Stephen G Waxman

List of Publications by Year in Descending Order

569 papers	37,174 citations	106 h-index	162 g-index
606 ext. papers	41,030 ext. citations	7 avg, IF	7.54 L-index

#	Paper	IF	Citations
569	iPSCs and DRGs: stepping stones to new pain therapies.. *Trends in Molecular Medicine*, **2021**,	11.5	3
568	Two independent mouse lines carrying the Nav1.7 I228M gain-of-function variant display dorsal root ganglion neuron hyperexcitability but a minimal pain phenotype. *Pain*, **2021**, 162, 1758-1770	8	5
567	Paclitaxel increases axonal localization and vesicular trafficking of Nav1.7. *Brain*, **2021**, 144, 1727-1737	11.2	6
566	Hydropathicity-based prediction of pain-causing NaV1.7 variants. *BMC Bioinformatics*, **2021**, 22, 212	3.6	0
565	Intravenous infusion of auto serum-expanded autologous mesenchymal stem cells in spinal cord injury patients: 13 case series. *Clinical Neurology and Neurosurgery*, **2021**, 203, 106565	2	9
564	Conditional RAC1 knockout in motor neurons restores H-reflex rate-dependent depression after spinal cord injury. *Scientific Reports*, **2021**, 11, 7838	4.9	1
563	Human cells and networks of pain: Transforming pain target identification and therapeutic development. *Neuron*, **2021**, 109, 1426-1429	13.9	18
562	A Buthus martensii Karsch scorpion sting targets Nav1.7 in mice and mimics a phenotype of human chronic pain. *Pain*, **2021**,	8	1
561	Mini-review - Sodium channels and beyond in peripheral nerve disease: Modulation by cytokines and their effector protein kinases. *Neuroscience Letters*, **2021**, 741, 135446	3.3	5
560	Core principles for the implementation of the neurodata without borders data standard. *Journal of Neuroscience Methods*, **2021**, 348, 108972	3	1
559	variants and pain modulation: a missense variant in Kv7.3 contributes to pain resilience. *Brain Communications*, **2021**, 3, fcab212	4.5	0
558	Non-extensitivity and criticality of atomic hydropathicity around a voltage-gated sodium channel's pore: a modeling study. *Journal of Biological Physics*, **2021**, 47, 61-77	1.6	1
557	A novel gain-of-function sodium channel β2 subunit mutation in idiopathic small fiber neuropathy. *Journal of Neurophysiology*, **2021**, 126, 827-839	3.2	1
556	Hominini-specific regulation of CBLN2 increases prefrontal spinogenesis. *Nature*, **2021**, 598, 489-494	50.4	5
555	Trigeminal Neuralgia TRPM8 Mutation: Enhanced Activation, Basal [Ca] and Menthol Response. *Neurology: Genetics*, **2021**, 7, e550	3.8	3
554	Congenital Insensitivity to Pain: A Case Report With Corneal Esthesiometry and In Vivo Confocal Microscopy. *Cornea*, **2021**, 40, 1610-1613	3.1	1
553	Lacosamide Inhibition of Na1.7 Channels Depends on its Interaction With the Voltage Sensor Domain and the Channel Pore.. *Frontiers in Pharmacology*, **2021**, 12, 791740	5.6	1

552	Contributions of Na1.8 and Na1.9 to excitability in human induced pluripotent stem-cell derived somatosensory neurons.. *Scientific Reports*, **2021**, 11, 24283	4.9	1
551	Dendritic Spine Dynamics after Peripheral Nerve Injury: An Intravital Structural Study. *Journal of Neuroscience*, **2020**, 40, 4297-4308	6.6	4
550	Pharmacological characterization of a rat Nav1.7 loss-of-function model with insensitivity to pain. *Pain*, **2020**, 161, 1350-1360	8	9
549	Pharmacological activity and NMR solution structure of the leech peptide HSTX-I. *Biochemical Pharmacology*, **2020**, 181, 114082	6	
