James Deuchars

List of Publications by Year
in descending order

101 papers	5,343 citations	81900 39 h-index	88630 70 g-index
108 all docs	108 docs citations	108 times ranked	5190 citing authors

#	Article	IF	Citations
1	A Feasibility Study Exploring Measures of Autonomic Function in Patients With Failed Back Surgery Syndrome Undergoing Spinal Cord Stimulation. Neuromodulation, 2023, 26, 192-205.	0.8	4
2	Kv3 Channels Contribute to the Excitability of Subpopulations of Spinal Cord Neurons in Lamina VII. ENeuro, 2022, 9, ENEURO.0510-21.2021.	1.9	0
3	Mediation of Cardiac Macrophage Activity via Auricular Vagal Nerve Stimulation Ameliorates Cardiac Ischemia/Reperfusion Injury. Frontiers in Neuroscience, 2020, 14, 906.	2.8	6
4	A versatile cholera toxin conjugate for neuronal targeting and tracing. Chemical Communications, 2020, 56, 6098-6101.	4.1	9
5	International Consensus Based Review and Recommendations for Minimum Reporting Standards in Research on Transcutaneous Vagus Nerve Stimulation (Version 2020). Frontiers in Human Neuroscience, 2020, 14, 568051.	2.0	143
6	The Effects of Controlled Tempo Manipulations on Cardiovascular Autonomic Function. Music & Science, 2019, 2, 205920431985828.	1.0	13
7	Cardiovascular autonomic effects of transcutaneous auricular nerve stimulation via the tragus in the rat involve spinal cervical sensory afferent pathways. Brain Stimulation, 2019, 12, 1151-1158.	1.6	30
8	Messages from the auricle: Limiting progression of heart failure with preserved ejection fraction through transcutaneous nerve stimulation of nerves in the external ear. Experimental Physiology, 2019, 104, 11-12.	2.0	1
9	Effects of transcutaneous vagus nerve stimulation in individuals aged 55 years or above: potential benefits of daily stimulation. Aging, 2019, 11, 4836-4857.	3.1	86
10	What impact could transcutaneous vagal nerve stimulation have on an aging population?. Bioelectronics in Medicine, 2019, 2, 59-61.	2.0	1
11	Mechanisms underpinning sympathetic nervous activity and its modulation using transcutaneous vagus nerve stimulation. Experimental Physiology, 2018, 103, 326-331.	2.0	63
12	Non-invasive vagus nerve stimulation acutely improves spontaneous cardiac baroreflex sensitivity in healthy young men: A randomized placebo-controlled trial. Brain Stimulation, 2017, 10, 875-881.	1.6	93
13	Physiologic regulation of heart rate and blood pressure involves connexin 36â€“containing gap junctions. FASEB Journal, 2017, 31, 3966-3977.	0.5	8
14	Local GABAergic signaling within sensory ganglia controls peripheral nociceptive transmission. Journal of Clinical Investigation, 2017, 127, 1741-1756.	8.2	119
15	Co-expression of GAD67 and choline acetyltransferase in neurons in the mouse spinal cord: A focus on lamina X. Brain Research, 2016, 1646, 570-579.	2.2	10
16	The strange case of the ear and the heart: The auricular vagus nerve and its influence on cardiac control. Autonomic Neuroscience: Basic and Clinical, 2016, 199, 48-53.	2.8	70
17	Cholinergic Enhancement of Cell Proliferation in the Postnatal Neurogenic Niche of the Mammalian Spinal Cord. Stem Cells, 2015, 33, 2864-2876.	3.2	19
18	Co-expression of GAD67 and choline acetyltransferase reveals a novel neuronal phenotype in the mouse medulla oblongata. Autonomic Neuroscience: Basic and Clinical, 2015, 193, 22-30.	2.8	9

