Gareth B Miles

List of Publications by Year
in descending order

42 papers	2,420 citations	331670 21 h-index	302126 39 g-index
59 all docs	59 docs citations	59 times ranked	2873 citing authors

#	Article	IF	Citations
1	Selective vulnerability of tripartite synapses in amyotrophic lateral sclerosis. Acta Neuropathologica, 2022, 143, 471-486.	7.7	15
2	A common role for astrocytes in rhythmic behaviours?. Progress in Neurobiology, 2021, 202, 102052.	5.7	12
3	Long-term culture of SH-SY5Y neuroblastoma cells in the absence of neurotrophins: A novel model of neuronal ageing. Journal of Neuroscience Methods, 2021, 362, 109301.	2.5	16
4	Deep tissue contractility sensing with biointegrated microlasers. , 2021, , .		0
5	Maturation of persistent and hyperpolarization-activated inward currents shapes the differential activation of motoneuron subtypes during postnatal development. ELife, 2021, 10, .	6.0	17
6	Mutant <i>C9orf72</i> human iPSCâ€derived astrocytes cause nonâ€cell autonomous motor neuron pathophysiology. Glia, 2020, 68, 1046-1064.	4.9	90
7	Nanostructural Diversity of Synapses in the Mammalian Spinal Cord. Scientific Reports, 2020, 10, 8189.	3.3	22
8	Monitoring contractility in cardiac tissue with cellular resolution using biointegrated microlasers. Nature Photonics, 2020, 14, 452-458.	31.4	77
9	Bi-Directional Communication Between Neurons and Astrocytes Modulates Spinal Motor Circuits. Frontiers in Cellular Neuroscience, 2020, 14, 30.	3.7	25
10	Synaptic mechanisms underlying modulation of locomotor-related motoneuron output by premotor cholinergic interneurons. ELife, 2020, 9, .	6.0	19
11	Balanced cholinergic modulation of spinal locomotor circuits via M2 and M3 muscarinic receptors. Scientific Reports, 2019, 9, 14051.	3.3	15
12	Photostimulation for In Vitro Optogenetics with Highâ€Power Blue Organic Lightâ€Emitting Diodes. Advanced Biology, 2019, 3, e1800290.	3.0	24
13	Pitx2 cholinergic interneurons are the source of C bouton synapses on brainstem motor neurons. Scientific Reports, 2019, 9, 4936.	3.3	22
14	Microlaser-based contractility sensing in single cardiomyocytes and whole hearts. , 2019, , .		0
15	Microlaser-based contractility sensing in single cardiomyocytes and whole hearts. , 2019, , .		0
16	C9ORF72 repeat expansion causes vulnerability of motor neurons to Ca2+-permeable AMPA receptor-mediated excitotoxicity. Nature Communications, 2018, 9, 347.	12.8	151
17	Modulation of spinal motor networks by astrocyte-derived adenosine is dependent on D₁-like dopamine receptor signaling. Journal of Neurophysiology, 2018, 120, 998-1009.	1.8	22
18	Differential regulation of NMDA receptors by <scp>d</scp>-serine and glycine in mammalian spinal locomotor networks. Journal of Neurophysiology, 2017, 117, 1877-1893.	1.8	8

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19	Sodium Pumps Mediate Activity-Dependent Changes in Mammalian Motor Networks. Journal of Neuroscience, 2017, 37, 906-921.	3.6	48
20	Gliotransmission and adenosinergic modulation: insights from mammalian spinal motor networks. Journal of Neurophysiology, 2017, 118, 3311-3327.	1.8	13
21	Lasing in Live Mitotic and Non-Phagocytic Cells by Efficient Delivery of Microresonators. Scientific Reports, 2017, 7, 40877.	3.3	41
22	Sodium Pumps Mediate Activity-Dependent Changes in Mammalian Motor Networks. Journal of Neuroscience, 2017, 37, 906-921.	3.6	10
23	Arrays of microscopic organic LEDs for high-resolution optogenetics. Science Advances, 2016, 2, e1600061.	10.3	69
24	Adenosine-mediated modulation of ventral horn interneurons and spinal motoneurons in neonatal mice. Journal of Neurophysiology, 2015, 114, 2305-2315.	1.8	22
25	Human iPSC-derived motoneurons harbouring TARDBP or C9ORF72 ALS mutations are dysfunctional despite maintaining viability. Nature Communications, 2015, 6, 5999.	12.8	241
26	Stimulation of Glia Reveals Modulation of Mammalian Spinal Motor Networks by Adenosine. PLoS ONE, 2015, 10, e0134488.	2.5	26
27	Anatomy and function of cholinergic <scp>C</scp> bouton inputs to motor neurons. Journal of Anatomy, 2014, 224, 52-60.	1.5	61
28	Nitric oxide-mediated modulation of the murine locomotor network. Journal of Neurophysiology, 2014, 111, 659-674.	1.8	15
29	Fast targeted gene transfection and optogenetic modification of single neurons using femtosecond laser irradiation. Scientific Reports, 2013, 3, 3281.	3.3	27
30	Glial-derived adenosine modulates spinal motor networks in mice. Journal of Neurophysiology, 2012, 107, 1925-1934.	1.8	28
31	Neuromodulation of Vertebrate Locomotor Control Networks. Physiology, 2011, 26, 393-411.	3.1	100
32	Activation of group I metabotropic glutamate receptors modulates locomotor-related motoneuron output in mice. Journal of Neurophysiology, 2011, 105, 2108-2120.	1.8	25
33	A Cluster of Cholinergic Premotor Interneurons Modulates Mouse Locomotor Activity. Neuron, 2009, 64, 645-662.	8.1	378
34	Transplanted Mouse Embryonic Stem-Cell-Derived Motoneurons Form Functional Motor Units and Reduce Muscle Atrophy. Journal of Neuroscience, 2008, 28, 12409-12418.	3.6	93
35	Spinal cholinergic interneurons regulate the excitability of motoneurons during locomotion. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 2448-2453.	7.1	264
36	Nonâ€linear interaction between Î±1â€noradrenergic and P2 receptor signaling cascades in XII motoneurons (MNs). FASEB Journal, 2007, 21, A1295.	0.5	2

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37	Motoneurons Derived from Embryonic Stem Cells Express Transcription Factors and Develop Phenotypes Characteristic of Medial Motor Column Neurons. Journal of Neuroscience, 2006, 26, 3256-3268.	3.6	96
38	Functional Properties of Motoneurons Derived from Mouse Embryonic Stem Cells. Journal of Neuroscience, 2004, 24, 7848-7858.	3.6	200
39	Differential expression of voltage-activated calcium channels in III and XII motoneurones during development in the rat. European Journal of Neuroscience, 2004, 20, 903-913.	2.6	17
40	Modulation of phrenic motoneuron excitability by ATP: consequences for respiratory-related output in vitro. Journal of Applied Physiology, 2002, 92, 1899-1910.	2.5	29
41	GluR2 AMPA Receptor Subunit Expression in Motoneurons at Low and High Risk for Degeneration in Amyotrophic Lateral Sclerosis. Experimental Neurology, 2001, 169, 461-471.	4.1	45
42	Calcium binding proteins in motoneurons at low and high risk for degeneration in ALS. NeuroReport, 2000, 11, 3305-3308.	1.2	34