Trese Leinders-Zufall

List of Publications by Year
in descending order

89 papers	7,336 citations	66343 42 h-index	62596 80 g-index
94 all docs	94 docs citations	94 times ranked	4443 citing authors

#	Article	IF	Citations
1	Ultrasensitive pheromone detection by mammalian vomeronasal neurons. Nature, 2000, 405, 792-796.	27.8	557
2	MHC Class I Peptides as Chemosensory Signals in the Vomeronasal Organ. Science, 2004, 306, 1033-1037.	12.6	546
3	Altered sexual and social behaviors in trp2 mutant mice. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 6376-6381.	7.1	516
4	Deficient pheromone responses in mice lacking a cluster of vomeronasal receptor genes. Nature, 2002, 419, 70-74.	27.8	338
5	A Diacylglycerol-Gated Cation Channel in Vomeronasal Neuron Dendrites Is Impaired in TRPC2 Mutant Mice. Neuron, 2003, 40, 551-561.	8.1	295
6	Essential Role of the Main Olfactory System in Social Recognition of Major Histocompatibility Complex Peptide Ligands. Journal of Neuroscience, 2006, 26, 1961-1970.	3.6	275
7	Loss-of-function mutations in sodium channel Nav1.7 cause anosmia. Nature, 2011, 472, 186-190.	27.8	267
8	Subsystem Organization of the Mammalian Sense of Smell. Annual Review of Physiology, 2009, 71, 115-140.	13.1	263
9	The Cellular and Molecular Basis of Odor Adaptation. Chemical Senses, 2000, 25, 473-481.	2.0	260
10	Retinal ganglion cells express a cGMP-gated cation conductance activatable by nitric oxide donors. Neuron, 1994, 12, 155-165.	8.1	237
11	Contribution of the receptor guanylyl cyclase GC-D to chemosensory function in the olfactory epithelium. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 14507-14512.	7.1	199
12	G protein GÎ±o is essential for vomeronasal function and aggressive behavior in mice. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 12898-12903.	7.1	159
13	An Olfactory Subsystem that Detects Carbon Disulfide and Mediates Food-Related Social Learning. Current Biology, 2010, 20, 1438-1444.	3.9	151
14	Calcium Entry through Cyclic Nucleotide-Gated Channels in Individual Cilia of Olfactory Receptor Cells: Spatiotemporal Dynamics. Journal of Neuroscience, 1997, 17, 4136-4148.	3.6	146
15	Imaging Odor-Induced Calcium Transients in Single Olfactory Cilia: Specificity of Activation and Role in Transduction. Journal of Neuroscience, 1998, 18, 5630-5639.	3.6	144
16	Innate Predator Odor Aversion Driven by Parallel Olfactory Subsystems that Converge in the Ventromedial Hypothalamus. Current Biology, 2015, 25, 1340-1346.	3.9	138
17	From genes to social communication: molecular sensing by the vomeronasal organ. Trends in Neurosciences, 2012, 35, 597-606.	8.6	136
18	Central Role of the CNGA4 Channel Subunit in Ca2+-Calmodulin-Dependent Odor Adaptation. Science, 2001, 294, 2172-2175.	12.6	124

