Peter Mombaerts

List of Publications by Year in descending order

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57 papers	7,843 citations	87843 38 h-index	143943 57 g-index
59 all docs	59 docs citations	59 times ranked	4381 citing authors

#	Article	IF	Citations
1	Visualizing an Olfactory Sensory Map. Cell, 1996, 87, 675-686.	13.5	1,825
2	Odorant Receptor Expression Defines Functional Units in the Mouse Olfactory System. Journal of Neuroscience, 2002, 22, 3033-3043.	1.7	363
3	Variable Patterns of Axonal Projections of Sensory Neurons in the Mouse Vomeronasal System. Cell, 1999, 97, 199-208.	13.5	355
4	Structure and Emergence of Specific Olfactory Glomeruli in the Mouse. Journal of Neuroscience, 2001, 21, 9713-9723.	1.7	314
5	A Contextual Model for Axonal Sorting into Glomeruli in the Mouse Olfactory System. Cell, 2004, 117, 817-831.	13.5	298
6	Axonal Wiring in the Mouse Olfactory System. Annual Review of Cell and Developmental Biology, 2006, 22, 713-737.	4.0	284
7	Axon Guidance of Mouse Olfactory Sensory Neurons by Odorant Receptors and the Î²2 Adrenergic Receptor. Cell, 2004, 117, 833-846.	13.5	277
8	Odorant receptor gene choice is reset by nuclear transfer from mouse olfactory sensory neurons. Nature, 2004, 428, 393-399.	13.7	247
9	Visualizing in deceased COVID-19 patients how SARS-CoV-2 attacks the respiratory and olfactory mucosae but spares the olfactory bulb. Cell, 2021, 184, 5932-5949.e15.	13.5	245
10	Minigenes Impart Odorant Receptor-Specific Axon Guidance in the Olfactory Bulb. Neuron, 2002, 35, 681-696.	3.8	223
11	Peripheral Olfactory Projections Are Differentially Affected in Mice Deficient in a Cyclic Nucleotide-Gated Channel Subunit. Neuron, 2000, 26, 81-91.	3.8	218
12	Detection of Near-Atmospheric Concentrations of CO ₂ by an Olfactory Subsystem in the Mouse. Science, 2007, 317, 953-957.	6.0	216
13	Local Permutations in the Glomerular Array of the Mouse Olfactory Bulb. Journal of Neuroscience, 2000, 20, 6927-6938.	1.7	204
14	Specificity of Glomerular Targeting by Olfactory Sensory Axons. Journal of Neuroscience, 2002, 22, 2469-2477.	1.7	180
15	Mapping of Class I and Class II Odorant Receptors to Glomerular Domains by Two Distinct Types of Olfactory Sensory Neurons in the Mouse. Neuron, 2009, 61, 220-233.	3.8	180
16	Combinatorial Coexpression of Neural and Immune Multigene Families in Mouse Vomeronasal Sensory Neurons. Current Biology, 2003, 13, 394-400.	1.8	164
17	Local and cis Effects of the H Element on Expression of Odorant Receptor Genes in Mouse. Cell, 2007, 130, 373-384.	13.5	162
18	Hierarchical deconstruction of mouse olfactory sensory neurons: from whole mucosa to single-cell RNA-seq. Scientific Reports, 2015, 5, 18178.	1.6	148

#	Article	IF	Citations
19	A Divergent Pattern of Sensory Axonal Projections Is Rendered Convergent by Second-Order Neurons in the Accessory Olfactory Bulb. Neuron, 2002, 35, 1057-1066.	3.8	146
20	Odorant responses of olfactory sensory neurons expressing the odorant receptor MOR23: A patch clamp analysis in gene-targeted mice. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 1970-1975.	3.3	142
21	Regulation of the Probability of Mouse Odorant Receptor Gene Choice. Cell, 2011, 147, 907-921.	13.5	124
22	Structural requirements for the activation of vomeronasal sensory neurons by MHC peptides. Nature Neuroscience, 2009, 12, 1551-1558.	7.1	120
23	SR1, a Mouse Odorant Receptor with an Unusually Broad Response Profile. Journal of Neuroscience, 2009, 29, 14545-14552.	1.7	105
24	Protocols for two- and three-color fluorescent RNA in situ hybridization of the main and accessory olfactory epithelia in mouse. Journal of Neurocytology, 2004, 33, 657-669.	1.6	97
25	Expression of Nonclassical Class I Major Histocompatibility Genes Defines a Tripartite Organization of the Mouse Vomeronasal System. Journal of Neuroscience, 2008, 28, 2332-2341.	1.7	80
26	A Family of Nonclassical Class I MHC Genes Contributes to Ultrasensitive Chemodetection by Mouse Vomeronasal Sensory Neurons. Journal of Neuroscience, 2014, 34, 5121-5133.	1.7	79
27	The promoter of the mouse odorant receptor gene M71. Molecular and Cellular Neurosciences, 2005, 28, 535-546.	1.0	75
28	Trpc2-Expressing Sensory Neurons in the Main Olfactory Epithelium of the Mouse. Cell Reports, 2014, 8, 583-595.	2.9	69
29	Linear correlation between the number of olfactory sensory neurons expressing a given mouse odorant receptor gene and the total volume of the corresponding glomeruli in the olfactory bulb. Journal of Comparative Neurology, 2016, 524, 199-209.	0.9	64
30	Differential impact of Lhx2 deficiency on expression of class I and class II odorant receptor genes in mouse. Molecular and Cellular Neurosciences, 2007, 34, 679-688.	1.0	63
31	A transcriptomic atlas of mammalian olfactory mucosae reveals an evolutionary influence on food odor detection in humans. Science Advances, 2019, 5, eaax0396.	4.7	59
32	Small subfamily of olfactory receptor genes: structural features, expression pattern and genomic organization. Gene, 1999, 236, 281-291.	1.0	54
33	Temporal patterns of odorant receptor gene expression in adult and aged mice. Molecular and Cellular Neurosciences, 2013, 57, 120-129.	1.0	54
34	A ventral glomerular deficit in Parkinsonâ€™s disease revealed by whole olfactory bulb reconstruction. Brain, 2017, 140, 2722-2736.	3.7	53
35	Coordinated coexpression of two vomeronasal receptor V2R genes per neuron in the mouse. Molecular and Cellular Neurosciences, 2011, 46, 397-408.	1.0	50
36	Multiplex assessment of the positions of odorant receptor-specific glomeruli in the mouse olfactory bulb by serial two-photon tomography. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E5873-82.	3.3	48

