Jeffrey R Holt

List of Publications by Year
in descending order

54	6,008	136950	149698
papers	citations	32 h-index	56 g-index

59	59	59	4610
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	pH regulates potassium conductance and drives a constitutive proton current in human TMEM175. Science Advances, 2022, 8, eabm1568.	10.3	22
2	Efficient Viral Transduction in Fetal and Adult Human Inner Ear Explants with AAV9-PHP.B Vectors. Biomolecules, 2022, 12, 816.	4.0	4
3	Optimized AAV Vectors for TMC1 Gene Therapy in a Humanized Mouse Model of DFNB7/11. Biomolecules, 2022, 12, 914.	4.0	10
4	Single and Dual Vector Gene Therapy with AAV9-PHP.B Rescues Hearing in Tmc1 Mutant Mice. Molecular Therapy, 2021, 29, 973-988.	8.2	36
5	The Mechanosensory Transduction Machinery in Inner Ear Hair Cells. Annual Review of Biophysics, 2021, 50, 31-51.	10.0	45
6	Neonatal AAV gene therapy rescues hearing in a mouse model of SYNE4 deafness. EMBO Molecular Medicine, 2021, 13, e13259.	6.9	39
7	Putting the Pieces Together: the Hair Cell Transduction Complex. JARO - Journal of the Association for Research in Otolaryngology, 2021, 22, 601-608.	1.8	11
8	Sensory transduction is required for normal development and maturation of cochlear inner hair cell synapses. ELife, 2021, 10, .	6.0	7
9	Dual-vector gene therapy restores cochlear amplification and auditory sensitivity in a mouse model of DFNB16 hearing loss. Science Advances, 2021, 7, eabi7629.	10.3	24
10	Evolution and function of Tmc genes in mammalian hearing. Current Opinion in Physiology, 2020, 18, 11-19.	1.8	9
11	In vivo base editing restores sensory transduction and transiently improves auditory function in a mouse model of recessive deafness. Science Translational Medicine, 2020, 12, .	12.4	114
12	Introduction to the Hearing Research special issue on inner ear gene therapy. Hearing Research, 2020, 394, 108010.	2.0	4
13	Efficient viral transduction in mouse inner ear hair cells with utricle injection and AAV9-PHP.B. Hearing Research, 2020, 394, 107882.	2.0	55
14	Continuous evolution of base editors with expanded target compatibility and improved activity. Nature Biotechnology, 2019, 37, 1070-1079.	17.5	215
15	Allele-specific gene editing prevents deafness in a model of dominant progressive hearing loss. Nature Medicine, 2019, 25, 1123-1130.	30.7	149
16	Increasing the expression level of ChR2 enhances the optogenetic excitability of cochlear neurons. Journal of Neurophysiology, 2019, 122, 1962-1974.	1.8	15
17	Split otoferlins reunited. EMBO Molecular Medicine, 2019, 11, .	6.9	4
18	ImprovedÂTMC1 gene therapy restores hearing and balance in mice with genetic inner ear disorders. Nature Communications, 2019, 10, 236.	12.8	104

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19	Function and Dysfunction of TMC Channels in Inner Ear Hair Cells. Cold Spring Harbor Perspectives in Medicine, 2019, 9, a033506.	6.2	40
20	Treatment of autosomal dominant hearing loss by in vivo delivery of genome editing agents. Nature, 2018, 553, 217-221.	27.8	412
21	Tmc2 expression partially restores auditory function in a mouse model of DFNB7/B11 deafness caused by loss of Tmc1 function. Scientific Reports, 2018, 8, 12125.	3.3	22
22	Transgenic Tmc2 expression preserves inner ear hair cells and vestibular function in mice lacking Tmc1. Scientific Reports, 2018, 8, 12124.	3.3	17
23	TMC1 Forms the Pore of Mechanosensory Transduction Channels in Vertebrate Inner Ear Hair Cells. Neuron, 2018, 99, 736-753.e6.	8.1	250
24	Regenerating hair cells in vestibular sensory epithelia from humans. ELife, 2018, 7, .	6.0	39
25	A synthetic AAV vector enables safe and efficient gene transfer to the mammalian inner ear. Nature Biotechnology, 2017, 35, 280-284.	17.5	248
26	Gene therapy restores auditory and vestibular function in a mouse model of Usher syndrome type 1c. Nature Biotechnology, 2017, 35, 264-272.	17.5	247
27	Generation of inner ear organoids containing functional hair cells from human pluripotent stem cells. Nature Biotechnology, 2017, 35, 583-589.	17.5	249
28	Emerging Gene Therapies for Genetic Hearing Loss. JARO - Journal of the Association for Research in Otolaryngology, 2017, 18, 649-670.	1.8	86
29	RNA Interference Prevents Autosomal-Dominant Hearing Loss. American Journal of Human Genetics, 2016, 98, 1101-1113.	6.2	95
30	Functional development of mechanosensitive hair cells in stem cell-derived organoids parallels native vestibular hair cells. Nature Communications, 2016, 7, 11508.	12.8	89
31	Are TMCs the Mechanotransduction Channels of Vertebrate Hair Cells?. Journal of Neuroscience, 2016, 36, 10921-10926.	3.6	43
32	Plug-N-Play: Mechanotransduction Goes Modular. Neuron, 2016, 89, 1128-1130.	8.1	4
33	Recessive mutations of TMC1 associated with moderate to severe hearing loss. Neurogenetics, 2016, 17, 115-123.	1.4	28
34	Transmembrane channel-like (TMC) genes are required for auditory and vestibular mechanosensation. Pflugers Archiv European Journal of Physiology, 2015, 467, 85-94.	2.8	78
35	Tmc gene therapy restores auditory function in deaf mice. Science Translational Medicine, 2015, 7, 295ra108.	12.4	222
36	The molecules that mediate sensory transduction in the mammalian inner ear. Current Opinion in Neurobiology, 2015, 34, 165-171.	4.2	9

