inward currents using firing rate profiles of multiple motor units in humans. Journal of Neurophysiology, 2020, 124, 63-85.	0.9	54
28	Long-Term Viral Brain-Derived Neurotrophic Factor Delivery Promotes Spasticity in Rats with a Cervical Spinal Cord Hemisection. Frontiers in Neurology, 2013, 4, 187.	1.1	52
29	Polysynaptic excitatory postsynaptic potentials that trigger spasms after spinal cord injury in rats are inhibited by 5-HT_{1B} and 5-HT_{1F} receptors. Journal of Neurophysiology, 2011, 106, 925-943.	0.9	51
30	Locomotor-related V3 interneurons initiate and coordinate muscles spasms after spinal cord injury. Journal of Neurophysiology, 2019, 121, 1352-1367.	0.9	41
31	Reduction of spinal sensory transmission by facilitation of 5-HT_{1B/D} receptors in noninjured and spinal cord-injured humans. Journal of Neurophysiology, 2013, 109, 1485-1493.	0.9	38
32	Tail Muscles Become Slow but Fatigable in Chronic Sacral Spinal Rats With Spasticity. Journal of Neurophysiology, 2006, 95, 1124-1133.	0.9	33
33	Role of Endogenous Release of Norepinephrine in Muscle Spasms After Chronic Spinal Cord Injury. Journal of Neurophysiology, 2007, 97, 3166-3180.	0.9	32
34	Extrasynaptic Î±₅GABA_A receptors on proprioceptive afferents produce a tonic depolarization that modulates sodium channel function in the rat spinal cord. Journal of Neurophysiology, 2018, 120, 2953-2974.	0.9	32
35	Synthesis, transport, and metabolism of serotonin formed from exogenously applied 5-HTP after spinal cord injury in rats. Journal of Neurophysiology, 2014, 111, 145-163.	0.9	27
36	Decrease of mRNA Editing after Spinal Cord Injury is Caused by Down-regulation of ADAR2 that is Triggered by Inflammatory Response. Scientific Reports, 2015, 5, 12615.	1.6	27

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37	Improved single pellet grasping using automated ad libitum full-time training robot. Behavioural Brain Research, 2015, 281, 137-148.	1.2	26
38	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
39	Single pellet grasping following cervical spinal cord injury in adult rat using an automated full-time training robot. Behavioural Brain Research, 2016, 299, 59-71.	1.2	22
40	Electromyographic responses to constant position errors imposed during voluntary elbow joint movement in human. Experimental Brain Research, 1993, 95, 499-508.	0.7	21
41	Stretch reflex gain in cat triceps surae muscles with compliant loads. Journal of Physiology, 2002, 545, 1027-1040.	1.3	21
42	Spastic Tail Muscles Recover From Myofiber Atrophy and Myosin Heavy Chain Transformations in Chronic Spinal Rats. Journal of Neurophysiology, 2007, 97, 1040-1051.	0.9	21
43	Self-directed rehabilitation training intensity thresholds for efficient recovery of skilled forelimb function in rats with cervical spinal cord injury. Experimental Neurology, 2021, 339, 113543.	2.0	21
44	5-HT_{1D}receptors inhibit the monosynaptic stretch reflex by modulating C-fiber activity. Journal of Neurophysiology, 2019, 121, 1591-1608.	0.9	19
45	Comment on â€œRestoring Voluntary Control of Locomotion After Paralyzing Spinal Cord Injuryâ€. Science, 2012, 338, 328-328.	6.0	17
46	Branching points of primary afferent fibers are vital for the modulation of fiber excitability by epidural DC polarization and by GABA in the rat spinal cord. Journal of Neurophysiology, 2020, 124, 49-62.	0.9	12
47	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
48	Rehabilitative training improves skilled forelimb motor function after cervical unilateral contusion spinal cord injury in rats. Behavioural Brain Research, 2022, 422, 113731.	1.2	2
49	The Spastic Rat with Sacral Spinal Cord Injury. , 2005, , 691-697.		1
50	Tail muscle parvalbumin content is decreased in chronic sacral spinal cord injured rats with spasticity. Experimental Physiology, 2011, 96, 1311-1320.	0.9	0