David P Corey

List of Publications by Year
in descending order

124 papers	17,543 citations	13087 68 h-index	19726 117 g-index
130 all docs	130 docs citations	130 times ranked	12803 citing authors

#	Article	IF	Citations
1	Mechanical gating of the auditory transduction channel TMC1 involves the fourth and sixth transmembrane helices. Science Advances, 2022, 8, .	4.7	13
2	Single-molecule force spectroscopy reveals the dynamic strength of the hair-cell tip-link connection. Nature Communications, 2021, 12, 849.	5.8	24
3	AAV-S: A versatile capsid variant for transduction of mouse and primate inner ear. Molecular Therapy - Methods and Clinical Development, 2021, 21, 382-398.	1.8	40
4	Identification of Novel and Recurrent Variants in MYO15A in Ashkenazi Jewish Patients With Autosomal Recessive Nonsyndromic Hearing Loss. Frontiers in Genetics, 2021, 12, 737782.	1.1	1
5	Electron Microscopy Techniques for Investigating Structure and Composition of Hair-Cell Stereociliary Bundles. Frontiers in Cell and Developmental Biology, 2021, 9, 744248.	1.8	13
6	Serial scanning electron microscopy of anti-PKHD1L1 immuno-gold labeled mouse hair cell stereocilia bundles. Scientific Data, 2020, 7, 182.	2.4	4
7	Viral vectors for gene delivery to the inner ear. Hearing Research, 2020, 394, 107927.	0.9	26
8	Preclinical testing of AAV9-PHP.B for transgene expression in the non-human primate cochlea. Hearing Research, 2020, 394, 107930.	0.9	39
9	Allele-specific gene editing prevents deafness in a model of dominant progressive hearing loss. Nature Medicine, 2019, 25, 1123-1130.	15.2	149
10	PKHD1L1 is a coat protein of hair-cell stereocilia and is required for normal hearing. Nature Communications, 2019, 10, 3801.	5.8	24
11	High levels of AAV vector integration into CRISPR-induced DNA breaks. Nature Communications, 2019, 10, 4439.	5.8	257
12	Gene Transfer with AAV9-PHP.B Rescues Hearing in a Mouse Model of Usher Syndrome 3A and Transduces Hair Cells in a Non-human Primate. Molecular Therapy - Methods and Clinical Development, 2019, 13, 1-13.	1.8	110
13	Function and Dysfunction of TMC Channels in Inner Ear Hair Cells. Cold Spring Harbor Perspectives in Medicine, 2019, 9, a033506.	2.9	40
14	Engineering biomimetic hair bundle sensors for underwater sensing applications. AIP Conference Proceedings, 2018, , .	0.3	7
15	TMC1 Forms the Pore of Mechanosensory Transduction Channels in Vertebrate Inner Ear Hair Cells. Neuron, 2018, 99, 736-753.e6.	3.8	250
16	Mass spectrometry quantitation of proteins from small pools of developing auditory and vestibular cells. Scientific Data, 2018, 5, 180128.	2.4	16
17	Rescue of Hearing by Gene Delivery to Inner-Ear Hair Cells Using Exosome-Associated AAV. Molecular Therapy, 2017, 25, 379-391.	3.7	181
18	Heterodimeric capping protein is required for stereocilia length and width regulation. Journal of Cell Biology, 2017, 216, 3861-3881.	2.3	48

