Peter Anthony McNaughton

List of Publications by Year
in descending order

95	10,052	36271 51	49868 87
papers	citations	h-index	g-index

99	99	99	6578
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	NGF rapidly increases membrane expression of TRPV1 heat-gated ion channels. EMBO Journal, 2005, 24, 4211-4223.	3.5	637
2	Protein kinase C activation potentiates gating of the vanilloid receptor VR1 by capsaicin, protons, heat and anandamide. Journal of Physiology, 2001, 534, 813-825.	1.3	453
3	A novel heat-activated current in nociceptive neurons and its sensitization by bradykinin. Proceedings of the National Academy of Sciences of the United States of America, 1996, 93, 15435-15439.	3.3	398
4	Specific Involvement of PKC-Îµ in Sensitization of the Neuronal Response to Painful Heat. Neuron, 1999, 23, 617-624.	3.8	389
5	Extrusion of calcium from rod outer segments is driven by both sodium and potassium gradients. Nature, 1989, 337, 740-743.	13.7	363
6	HCN2 Ion Channels Play a Central Role in Inflammatory and Neuropathic Pain. Science, 2011, 333, 1462-1466.	6.0	297
7	Signalling pathways involved in the sensitisation of mouse nociceptive neurones by nerve growth factor. Journal of Physiology, 2003, 551, 433-446.	1.3	291
8	Spatial spread of activation and background desensitization in toad rod outer segments. Journal of Physiology, 1981, 319, 463-496.	1.3	280
9	The ionic selectivity and calcium dependence of the lightâ€sensitive pathway in toad rods.. Journal of Physiology, 1985, 358, 447-468.	1.3	259
10	The thermoâ€TRP ion channel family: properties and therapeutic implications. British Journal of Pharmacology, 2012, 165, 787-801.	2.7	236
11	Proinflammatory Mediators Modulate the Heat-Activated Ion Channel TRPV1 via the Scaffolding Protein AKAP79/150. Neuron, 2008, 59, 450-461.	3.8	234
12	Acid-Induced Pain and Its Modulation in Humans. Journal of Neuroscience, 2004, 24, 10974-10979.	1.7	220
13	Light response of vertebrate photoreceptors. Physiological Reviews, 1990, 70, 847-883.	13.1	213
14	Anandamide acts as an intracellular messenger amplifying Ca2+ influx via TRPV1 channels. EMBO Journal, 2005, 24, 3026-3037.	3.5	210
15	The TRPM2 ion channel is required for sensitivity to warmth. Nature, 2016, 536, 460-463.	13.7	207
16	Response properties of cones from the retina of the tiger salamander.. Journal of Physiology, 1991, 433, 561-587.	1.3	188
17	Measurement of the intracellular free calcium concentration in salamander rods. Nature, 1986, 322, 261-263.	13.7	185
18	Kinetics and energetics of calcium efflux from intact squid giant axons.. Journal of Physiology, 1976, 259, 103-144.	1.3	181

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19	Characterization of the primary spinal afferent innervation of the mouse colon using retrograde labelling. Neurogastroenterology and Motility, 2004, 16, 113-124.	1.6	180
20	Calcium homeostasis in the outer segments of retinal rods from the tiger salamander.. Journal of Physiology, 1992, 455, 111-142.	1.3	178
21	Effect of ions on the light-sensitive current in retinal rods. Nature, 1981, 292, 502-505.	13.7	175
22	Electrogenic properties of the Na:Ca exchange. Journal of Membrane Biology, 1990, 113, 177-191.	1.0	172
23	Inflammatory Pain: The Cellular Basis of Heat Hyperalgesia. Current Neuropharmacology, 2006, 4, 197-206.	1.4	161
24	Ion channels gated by heat. Proceedings of the National Academy of Sciences of the United States of America, 1999, 96, 7658-7663.	3.3	160
25	Activation of the TRPV4 Ion Channel Is Enhanced by Phosphorylation. Journal of Biological Chemistry, 2009, 284, 27884-27891.	1.6	157
26	Role of the hyperpolarizationâ€activated current I_h in somatosensory neurons. Journal of Physiology, 2008, 586, 5911-5929.	1.3	139
27	Peripheral pain mechanisms. Current Opinion in Neurobiology, 1997, 7, 493-499.	2.0	134
28	Direct inhibition of the cold-activated TRPM8 ion channel by Gα_q. Nature Cell Biology, 2012, 14, 851-858.	4.6	134
29	Plasma albumin is a potent trigger of calcium signals and DNA synthesis in astrocytes.. Proceedings of the National Academy of Sciences of the United States of America, 1995, 92, 1426-1430.	3.3	133
30	Temporal and spatial characteristics of the voltage response of rods in the retina of the snapping turtle. Journal of Physiology, 1980, 300, 213-250.	1.3	132
31	Arachidonic acid potentiates acid-sensing ion channels in rat sensory neurons by a direct action. Neuroscience, 2007, 145, 686-698.	1.1	131
32	Modulation of Acid-Sensing Ion Channel Activity by Nitric Oxide. Journal of Neuroscience, 2007, 27, 13251-13260.	1.7	131
33	Protein Kinase C-mediated Phosphorylation Does Not Regulate Drug Transport by the Human Multidrug Resistance P-glycoprotein. Journal of Biological Chemistry, 1996, 271, 13668-13674.	1.6	118
34	Modulation of temperature-sensitive TRP channels. Seminars in Cell and Developmental Biology, 2006, 17, 638-645.	2.3	114
35	Confocal microscopy: applications in neurobiology. Trends in Neurosciences, 1988, 11, 346-351.	4.2	109
36	Effect of ions on retinal rods from Bufo marinus.. Journal of Physiology, 1984, 350, 649-680.	1.3	106

