John N Wood

List of Publications by Year
in descending order

144 papers	20,249 citations	14655 66 h-index	10734 138 g-index
155 all docs	155 docs citations	155 times ranked	13383 citing authors

#	Article	IF	Citations
1	An SCN9A channelopathy causes congenital inability to experience pain. Nature, 2006, 444, 894-898.	27.8	1,353
2	A tetrodotoxin-resistant voltage-gated sodium channel expressed by sensory neurons. Nature, 1996, 379, 257-262.	27.8	1,023
3	A P2X purinoceptor expressed by a subset of sensory neurons. Nature, 1995, 377, 428-431.	27.8	985
4	Nomenclature of Voltage-Gated Sodium Channels. Neuron, 2000, 28, 365-368.	8.1	946
5	The tetrodotoxin-resistant sodium channel SNS has a specialized function in pain pathways. Nature Neuroscience, 1999, 2, 541-548.	14.8	739
6	Piezo2 is the major transducer of mechanical forces for touch sensation in mice. Nature, 2014, 516, 121-125.	27.8	660
7	SCN9A Mutations in Paroxysmal Extreme Pain Disorder: Allelic Variants Underlie Distinct Channel Defects and Phenotypes. Neuron, 2006, 52, 767-774.	8.1	640
8	Nociceptor-specific gene deletion reveals a major role for Nav1.7 (PN1) in acute and inflammatory pain. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 12706-12711.	7.1	608
9	Potent Analgesic Effects of GDNF in Neuropathic Pain States. Science, 2000, 290, 124-127.	12.6	482
10	Nociceptive sensory neurons drive interleukin-23-mediated psoriasiform skin inflammation. Nature, 2014, 510, 157-161.	27.8	427
11	Warm-coding deficits and aberrant inflammatory pain in mice lacking P2X3 receptors. Nature, 2000, 407, 1015-1017.	27.8	421
12	The Cell and Molecular Basis of Mechanical, Cold, and Inflammatory Pain. Science, 2008, 321, 702-705.	12.6	419
13	A Novel Persistent Tetrodotoxin-Resistant Sodium Current In SNS-Null And Wild-Type Small Primary Sensory Neurons. Journal of Neuroscience, 1999, 19, RC43-RC43.	3.6	396
14	A Gain-of-Function Mutation in TRPA1 Causes Familial Episodic Pain Syndrome. Neuron, 2010, 66, 671-680.	8.1	376
15	Sensory neuron sodium channel Nav1.8 is essential for pain at low temperatures. Nature, 2007, 447, 856-859.	27.8	355
16	Purinergic receptors: their role in nociception and primary afferent neurotransmission. Current Opinion in Neurobiology, 1996, 6, 526-532.	4.2	338
17	Voltage-gated sodium channels and pain pathways. Journal of Neurobiology, 2004, 61, 55-71.	3.6	337
18	The TTXâ€Resistant Sodium Channel Na v 1.8 (SNS/PN3): Expression and Correlation with Membrane Properties in Rat Nociceptive Primary Afferent Neurons. Journal of Physiology, 2003, 550, 739-752.	2.9	310

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19	Neurological perspectives on voltage-gated sodium channels. Brain, 2012, 135, 2585-2612.	7.6	285
20	Parallel â€œPainâ€•Pathways Arise from Subpopulations of Primary Afferent Nociceptor. Neuron, 2005, 47, 787-793.	8.1	274
21	Loss-of-function mutations in sodium channel Nav1.7 cause anosmia. Nature, 2011, 472, 186-190.	27.8	267
22	Genetic variation in SCN10A influences cardiac conduction. Nature Genetics, 2010, 42, 149-152.	21.4	248
23	Annexin II light chain regulates sensory neuron-specific sodium channel expression. Nature, 2002, 417, 653-656.	27.8	238
24	Acid-sensing ion channels ASIC2 and ASIC3 do not contribute to mechanically activated currents in mammalian sensory neurones. Journal of Physiology, 2004, 556, 691-710.	2.9	229
