

# Joris Vriens

## List of Publications by Year in descending order

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103  
papers

10,534  
citations

66234

42  
h-index

49773

87  
g-index

110  
all docs

110  
docs citations

110  
times ranked

9696  
citing authors

#	ARTICLE	IF	CITATIONS
1	Anandamide and arachidonic acid use epoxyeicosatrienoic acids to activate TRPV4 channels. <i>Nature</i> , 2003, 424, 434-438.	13.7	895
2	Heat-evoked Activation of TRPV4 Channels in a HEK293 Cell Expression System and in Native Mouse Aorta Endothelial Cells. <i>Journal of Biological Chemistry</i> , 2002, 277, 47044-47051.	1.6	580
3	Cell swelling, heat, and chemical agonists use distinct pathways for the activation of the cation channel TRPV4. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004, 101, 396-401.	3.3	561
4	Activation of TRPV4 Channels (hVRL-2/mTRP12) by Phorbol Derivatives. <i>Journal of Biological Chemistry</i> , 2002, 277, 13569-13577.	1.6	519
5	Inhibition of the Glycolytic Activator PFKFB3 in Endothelium Induces Tumor Vessel Normalization, Impairs Metastasis, and Improves Chemotherapy. <i>Cancer Cell</i> , 2016, 30, 968-985.	7.7	464
6	TRPM3 Is a Nociceptor Channel Involved in the Detection of Noxious Heat. <i>Neuron</i> , 2011, 70, 482-494.	3.8	454
7	TRPV4 calcium entry channel: a paradigm for gating diversity. <i>American Journal of Physiology - Cell Physiology</i> , 2004, 286, C195-C205.	2.1	401
8	Pharmacology of Vanilloid Transient Receptor Potential Cation Channels. <i>Molecular Pharmacology</i> , 2009, 75, 1262-1279.	1.0	366
9	Inhibition of the cation channel TRPV4 improves bladder function in mice and rats with cyclophosphamide-induced cystitis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 19084-19089.	3.3	351
10	Modulation of the Ca <sup>2+</sup> Permeable Cation Channel TRPV4 by Cytochrome P450 Epoxygenases in Vascular Endothelium. <i>Circulation Research</i> , 2005, 97, 908-915.	2.0	334
11	A TRP channel trio mediates acute noxious heat sensing. <i>Nature</i> , 2018, 555, 662-666.	13.7	329
12	Peripheral thermosensation in mammals. <i>Nature Reviews Neuroscience</i> , 2014, 15, 573-589.	4.9	304
13	Deletion of the transient receptor potential cation channel TRPV4 impairs murine bladder voiding. <i>Journal of Clinical Investigation</i> , 2007, 117, 3453-3462.	3.9	283
14	Patient-derived organoids from endometrial disease capture clinical heterogeneity and are amenable to drug screening. <i>Nature Cell Biology</i> , 2019, 21, 1041-1051.	4.6	281
15	Molecular Determinants of Permeation through the Cation Channel TRPV4. <i>Journal of Biological Chemistry</i> , 2002, 277, 33704-33710.	1.6	270
16	TRPV4-Mediated Calcium Influx Regulates Terminal Differentiation of Osteoclasts. <i>Cell Metabolism</i> , 2008, 8, 257-265.	7.2	260
17	THE CONCISE GUIDE TO PHARMACOLOGY 2019/20: Ion channels. <i>British Journal of Pharmacology</i> , 2019, 176, S142-S228.	2.7	242
18	Role of Caveolar Compartmentation in Endothelium-Derived Hyperpolarizing Factor-Mediated Relaxation. <i>Circulation</i> , 2008, 117, 1065-1074.	1.6	202