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37	HCN2 ion channels: an emerging role as the pacemakers of pain. Trends in Pharmacological Sciences, 2012, 33, 456-463.	4.0	106
38	Ion transport by the Na-Ca exchange in isolated rod outer segments.. Proceedings of the National Academy of Sciences of the United States of America, 1988, 85, 4548-4552.	3.3	100
39	Magnetic characterization of isolated candidate vertebrate magnetoreceptor cells. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 12022-12027.	3.3	98
40	Direct evidence for functional TRPV1/TRPA1 heteromers. Pflugers Archiv European Journal of Physiology, 2014, 466, 2229-2241.	1.3	98
41	A surprising property of electrical spread in the network of rods in the turtle's retina. Nature, 1978, 274, 562-565.	13.7	94
42	Inflammatory and neuropathic pain are rapidly suppressed by peripheral block of hyperpolarisation-activated cyclic nucleotide-gated ion channels. Pain, 2014, 155, 1708-1719.	2.0	94
43	Sensitization of Transient Receptor Potential Vanilloid 1 by the Prokineticin Receptor Agonist Bv8. Journal of Neuroscience, 2006, 26, 5109-5116.	1.7	93
44	Hyperpolarization-activated cyclic nucleotideâ€“gated 2 (HCN2) ion channels drive pain in mouse models of diabetic neuropathy. Science Translational Medicine, 2017, 9, eaam6072.	5.8	90
45	Functional bradykinin B1 receptors are expressed in nociceptive neurones and are upregulated by the neurotrophin GDNF. Journal of Physiology, 2004, 560, 391-401.	1.3	89
46	Modulation of single-channel properties of TRPV1 by phosphorylation. Journal of Physiology, 2010, 588, 3743-3756.	1.3	74
47	The effects of calcium on outward membrane currents in the cardiac Purkinje fibre.. Journal of Physiology, 1979, 289, 347-373.	1.3	71
48	The influence of extracellular calcium binding on the calcium efflux from squid axons.. Journal of Physiology, 1978, 276, 127-150.	1.3	70
49	Upregulation of Bradykinin B2 Receptor Expression by Neurotrophic Factors and Nerve Injury in Mouse Sensory Neurons. Molecular and Cellular Neurosciences, 2002, 19, 186-200.	1.0	69
50	Protease Activated Receptors 1 and 4 Sensitize TRPV1 in Nociceptive Neurones. Molecular Pain, 2010, 6, 1744-8069-6-61.	1.0	69
51	Disrupting Sensitization of Transient Receptor Potential Vanilloid Subtype 1 Inhibits Inflammatory Hyperalgesia. Journal of Neuroscience, 2013, 33, 7407-7414.	1.7	67
52	The effects of phosphodiesterase inhibitors and lanthanum ions on the lightâ€sensitive current of toad retinal rods.. Journal of Physiology, 1986, 370, 91-109.	1.3	48
53	HCN2 ion channels: basic science opens up possibilities for therapeutic intervention in neuropathic pain. Biochemical Journal, 2016, 473, 2717-2736.	1.7	48
54	Multidrug transporters in prokaryotic and eukaryotic cells: physiological functions and transport mechanisms. Molecular Membrane Biology, 2001, 18, 97-103.	2.0	47