25	Distinct Nav1.7-dependent pain sensations require different sets of sensory and sympathetic neurons. Nature Communications, 2012, 3, 791.	12.8	228
26	Nav1.8 expression is not restricted to nociceptors in mouse peripheral nervous system. Pain, 2012, 153, 2017-2030.	4.2	223
27	Nociceptor-specific gene deletion using heterozygous NaV1.8-Cre recombinase mice. Pain, 2005, 113, 27-36.	4.2	212
28	Deficits in Visceral Pain and Referred Hyperalgesia in Nav1.8 (SNS/PN3)-Null Mice. Journal of Neuroscience, 2002, 22, 8352-8356.	3.6	210
29	A role for the TTX-resistant sodium channel Nav 1.8 in NGF-induced hyperalgesia, but not neuropathic pain. NeuroReport, 2001, 12, 3077-3080.	1.2	200
30	Involvement of Na+ channels in pain pathways. Trends in Pharmacological Sciences, 2001, 22, 27-31.	8.7	187
31	VGLUT2-Dependent Sensory Neurons in the TRPV1 Population Regulate Pain and Itch. Neuron, 2010, 68, 529-542.	8.1	187
32	Distinct Mechanosensitive Properties of Capsaicin-Sensitive and -Insensitive Sensory Neurons. Journal of Neuroscience, 2002, 22, RC228-RC228.	3.6	177
33	Neuropathic Pain Develops Normally in Mice Lacking both Na_v1.7 and Na_v1.8. Molecular Pain, 2005, 1, 1744-8069-1-24.	2.1	173
34	Na_v1.7 and other voltage-gated sodium channels as drug targets for pain relief. Expert Opinion on Therapeutic Targets, 2016, 20, 975-983.	3.4	168
35	The Tetrodotoxinâ€Resistant Na + Channel Nav1.8 is Essential for the Expression of Spontaneous Activity in Damaged Sensory Axons of Mice. Journal of Physiology, 2003, 550, 921-926.	2.9	163
36	GTP-induced tetrodotoxin-resistant Na+ current regulates excitability in mouse and rat small diameter sensory neurones. Journal of Physiology, 2003, 548, 373-382.	2.9	160

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37	Small RNAs Control Sodium Channel Expression, Nociceptor Excitability, and Pain Thresholds. Journal of Neuroscience, 2010, 30, 10860-10871.	3.6	152
38	Endogenous opioids contribute to insensitivity to pain in humans and mice lacking sodium channel Nav1.7. Nature Communications, 2015, 6, 8967.	12.8	150
39	Nociceptor-derived brain-derived neurotrophic factor regulates acute and inflammatory but not neuropathic pain. Molecular and Cellular Neurosciences, 2006, 31, 539-548.	2.2	148
40	Sodium channel genes in pain-related disorders: phenotypeâ€“genotype associations and recommendations for clinical use. Lancet Neurology, The, 2014, 13, 1152-1160.	10.2	148
41	Pain Genes. PLoS Genetics, 2008, 4, e1000086.	3.5	144
42	The Roles of Sodium Channels in Nociception: Implications for Mechanisms of Neuropathic Pain. Pain Medicine, 2011, 12, S93-S99.	1.9	141
43	Pain without Nociceptors? Nav1.7-Independent Pain Mechanisms. Cell Reports, 2014, 6, 301-312.	6.4	141
44	Genetic ablation of delta opioid receptors in nociceptive sensory neurons increases chronic pain and abolishes opioid analgesia. Pain, 2011, 152, 1238-1248.	4.2	139
45	Nerve Injury Induces Robust Allodynia and Ectopic Discharges in Nav1.3 Null Mutant Mice. Molecular Pain, 2006, 2, 1744-8069-2-33.	2.1	138
46	TRPC3 and TRPC6 are essential for normal mechanotransduction in subsets of sensory neurons and cochlear hair cells. Open Biology, 2012, 2, 120068.	3.6	135