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19	Mechanical Transduction Processes in the Hair Cell. Springer Handbook of Auditory Research, 2017, , 75-111.	0.3	15
20	Hair-Cell Mechanotransduction Persists in TRP Channel Knockout Mice. PLoS ONE, 2016, 11, e0155577.	1.1	32
21	Mice lacking WRB reveal differential biogenesis requirements of tail-anchored proteins in vivo. Scientific Reports, 2016, 6, 39464.	1.6	35
22	Single Molecule Force Spectroscopy of Hair-Cell Tip-Link Proteins. Biophysical Journal, 2016, 110, 196a.	0.2	0
23	The zebrafish <i>pinball wizard</i> gene encodes WRB, a tailâ€anchoredâ€protein receptor essential for innerâ€ear hair cells and retinal photoreceptors. Journal of Physiology, 2016, 594, 895-914.	1.3	29
24	Tryptophanâ€rich basic protein (<scp>WRB</scp>) mediates insertion of the tailâ€anchored protein otoferlin and is required for hair cell exocytosis and hearing. EMBO Journal, 2016, 35, 2536-2552.	3.5	55
25	From Biological Cilia to Artificial Flow Sensors: Biomimetic Soft Polymer Nanosensors with High Sensing Performance. Scientific Reports, 2016, 6, 32955.	1.6	117
26	Are TMCs the Mechanotransduction Channels of Vertebrate Hair Cells?. Journal of Neuroscience, 2016, 36, 10921-10926.	1.7	43
27	PSIP1/LEDGF: a new gene likely involved in sensorineural progressive hearing loss. Scientific Reports, 2016, 5, 18568.	1.6	7
28	Design of a Tunable PDMS Force Delivery and Sensing Probe for Studying Mechanosensation. IEEE Sensors Journal, 2016, 16, 620-627.	2.4	1
29	Three Recombinant Engineered Antibodies against Recombinant Tags with High Affinity and Specificity. PLoS ONE, 2016, 11, e0150125.	1.1	3
30	The Outer Pore and Selectivity Filter of TRPA1. PLoS ONE, 2016, 11, e0166167.	1.1	20
31	In search of the cochlear amplifier: New mechanical and molecular tools to probe transduction channel function. AIP Conference Proceedings, 2015, , .	0.3	0
32	SHIELD: an integrative gene expression database for inner ear research. Database: the Journal of Biological Databases and Curation, 2015, 2015, bav071.	1.4	128
33	Molecular and Cellular Mechanics (Part I): A moderated discussion. AIP Conference Proceedings, 2015, , .	0.3	0
34	Towards force spectroscopy of single tip-link bonds. AIP Conference Proceedings, 2015, , .	0.3	0
35	C-MYC Transcriptionally Amplifies SOX2 Target Genes to Regulate Self-Renewal in Multipotent Otic Progenitor Cells. Stem Cell Reports, 2015, 4, 47-60.	2.3	75
36	Length regulation of mechanosensitive stereocilia depends on very slow actin dynamics and filament-severing proteins. Nature Communications, 2015, 6, 6855.	5.8	80

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37	Gene Expression by Mouse Inner Ear Hair Cells during Development. Journal of Neuroscience, 2015, 35, 6366-6380.	1.7	308
38	In the Right Place at the Right Time: Is TMC1/2 the Transduction Channel for Hearing?. Cell Reports, 2015, 12, 1531-1532.	2.9	2
39	Live-cell imaging of actin dynamics reveals mechanisms of stereocilia length regulation in the inner ear. Nature Communications, 2015, 6, 6873.	5.8	60
40	Genome-wide association analysis on normal hearing function identifies<i>PCDH20</i>and<i>SLC28A3</i>as candidates for hearing function and loss. Human Molecular Genetics, 2015, 24, 5655-5664.	1.4	37
41	XIRP2, an Actin-Binding Protein Essential for Inner Ear Hair-Cell Stereocilia. Cell Reports, 2015, 10, 1811-1818.	2.9	32
42	Sorting out a promiscuous superfamily: towards cadherin connectomics. Trends in Cell Biology, 2014, 24, 524-536.	3.6	79
43	Noddy, a Mouse Harboring a Missense Mutation in Protocadherin-15, Reveals the Impact of Disrupting a Critical Interaction Site between Tip-Link Cadherins in Inner Ear Hair Cells. Journal of Neuroscience, 2013, 33, 4395-4404.	1.7	33
44	Weak lateral coupling between stereocilia of mammalian cochlear hair cells requires new stimulus methods to study the biomechanics of hearing. Proceedings of Meetings on Acoustics, 2013, , .	0.3	5
45	Multi-isotope imaging mass spectrometry reveals slow protein turnover in hair-cell stereocilia. Nature, 2012, 481, 520-524.	13.7	210
46	Structure of a force-conveying cadherin bond essential for inner-ear mechanotransduction. Nature, 2012, 492, 128-132.	13.7	157
47	TRPA1 channels regulate astrocyte resting calcium and inhibitory synapse efficacy through GAT-3. Nature Neuroscience, 2012, 15, 70-80.	7.1	391
48	Molecular Mechanics of Tip-Link Cadherins. , 2011, , .		0
49	Sliding Adhesion Confers Coherent Motion to Hair Cell Stereocilia and Parallel Gating to Transduction Channels. Journal of Neuroscience, 2010, 30, 9051-9063.	1.7	61
50	Structural Determinants of Cadherin-23 Function in Hearing and Deafness. Neuron, 2010, 66, 85-100.	3.8	122
51	The Force Be With You: A Mechanoreceptor Channel in Proprioception and Touch. Neuron, 2010, 67, 349-351.	3.8	10
52	Tannous et al. Respond:. Molecular Therapy, 2009, 17, 1311-1312.	3.7	1
53	Burning Cold: Involvement of TRPA1 in Noxious Cold Sensation. Journal of General Physiology, 2009, 133, 251-256.	0.9	64
54	TRPA1 Modulates Mechanotransduction in Cutaneous Sensory Neurons. Journal of Neuroscience, 2009, 29, 4808-4819.	1.7	280