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55	Avian magnetite-based magnetoreception: a physiologist's perspective. Journal of the Royal Society Interface, 2010, 7, S193-205.	1.5	45
56	Functional lipidomics. Calcium-independent activation of endocannabinoid/endovanilloid lipid signalling in sensory neurons by protein kinases C and A and thrombin. Neuropharmacology, 2008, 55, 1274-1279.	2.0	44
57	Proton binding sites involved in the activation of acid-sensing ion channel ASIC2a. Neuroscience Letters, 2007, 426, 12-17.	1.0	43
58	Mapping the Binding Site of TRPV1 on AKAP79: Implications for Inflammatory Hyperalgesia. Journal of Neuroscience, 2013, 33, 9184-9193.	1.7	40
59	Sensitization of TRPA1 by Protein Kinase A. PLoS ONE, 2017, 12, e0170097.	1.1	40
60	Plasma albumin induces calcium waves in rat cortical astrocytes. , 1997, 19, 343-351.		37
61	Regulation of firing frequency in nociceptive neurons by pro-inflammatory mediators. Experimental Brain Research, 2009, 196, 45-52.	0.7	37
62	Modulation of the synaptic Ca 2+ current in salamander photoreceptors by polyunsaturated fatty acids and retinoids. Journal of Physiology, 2000, 529, 333-344.	1.3	33
63	Agonistâ€induced sensitisation of the irritant receptor ion channel TRPA1. Journal of Physiology, 2016, 594, 6643-6660.	1.3	31
64	HCN3 ion channels: roles in sensory neuronal excitability and pain. Journal of Physiology, 2019, 597, 4661-4675.	1.3	31
65	Why Pain Gets Worse: The Mechanism of Heat Hyperalgesia. Journal of General Physiology, 2006, 128, 491-493.	0.9	30
66	K+ and Cl- currents in enterocytes isolated from guinea-pig small intestinal villi.. Journal of Physiology, 1991, 434, 351-367.	1.3	29
67	Enrichment of the fraction of nociceptive neurones in cultures of primary sensory neurones. Journal of Neuroscience Methods, 1997, 71, 191-198.	1.3	27
68	TRPM2 and warmth sensation. Pflugers Archiv European Journal of Physiology, 2018, 470, 787-798.	1.3	26
69	The Role of Cold-Sensitive Ion Channels in Peripheral Thermosensation. Frontiers in Cellular Neuroscience, 2020, 14, 262.	1.8	26
70	Spread of activation and desensitisation in rod outer segments. Nature, 1980, 283, 85-87.	13.7	24
71	Albumin elicits calcium signals from astrocytes in brain slices from neonatal rat cortex. Journal of Physiology, 1998, 509, 711-716.	1.3	23
72	Heat detection by the TRPM2 ion channel. Nature, 2020, 584, E5-E12.	13.7	23

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73	Temperature dependence of the light response in rat rods.. Journal of Physiology, 1993, 462, 465-481.	1.3	22
74	Oligodendrocyte HCN2 Channels Regulate Myelin Sheath Length. Journal of Neuroscience, 2021, 41, 7954-7964.	1.7	20
75	Net charge transport during sodium-dependent calcium extrusion in isolated salamander rod outer segments.. Journal of General Physiology, 1991, 98, 479-495.	0.9	19
76	Possible involvement of GTP-binding proteins in the deactivation of an inwardly rectifying K+ current in enterocytes isolated from guinea-pig small intestine. Pflugers Archiv European Journal of Physiology, 1990, 417, 240-242.	1.3	17
77	A randomised, double-blind, placebo-controlled crossover trial of the influence of the HCN channel blocker ivabradine in a healthy volunteer pain model: an enriched population trial. Pain, 2019, 160, 2554-2565.	2.0	17
78	Lysophospholipids trigger calcium signals but not DNA synthesis in cortical astrocytes. , 1999, 28, 272-276.		15
79	Manipulation of synaptic sign and strength with divalent cations in the vertebrate retina: pushing the limits of tonic, chemical neurotransmission. European Journal of Neuroscience, 1999, 11, 4134-4138.	1.2	14
80	Glial cell responses to lipids bound to albumin in serum and plasma. Progress in Brain Research, 2001, 132, 367-374.	0.9	14
81	TRPM2 ion channels steer neutrophils towards a source of hydrogen peroxide. Scientific Reports, 2021, 11, 9339.	1.6	14
82	Rods, cones and calcium. Cell Calcium, 1995, 18, 275-284.	1.1	13
83	Sensitisation of Nociceptors â€“ What are Ion Channels Doing?. Open Pain Journal, 2010, 3, 82-96.	0.4	13
84	Sensitisation of TRPV1 in rat sensory neurones by activation of SNSRs. Neuroscience Letters, 2007, 422, 1-6.	1.0	12
85	Current perspectives on the modulation of thermo-TRP channels: new advances and therapeutic implications. Expert Review of Clinical Pharmacology, 2010, 3, 687-704.	1.3	10
86	Role of hyperpolarization-activated cyclic nucleotide-gated ion channels in neuropathic pain: a proof-of-concept study of ivabradine in patients with chronic peripheral neuropathic pain. Pain Reports, 2021, 6, e967.	1.4	10
87	Calcium regulation in neurons: transport processes. Current Opinion in Neurobiology, 1991, 1, 98-104.	2.0	7
88	How anchoring proteins shape pain. , 2014, 143, 316-322.		6
89	Hidden Multivalency in Phosphatase Recruitment by a Disordered AKAP Scaffold. Journal of Molecular Biology, 2022, 434, 167682.	2.0	5
90	Artemisinin inhibits neutrophil and macrophage chemotaxis, cytokine production and NET release. Scientific Reports, 2022, 12, .	1.6	2

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91	TRP Channels in the Sensation of Heat. , 2015, , 165-183.		1
92	The effects of quinidine on sodium-dependent calcium efflux in isolated rod photoreceptors of the salamander retina. Pflugers Archiv European Journal of Physiology, 1990, 417, 168-173.	1.3	0
93	The Cellular and Molecular Basis of the Detection of Pain. Cell and Molecular Response To Stress, 2002, , 105-119.	0.4	0
94	Pain Transduction: Gating and Modulation of Ion Channels. , 2005, , 251-270.		0
95	Neuroscience cuts will hurt key areas. Nature, 2011, 471, 36-37.	13.7	0