47	Pharmacological characterisation of the highly NaV1.7 selective spider venom peptide Pn3a. Scientific Reports, 2017, 7, 40883.	3.3	120
48	Serum Response Factor Mediates NGF-Dependent Target Innervation by Embryonic DRG Sensory Neurons. Neuron, 2008, 58, 532-545.	8.1	116
49	Brain-derived neurotrophic factor derived from sensory neurons plays a critical role in chronic pain. Brain, 2018, 141, 1028-1039.	7.6	116
50	GTP upâ€regulated persistent Na⁺ current and enhanced nociceptor excitability require Na_V1.9. Journal of Physiology, 2008, 586, 1077-1087.	2.9	105
51	Ciguatoxins activate specific cold pain pathways to elicit burning pain from cooling. EMBO Journal, 2012, 31, 3795-3808.	7.8	103
52	Mu Opioid Receptors on Primary Afferent Nav1.8 Neurons Contribute to Opiate-Induced Analgesia: Insight from Conditional Knockout Mice. PLoS ONE, 2013, 8, e74706.	2.5	102
53	Genetic tracing of Nav1.8â€expressing vagal afferents in the mouse. Journal of Comparative Neurology, 2011, 519, 3085-3101.	1.6	100
54	Pain as a channelopathy. Journal of Clinical Investigation, 2010, 120, 3745-3752.	8.2	100

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55	Mechanical allodynia. Pflugers Archiv European Journal of Physiology, 2015, 467, 133-139.	2.8	98
56	Peripheral Nervous System-specific Genes Identified by Subtractive cDNA Cloning. Journal of Biological Chemistry, 1995, 270, 21264-21270.	3.4	90
57	In vivo characterization of distinct modality-specific subsets of somatosensory neurons using GCaMP. Science Advances, 2016, 2, e1600990.	10.3	87
58	Temporal Control of Gene Deletion in Sensory Ganglia Using a Tamoxifen-Inducible <i>Advillin-CreERT2</i> Recombinase Mouse. Molecular Pain, 2011, 7, 1744-8069-7-100.	2.1	84
59	Significant Determinants of Mouse Pain Behaviour. PLoS ONE, 2014, 9, e104458.	2.5	81
60	ATP, P2X receptors and pain pathways. Journal of the Autonomic Nervous System, 2000, 81, 289-294.	1.9	79
61	Sensory neuron voltage-gated sodium channels as analgesic drug targets. Current Opinion in Neurobiology, 2008, 18, 383-388.	4.2	79
62	Near-Perfect Synaptic Integration by Na v 1.7 in Hypothalamic Neurons Regulates Body Weight. Cell, 2016, 165, 1749-1761.	28.9	77
63	A single serine residue confers tetrodotoxin insensitivity on the rat sensory-neuron-specific sodium channel SNS. FEBS Letters, 1997, 409, 49-52.	2.8	73
64	Modulation of sensory neuron mechanotransduction by PKC- and nerve growth factor-dependent pathways. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 4699-4704.	7.1	73
65	The Fabry disease-associated lipid Lyso-Gb3 enhances voltage-gated calcium currents in sensory neurons and causes pain. Neuroscience Letters, 2015, 594, 163-168.	2.1	73
66	Voltage-Gated Sodium Channel Blockers; Target Validation and Therapeutic Potential. Current Topics in Medicinal Chemistry, 2005, 5, 529-537.	2.1	72
67	Pain channelopathies. Journal of Physiology, 2010, 588, 1897-1904.	2.9	72
68	Sodium Channels and Pain. Handbook of Experimental Pharmacology, 2015, 227, 39-56.	1.8	70
69	High-Threshold Mechanosensitive Ion Channels Blocked by a Novel Conopeptide Mediate Pressure-Evoked Pain. PLoS ONE, 2007, 2, e515.	2.5	66
70	Trans-splicing of a voltage-gated sodium channel is regulated by nerve growth factor. FEBS Letters, 1999, 445, 177-182.	2.8	65