548	Familial trigeminal neuralgia - a systematic clinical study with a genomic screen of the neuronal electrogenisome. *Cephalalgia*, **2020**, 40, 767-777	6.1	21
547	A 49-residue sequence motif in the C terminus of Nav1.9 regulates trafficking of the channel to the plasma membrane. *Journal of Biological Chemistry*, **2020**, 295, 1077-1090	5.4	6
546	Differential effect of lacosamide on Nav1.7 variants from responsive and non-responsive patients with small fibre neuropathy. *Brain*, **2020**, 143, 771-782	11.2	14
545	Rational Drug Design for Pain Medicine: A New Nav1.7 Inhibitor. *Anesthesiology*, **2020**, 133, 497-499	4.3	
544	A 49-residue sequence motif in the C terminus of Nav1.9 regulates trafficking of the channel to the plasma membrane. *Journal of Biological Chemistry*, **2020**, 295, 1077-1090	5.4	3
543	The small fiber neuropathy NaV1.7 I228M mutation: impaired neurite integrity via bioenergetic and mitotoxic mechanisms, and protection by dexpramipexole. *Journal of Neurophysiology*, **2020**, 123, 645-657	3.2	3
542	Dexpramipexole blocks Nav1.8 sodium channels and provides analgesia in multiple nociceptive and neuropathic pain models. *Pain*, **2020**, 161, 831-841	8	13
541	Exome Sequencing Implicates Impaired GABA Signaling and Neuronal Ion Transport in Trigeminal Neuralgia. *IScience*, **2020**, 23, 101552	6.1	10
540	Computational pipeline to probe NaV1.7 gain-of-function variants in neuropathic painful syndromes. *Scientific Reports*, **2020**, 10, 17930	4.9	1
539	Genomic analysis of 21 patients with corneal neuralgia after refractive surgery. *Pain Reports*, **2020**, 5, e826	3.5	4
538	Status of peripheral sodium channel blockers for non-addictive pain treatment. *Nature Reviews Neurology*, **2020**, 16, 689-705	15	24
537	Evaluation of molecular inversion probe versus TruSeq custom methods for targeted next-generation sequencing. *PLoS ONE*, **2020**, 15, e0238467	3.7	6
536	Sodium channel Nav1.6 in sensory neurons contributes to vincristine-induced allodynia. *Brain*, **2020**, 143, 2421-2436	11.2	11
535	Sodium Channels and Pain **2020**, 232-262		

534	Measurement of axonal excitability: Consensus guidelines. *Clinical Neurophysiology*, **2020**, 131, 308-323	4.3	31
533	Resilience to Stress and Resilience to Pain: Lessons from Molecular Neurobiology and Genetics. *Trends in Molecular Medicine*, **2020**, 26, 924-935	11.5	1
532	Cumulative hydropathic topology of a voltage-gated sodium channel at atomic resolution. *Proteins: Structure, Function and Bioinformatics*, **2020**, 88, 1319-1328	4.2	2
531	Building sensory axons: Delivery and distribution of Na1.7 channels and effects of inflammatory mediators. *Science Advances*, **2019**, 5, eaax4755	14.3	21
530	Sodium Channels in Human Pain Disorders: Genetics and Pharmacogenomics. *Annual Review of Neuroscience*, **2019**, 42, 87-106	17	43
529	Fibroblast growth factor homologous factor 2 (FGF-13) associates with Nav1.7 in DRG neurons and alters its current properties in an isoform-dependent manner. *Neurobiology of Pain (Cambridge, Mass)*, **2019**, 6, 100029	4	9
528	Na 1.6 regulates excitability of mechanosensitive sensory neurons. *Journal of Physiology*, **2019**, 597, 3751-3768	3.9	16
527	A gain-of-function sodium channel β-subunit mutation in painful diabetic neuropathy. *Molecular Pain*, **2019**, 15, 1744806919849802	3.4	28