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55	Mutant Sodium Channel for Tumor Therapy. Molecular Therapy, 2009, 17, 810-819.	3.7	18
56	The Ion Channel TRPA1 Is Required for Normal Mechanosensation and Is Modulated by Algesic Stimuli. Gastroenterology, 2009, 137, 2084-2095.e3.	0.6	232
57	Cell biology of mechanotransduction in inner-ear hair cells. F1000 Biology Reports, 2009, 1, 58.	4.0	9
58	Sensory systems: from molecules to percepts. Current Opinion in Neurobiology, 2008, 18, 355-356.	2.0	0
59	The Micromachinery of Mechanotransduction in Hair Cells. Annual Review of Neuroscience, 2007, 30, 339-365.	5.0	199
60	Gene expression profiling identifies <i>Hes6</i> as a transcriptional target of ATOH1 in cochlear hair cells. FEBS Letters, 2007, 581, 4651-4656.	1.3	17
61	An Ion Channel Essential for Sensing Chemical Damage. Journal of Neuroscience, 2007, 27, 11412-11415.	1.7	254
62	Stringing the fiddle: the inner ear's two-part invention. Nature Neuroscience, 2007, 10, 1232-1233.	7.1	10
63	TRP channels in mechanosensation: direct or indirect activation?. Nature Reviews Neuroscience, 2007, 8, 510-521.	4.9	449
64	The Î±1 subunit of nicotinic acetylcholine receptors in the inner ear: transcriptional regulation by ATOH1 and coâ€expression with the Î³ subunit in hair cells. Journal of Neurochemistry, 2007, 103, 2651-2664.	2.1	27
65	Effects of genetic variations in the dystonia protein torsinA: identification of polymorphism at residue 216 as protein modifier. Human Molecular Genetics, 2006, 15, 1355-1364.	1.4	104
66	Ca2+ Changes the Force Sensitivity of the Hair-Cell Transduction Channel. Biophysical Journal, 2006, 90, 124-139.	0.2	115
67	TRPA1 Contributes to Cold, Mechanical, and Chemical Nociception but Is Not Essential for Hair-Cell Transduction. Neuron, 2006, 50, 277-289.	3.8	1,134
68	What is the hair cell transduction channel?. Journal of Physiology, 2006, 576, 23-28.	1.3	85
69	Essential role of retinoblastoma protein in mammalian hair cell development and hearing. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 7345-7350.	3.3	115
70	TRP channels in mechanosensation. Current Opinion in Neurobiology, 2005, 15, 350-357.	2.0	132
71	In Search of the Hair-Cell Gating Spring. Structure, 2005, 13, 669-682.	1.6	262
72	Proliferation of Functional Hair Cells in Vivo in the Absence of the Retinoblastoma Protein. Science, 2005, 307, 1114-1118.	6.0	240

