Viktorie Vlachova

List of Publications by Year in Descending Order

62 papers	1,918 citations	24 h-index	42 g-index
69 ext. papers	2,152 ext. citations	4.8 avg, IF	4.35 L-index

#	Paper	IF	Citations
62	Odontoblast TRPC5 channels signal cold pain in teeth. *Science Advances*, **2021**, 7,	14.3	12
61	Transient receptor potential ankyrin 1 channel: An evolutionarily tuned thermosensor. *Physiological Research*, **2021**, 70, 363-381	2.1	0
60	Structural mechanism of heat-induced opening of a temperature-sensitive TRP channel. *Nature Structural and Molecular Biology*, **2021**, 28, 564-572	17.6	19
59	Proximal C-Terminus Serves as a Signaling Hub for TRPA1 Channel Regulation via Its Interacting Molecules and Supramolecular Complexes. *Frontiers in Physiology*, **2020**, 11, 189	4.6	8
58	Cytoplasmic Inter-Subunit Interface Controls Use-Dependence of Thermal Activation of TRPV3 Channel. *International Journal of Molecular Sciences*, **2019**, 20,	6.3	8
57	Putative interaction site for membrane phospholipids controls activation of TRPA1 channel at physiological membrane potentials. *FEBS Journal*, **2019**, 286, 3664-3683	5.7	8
56	Human and Mouse TRPA1 Are Heat and Cold Sensors Differentially Tuned by Voltage. *Cells*, **2019**, 9,	7.9	17
55	Intracellular cavity of sensor domain controls allosteric gating of TRPA1 channel. *Science Signaling*, **2018**, 11,	8.8	21
54	Heat-resistant action potentials require TTX-resistant sodium channels Na1.8 and Na1.9. *Journal of General Physiology*, **2018**, 150, 1125-1144	3.4	10
53	Acute exposure to high-induction electromagnetic field affects activity of model peripheral sensory neurons. *Journal of Cellular and Molecular Medicine*, **2018**, 22, 1355-1362	5.6	12
52	The human transient receptor potential vanilloid 3 channel is sensitized via the ERK pathway. *Journal of Biological Chemistry*, **2017**, 292, 21083-21091	5.4	1
51	The First Extracellular Linker Is Important for Several Aspects of the Gating Mechanism of Human TRPA1 Channel. *Frontiers in Molecular Neuroscience*, **2017**, 10, 16	6.1	13
50	Molecular basis of TRPA1 regulation in nociceptive neurons. A review. *Physiological Research*, **2017**, 66, 425-439	2.1	31
49	N-terminal tetrapeptide T/SPLH motifs contribute to multimodal activation of human TRPA1 channel. *Scientific Reports*, **2016**, 6, 28700	4.9	15
48	Comprehensive thermal preference phenotyping in mice using a novel automated circular gradient assay. *Temperature*, **2016**, 3, 77-91	5.2	14
47	Interaction of a peptide derived from C-terminus of human TRPA1 channel with model membranes mimicking the inner leaflet of the plasma membrane. *Biochimica Et Biophysica Acta - Biomembranes*, **2015**, 1848, 1147-56	3.8	7
46	Structural modeling and patch-clamp analysis of pain-related mutation TRPA1-N855S reveal inter-subunit salt bridges stabilizing the channel open state. *Neuropharmacology*, **2015**, 93, 294-307	5.5	17

45	Protons stabilize the closed conformation of gain-of-function mutants of the TRPV1 channel. *Biochimica Et Biophysica Acta - Molecular Cell Research*, **2013**, 1833, 520-8	4.9	14
44	Amplified cold transduction in native nociceptors by M-channel inhibition. *Journal of Neuroscience*, **2013**, 33, 16627-41	6.6	33
43	Pore helix domain is critical to camphor sensitivity of transient receptor potential vanilloid 1 channel. *Anesthesiology*, **2012**, 116, 903-17	4.3	11
42	Ciguatoxins activate specific cold pain pathways to elicit burning pain from cooling. *EMBO Journal*, **2012**, 31, 3795-808	13	89
41	C-terminal acidic cluster is involved in Ca2+-induced regulation of human transient receptor potential ankyrin 1 channel. *Journal of Biological Chemistry*, **2012**, 287, 18067-77	5.4	34
40	A "cute" desensitization of TRPV1. *Current Pharmaceutical Biotechnology*, **2011**, 12, 122-9	2.6	60
39	The C-terminal basic residues contribute to the chemical- and voltage-dependent activation of TRPA1. *Biochemical Journal*, **2011**, 433, 197-204	3.8	31
38	Conserved residues within the putative S4-S5 region serve distinct functions among thermosensitive vanilloid transient receptor potential (TRPV) channels. *Journal of Biological Chemistry*, **2010**, 285, 41455-62	5.4	50
37	Essential role for the putative S6 inner pore region in the activation gating of the human TRPA1 channel. *Biochimica Et Biophysica Acta - Molecular Cell Research*, **2009**, 1793, 1279-88	4.9	19
36	Ethanol inhibits cold-menthol receptor TRPM8 by modulating its interaction with membrane phosphatidylinositol 4,5-bisphosphate. *Journal of Neurochemistry*, **2007**, 100, 211-24	6	50
35	Contribution of the putative inner-pore region to the gating of the transient receptor potential vanilloid subtype 1 channel (TRPV1). *Journal of Neuroscience*, **2007**, 27, 7578-85	6.6	49
34	Functional changes in the vanilloid receptor subtype 1 channel during and after acute desensitization. *Neuroscience*, **2007**, 149, 144-54	3.9	48
33	ATP binding site on the C-terminus of the vanilloid receptor. *Archives of Biochemistry and Biophysics* , **2007**, 465, 389-98	4.1	13
32	Reducing and oxidizing agents sensitize heat-activated vanilloid receptor (TRPV1) current. *Molecular Pharmacology*, **2006**, 70, 383-94	4.3	88
31	Improved superfusion technique for rapid cooling or heating of cultured cells under patch-clamp conditions. *Journal of Neuroscience Methods*, **2006**, 151, 178-85	3	68
30	Gadolinium activates and sensitizes the vanilloid receptor TRPV1 through the external protonation sites. *Molecular and Cellular Neurosciences*, **2005**, 30, 207-17	4.8	51
29	Oxidizing reagent copper-o-phenanthroline is an open channel blocker of the vanilloid receptor TRPV1. *Neuropharmacology*, **2004**, 47, 273-85	5.5	22
28	Intracellular spermine decreases open probability of N-methyl-D-aspartate receptor channels. *Neuroscience*, **2004**, 125, 879-87	3.9	19