526	Restoration of brain circulation and cellular functions hours post-mortem. *Nature*, **2019**, 568, 336-343	50.4	95
525	The Two Sides of Na1.7: Painful and Painless Channelopathies. *Neuron*, **2019**, 101, 765-767	13.9	6
524	The Role of Voltage-Gated Sodium Channels in Pain Signaling. *Physiological Reviews*, **2019**, 99, 1079-1151	47.9	199
523	A Novel Gain-of-Function Nav1.9 Mutation in a Child With Episodic Pain. *Frontiers in Neuroscience*, **2019**, 13, 918	5.1	9
522	Spinal cord motor neuron plasticity accompanies second-degree burn injury and chronic pain. *Physiological Reports*, **2019**, 7, e14288	2.6	3
521	Pointer-kindreds and pain: big lessons from small families. *Pain*, **2019**, 160 Suppl 1, S49-S52	8	
520	Small-fiber neuropathy: Expanding the clinical pain universe. *Journal of the Peripheral Nervous System*, **2019**, 24, 19-33	4.7	36
519	Pediatric Erythromelalgia and SCN9A Mutations: Systematic Review and Single-Center Case Series. *Journal of Pediatrics*, **2019**, 206, 217-224.e9	3.6	10
518	Resilience to Pain: A Peripheral Component Identified Using Induced Pluripotent Stem Cells and Dynamic Clamp. *Journal of Neuroscience*, **2019**, 39, 382-392	6.6	37
517	Lacosamide in patients with Nav1.7 mutations-related small fibre neuropathy: a randomized controlled trial. *Brain*, **2019**, 142, 263-275	11.2	54

516	Expression of pathogenic SCN9A mutations in the zebrafish: A model to study small-fiber neuropathy. *Experimental Neurology*, **2019**, 311, 257-264	5.7	11
515	Yield of peripheral sodium channels gene screening in pure small fibre neuropathy. *Journal of Neurology, Neurosurgery and Psychiatry*, **2019**, 90, 342-352	5.5	25
514	Conditional knockout of Na1.6 in adult mice ameliorates neuropathic pain. *Scientific Reports*, **2018**, 8, 3845	4.9	41
513	Brain activity associated with pain in inherited erythromelalgia: stimulus-free pain engages brain areas involved in valuation and learning. *Neurobiology of Pain (Cambridge, Mass)*, **2018**, 3, 8-14	4	
512	Atypical changes in DRG neuron excitability and complex pain phenotype associated with a Na1.7 mutation that massively hyperpolarizes activation. *Scientific Reports*, **2018**, 8, 1811	4.9	10
511	Na1.7 as a Pharmacogenomic Target for Pain: Moving Toward Precision Medicine. *Trends in Pharmacological Sciences*, **2018**, 39, 258-275	13.2	37
510	Reverse pharmacogenomics: carbamazepine normalizes activation and attenuates thermal hyperexcitability of sensory neurons due to Na 1.7 mutation I234T. *British Journal of Pharmacology*, **2018**, 175, 2261-2271	8.6	20
509	Loss-of-function mutations of SCN10A encoding Na1.8 subunit of voltage-gated sodium channel in patients with human kidney stone disease. *Scientific Reports*, **2018**, 8, 10453	4.9	3
508	Multiple myosin motors interact with sodium/potassium-ATPase alpha 1 subunits. *Molecular Brain*, **2018**, 11, 45	4.5	8
507	The Novel Activity of Carbamazepine as an Activation Modulator Extends from Na1.7 Mutations to the Na1.8-S242T Mutant Channel from a Patient with Painful Diabetic Neuropathy. *Molecular Pharmacology*, **2018**, 94, 1256-1269	4.3	15
506	Characterization of small fiber pathology in a mouse model of Fabry disease. *ELife*, **2018**, 7,	8.9	27
505	Detection of local and remote cellular damage caused by spinal cord and peripheral nerve injury using a heat shock signaling reporter system. *IBRO Reports*, **2018**, 5, 91-98	2	6