#	Article	IF	Citations
19	Signaling in the Chemosensory Systems. Cellular and Molecular Life Sciences, 2006, 63, 1476-1484.	5.4	120
20	Structural requirements for the activation of vomeronasal sensory neurons by MHC peptides. Nature Neuroscience, 2009, 12, 1551-1558.	14.8	120
21	Pheromonal recognition memory induced by TRPC2-independent vomeronasal sensing. European Journal of Neuroscience, 2006, 23, 3385-3390.	2.6	107
22	Genetic Identification of GnRH Receptor Neurons: A New Model for Studying Neural Circuits Underlying Reproductive Physiology in the Mouse Brain. Endocrinology, 2011, 152, 1515-1526.	2.8	104
23	Identification of a Long-Lasting Form of Odor Adaptation that Depends on the Carbon Monoxide/cGMP SecondMessenger System. Journal of Neuroscience, 1997, 17, 2703-2712.	3.6	97
24	A calcium-permeable cGMP-activated cation conductance in hippocampal neurons. NeuroReport, 1995, 6, 1761-1765.	1.2	88
25	Mammalian pheromone sensing. Current Opinion in Neurobiology, 2007, 17, 483-489.	4.2	84
26	Impaired Odor Adaptation in Olfactory Receptor Neurons after Inhibition of Ca2+/Calmodulin Kinase II. Journal of Neuroscience, 1999, 19, RC19-RC19.	3.6	82
27	Mouse urinary peptides provide a molecular basis for genotype discrimination by nasal sensory neurons. Nature Communications, 2013, 4, 1616.	12.8	81
28	A Family of Nonclassical Class I MHC Genes Contributes to Ultrasensitive Chemodetection by Mouse Vomeronasal Sensory Neurons. Journal of Neuroscience, 2014, 34, 5121-5133.	3.6	79
29	Regulation of cyclic nucleotide-gated channels and membrane excitability in olfactory receptor cells by carbon monoxide. Journal of Neurophysiology, 1995, 74, 1498-1508.	1.8	75
30	Amplification of Odor-Induced Ca²⁺ Transients by Store-Operated Ca²⁺ Release and Its Role in Olfactory Signal Transduction. Journal of Neurophysiology, 2000, 83, 501-512.	1.8	75
31	Neurobiology of TRPC2: from gene to behavior. Pflugers Archiv European Journal of Physiology, 2005, 451, 61-71.	2.8	70
32	Newborn Interneurons in the Accessory Olfactory Bulb Promote Mate Recognition in Female Mice. Frontiers in Neuroscience, 2011, 5, 113.	2.8	65
33	Blocking Adenylyl Cyclase Inhibits Olfactory Generator Currents Induced by â€œIP3-Odorsâ€• Journal of Neurophysiology, 2000, 84, 575-580.	1.8	63
34	Pheromone detection by mammalian vomeronasal neurons. Microscopy Research and Technique, 2002, 58, 251.	2.2	63
35	Chemosensory Cell-Derived Acetylcholine Drives Tracheal Mucociliary Clearance in Response to Virulence-Associated Formyl Peptides. Immunity, 2020, 52, 683-699.e11.	14.3	63
36	Ca²⁺â€“Calmodulin Feedback Mediates Sensory Adaptation and Inhibits Pheromone-Sensitive Ion Channels in the Vomeronasal Organ. Journal of Neuroscience, 2009, 29, 2125-2135.	3.6	60