71	FM1-43 is a Permeant Blocker of Mechanosensitive Ion Channels in Sensory Neurons and Inhibits Behavioural Responses to Mechanical Stimuli. Molecular Pain, 2007, 3, 1744-8069-3-1.	2.1	64
72	Proteomic Profiling of Neuromas Reveals Alterations in Protein Composition and Local Protein Synthesis in Hyper-Excitable Nerves. Molecular Pain, 2008, 4, 1744-8069-4-33.	2.1	62

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73	Transient Receptor Potential Channels and Mechanosensation. Annual Review of Neuroscience, 2013, 36, 519-546.	10.7	62
74	Visceral and somatic pain modalities reveal Na_V1.7â€independent visceral nociceptive pathways. Journal of Physiology, 2017, 595, 2661-2679.	2.9	61
75	Behavioral Measures of Pain Thresholds. Current Protocols in Mouse Biology, 2011, 1, 383-412.	1.2	58
76	Structure and distribution of a broadly expressed atypical sodium channel. FEBS Letters, 1997, 400, 183-187.	2.8	56
77	Novel Mutations Mapping to the Fourth Sodium Channel Domain of Nav1.7 Result in Variable Clinical Manifestations of Primary Erythromelalgia. NeuroMolecular Medicine, 2013, 15, 265-278.	3.4	56
78	Kinetic properties of mechanically activated currents in spinal sensory neurons. Journal of Physiology, 2010, 588, 301-314.	2.9	54
79	Synergistic regulation of serotonin and opioid signaling contributes to pain insensitivity in Na _v 1.7 knockout mice. Science Signaling, 2017, 10, .	3.6	54
80	Mapping protein interactions of sodium channel Na _V 1.7 using epitopeâ€tagged geneâ€targeted mice. EMBO Journal, 2018, 37, 427-445.	7.8	54
81	Cold sensing by Na _V 1.8-positive and Na _V 1.8-negative sensory neurons. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 3811-3816.	7.1	52
82	Deletion of Annexin 2 Light Chain p11 in Nociceptors Causes Deficits in Somatosensory Coding and Pain Behavior. Journal of Neuroscience, 2006, 26, 10499-10507.	3.6	51
83	Mechanisms of Cold Pain. Channels, 2007, 1, 154-160.	2.8	50
84	Nerve Growth Factor and Pain. New England Journal of Medicine, 2010, 363, 1572-1573.	27.0	50
85	The Genetics of Pain: Implications for Therapeutics. Annual Review of Pharmacology and Toxicology, 2018, 58, 123-142.	9.4	49
86	Botulinum toxinâ€a treatment reduces human mechanical pain sensitivity and mechanotransduction. Annals of Neurology, 2014, 75, 591-596.	5.3	47
87	From plant extract to molecular panacea: a commentary on Stone (1763) â€˜An account of the success of the bark of the willow in the cure of the aguesâ€™. Philosophical Transactions of the Royal Society B: Biological Sciences, 2015, 370, 20140317.	4.0	46
88	Electrophysiological characterization of the tetrodotoxin-resistant Na+ channel, Nav1.9, in mouse dorsal root ganglion neurons. Pflugers Archiv European Journal of Physiology, 2004, 449, 76-87.	2.8	45
89	Voltage-gated sodium channels. Current Opinion in Pharmacology, 2001, 1, 17-21.	3.5	44
90	Identification of binding domains in the sodium channel NaV1.8 intracellular N-terminal region and annexin II light chain p11. FEBS Letters, 2004, 558, 114-118.	2.8	44

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91	Nociceptor-Expressed Ephrin-B2 Regulates Inflammatory and Neuropathic Pain. Molecular Pain, 2010, 6, 1744-8069-6-77.	2.1	43
92	Molecular mechanisms of cold pain. Neurobiology of Pain (Cambridge, Mass), 2020, 7, 100044.	2.5	42