#	Article	IF	Citations
19	Neck muscle afferents influence oromotor and cardiorespiratory brainstem neural circuits. Brain Structure and Function, 2015, 220, 1421-1436.	2.3	15
20	Anodal Transcranial Direct Current Stimulation (tDCS) Over the Motor Cortex Increases Sympathetic Nerve Activity. Brain Stimulation, 2014, 7, 97-104.	1.6	45
21	Non-invasive Vagus Nerve Stimulation in Healthy Humans Reduces Sympathetic Nerve Activity. Brain Stimulation, 2014, 7, 871-877.	1.6	325
22	Localization of neurones expressing the gap junction protein Connexin45 within the adult spinal dorsal horn: a study using Cx45-eGFP reporter mice. Brain Structure and Function, 2013, 218, 751-765.	2.3	12
23	GABAergic responses of mammalian ependymal cells in the central canal neurogenic niche of the postnatal spinal cord. Neuroscience Letters, 2013, 553, 57-62.	2.1	15
24	The wonders of the Wanderer. Experimental Physiology, 2013, 98, 38-45.	2.0	31
25	A simple method to fluorescently label pericytes in the CNS and skeletal muscle. Microvascular Research, 2013, 89, 164-168.	2.5	3
26	Na+/K+ ATPase Â1 and Â3 Isoforms Are Differentially Expressed in Â- and Â-Motoneurons. Journal of Neuroscience, 2013, 33, 9913-9919.	3.6	61
27	The anti-malarial drug Mefloquine disrupts central autonomic and respiratory control in the working heart brainstem preparation of the rat. Journal of Biomedical Science, 2012, 19, 103.	7.0	8
28	Sympathetic nerve hyperactivity and its effect in postmenopausal women. Journal of Hypertension, 2011, 29, 2167-2175.	0.5	27
29	Kv3.3 immunoreactivity in the vestibular nuclear complex of the rat with focus on the medial vestibular nucleus: Targeting of Kv3.3 neurones by terminals positive for vesicular glutamate transporter 1. Brain Research, 2010, 1345, 45-58.	2.2	11
30	GABAB Mediated Regulation of Sympathetic Preganglionic Neurons: Pre- and Postsynaptic Sites of Action. Frontiers in Neurology, 2010, 1, 142.	2.4	33
31	Immunopharmacology: utilizing antibodies as ion channel modulators. Expert Review of Clinical Pharmacology, 2010, 3, 281-289.	3.1	6
32	Spontaneous rhythmogenic capabilities of sympathetic neuronal assemblies in the rat spinal cord slice. Neuroscience, 2010, 170, 827-838.	2.3	21
33	The intermedius nucleus of the medulla: A potential site for the integration of cervical information and the generation of autonomic responses. Journal of Chemical Neuroanatomy, 2009, 38, 166-175.	2.1	9
34	A new conditional mouse mutant reveals specific expression and functions of connexin36 in neurons and pancreatic beta-cells. Experimental Cell Research, 2008, 314, 997-1012.	2.6	57
35	Voltage-gated potassium currents within the dorsal vagal nucleus: Inhibition by BDS toxin. Brain Research, 2008, 1189, 51-57.	2.2	2
36	Expression of connexin30.2 in interneurons of the central nervous system in the mouse. Molecular and Cellular Neurosciences, 2008, 37, 119-134.	2.2	58

#	Article	IF	Citations
37	Role of Olivary Electrical Coupling in Cerebellar Motor Learning. Neuron, 2008, 58, 599-612.	8.1	199
38	Tonic GABAergic Inhibition of Sympathetic Preganglionic Neurons: A Novel Substrate for Sympathetic Control. Journal of Neuroscience, 2008, 28, 12445-12452.	3.6	37
39	Modulation of Potassium Ion Channel Proteins Utilising Antibodies. Methods in Molecular Biology, 2008, 491, 247-255.	0.9	2
40	The Neurochemically Diverse Intermedius Nucleus of the Medulla as a Source of Excitatory and Inhibitory Synaptic Input to the Nucleus Tractus Solitarii. Journal of Neuroscience, 2007, 27, 8324-8333.	3.6	15
41	Subdivision-Specific Responses of Neurons in the Nucleus of the Tractus Solitarius to Activation of Mu-Opioid Receptors in the Rat. Journal of Neurophysiology, 2007, 98, 3060-3071.	1.8	25
42	How much gas does it take to pump up synaptic transmission in the brain?. Experimental Physiology, 2007, 92, 367-367.	2.0	1
43	Dynamic remodelling of synapses can occur in the absence of the parent cell body. BMC Neuroscience, 2007, 8, 79.	1.9	12
44	GABAB receptors decrease inhibitory synaptic transmission onto sympathetic preganglionic neurones (SPNs) in the rat spinal cord slice preparation.. FASEB Journal, 2007, 21, A884.	0.5	0
45	Differential effects of 5â€HT on neurones in the central autonomic area of rat thoracic spinal cord.. FASEB Journal, 2007, 21, A885.	0.5	3
46	GADâ€GFP reporter mice reveal neurochemically distinct GABAergic populations in the Intermedius nucleus of the Medulla. FASEB Journal, 2007, 21, A464.	0.5	0
47	Detection of angiotensin II mediated nitric oxide release within the nucleus of the solitary tract using electron-paramagnetic resonance (EPR) spectroscopy. Autonomic Neuroscience: Basic and Clinical, 2006, 126-127, 193-201.	2.8	26
48	An evaluation of antibody detection of the P2X1 receptor subunit in the CNS of wild type and P2X1-knockout mice. Neuroscience Letters, 2006, 397, 120-125.	2.1	14
49	The transcriptional repressor REST is a critical regulator of the neurosecretory phenotype. Journal of Neurochemistry, 2006, 98, 1828-1840.	3.9	42
50	Immunohistochemical localisation of the voltage gated potassium ion channel subunit Kv3.3 in the rat medulla oblongata and thoracic spinal cord. Brain Research, 2006, 1070, 101-115.	2.2	25
51	HCN1 ion channel immunoreactivity in spinal cord and medulla oblongata. Brain Research, 2006, 1081, 79-91.	2.2	48
52	Localization and function of the Kv3.1b subunit in the rat medulla oblongata: focus on the nucleus tractus solitarii. Journal of Physiology, 2005, 562, 655-672.	2.9	21
53	Properties of presynaptic P2X7-like receptors at the neuromuscular junction. Brain Research, 2005, 1034, 40-50.	2.2	36
54	Localization of the NBMPR-sensitive equilibrative nucleoside transporter, ENT1, in the rat dorsal root ganglion and lumbar spinal cord. Brain Research, 2005, 1059, 129-138.	2.2	14