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19	THE CONCISE GUIDE TO PHARMACOLOGY 2021/22: Ion channels. British Journal of Pharmacology, 2021, 178, S157-S245.	2.7	187
20	Mutations in the Gene Encoding the Calcium-Permeable Ion Channel TRPV4 Produce Spondylometaphyseal Dysplasia, Kozlowski Type and Metatropic Dysplasia. American Journal of Human Genetics, 2009, 84, 307-315.	2.6	173
21	Role of cytochrome P450-dependent transient receptor potential V4 activation in flow-induced vasodilatation. Cardiovascular Research, 2008, 80, 445-452.	1.8	165
22	TRPM1 Forms Ion Channels Associated with Melanin Content in Melanocytes. Science Signaling, 2009, 2, ra21.	1.6	164
23	The "headache tree"™ via umbellulone and TRPA1 activates the trigeminovascular system. Brain, 2012, 135, 376-390.	3.7	163
24	Herbal Compounds and Toxins Modulating TRP Channels. Current Neuropharmacology, 2008, 6, 79-96.	1.4	155
25	Functional characterization of transient receptor potential channels in mouse urothelial cells. American Journal of Physiology - Renal Physiology, 2010, 298, F692-F701.	1.3	135
26	The TRPV4 channel: structure-function relationship and promiscuous gating behaviour. Pflugers Archiv European Journal of Physiology, 2003, 446, 298-303.	1.3	132
27	A novel function of capsaicin-sensitive TRPV1 channels: Involvement in cell migration. Cell Calcium, 2007, 42, 17-25.	1.1	129
28	Determinants of $4\beta$ -Phorbol Sensitivity in Transmembrane Domains 3 and 4 of the Cation Channel TRPV4. Journal of Biological Chemistry, 2007, 282, 12796-12803.	1.6	119
29	The Sensory Coding of Warm Perception. Neuron, 2020, 106, 830-841.e3.	3.8	119
30	Modulation of TRPV4 gating by intra- and extracellular $Ca^{2+}$ . Cell Calcium, 2003, 33, 489-495.	1.1	118
31	Activation of TRPM3 by a potent synthetic ligand reveals a role in peptide release. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E1363-72.	3.3	105
32	TRPV channels and modulation by hepatocyte growth factor/scatter factor in human hepatoblastoma (HepG2) cells. Cell Calcium, 2004, 36, 19-28.	1.1	103
33	Citral Sensing by TRANSient Receptor Potential Channels in Dorsal Root Ganglion Neurons. PLoS ONE, 2008, 3, e2082.	1.1	101
34	Dominant <i>TRPV4</i> mutations in nonlethal and lethal metatropic dysplasia. American Journal of Medical Genetics, Part A, 2010, 152A, 1169-1177.	0.7	93
35	Opening of an alternative ion permeation pathway in a nociceptor TRP channel. Nature Chemical Biology, 2014, 10, 188-195.	3.9	86
36	Cholesterol loss during glutamate-mediated excitotoxicity. EMBO Journal, 2012, 31, 1764-1773.	3.5	83

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37	Regulation of the transient receptor potential channel TRPM3 by phosphoinositides. <i>Journal of General Physiology</i> , 2015, 146, 51-63.	0.9	62
38	TRPM3 in temperature sensing and beyond. <i>Temperature</i> , 2015, 2, 201-213.	1.7	58
39	TRP Channel Cooperation for Nociception: Therapeutic Opportunities. <i>Annual Review of Pharmacology and Toxicology</i> , 2021, 61, 655-677.	4.2	54
40	Invertebrate TRP proteins as functional models for mammalian channels. <i>Pflügers Archiv European Journal of Physiology</i> , 2004, 449, 213-26.	1.3	49
41	Vascular Hypoxic Preconditioning Relies on TRPV4-Dependent Calcium Influx and Proper Intercellular Gap Junctions Communication. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2012, 32, 2241-2249.	1.1	49
42	High-resolution contrast-enhanced microCT reveals the true three-dimensional morphology of the murine placenta. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 13927-13936.	3.3	47
43	VAMP7 regulates constitutive membrane incorporation of the cold-activated channel TRPM8. <i>Nature Communications</i> , 2016, 7, 10489.	5.8	44
44	TRP channel pores and local calcium signals. <i>Cell Calcium</i> , 2017, 66, 19-24.	1.1	42
45	Isolation of Mouse Endometrial Epithelial and Stromal Cells for &em&gt;In Vitro&/em&gt; Decidualization. <i>Journal of Visualized Experiments</i> , 2017, , .	0.2	41
46	TRPV1 is involved in stretch-evoked contractile changes in the rat autonomous bladder model: a study with piperine, a new TRPV1 agonist. <i>Neurourology and Urodynamics</i> , 2007, 26, 440-450.	0.8	37
47	Functional expression of transient receptor potential channels in human endometrial stromal cells during the luteal phase of the menstrual cycle. <i>Human Reproduction</i> , 2015, 30, 1421-1436.	0.4	37
48	Functional expression of the mechanosensitive PIEZO1 channel in primary endometrial epithelial cells and endometrial organoids. <i>Scientific Reports</i> , 2019, 9, 1779.	1.6	36
49	Sensing the heat with TRPM3. <i>Pflügers Archiv European Journal of Physiology</i> , 2018, 470, 799-807.	1.3	33
50	Urine of Preterm Neonates as a Novel Source of Kidney Progenitor Cells. <i>Journal of the American Society of Nephrology: JASN</i> , 2016, 27, 2762-2770.	3.0	32
51	Functional expression and pharmacological modulation of TRPM3 in human sensory neurons. <i>British Journal of Pharmacology</i> , 2020, 177, 2683-2695.	2.7	32
52	Gain of channel function and modified gating properties in TRPM3 mutants causing intellectual disability and epilepsy. <i>ELife</i> , 2020, 9, .	2.8	32
53	TRPV4 participates in the establishment of trailing adhesions and directional persistence of migrating cells. <i>Pflügers Archiv European Journal of Physiology</i> , 2015, 467, 2107-2119.	1.3	31
54	Mutations in the voltage-sensing domain affect the alternative ion permeation pathway in the TRPM3 channel. <i>Journal of Physiology</i> , 2018, 596, 2413-2432.	1.3	29