93	A central mechanism of analgesia in mice and humans lacking the sodium channel NaV1.7. Neuron, 2021, 109, 1497-1512.e6.	8.1	42
94	Dorsal Root Ganglia Macrophages Maintain Osteoarthritis Pain. Journal of Neuroscience, 2021, 41, 8249-8261.	3.6	41
95	Sensory neuron proteins interact with the intracellular domains of sodium channel NaV1.8. Molecular Brain Research, 2003, 110, 298-304.	2.3	37
96	Distinct transcriptional responses of mouse sensory neurons in models of human chronic pain conditions. Wellcome Open Research, 2018, 3, 78.	1.8	34
97	Nav 1.8-Null Mice Show Stimulus-Dependent Deficits in Spinal Neuronal Activity. Molecular Pain, 2006, 2, 1744-8069-2-5.	2.1	33
98	A sensory subpopulation depends on vesicular glutamate transporter 2 for mechanical pain, and together with substance P, inflammatory pain. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 5789-5794.	7.1	33
99	A novel human pain insensitivity disorder caused by a point mutation in ZFHX2. Brain, 2018, 141, 365-376.	7.6	32
100	Sodium Channels in Pain and Cancer. Advances in Pharmacology, 2016, 75, 153-178.	2.0	30
101	Pain. Current Opinion in Genetics and Development, 1999, 9, 328-332.	3.3	29
102	Ion Channel Activities Implicated in Pathological Pain. Novartis Foundation Symposium, 2008, , 32-46.	1.1	29
103	The mechanosensitive cell line ND-C does not express functional thermoTRP channels. Neuropharmacology, 2009, 56, 1138-1146.	4.1	28
104	Silent cold-sensing neurons contribute to cold allodynia in neuropathic pain. Brain, 2021, 144, 1711-1726.	7.6	28
105	Regulation of Nav1.7: A Conserved SCN9A Natural Antisense Transcript Expressed in Dorsal Root Ganglia. PLoS ONE, 2015, 10, e0128830.	2.5	28
106	A peripheral nervous system actin-binding protein regulates neurite outgrowth. European Journal of Neuroscience, 2002, 15, 281-290.	2.6	27
107	Effects of Tetrodotoxin in Mouse Models of Visceral Pain. Marine Drugs, 2017, 15, 188.	4.6	27
108	ZBTB20 regulates nociception and pain sensation by modulating TRP channel expression in nociceptive sensory neurons. Nature Communications, 2014, 5, 4984.	12.8	26

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109	The Role of Na_v1.9 Channel in the Development of Neuropathic Orofacial Pain Associated with Trigeminal Neuralgia. Molecular Pain, 2015, 11, s12990-015-0076.	2.1	26
110	Tamoxifenâ€inducible Na_V1.8â€CreERT2 recombinase activity in nociceptive neurons of dorsal root ganglia. Genesis, 2006, 44, 364-371.	1.6	25
111	Sodium Channels and Mammalian Sensory Mechanotransduction. Molecular Pain, 2012, 8, 1744-8069-8-21.	2.1	22
112	Sensory neuronâ€“derived Na _V 1.7 contributes to dorsal horn neuron excitability. Science Advances, 2020, 6, eaax4568.	10.3	22
113	Analgesia linked to Nav1.7 loss of function requires Âµ- and Î´-opioid receptors. Wellcome Open Research, 2018, 3, 101.	1.8	21
114	Noxious mechanosensation â€“ molecules and circuits. Current Opinion in Pharmacology, 2012, 12, 4-8.	3.5	20
115	TRPs and Pain. Handbook of Experimental Pharmacology, 2014, 223, 873-897.	1.8	20
116	II. Genetic approaches to pain therapy. American Journal of Physiology - Renal Physiology, 2000, 278, G507-G512.	3.4	19
117	MicroRNA-1-associated effects of neuron-specific brain-derived neurotrophic factor gene deletion in dorsal root ganglia. Molecular and Cellular Neurosciences, 2016, 75, 36-43.	2.2	19