504	A novel gain-of-function Na1.7 mutation in a carbamazepine-responsive patient with adult-onset painful peripheral neuropathy. *Molecular Pain*, **2018**, 14, 1744806918815007	3.4	6
503	Nav1.5 in astrocytes plays a sex-specific role in clinical outcomes in a mouse model of multiple sclerosis. *Glia*, **2018**, 66, 2174-2187	9	6
502	Somatosensory Neurons Enter a State of Altered Excitability during Hibernation. *Current Biology*, **2018**, 28, 2998-3004.e3	6.3	7
501	Nav1.7 is phosphorylated by Fyn tyrosine kinase which modulates channel expression and gating in a cell type-dependent manner. *Molecular Pain*, **2018**, 14, 1744806918782229	3.4	9
500	Nonmuscle myosin II isoforms interact with sodium channel alpha subunits. *Molecular Pain*, **2018**, 14, 1744806918788638	3.4	6
499	Therapeutic potential of Pak1 inhibition for pain associated with cutaneous burn injury. *Molecular Pain*, **2018**, 14, 1744806918788648	3.4	8

498	Differential aging-related changes in neurophysiology and gene expression in IB4-positive and IB4-negative nociceptive neurons. *Aging Cell*, **2018**, 17, e12795	9.9	6
497	Pharmacological characterisation of the highly Na1.7 selective spider venom peptide Pn3a. *Scientific Reports*, **2017**, 7, 40883	4.9	90
496	COL6A5 variants in familial neuropathic chronic itch. *Brain*, **2017**, 140, 555-567	11.2	17
495	Detection of vulnerable neurons damaged by environmental insults in utero. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 2367-2372	11.5	13
494	Familial gain-of-function Na1.9 mutation in a painful channelopathy. *Journal of Neurology, Neurosurgery and Psychiatry*, **2017**, 88, 233-240	5.5	36
493	Safety and efficacy of a Nav1.7 selective sodium channel blocker in patients with trigeminal neuralgia: a double-blind, placebo-controlled, randomised withdrawal phase 2a trial. *Lancet Neurology, The*, **2017**, 16, 291-300	24.1	103
492	Network topology of NaV1.7 mutations in sodium channel-related painful disorders. *BMC Systems Biology*, **2017**, 11, 28	3.5	24
491	Gain-of-function mutation of a voltage-gated sodium channel Na1.7 associated with peripheral pain and impaired limb development. *Journal of Biological Chemistry*, **2017**, 292, 9262-9272	5.4	15
490	Sodium channels in pain disorders: pathophysiology and prospects for treatment. *Pain*, **2017**, 158 Suppl 1, S97-S107	8	45
489	Nonlinear effects of hyperpolarizing shifts in activation of mutant Na1.7 channels on resting membrane potential. *Journal of Neurophysiology*, **2017**, 117, 1702-1712	3.2	6
488	Dendritic spine dysgenesis in superficial dorsal horn sensory neurons after spinal cord injury. *Molecular Pain*, **2017**, 13, 1744806916688016	3.4	18
487	Mechanism of inhibition by chlorpromazine of the human pain threshold sodium channel, Na1.7. *Neuroscience Letters*, **2017**, 639, 1-7	3.3	3
486	Ode to Glia: A Tribute to Bruce Ransom. *Neurochemical Research*, **2017**, 42, 2442	4.6	
485	Between fire and ice: refractory hypothermia and warmth-induced pain in inherited erythromelalgia. *BMJ Case Reports*, **2017**, 2017,	0.9	5
484	Sodium channel NaV1.9 mutations associated with insensitivity to pain dampen neuronal excitability. *Journal of Clinical Investigation*, **2017**, 127, 2805-2814	15.9	42
483	The AMPK Activator A769662 Blocks Voltage-Gated Sodium Channels: Discovery of a Novel Pharmacophore with Potential Utility for Analgesic Development. *PLoS ONE*, **2017**, 12, e0169882	3.7	13