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73	TRPA1 is a candidate for the mechanosensitive transduction channel of vertebrate hair cells. Nature, 2004, 432, 723-730.	13.7	657
74	Tightrope act. Nature, 2004, 428, 901-903.	13.7	53
75	Mechanosensitive Channels: Multiplicity of Families and Gating Paradigms. Science Signaling, 2004, 2004, re4-re4.	1.6	181
76	The Early Onset Dystonia Protein TorsinA Interacts with Kinesin Light Chain 1. Journal of Biological Chemistry, 2004, 279, 19882-19892.	1.6	80
77	New TRP Channels in Hearing and Mechanosensation. Neuron, 2003, 39, 585-588.	3.8	134
78	A Gradient of Single-Channel Conductance in the Cochlea. Neuron, 2003, 40, 875-876.	3.8	0
79	Sensory transduction in the ear. Journal of Cell Science, 2003, 116, 1-3.	1.2	25
80	Lighting up the Senses: FM1-43 Loading of Sensory Cells through Nonselective Ion Channels. Journal of Neuroscience, 2003, 23, 4054-4065.	1.7	479
81	The PDZ Domain Protein PICK1 and the Sodium Channel BNaC1 Interact and Localize at Mechanosensory Terminals of Dorsal Root Ganglion Neurons and Dendrites of Central Neurons. Journal of Biological Chemistry, 2002, 277, 5203-5208.	1.6	116
82	A Chemical-Genetic Strategy Implicates Myosin-1c in Adaptation by Hair Cells. Cell, 2002, 108, 371-381.	13.5	318
83	Vascular Defects and Sensorineural Deafness in a Mouse Model of Norrie Disease. Journal of Neuroscience, 2002, 22, 4286-4292.	1.7	136
84	Understanding inner ear development with gene expression profiling. Journal of Neurobiology, 2002, 53, 276-285.	3.7	29
85	An inner ear gene expression database. JARO - Journal of the Association for Research in Otolaryngology, 2002, 3, 140-148.	0.9	47
86	Myosin-VIIb, a Novel Unconventional Myosin, Is a Constituent of Microvilli in Transporting Epithelia. Genomics, 2001, 72, 285-296.	1.3	60
87	Transport and Localization of the DEG/ENaC Ion Channel BNaC1Î± to Peripheral Mechanosensory Terminals of Dorsal Root Ganglia Neurons. Journal of Neuroscience, 2001, 21, 2678-2686.	1.7	222
88	Novel mutation in the TOR1A (DYT1) gene in atypical, early onset dystonia and polymorphisms in dystonia and early onset parkinsonism. Neurogenetics, 2001, 3, 133-143.	0.7	155
89	Myosin-I nomenclature. Journal of Cell Biology, 2001, 155, 703-704.	2.3	71
90	Insect mechanoreception: What a long, strange TRP itâ€™s been. Current Biology, 2000, 10, R384-R387.	1.8	22