118	Genetic pain loss disorders. Nature Reviews Disease Primers, 2022, 8, .	30.5	18
119	Splice Variants of NaV1.7 Sodium Channels Have Distinct Î² Subunit-Dependent Biophysical Properties. PLoS ONE, 2012, 7, e41750.	2.5	16
120	Osteoarthritis-related nociceptive behaviour following mechanical joint loading correlates with cartilage damage. Osteoarthritis and Cartilage, 2020, 28, 383-395.	1.3	15
121	Flanking regulatory sequences of the locus encoding the murine GDNF receptor,c-ret, directs lac Z (?-galactosidase) expression in developing somatosensory system. Developmental Dynamics, 2001, 222, 389-402.	1.8	14
122	Ion channel activities implicated in pathological pain. Novartis Foundation Symposium, 2004, 261, 32-40; discussion 40-54.	1.1	13
123	Sodium Channels in Primary Sensory Neurons: Relationship to Pain States. Novartis Foundation Symposium, 2008, , 159-172.	1.1	11
124	Touch. Current Topics in Membranes, 2007, 59, 425-465.	0.9	10
125	Pyramidal cells of rodent presubiculum express a tetrodotoxinâ€insensitive Na⁺ current. Journal of Physiology, 2009, 587, 4249-4264.	2.9	10
126	Inhibition of somatosensory mechanotransduction by annexin A6. Science Signaling, 2018, 11, .	3.6	10

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127	Worm Sensation!. Molecular Pain, 2005, 1, 1744-8069-1-8.	2.1	9
128	No pain, more gain. Nature Genetics, 2013, 45, 1271-1272.	21.4	9
129	Sodium channels: from mechanisms to medicines?. Brain Research Bulletin, 1999, 50, 309-310.	3.0	8
130	Tools for analysis and conditional deletion of subsets of sensory neurons. Wellcome Open Research, 2021, 6, 250.	1.8	8
131	Chapter 5 Molecular mechanisms of nociception and pain. Handbook of Clinical Neurology / Edited By P J Vinken and G W Bruyn, 2006, 81, 49-59.	1.8	7
132	Null mutation in <i>SCN9A</i> in which noxious stimuli can be detected in the absence of pain. Neurology, 2014, 83, 1577-1580.	1.1	7
133	Sodium channels. Brain and Neuroscience Advances, 2018, 2, 239821281881068.	3.4	7
134	Calcium imaging for analgesic drug discovery. Neurobiology of Pain (Cambridge, Mass), 2022, 11, 100083.	2.5	7
135	Sodium channels in primary sensory neurons: relationship to pain states. Novartis Foundation Symposium, 2002, 241, 159-68; discussion 168-72, 226-32.	1.1	7
136	From transduction to pain sensation: Defining genes, cells, and circuits. Pain, 2011, 152, S16-S19.	4.2	6
137	Somatosensation a la mode: plasticity and polymodality in sensory neurons. Current Opinion in Physiology, 2019, 11, 29-34.	1.8	6
138	Sensitization of Cutaneous Primary Afferents in Bone Cancer Revealed by In Vivo Calcium Imaging. Cancers, 2020, 12, 3491.	3.7	6
139	Physiologic osteoclasts are not sufficient to induce skeletal pain in mice. European Journal of Pain, 2021, 25, 199-212.	2.8	5
140	Molecules that specify modality: Mechanisms of nociception. Journal of Pain, 2000, 1, 19-25.	1.4	3
141	Pain, purines and Geoff. Autonomic Neuroscience: Basic and Clinical, 2021, 237, 102902.	2.8	2
142	Glycine at the Gateâ€"from Model to Mechanism. Neuron, 2015, 85, 1152-1154.	8.1	1
143	Ligand-gated cation channels of sensory neurons. Biochemical Society Transactions, 1997, 25, 536S-536S.	3.4	0
144	Sodium Channels. , 2008, , 89-95.		0