482	Nav1.7-A1632G Mutation from a Family with Inherited Erythromelalgia: Enhanced Firing of Dorsal Root Ganglia Neurons Evoked by Thermal Stimuli. *Journal of Neuroscience*, **2016**, 36, 7511-22	6.6	43
481	Pharmacological reversal of a pain phenotype in iPSC-derived sensory neurons and patients with inherited erythromelalgia. *Science Translational Medicine*, **2016**, 8, 335ra56	17.5	121

480	A painful neuropathy-associated Nav1.7 mutant leads to time-dependent degeneration of small-diameter axons associated with intracellular Ca2+ dysregulation and decrease in ATP levels. *Molecular Pain*, **2016**, 12,	3.4	14
479	Inherited erythromelalgia due to mutations in SCN9A: natural history, clinical phenotype and somatosensory profile. *Brain*, **2016**, 139, 1052-65	11.2	53
478	Sodium channel Nav1.8: Emerging links to human disease. *Neurology*, **2016**, 86, 473-83	6.5	59
477	Voltage-Gated Ion Channels as Molecular Targets for Pain **2016**, 415-436		1
476	A gain-of-function mutation in Nav1.6 in a case of trigeminal neuralgia. *Molecular Medicine*, **2016**, 22, 338-348	6.2	76
475	Subtype-Selective Small Molecule Inhibitors Reveal a Fundamental Role for Nav1.7 in Nociceptor Electrogenesis, Axonal Conduction and Presynaptic Release. *PLoS ONE*, **2016**, 11, e0152405	3.7	108
474	Sodium channels in astroglia and microglia. *Glia*, **2016**, 64, 1628-45	9	45
473	Dendritic spine remodeling following early and late Rac1 inhibition after spinal cord injury: evidence for a pain biomarker. *Journal of Neurophysiology*, **2016**, 115, 2893-910	3.2	26
472	A SCN10A SNP biases human pain sensitivity. *Molecular Pain*, **2016**, 12,	3.4	22
471	Pharmacotherapy for Pain in a Family With Inherited Erythromelalgia Guided by Genomic Analysis and Functional Profiling. *JAMA Neurology*, **2016**, 73, 659-67	17.2	56
470	Sodium Channels, Mitochondria, and Axonal Degeneration in Peripheral Neuropathy. *Trends in Molecular Medicine*, **2016**, 22, 377-390	11.5	35
469	Dendritic spine dysgenesis contributes to hyperreflexia after spinal cord injury. *Journal of Neurophysiology*, **2015**, 113, 1598-615	3.2	31
468	NaV1.9: a sodium channel linked to human pain. *Nature Reviews Neuroscience*, **2015**, 16, 511-9	13.5	126
467	Human Na(v)1.8: enhanced persistent and ramp currents contribute to distinct firing properties of human DRG neurons. *Journal of Neurophysiology*, **2015**, 113, 3172-85	3.2	57
466	The Domain II S4-S5 Linker in Nav1.9: A Missense Mutation Enhances Activation, Impairs Fast Inactivation, and Produces Human Painful Neuropathy. *NeuroMolecular Medicine*, **2015**, 17, 158-69	4.6	55
465	Destruction of paranodal architecture in inflammatory neuropathy with anti-contactin-1 autoantibodies. *Journal of Neurology, Neurosurgery and Psychiatry*, **2015**, 86, 720-8	5.5	115
464	Neurology--the next 10 years. *Nature Reviews Neurology*, **2015**, 11, 658-64	15	6
463	Dendritic spine dysgenesis in neuropathic pain. *Neuroscience Letters*, **2015**, 601, 54-60	3.3	18

462	Sodium channel Nav1.7 in vascular myocytes, endothelium, and innervating axons in human skin. *Molecular Pain*, **2015**, 11, 26	3.4	21
461	Diversity of composition and function of sodium channels in peripheral sensory neurons. *Pain*, **2015**, 156, 2406-7	8	14