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37	Block of cyclic nucleotide-gated channels in salamander olfactory receptor neurons by the guanylyl cyclase inhibitor LY83583. Journal of Neurophysiology, 1995, 74, 2759-2762.	1.8	58
38	A wide range of pheromone-stimulated sexual and reproductive behaviors in female mice depend on G protein GÎ±o. BMC Biology, 2014, 12, 31.	3.8	56
39	Ca2+ Extrusion by NCX Is Compromised in Olfactory Sensory Neurons of OMPâ^'/â^' Mice. PLoS ONE, 2009, 4, e4260.	2.5	55
40	Grueneberg Ganglion Neurons Are Finely Tuned Cold Sensors. Journal of Neuroscience, 2010, 30, 7563-7568.	3.6	54
41	Central role of G protein GÎ±i2 and GÎ±i2 ⁺ vomeronasal neurons in balancing territorial and infant-directed aggression of male mice. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 5135-5143.	7.1	51
42	PhoDAGs Enable Optical Control of Diacylglycerol-Sensitive Transient Receptor Potential Channels. Cell Chemical Biology, 2018, 25, 215-223.e3.	5.2	47
43	Single Ca2+-activated k+ channels in human erythrocytes: Ca2+ dependence of opening frequency but not of open lifetimes. Biochimica Et Biophysica Acta - Biomembranes, 1992, 1112, 67-74.	2.6	46
44	A Sensor for Low Environmental Oxygen in the Mouse Main Olfactory Epithelium. Neuron, 2016, 92, 1196-1203.	8.1	45
45	Pregnancy and estrogen enhance neural progenitor-cell proliferation in the vomeronasal sensory epithelium. BMC Biology, 2015, 13, 104.	3.8	42
46	Patch-Clamp Analysis of Gene-Targeted Vomeronasal Neurons Expressing a Defined V1r or V2r Receptor: Ionic Mechanisms Underlying Persistent Firing. Journal of Neurophysiology, 2007, 98, 2357-2369.	1.8	38
47	Strain-specific Loss of Formyl Peptide Receptor 3 in the Murine Vomeronasal and Immune Systems. Journal of Biological Chemistry, 2016, 291, 9762-9775.	3.4	38
48	Differential role of two Ca(2+)-permeable non-NMDA glutamate channels in rat retinal ganglion cells: kainate-induced cytoplasmic and nuclear Ca2+ signals. Journal of Neurophysiology, 1994, 72, 2503-2516.	1.8	37
49	Modulation by cyclic GMP of the odour sensitivity of vertebrate olfactory receptor cells. Proceedings of the Royal Society B: Biological Sciences, 1996, 263, 803-811.	2.6	36
50	Signaling mechanisms and behavioral function of the mouse basal vomeronasal neuroepithelium. Frontiers in Neuroanatomy, 2014, 8, 135.	1.7	35
51	Distinct metal ion binding sites on Ca2+-activated K+ channels in inside-out patches of human erythrocytes. Biochimica Et Biophysica Acta - Biomembranes, 1992, 1112, 75-82.	2.6	32
52	Metal interactions with voltage- and receptor-activated ion channels.. Environmental Health Perspectives, 1994, 102, 153-158.	6.0	31
53	Bacterial MgrB peptide activates chemoreceptor Fpr3 in mouse accessory olfactory system and drives avoidance behaviour. Nature Communications, 2019, 10, 4889.	12.8	30
54	Calcium signals in neurons. Nature, 1994, 371, 291-292.	27.8	28

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55	Ovariectomy and subchronic estradiol-17Î² administration decrease dopamine D1 and D2 receptors in rat striatum. Psychoneuroendocrinology, 1989, 14, 469-476.	2.7	26
56	Role of Cyclic GMP in Olfactory Transduction and Adaptationa. Annals of the New York Academy of Sciences, 1998, 855, 199-204.	3.8	26
57	Ca2+ dependence of small Ca2+-activated K+ channels in cultured N1E-115 mouse neuroblastoma cells. Pflugers Archiv European Journal of Physiology, 1992, 422, 223-232.	2.8	24
58	Link Between Pain and Olfaction in an Inherited Sodium Channelopathy. Archives of Neurology, 2012, 69, 1119-23.	4.5	22
59	Trpc5 deficiency causes hypoprolactinemia and altered function of oscillatory dopamine neurons in the arcuate nucleus. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 15236-15243.	7.1	22
60	Cyclic GMP evoked calcium transients in olfactory receptor cell growth cones. NeuroReport, 2000, 11, 677-681.	1.2	19
61	Divalent cations activate small- (SK) and large-conductance (BK) channels in mouse neuroblastoma cells: selective activation of SK channels by cadmium. Pflugers Archiv European Journal of Physiology, 1992, 422, 217-222.	2.8	18
62	Type 3 inositol 1,4,5-trisphosphate receptor is dispensable for sensory activation of the mammalian vomeronasal organ. Scientific Reports, 2017, 7, 10260.	3.3	17
63	Hypothalamic gonadotropin-releasing hormone (GnRH) receptor neurons fire in synchrony with the female reproductive cycle. Journal of Neurophysiology, 2015, 114, 1008-1021.	1.8	14
64	Sensory Detection by the Vomeronasal Organ Modulates Experience-Dependent Social Behaviors in Female Mice. Frontiers in Cellular Neuroscience, 2021, 15, 638800.	3.7	14
65	Danger perception and stress response through an olfactory sensor for the bacterial metabolite hydrogen sulfide. Neuron, 2021, 109, 2469-2484.e7.	8.1	14
66	Differential effects of heavy metal ions on Ca2+-dependent K+ channels. Cellular and Molecular Neurobiology, 1994, 14, 841-857.	3.3	13
67	Functional Analysis of the Guanylyl Cyclase Type D Signaling System in the Olfactory Epithelium. Annals of the New York Academy of Sciences, 2009, 1170, 173-176.	3.8	13
68	Ca2+-activated Clâ^' currents in the murine vomeronasal organ enhance neuronal spiking but are dispensable for maleâ€“male aggression. Journal of Biological Chemistry, 2018, 293, 10392-10403.	3.4	13
69	One Neuron-Multiple Receptors: Increased Complexity in Olfactory Coding?. Science Signaling, 2005, 2005, pe25-pe25.	3.6	11
70	Functional Overexpression of Vomeronasal Receptors Using a Herpes Simplex Virus Type 1 (HSV-1)-Derived Amplicon. PLoS ONE, 2016, 11, e0156092.	2.5	11
71	Visualizing Odor Detection in Olfactory Cilia by Calcium Imaginga. Annals of the New York Academy of Sciences, 1998, 855, 205-207.	3.8	10
72	The action of pyrethroids on sodium channels in myelinated nerve fibres and spinal ganglion cells of the frog. Brain Research, 1989, 482, 324-332.	2.2	8