27	Vanilloid receptor TRPV1 is not activated by vanilloids applied intracellularly. *NeuroReport*, **2003**, 14, 1061-1065	1.7	10
26	Vanilloid receptor TRPV1 is not activated by vanilloids applied intracellularly. *NeuroReport*, **2003**, 14, 1061-5	1.7	28
25	Functional role of C-terminal cytoplasmic tail of rat vanilloid receptor 1. *Journal of Neuroscience*, **2003**, 23, 1340-50	6.6	161
24	The effects of excessive heat on heat-activated membrane currents in cultured dorsal root ganglia neurons from neonatal rat. *Pain*, **2002**, 95, 207-214	8	13
23	Reducing agent dithiothreitol facilitates activity of the capsaicin receptor VR-1. *Neuroscience*, **2002**, 111, 435-41	3.9	34
22	Modelling the consequences of receptor-G-protein promiscuity. *Trends in Pharmacological Sciences*, **2002**, 23, 171-6	13.2	30
21	The effects of capsaicin and acidity on currents generated by noxious heat in cultured neonatal rat dorsal root ganglion neurones. *Journal of Physiology*, **2001**, 533, 717-28	3.9	21
20	Dual effects of muscarinic M2 receptors on the synthesis of cyclic AMP in CHO cells: background and model. *Life Sciences*, **2001**, 68, 2501-10	6.8	11
19	Molecular and functional properties of synaptically activated NMDA receptors in neonatal motoneurons in rat spinal cord slices. *European Journal of Neuroscience*, **2000**, 12, 955-63	3.5	24
18	Axotomy-induced change in the properties of (S)-alpha-amino-3-hydroxy-5-methyl-4-isoxazolepropionate receptor channels in rat motoneurons. *Neuroscience*, **2000**, 99, 119-31	3.9	4
17	Temperature coefficient of membrane currents induced by noxious heat in sensory neurones in the rat. *Journal of Physiology*, **1999**, 517 (Pt 1), 181-92	3.9	77
16	Procaine excites nociceptors in cultures from dorsal root ganglion of the rat. *Neuroscience Letters*, **1999**, 263, 49-52	3.3	6
15	Properties of NMDA receptors in rat spinal cord motoneurons. *European Journal of Neuroscience*, **1999**, 11, 827-36	3.5	36
14	A technique for fast application of heated solutions of different composition to cultured neurones. *Journal of Neuroscience Methods*, **1998**, 82, 195-201	3	69
13	Inflammatory mediators at acidic pH activate capsaicin receptors in cultured sensory neurons from newborn rats. *Journal of Neurophysiology*, **1998**, 79, 670-6	3.2	93
12	Spontaneous openings of NMDA receptor channels in cultured rat hippocampal neurons. *European Journal of Neuroscience*, **1997**, 9, 1999-2008	3.5	18
11	Copper modulation of NMDA responses in mouse and rat cultured hippocampal neurons. *European Journal of Neuroscience*, **1996**, 8, 2257-64	3.5	81
10	G-protein modulation of glycine-resistant NMDA receptor desensitization in rat cultured hippocampal neurons. *European Journal of Neuroscience*, **1995**, 7, 1826-30	3.5	4

9	Membrane currents induced by L-homocysteic acid in mouse cultured hippocampal neurons. *Neuroscience*, **1992**, 48, 813-9	3.9	1
8	The effect of external pH changes on responses to excitatory amino acids in mouse hippocampal neurones. *Journal of Physiology*, **1990**, 430, 497-517	3.9	132
7	Single K+ currents during differentiation of embryonic muscle cells in vitro. *Biochimica Et Biophysica Acta - Biomembranes*, **1989**, 986, 146-50	3.8	2
6	Glutamine-induced membrane currents in cultured chick spinal cord neurons. *Neuroscience Letters*, **1988**, 90, 333-7	3.3	4
5	The action of excitatory amino acids on chick spinal cord neurones in culture. *Journal of Physiology*, **1987**, 386, 425-38	3.9	44
4	Voltage-dependent chloride channels with several substates in excised patches from mouse neuroblastoma cells. *Neuroscience Letters*, **1987**, 77, 298-302	3.3	18
3	Evidence that excitatory amino acids not only activate the receptor channel complex but also lead to use-dependent block. *Brain Research*, **1986**, 363, 148-51	3.7	24
2	Ionic currents in neuroblastoma clone E-7 cells. *Neuroscience Letters*, **1985**, 55, 197-201	3.3	2
1	Cobalt ions block L-glutamate and L-aspartate-induced currents in cultured neurons from embryonic chick spinal cord. *Neuroscience Letters*, **1985**, 61, 345-50	3.3	4