460	Oral administration of PF-01247324, a subtype-selective Nav1.8 blocker, reverses cerebellar deficits in a mouse model of multiple sclerosis. *PLoS ONE*, **2015**, 10, e0119067	3.7	11
459	Preferential targeting of Nav1.6 voltage-gated Na+ Channels to the axon initial segment during development. *PLoS ONE*, **2015**, 10, e0124397	3.7	43
458	Contactin-1 and Neurofascin-155/-186 Are Not Targets of Auto-Antibodies in Multifocal Motor Neuropathy. *PLoS ONE*, **2015**, 10, e0134274	3.7	13
457	Virus-Mediated Knockdown of Nav1.3 in Dorsal Root Ganglia of STZ-Induced Diabetic Rats Alleviates Tactile Allodynia. *Molecular Medicine*, **2015**, 21, 544-52	6.2	52
456	De novo gain-of-function and loss-of-function mutations of SCN8A in patients with intellectual disabilities and epilepsy. *Journal of Medical Genetics*, **2015**, 52, 330-7	5.8	99
455	Painful peripheral neuropathy and sodium channel mutations. *Neuroscience Letters*, **2015**, 596, 51-9	3.3	55
454	Regulating excitability of peripheral afferents: emerging ion channel targets. *Nature Neuroscience*, **2014**, 17, 153-63	25.5	265
453	Voltage-gated sodium channel Nav 1.5 contributes to astrogliosis in an in vitro model of glial injury via reverse Na+ /Ca2+ exchange. *Glia*, **2014**, 62, 1162-75	9	55
452	Contribution of sodium channels to lamellipodial protrusion and Rac1 and ERK1/2 activation in ATP-stimulated microglia. *Glia*, **2014**, 62, 2080-95	9	24
451	Neuropathic pain in two-generation twins carrying the sodium channel Nav1.7 functional variant R1150W. *Pain*, **2014**, 155, 2199-203	8	10
450	The role of sodium channels in painful diabetic and idiopathic neuropathy. *Current Diabetes Reports*, **2014**, 14, 538	5.6	26
449	Sodium channel genes in pain-related disorders: phenotype-genotype associations and recommendations for clinical use. *Lancet Neurology, The*, **2014**, 13, 1152-1160	24.1	121
448	The G1662S NaV1.8 mutation in small fibre neuropathy: impaired inactivation underlying DRG neuron hyperexcitability. *Journal of Neurology, Neurosurgery and Psychiatry*, **2014**, 85, 499-505	5.5	61
447	Channelopathies, painful neuropathy, and diabetes: which way does the causal arrow point?. *Trends in Molecular Medicine*, **2014**, 20, 544-50	11.5	30
446	Gain-of-function mutations in sodium channel Na(v)1.9 in painful neuropathy. *Brain*, **2014**, 137, 1627-42	11.2	194
445	Characterization of a de novo SCN8A mutation in a patient with epileptic encephalopathy. *Epilepsy Research*, **2014**, 108, 1511-8	3	76

444	Paroxysmal itch caused by gain-of-function Nav1.7 mutation. *Pain*, **2014**, 155, 1702-1707	8	66
443	A novel de novo mutation of SCN8A (Nav1.6) with enhanced channel activation in a child with epileptic encephalopathy. *Neurobiology of Disease*, **2014**, 69, 117-23	7.5	81
442	Dynamic-clamp analysis of wild-type human Nav1.7 and erythromelalgia mutant channel L858H. *Journal of Neurophysiology*, **2014**, 111, 1429-43	3.2	46
441	Decreased resting functional connectivity after traumatic brain injury in the rat. *PLoS ONE*, **2014**, 9, e95280	3.7	46
440	Translational pain research: Lessons from genetics and genomics. *Science Translational Medicine*, **2014**, 6, 249sr4	17.5	37
439	Depolarized inactivation overcomes impaired activation to produce DRG neuron hyperexcitability in a Nav1.7 mutation in a patient with distal limb pain. *Journal of Neuroscience*, **2014**, 34, 12328-40	6.6	18