#	Article	IF	Citations
55	Immunopharmacologyâ€"Antibodies for specific modulation of proteins involved in neuronal function. Journal of Neuroscience Methods, 2005, 146, 133-148.	2.5	13
56	A2A adenosine receptors are located on presynaptic motor nerve terminals in the mouse. Synapse, 2005, 57, 229-234.	1.2	18
57	Distinct Profiles of REST Interactions with Its Target Genes at Different Stages of Neuronal Development. Molecular Biology of the Cell, 2005, 16, 5630-5638.	2.1	157
58	GABAergic Neurons in the Central Region of the Spinal Cord: A Novel Substrate for Sympathetic Inhibition. Journal of Neuroscience, 2005, 25, 1063-1070.	3.6	73
59	Differential expression of vesicular glutamate transporters by vagal afferent terminals in rat nucleus of the solitary tract: Projections from the heart preferentially express vesicular glutamate transporter 1. Neuroscience, 2005, 135, 133-145.	2.3	45
60	Nitroxergic Modulation in the NTS. Frontiers in Neuroscience, 2005, , 209-258.	0.0	1
61	Evidence for Inhibition Mediated by Coassembly of GABAA and GABAC Receptor Subunits in Native Central Neurons. Journal of Neuroscience, 2004, 24, 7241-7250.	3.6	85
62	Input-Specific Modulation of Neurotransmitter Release in the Lateral Horn of the Spinal Cord via Adenosine Receptors. Journal of Neuroscience, 2004, 24, 127-137.	3.6	36
63	Kv3 voltageâ€gated potassium channels regulate neurotransmitter release from mouse motor nerve terminals. European Journal of Neuroscience, 2004, 20, 3313-3321.	2.6	42
64	Electron microscopic localisation of P2X4 receptor subunit immunoreactivity to pre- and post-synaptic neuronal elements and glial processes in the dorsal vagal complex of the rat. Brain Research, 2004, 1026, 44-55.	2.2	28
65	Differential co-localisation of the P2X7 receptor subunit with vesicular glutamate transporters VGLUT1 and VGLUT2 in rat CNS. Neuroscience, 2004, 123, 761-768.	2.3	77
66	Association of potassium channel Kv3.4 subunits with pre- and post-synaptic structures in brainstem and spinal cord. Neuroscience, 2004, 126, 1001-1010.	2.3	31
67	Angiotensin type 1 receptor immunoreactivity in the thoracic spinal cord. Brain Research, 2003, 985, 21-31.	2.2	31
68	Purinergic Signalling in the Medullary Mechanisms of Respiratory Control in the Rat: Respiratory Neurones Express the P2X 2 Receptor Subunit. Journal of Physiology, 2003, 552, 197-211.	2.9	78
69	Differential increases in P2X receptor levels in rat vagal efferent neurones following a vagal nerve section. Brain Research, 2003, 977, 112-118.	2.2	13
70	Subcellular localization of neuronal nitric oxide synthase in the rat nucleus of the solitary tract in relation to vagal afferent inputs. Neuroscience, 2003, 118, 115-122.	2.3	31
71	GABAB receptor subunit expression in glia. Molecular and Cellular Neurosciences, 2003, 24, 214-223.	2.2	86
72	Ionotropic glutamate receptor subunit immunoreactivity of vagal preganglionic neurones projecting to the rat heart. Autonomic Neuroscience: Basic and Clinical, 2003, 105, 105-117.	2.8	25