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91	Two mechanisms for transducer adaptation in vertebrate hair cells. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 11730-11735.	3.3	106
92	Sound Amplification in the Inner Ear. Neuron, 2000, 28, 1-9.	3.8	28
93	Functional Expression of Exogenous Proteins in Mammalian Sensory Hair Cells Infected With Adenoviral Vectors. Journal of Neurophysiology, 1999, 81, 1881-1888.	0.9	76
94	TRP2: A candidate transduction channel for mammalian pheromone sensory signaling. Proceedings of the National Academy of Sciences of the United States of America, 1999, 96, 5791-5796.	3.3	387
95	The Usher syndromes. American Journal of Medical Genetics Part A, 1999, 89, 158-166.	2.4	140
96	Gene transfer into the mammalian inner ear using HSV-1 and vaccinia virus vectors. Hearing Research, 1999, 134, 1-8.	0.9	99
97	The TOR1A (DYT1) Gene Family and Its Role in Early Onset Torsion Dystonia. Genomics, 1999, 62, 377-384.	1.3	142
98	The Nematode Degenerin UNC-105 Forms Ion Channels that Are Activated by Degeneration- or Hypercontraction-Causing Mutations. Neuron, 1998, 20, 1231-1241.	3.8	89
99	Localization of Myosin-Iî² near Both Ends of Tip Links in Frog Saccular Hair Cells. Journal of Neuroscience, 1998, 18, 8637-8647.	1.7	92
100	Unconventional Myosins in Inner-Ear Sensory Epithelia. Journal of Cell Biology, 1997, 137, 1287-1307.	2.3	522
101	THE MOLECULES OF MECHANOSENSATION. Annual Review of Neuroscience, 1997, 20, 567-594.	5.0	168
102	BNaC1 and BNaC2 constitute a new family of human neuronal sodium channels related to degenerins and epithelial sodium channels. Proceedings of the National Academy of Sciences of the United States of America, 1997, 94, 1459-1464.	3.3	341
103	The Genomic Structure of the Gene Defective in Usher Syndrome Type Ib (MYO7A). Genomics, 1997, 40, 73-79.	1.3	36
104	Myosin and Adaptation by Hair Cells. Neuron, 1997, 19, 955-958.	3.8	113
105	Mechanoelectrical Transduction and Adaptation in Hair Cells of the Mouse Utricle, a Low-Frequency Vestibular Organ. Journal of Neuroscience, 1997, 17, 8739-8748.	1.7	101
106	The early-onset torsion dystonia gene (DYT1) encodes an ATP-binding protein. Nature Genetics, 1997, 17, 40-48.	9.4	1,051
107	Mapping of Unconventional Myosins in Mouse and Human. Genomics, 1996, 36, 431-439.	1.3	84
108	Molecular Cloning and Domain Structure of Human Myosin-VIIa, the Gene Product Defective in Usher Syndrome 1B. Genomics, 1996, 36, 440-448.	1.3	135

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109	Sequence of the voltage-gated sodium channel Î²1-subunit in wild-type and in quivering mice. Molecular Brain Research, 1996, 42, 222-226.	2.5	10
110	Mechanosensation and the DEG/ENaC Ion Channels. Science, 1996, 273, 323-324.	6.0	96
111	Mechanosensation: Touch at the molecular level. Current Biology, 1996, 6, 541-543.	1.8	34
112	Expression in cochlea and retina of myosin VIIa, the gene product defective in Usher syndrome type 1B.. Proceedings of the National Academy of Sciences of the United States of America, 1995, 92, 9815-9819.	3.3	408
113	Calcium imaging of single stereocilia in hair cells: Localization of transduction channels at both ends of tip links. Neuron, 1995, 15, 1311-1321.	3.8	250
114	cDNA Cloning, Tissue Distribution, and Chromosomal Localization of Ocp2, a Gene Encoding a Putative Transcription-Associated Factor Predominantly Expressed in the Auditory Organs. Genomics, 1995, 27, 389-398.	1.3	47
115	Mechanoelectrical transduction by hair cells. Trends in Neurosciences, 1992, 15, 254-259.	4.2	162
116	Tip-link integrity and mechanical transduction in vertebrate hair cells. Neuron, 1991, 7, 985-994.	3.8	459
117	A sodium channel defect in hyperkalemic periodic paralysis: Potassium-induced failure of inactivation. Neuron, 1991, 6, 619-626.	3.8	212
118	Ion channel expression by white matter glia: The O-2A glial progenitor cell. Neuron, 1990, 4, 507-524.	3.8	290
119	Ion channel expression by white matter glia: The type-1 astrocyte. Neuron, 1990, 5, 527-544.	3.8	270
120	Glial and neuronal forms of the voltage-dependent sodium channel: characteristics and cell-type distribution. Neuron, 1989, 2, 1375-1388.	3.8	194
121	Ion channel expression by white matter glia: I. Type 2 astrocytes and oligodendrocytes. Glia, 1988, 1, 10-30.	2.5	280
122	Immunological, morphological, and electrophysiological variation among retinal ganglion cells purified by panning. Neuron, 1988, 1, 791-803.	3.8	477
123	A reinterpretation of mammalian sodium channel gating based on single channel recording. Nature, 1983, 306, 436-441.	13.7	636
124	Mechanical stimulation and micromanipulation with piezoelectric bimorph elements. Journal of Neuroscience Methods, 1980, 3, 183-202.	1.3	83