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55	Definition of two agonist types at the mammalian cold-activated channel TRPM8. <i>ELife</i> , 2016, 5, .	2.8	25
56	Upregulation of TRPM3 in nociceptors innervating inflamed tissue. <i>ELife</i> , 2020, 9, .	2.8	23
57	TRPV4 is associated with central rather than nephrogenic osmoregulation. <i>Pflugers Archiv European Journal of Physiology</i> , 2016, 468, 1595-1607.	1.3	21
58	Double-label immunohistochemistry to assess labyrinth structure of the mouse placenta with stereology. <i>Placenta</i> , 2020, 94, 44-47.	0.7	21
59	The functional expression of transient receptor potential channels in the mouse endometrium. <i>Human Reproduction</i> , 2017, 32, 615-630.	0.4	20
60	Targeting TRP Channels – Valuable Alternatives to Combat Pain, Lower Urinary Tract Disorders, and Type 2 Diabetes?. <i>Trends in Pharmacological Sciences</i> , 2019, 40, 669-683.	4.0	20
61	Establishing life is a calcium-dependent TRiP: Transient receptor potential channels in reproduction. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , 2018, 1865, 1815-1829.	1.9	17
62	Heat sensing involves a <sc>TR</sc> family of ion channels. <i>British Journal of Pharmacology</i> , 2019, 176, 3893-3898.	2.7	17
63	TRPV1 dysfunction in cystinosis patients harboring the homozygous 57â€%kb deletion. <i>Scientific Reports</i> , 2016, 6, 35395.	1.6	15
64	Transient Receptor Potential Channels in the Epithelial-to-Mesenchymal Transition. <i>International Journal of Molecular Sciences</i> , 2021, 22, 8188.	1.8	14
65	Transient receptor potential channel regulation by growth factors. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , 2021, 1868, 118950.	1.9	13
66	Functional Expression of TRP Ion Channels in Endometrial Stromal Cells of Endometriosis Patients. <i>International Journal of Molecular Sciences</i> , 2018, 19, 2467.	1.8	12
67	Mimicking Sampsonâ€™s Retrograde Menstrual Theory in Rats: A New Rat Model for Ongoing Endometriosis-Associated Pain. <i>International Journal of Molecular Sciences</i> , 2020, 21, 2326.	1.8	12
68	Mapping the expression of transient receptor potential channels across murine placental development. <i>Cellular and Molecular Life Sciences</i> , 2021, 78, 4993-5014.	2.4	12
69	Testing of iatrogenic lingual nerve injury using a novel psychophysical method and oral reflexes. <i>International Journal of Oral and Maxillofacial Surgery</i> , 2007, 36, 545-549.	0.7	11
70	Optimization of Endometrial Decidualization in the Menstruating Mouse Model for Preclinical Endometriosis Research. <i>Reproductive Sciences</i> , 2018, 25, 1577-1588.	1.1	10
71	Pharmacological properties of TRPM3 isoforms are determined by the length of the pore loop. <i>British Journal of Pharmacology</i> , 2020, .	2.7	10
72	Signature and Pathophysiology of Non-canonical Pores in Voltage-Dependent Cation Channels. <i>Reviews of Physiology, Biochemistry and Pharmacology</i> , 2016, 170, 67-99.	0.9	9