438	Painful neuropathies: the emerging role of sodium channelopathies. *Journal of the Peripheral Nervous System*, **2014**, 19, 53-65	4.7	68
437	Dynamics of sodium channel Nav1.5 expression in astrocytes in mouse models of multiple sclerosis. *NeuroReport*, **2014**, 25, 1208-15	1.7	13
436	Altered sodium channel gating as molecular basis for pain: contribution of activation, inactivation, and resurgent currents. *Handbook of Experimental Pharmacology*, **2014**, 221, 91-110	3.2	35
435	Approach to Small Fiber Neuropathy **2014**, 507-517		2
434	Painful Na-channelopathies: an expanding universe. *Trends in Molecular Medicine*, **2013**, 19, 406-9	11.5	48
433	Sodium channels contribute to degeneration of dorsal root ganglion neurites induced by mitochondrial dysfunction in an in vitro model of axonal injury. *Journal of Neuroscience*, **2013**, 33, 19250-61	6.6	48
432	Correlation of Nav1.8 and Nav1.9 sodium channel expression with neuropathic pain in human subjects with lingual nerve neuromas. *Molecular Pain*, **2013**, 9, 52	3.4	18
431	NaV1.7: stress-induced changes in immunoreactivity within magnocellular neurosecretory neurons of the supraoptic nucleus. *Molecular Pain*, **2013**, 9, 39	3.4	20
430	Small-fiber neuropathy Nav1.8 mutation shifts activation to hyperpolarized potentials and increases excitability of dorsal root ganglion neurons. *Journal of Neuroscience*, **2013**, 33, 14087-97	6.6	84
429	The Na(V)1.7 sodium channel: from molecule to man. *Nature Reviews Neuroscience*, **2013**, 14, 49-62	13.5	374
428	Noncanonical roles of voltage-gated sodium channels. *Neuron*, **2013**, 80, 280-91	13.9	132
427	Differential effect of D623N variant and wild-type Na(v)1.7 sodium channels on resting potential and interspike membrane potential of dorsal root ganglion neurons. *Brain Research*, **2013**, 1529, 165-77	3.7	13

426	Wound-healing growth factor, basic FGF, induces Erk1/2-dependent mechanical hyperalgesia. *Pain*, **2013**, 154, 2216-2226	8	27
425	Burn injury-induced mechanical allodynia is maintained by Rac1-regulated dendritic spine dysgenesis. *Experimental Neurology*, **2013**, 248, 509-19	5.7	25
424	A new Nav1.7 mutation in an erythromelalgia patient. *Biochemical and Biophysical Research Communications*, **2013**, 432, 99-104	3.4	19
423	The response of Na(V)1.3 sodium channels to ramp stimuli: multiple components and mechanisms. *Journal of Neurophysiology*, **2013**, 109, 306-14	3.2	24
422	Axonal Protection with Sodium Channel Blocking Agents in Models of Multiple Sclerosis **2013**, 179-201		
421	Nav1.5 sodium channels in macrophages in multiple sclerosis lesions. *Multiple Sclerosis Journal*, **2013**, 19, 532-42	5	22
420	Virus-mediated shRNA knockdown of Na(v)1.3 in rat dorsal root ganglion attenuates nerve injury-induced neuropathic pain. *Molecular Therapy*, **2013**, 21, 49-56	11.7	82
419	Neuropathy-associated Nav1.7 variant I228M impairs integrity of dorsal root ganglion neuron axons. *Annals of Neurology*, **2013**, 73, 140-5	9.4	44
418	Multistate structural modeling and voltage-clamp analysis of epilepsy/autism mutation Kv10.2-R327H demonstrate the role of this residue in stabilizing the channel closed state. *Journal of Neuroscience*, **2013**, 33, 16586-93	6.6	30
417	Molecular architecture of a sodium channel S6 helix: radial tuning of the voltage-gated sodium channel 1.7 activation gate. *Journal of Biological Chemistry*, **2013**, 288, 13741-7	5.4	20