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37	A Sensor for Low Environmental Oxygen in the Mouse Main Olfactory Epithelium. Neuron, 2016, 92, 1196-1203.	3.8	45
38	The role of Olfr78 in the breathing circuit of mice. Nature, 2018, 561, E33-E40.	13.7	43
39	The Zonal Organization of Odorant Receptor Gene Choice in the Main Olfactory Epithelium of the Mouse. Cell Reports, 2020, 30, 4220-4234.e5.	2.9	40
40	Trpc2-expressing sensory neurons in the mouse main olfactory epithelium of type B express the soluble guanylate cyclase Gucy1b2. Molecular and Cellular Neurosciences, 2015, 65, 114-124.	1.0	39
41	Bacterial MgrB peptide activates chemoreceptor Fpr3 in mouse accessory olfactory system and drives avoidance behaviour. Nature Communications, 2019, 10, 4889.	5.8	30
42	Persistence of SARS-CoV-2 RNA in lung tissue after mild COVID-19. Lancet Respiratory Medicine,the, 2021, 9, e78-e79.	5.2	30
43	Expert curation of the human and mouse olfactory receptor gene repertoires identifies conserved coding regions split across two exons. BMC Genomics, 2020, 21, 196.	1.2	28
44	Exclusive transmission of the embryonic stem cellâ€derived genome through the mouse germline. Genesis, 2016, 54, 326-333.	0.8	27
45	The extremely broad odorant response profile of mouse olfactory sensory neurons expressing the odorant receptor MOR256â€17 includes trace amineâ€associated receptor ligands. European Journal of Neuroscience, 2016, 43, 608-617.	1.2	23
46	Efficient derivation of extraembryonic endoderm stem cell lines from mouse postimplantation embryos. Scientific Reports, 2016, 6, 39457.	1.6	21
47	The Î²2-adrenergic receptor as a surrogate odorant receptor in mouse olfactory sensory neurons. Molecular and Cellular Neurosciences, 2014, 58, 1-10.	1.0	18
48	Neuropilin-1 and the Positions of Glomeruli in the Mouse Olfactory Bulb. ENeuro, 2016, 3, ENEURO.0123-16.2016.	0.9	17
49	Odorant receptor gene choice and axonal wiring in mice with deletion mutations in the odorant receptor gene SR1. Molecular and Cellular Neurosciences, 2013, 56, 212-224.	1.0	16
50	Odorant responsiveness of embryonic mouse olfactory sensory neurons expressing the odorant receptors <scp>S</scp>1 or <scp>MOR</scp>23. European Journal of Neuroscience, 2013, 38, 2210-2217.	1.2	14
51	Odorant receptor proteins in the mouse main olfactory epithelium and olfactory bulb. Neuroscience, 2017, 344, 167-177.	1.1	14
52	Danger perception and stress response through an olfactory sensor for the bacterial metabolite hydrogen sulfide. Neuron, 2021, 109, 2469-2484.e7.	3.8	14
53	The testicular soma of Tsc22d3 knockout mice supports spermatogenesis and germline transmission from spermatogonial stem cell lines upon transplantation. Genesis, 2019, 57, e23295.	0.8	12
54	Subpopulations of vomeronasal sensory neurons with coordinated coexpression of type 2 vomeronasal receptor genes are differentially dependent on Vmn2r1. European Journal of Neuroscience, 2018, 47, 887-900.	1.2	10

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55	G-protein coupled receptors Mc4r and Drd1a can serve as surrogate odorant receptors in mouse olfactory sensory neurons. Molecular and Cellular Neurosciences, 2018, 88, 138-147.	1.0	7
56	PDGFRA Is Not Essential for the Derivation and Maintenance of Mouse Extraembryonic Endoderm Stem Cell Lines. Stem Cell Reports, 2017, 9, 1062-1070.	2.3	4
57	Lung donation and SARSâ€CoVâ€2 transmission: Missed detection versus missed opportunity?. Immunity, Inflammation and Disease, 2022, 10, e603.	1.3	4