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73	Laparoscopic Surgery: A New Technique to Induce Endometriosis in a Mouse Model. <i>Reproductive Sciences</i> , 2016, 23, 1332-1339.	1.1	9
74	Reply to: Heat detection by the TRPM2 ion channel. <i>Nature</i> , 2020, 584, E13-E15.	13.7	9
75	The TRPM3 ion channel mediates nociception but not itch evoked by endogenous pruritogenic mediators. <i>Biochemical Pharmacology</i> , 2021, 183, 114310.	2.0	9
76	TRP channel expression correlates with the epithelial-to-mesenchymal transition and high-risk endometrial carcinoma. <i>Cellular and Molecular Life Sciences</i> , 2022, 79, 1.	2.4	9
77	Phenotypic spectrum of the recurrent <i>TRPM3</i> p.(Val837Met) substitution in seven individuals with global developmental delay and hypotonia. <i>American Journal of Medical Genetics, Part A</i> , 2022, 188, 1667-1675.	0.7	8
78	Transient Receptor Potential channels (version 2019.4) in the IUPHAR/BPS Guide to Pharmacology Database. <i>IUPHAR/BPS Guide To Pharmacology CITE</i> , 2019, 2019, .	0.2	7
79	Partial Agonistic Actions of Sex Hormone Steroids on TRPM3 Function. <i>International Journal of Molecular Sciences</i> , 2021, 22, 13652.	1.8	6
80	Of Mice and Women: A Laparoscopic Mouse Model for Endometriosis. <i>Journal of Minimally Invasive Gynecology</i> , 2018, 25, 578-579.	0.3	5
81	Horizontal Hippocampal Slices of the Mouse Brain. <i>Journal of Visualized Experiments</i> , 2020, , .	0.2	3
82	Loratadine, an antihistaminic drug, suppresses the proliferation of endometrial stromal cells by inhibition of TRPV2. <i>European Journal of Pharmacology</i> , 2022, 928, 175086.	1.7	3
83	63 TRPV4 IS LOCALISED ON UROTHELIUM: DOES IT PLAY A ROLE IN AFFERENT BLADDER SIGNALLING?. <i>European Urology Supplements</i> , 2007, 6, 38.	0.1	2
84	Urine-Derived Kidney Progenitor Cells in Cystinosis. <i>Cells</i> , 2022, 11, 1245.	1.8	2
85	Cellular Regulation of Transient Receptor Potential Melastatin 3 (TRPM3) Channel Activity. <i>Biophysical Journal</i> , 2014, 106, 334a.	0.2	1
86	Transient Receptor Potential channels (TRP) in GtoPdb v.2021.3. <i>IUPHAR/BPS Guide To Pharmacology CITE</i> , 2021, 2021, .	0.2	1
87	TRPV1 ACTS AS A LOCAL STRETCH-SENSING MOLECULE IN RAT BLADDER. <i>European Urology Supplements</i> , 2006, 5, 799.	0.1	0
88	Clotrimazole Potentiates TRPM3 Responses to Pregnenolone Sulfate. <i>Biophysical Journal</i> , 2010, 98, 341a.	0.2	0
89	821 HC-067047, A TRPV4-SELECTIVE ANTAGONIST, IMPROVES BLADDER FUNCTION IN MICE WITH CYCLOPHOSPHAMIDE-INDUCED CYSTITIS. <i>European Urology Supplements</i> , 2011, 10, 260.	0.1	0
90	Transient Receptor Potential Melastatin 3 Channel. <i>Biophysical Journal</i> , 2011, 100, 109a.	0.2	0

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91	Pore and Gating Properties of TRPM3 Isoforms. Biophysical Journal, 2012, 102, 342a.	0.2	0
92	TRPM3 - A Promising Target for Analgesic Treatment. Biophysical Journal, 2014, 106, 754a.	0.2	0
93	Species-Dependent Effects of Mustard Oil on TRPM8. Biophysical Journal, 2014, 106, 337a.	0.2	0
94	Novel TRPM3 Agonist - Single Compound Opens Multiple Ion Permeation Pathways. Biophysical Journal, 2014, 106, 334a.	0.2	0
95	Functional Analysis of the Thermosensor TRPM3 in Intact Sensory Fibers Using the Skin-Nerve Assay. Biophysical Journal, 2015, 108, 283a.	0.2	0
96	An Alternative Ion Permeation Pathway in the TRPM3 <sup>Δ1</sup> Isoform?. Biophysical Journal, 2015, 108, 282a-283a.	0.2	0
97	Biophysical Properties of the Alternative Ion Permeation Pore in TRPM3. Biophysical Journal, 2015, 108, 283a.	0.2	0
98	Further Evidence of an Alternative Ion Permeation Pathway in the Nociceptor TRPM3. Biophysical Journal, 2016, 110, 612a.	0.2	0
99	A cellular pathway controlling functional plasma membrane incorporation of the cold sensor TRPM8. Temperature, 2016, 3, 521-523.	1.7	0
100	Localization of an Alternative Ion Permeation Pathway in TRPM3. Biophysical Journal, 2017, 112, 466a.	0.2	0
101	Molecular Determinants of the Trafficking of the Cold-activated Transient Receptor Potential Ion Channel Trpm8. FASEB Journal, 2015, 29, 845.5.	0.2	0
102	In vivo and ex vivo imaging of nociceptor expression and activity. Journal of Cellular Neuroscience and Oxidative Stress, 2019, 11, 3-3.	0.1	0
103	Transient Receptor Potential channels (TRP) in GtoPdb v.2022.1. IUPHAR/BPS Guide To Pharmacology CITE, 2022, 2022, .	0.2	0