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37	TMC1 and TMC2 Localize at the Site of Mechanotransduction in Mammalian Inner Ear Hair Cell Stereocilia. Cell Reports, 2015, 12, 1606-1617.	6.4	152
38	TMC function in hair cell transduction. Hearing Research, 2014, 311, 17-24.	2.0	35
39	Sound Strategies for Hearing Restoration. Science, 2014, 344, 1241062.	12.6	208
40	TMC1 and TMC2 Are Components of the Mechanotransduction Channel in Hair Cells of the Mammalian Inner Ear. Neuron, 2013, 79, 504-515.	8.1	363
41	The Mechanosensory Structure of the Hair Cell Requires Clarin-1, a Protein Encoded by Usher Syndrome III Causative Gene. Journal of Neuroscience, 2012, 32, 9485-9498.	3.6	52
42	Gene Therapy for Deaf Mice Goes Viral. Molecular Therapy, 2012, 20, 1836-1837.	8.2	7
43	Mechanotransduction in mouse inner ear hair cells requires transmembrane channelâ€“like genes. Journal of Clinical Investigation, 2011, 121, 4796-4809.	8.2	352
44	Development and Regeneration of Sensory Transduction in Auditory Hair Cells Requires Functional Interaction Between Cadherin-23 and Protocadherin-15. Journal of Neuroscience, 2010, 30, 11259-11269.	3.6	52
45	Tonotopic Gradient in the Developmental Acquisition of Sensory Transduction in Outer Hair Cells of the Mouse Cochlea. Journal of Neurophysiology, 2009, 101, 2961-2973.	1.8	148
46	Gene Transfer in Human Vestibular Epithelia and the Prospects for Inner Ear Gene Therapy. Laryngoscope, 2008, 118, 821-831.	2.0	24
47	Sensory Transduction and Adaptation in Inner and Outer Hair Cells of the Mouse Auditory System. Journal of Neurophysiology, 2007, 98, 3360-3369.	1.8	58
48	Fast Adaptation in Vestibular Hair Cells Requires Myosin-1c Activity. Neuron, 2005, 47, 541-553.	8.1	142
49	Developmental Acquisition of Voltage-Dependent Conductances and Sensory Signaling in Hair Cells of the Embryonic Mouse Inner Ear. Journal of Neuroscience, 2004, 24, 11148-11159.	3.6	74
50	TRPA1 is a candidate for the mechanosensitive transduction channel of vertebrate hair cells. Nature, 2004, 432, 723-730.	27.8	657
51	Developmental acquisition of sensory transduction in hair cells of the mouse inner ear. Nature Neuroscience, 2003, 6, 1019-1020.	14.8	147
52	A Chemical-Genetic Strategy Implicates Myosin-1c in Adaptation by Hair Cells. Cell, 2002, 108, 371-381.	28.9	318
53	Stimulus Processing by Type II Hair Cells in the Mouse Utricle. Annals of the New York Academy of Sciences, 1999, 871, 15-26.	3.8	28
54	Mechanoelectrical Transduction and Adaptation in Hair Cells of the Mouse Utricle, a Low-Frequency Vestibular Organ. Journal of Neuroscience, 1997, 17, 8739-8748.	3.6	101