#	Article	IF	Citations
73	Spinal cord interneurones labelled transneuronally from the adrenal gland by a GFP-herpes virus construct contain the potassium channel subunit Kv3.1b. Autonomic Neuroscience: Basic and Clinical, 2002, 98, 45-50.	2.8	19
74	Involvement of P2X7 receptors in the regulation of neurotransmitter release in the rat hippocampus. Journal of Neurochemistry, 2002, 81, 1196-1211.	3.9	247
75	An ATP-gated ion channel at the cell nucleus. Nature, 2002, 420, 42-42.	27.8	50
76	Properties of solitary tract neurones responding to peripheral arterial chemoreceptors. Neuroscience, 2001, 105, 231-248.	2.3	64
77	Properties of interneurones in the intermediolateral cell column of the rat spinal cord: role of the potassium channel subunit Kv3.1. Neuroscience, 2001, 106, 433-446.	2.3	58
78	Knockout mice highlight the promise of purines. Trends in Neurosciences, 2001, 24, 5-6.	8.6	6
79	It's enough to raise your blood pressure!. Trends in Neurosciences, 2001, 24, 200.	8.6	0
80	It takes your breath away â€“ NK1R ablation in the pre-BÃ¶tzinger complex. Trends in Neurosciences, 2001, 24, 633.	8.6	0
81	Neuronal P2X₇Receptors Are Targeted to Presynaptic Terminals in the Central and Peripheral Nervous Systems. Journal of Neuroscience, 2001, 21, 7143-7152.	3.6	281
82	Adenosine A1 Receptors Reduce Release from Excitatory But Not Inhibitory Synaptic Inputs onto Lateral Horn Neurons. Journal of Neuroscience, 2001, 21, 6308-6320.	3.6	58
83	Adenoviral vector demonstrates that angiotensin IIâ€induced depression of the cardiac baroreflex is mediated by endothelial nitric oxide synthase in the nucleus tractus solitarii of the rat. Journal of Physiology, 2001, 531, 445-458.	2.9	151
84	Morphological and electrophysiological properties of neurones in the dorsal vagal complex of the rat activated by arterial baroreceptors. Journal of Comparative Neurology, 2000, 417, 233-249.	1.6	48
85	P2X2 receptor immunoreactivity in the dorsal vagal complex and area postrema of the rat. Neuroscience, 2000, 99, 683-696.	2.3	54
86	Nerves â€“ the silent but strong type. Trends in Neurosciences, 2000, 23, 333.	8.6	1
87	Does the head rule the heart?. Trends in Neurosciences, 2000, 23, 449.	8.6	1
88	Morphological and electrophysiological properties of neurones in the dorsal vagal complex of the rat activated by arterial baroreceptors. , 2000, 417, 233.		1
89	Morphological and electrophysiological properties of neurones in the dorsal vagal complex of the rat activated by arterial baroreceptors. Journal of Comparative Neurology, 2000, 417, 233.	1.6	1
90	Modulation of bistratified cell IPSPs and basket cell IPSPs by pentobarbitone sodium, diazepam and Zn2+: dual recordings in slices of adult rat hippocampus. European Journal of Neuroscience, 1999, 11, 3552-3564.	2.6	56

#	Article	IF	Citations
91	Properties of solitary tract neurons receiving inputs from the sub-diaphragmatic vagus nerve. Neuroscience, 1999, 95, 141-153.	2.3	51
92	Labelling of rat vagal preganglionic neurones by carbocyanine dye DiI applied to the heart. NeuroReport, 1999, 10, 1177-1181.	1.2	41
93	CA1 pyramidal to basket and bistratified cell EPSPs: dual intracellular recordings in rat hippocampal slices. Journal of Physiology, 1998, 507, 201-217.	2.9	157
94	Synaptic interactions in neocortical local circuits: dual intracellular recordings in vitro. Cerebral Cortex, 1997, 7, 510-522.	2.9	274
95	Neocortical local synaptic circuitry revealed with dual intracellular recordings and biocytin-filling. Journal of Physiology (Paris), 1996, 90, 211-215.	2.1	14
96	Single axon fast inhibitory postsynaptic potentials elicited by a sparsely spiny interneuron in rat neocortex. Neuroscience, 1995, 65, 935-942.	2.3	65
97	Properties of single axon excitatory postsynaptic potentials elicited in spiny interneurons by action potentials in pyramidal neurons in slices of rat neocortex. Neuroscience, 1995, 69, 727-738.	2.3	93
98	Innervation of burst firing spiny interneurons by pyramidal cells in deep layers of rat somatomotor cortex: Paired intracellular recordings with biocytin filling. Neuroscience, 1995, 69, 739-755.	2.3	83
99	Temporal and spatial properties of local circuits in neocortex. Trends in Neurosciences, 1994, 17, 119-126.	8.6	337
100	Localization of cardiac vagal preganglionic motoneurones in the rat: Immunocytochemical evidence of synaptic inputs containing 5-hydroxytryptamine. Journal of Comparative Neurology, 1993, 327, 572-583.	1.6	122
101	Single axon excitatory postsynaptic potentials in neocortical interneurons exhibit pronounced paired pulse facilitation. Neuroscience, 1993, 54, 347-360.	2.3	192