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73	Studying the biology of cytotoxic T lymphocytes in vivo with a fluorescent granzyme B-mTFP knock-in mouse. ELife, 2020, 9, .	6.0	7
74	BTDAzo: A Photoswitchable TRPC5 Channel Activator**. Angewandte Chemie - International Edition, 2022, 61, .	13.8	7
75	A diacylglycerol photoswitching protocol for studying TRPC channel functions in mammalian cells and tissue slices. STAR Protocols, 2021, 2, 100527.	1.2	6
76	Accessory Olfactory System. , 2008, , 783-814.		3
77	The Electrovomeronasogram: Field Potential Recordings in the Mouse Vomeronasal Organ. Methods in Molecular Biology, 2013, 1068, 221-236.	0.9	3
78	Olfactory Epithelium. , 2009, , 113-118.		2
79	Imaging Calcium Responses in GFP-tagged Neurons of Hypothalamic Mouse Brain Slices. Journal of Visualized Experiments, 2012, , e4213.	0.3	2
80	TRP Channels in Reproductive (Neuro)Endocrinology. Handbook of Experimental Pharmacology, 2014, 223, 1107-1118.	1.8	2
81	Cyclic GMP Signaling in Olfactory Sensory Neurons. , 2016, , 141-155.		1
82	Multiple, distinct actions of metal ions on cellular signaling processes. Materialwissenschaft Und Werkstofftechnik, 2002, 33, 751-755.	0.9	0
83	Guest lecture: â€˜Love at first smell: olfactory neurons with MHC-like peptide binding propertiesâ€™. Experimental Dermatology, 2008, 17, 627-627.	2.9	0
84	Pheromonkommunikation bei MÃusen: Vom Gen zum Verhalten. E-Neuroforum, 2008, 14, 159-165.	0.1	0
85	Vomeronasal Accessory System. , 2009, , 453-459.		0
86	The Sense of Smell: Role of the Olfactory Systems in Detecting Pheromones. , 2016, , 935-960.		0
87	Olfactory Sensory Neurons of the Peripheral Olfactory Systemâ˜†. , 2017, , .		0
88	The Accessory Olfactory Systemâ˜†. , 2017, , .		0
89	The Sense of Smell: Role of the Olfactory Systems in Detecting Pheromones. , 2015, , 1-26.		0