416	Screening fluorescent voltage indicators with spontaneously spiking HEK cells. *PLoS ONE*, **2013**, 8, e85231	3.7	48
415	Gain of function Na1.7 mutations in idiopathic small fiber neuropathy. *Annals of Neurology*, **2012**, 71, 26-39	9.4	375
414	A channelopathy contributes to cerebellar dysfunction in a model of multiple sclerosis. *Annals of Neurology*, **2012**, 71, 186-94	9.4	37
413	Structural modelling and mutant cycle analysis predict pharmacoresponsiveness of a Na(V)1.7 mutant channel. *Nature Communications*, **2012**, 3, 1186	17.4	77
412	Mesenchymal stem cells: therapeutic outlook for stroke. *Trends in Molecular Medicine*, **2012**, 18, 292-7	11.5	129
411	Sodium channel slow inactivation and adaptation in C-fibres. *Journal of Physiology*, **2012**, 590, 1513-4	3.9	4
410	Sodium channels, the electrogenisome and the electrogenistat: lessons and questions from the clinic. *Journal of Physiology*, **2012**, 590, 2601-12	3.9	27
409	Small-fibre neuropathies--advances in diagnosis, pathophysiology and management. *Nature Reviews Neurology*, **2012**, 8, 369-79	15	148

408	Diagnosis of neuropathic pain: challenges and possibilities. *Expert Opinion on Medical Diagnostics*, **2012**, 6, 89-93		9
407	Nav1.8 expression is not restricted to nociceptors in mouse peripheral nervous system. *Pain*, **2012**, 153, 2017-2030	8	170
406	Expression of Nav1.7 in DRG neurons extends from peripheral terminals in the skin to central preterminal branches and terminals in the dorsal horn. *Molecular Pain*, **2012**, 8, 82	3.4	125
405	De novo pathogenic SCN8A mutation identified by whole-genome sequencing of a family quartet affected by infantile epileptic encephalopathy and SUDEP. *American Journal of Human Genetics*, **2012**, 90, 502-10	11	297
404	Spinal cord injury, dendritic spine remodeling, and spinal memory mechanisms. *Experimental Neurology*, **2012**, 235, 142-51	5.7	56
403	Sodium channels and microglial function. *Experimental Neurology*, **2012**, 234, 302-15	5.7	46
402	Membrane properties and electrogenesis in the distal axons of small dorsal root ganglion neurons in vitro. *Journal of Neurophysiology*, **2012**, 108, 729-40	3.2	40
401	Extraterritorial temperature pain threshold abnormalities in subjects with healed thermal injury. *Journal of Rehabilitation Research and Development*, **2012**, 49, 515-22		10
400	Interaction of voltage-gated sodium channel Nav1.6 (SCN8A) with microtubule-associated protein Map1b. *Journal of Biological Chemistry*, **2012**, 287, 18459-66	5.4	29
399	Functional profiles of SCN9A variants in dorsal root ganglion neurons and superior cervical ganglion neurons correlate with autonomic symptoms in small fibre neuropathy. *Brain*, **2012**, 135, 2613-28	11.2	82
398	Small nerve fibres, small hands and small feet: a new syndrome of pain, dysautonomia and acromesomelia in a kindred with a novel NaV1.7 mutation. *Brain*, **2012**, 135, 345-58	11.2	62
397	Interview: Pathways to discovery: making the translational leap. *Pain Management*, **2012**, 2, 117-8	2.3	
396	Gain-of-function Nav1.8 mutations in painful neuropathy. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 19444-9	11.5	292
395	An ankyrinG-binding motif is necessary and sufficient for targeting Nav1.6 sodium channels to axon initial segments and nodes of Ranvier. *Journal of Neuroscience*, **2012**, 32, 7232-43	6.6	95
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