Daniel C Marcus

List of Publications by Year
in descending order

86 papers	5,106 citations	87888 38 h-index	88630 70 g-index
86 all docs	86 docs citations	86 times ranked	3275 citing authors

#	Article	IF	Citations
1	Federated learning in medicine: facilitating multi-institutional collaborations without sharing patient data. Scientific Reports, 2020, 10, 12598.	3.3	509
2	Targeted Ablation of Connexin26 in the Inner Ear Epithelial Gap Junction Network Causes Hearing Impairment and Cell Death. Current Biology, 2002, 12, 1106-1111.	3.9	409
3	Inner Ear Defects Induced by Null Mutationof the isk Gene. Neuron, 1996, 17, 1251-1264.	8.1	380
4	KCNJ10 (Kir4.1) potassium channel knockout abolishes endocochlear potential. American Journal of Physiology - Cell Physiology, 2002, 282, C403-C407.	4.6	305
5	Loss of KCNJ10 protein expression abolishes endocochlear potential and causes deafness in Pendred syndrome mouse model. BMC Medicine, 2004, 2, 30.	5.5	241
6	Ion transport mechanisms responsible for K+ secretion and the transepithelial voltage across marginal cells of stria vascularis in vitro. Hearing Research, 1995, 84, 19-29.	2.0	238
7	Deafness in Claudin 11-Null Mice Reveals the Critical Contribution of Basal Cell Tight Junctions to Stria Vascularis Function. Journal of Neuroscience, 2004, 24, 7051-7062.	3.6	225
8	Loss of cochlear HCO3âˆ’ secretion causes deafness via endolymphatic acidification and inhibition of Ca2+ reabsorption in a Pendred syndrome mouse model. American Journal of Physiology - Renal Physiology, 2007, 292, F1345-F1353.	2.7	221
9	Localization and Functional Studies of Pendrin in the Mouse Inner Ear Provide Insight About the Etiology of Deafness in Pendred Syndrome. JARO - Journal of the Association for Research in Otolaryngology, 2003, 4, 394-404.	1.8	130
10	Lack of pendrin HCO3âˆ’ transport elevates vestibular endolymphatic [Ca2+] by inhibition of acid-sensitive TRPV5 and TRPV6 channels. American Journal of Physiology - Renal Physiology, 2007, 292, F1314-F1321.	2.7	119
11	A Claudin-9â€“Based Ion Permeability Barrier Is Essential for Hearing. PLoS Genetics, 2009, 5, e1000610.	3.5	102
12	P2X2Receptor Mediates Stimulation of Parasensory Cation Absorption by Cochlear Outer Sulcus Cells and Vestibular Transitional Cells. Journal of Neuroscience, 2001, 21, 9168-9174.	3.6	87
13	Direct measurement of longitudinal endolymph flow rate in the guinea pig cochlea. Hearing Research, 1986, 23, 141-151.	2.0	76
14	Expression of epithelial calcium transport system in rat cochlea and vestibular labyrinth. BMC Physiology, 2010, 10, 1.	3.6	68
15	Effects of barium and ion substitutions in artificial blood on endocochlear potential. Hearing Research, 1985, 17, 79-86.	2.0	67
16	Ca2+-activated nonselective cation, maxi K+ and Clâˆ’ channels in apical membrane of marginal cells of stria vascularis. Hearing Research, 1992, 61, 86-96.	2.0	64
17	Developmental delays consistent with cochlear hypothyroidism contribute to failure to develop hearing in mice lacking <i>Slc26a4</i>/pendrin expression. American Journal of Physiology - Renal Physiology, 2009, 297, F1435-F1447.	2.7	64
18	Glucocorticoids stimulate cation absorption by semicircular canal duct epithelium via epithelial sodium channel. American Journal of Physiology - Renal Physiology, 2004, 286, F1127-F1135.	2.7	63

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19	Regulation of ENaC-mediated sodium transport by glucocorticoids in Reissner's membrane epithelium. American Journal of Physiology - Cell Physiology, 2009, 296, C544-C557.	4.6	63
20	K+ and Na+ absorption by outer sulcus epithelial cells. Hearing Research, 1999, 134, 48-56.	2.0	61
21	P_{2U} purinergic receptor inhibits apical I_{sK}/KvLQT1 channel via protein kinase C in vestibular dark cells. American Journal of Physiology - Cell Physiology, 1997, 273, C2022-C2029.	4.6	60
22	Protein kinase C mediates P2U purinergic receptor inhibition of K+ channel in apical membrane of strial marginal cells. Hearing Research, 1998, 115, 82-92.	2.0	59
23	Sidedness of action of loop diuretics and ouabain on nonsensory cells of utricle: A micro-Ussing chamber for inner ear tissues. Hearing Research, 1987, 30, 55-64.	2.0	57
24	Transepithelial voltage and resistance of vestibular dark cell epithelium from the gerbil ampulla. Hearing Research, 1994, 73, 101-108.	2.0	57
25	Estrogen acutely inhibits ion transport by isolated stria vascularis. Hearing Research, 2001, 158, 123-130.	2.0	57
26	Vitamin D upregulates expression of ECaC1 mRNA in semicircular canal. Biochemical and Biophysical Research Communications, 2005, 331, 1353-1357.	2.1	57
27	SLC26A4 Targeted to the Endolymphatic Sac Rescues Hearing and Balance in Slc26a4 Mutant Mice. PLoS Genetics, 2013, 9, e1003641.	3.5	57
28	Immunolocalization of ClC-K chloride channel in strial marginal cells and vestibular dark cells. Hearing Research, 2001, 160, 1-9.	2.0	56
29	Glucocorticoid regulation of genes in the amiloride-sensitive sodium transport pathway by semicircular canal duct epithelium of neonatal rat. Physiological Genomics, 2006, 24, 114-123.	2.3	56
30	Regulation of sodium transport in the inner ear. Hearing Research, 2011, 280, 21-29.	2.0	54
31	Age-Related Changes in Cochlear Endolymphatic Potassium and Potential in CD-1 and CBA/CaJ Mice. JARO - Journal of the Association for Research in Otolaryngology, 2003, 4, 353-362.	1.8	53
32	RESPIRATORY RATE AND ATP CONTENT OF STRIA VASCULARIS OF GUINEA PIG IN VITRO. Laryngoscope, 1978, 88, 1825???1835.	2.0	49
33	Changes in cation contents of stria vascularis with ouabain and potassium-free perfusion. Hearing Research, 1981, 4, 149-160.	2.0	49
34	K+-induced swelling of vestibular dark cells is dependent on Na+ and Cl? and inhibited by piretanide. Pflugers Archiv European Journal of Physiology, 1990, 416, 262-269.	2.8	47
35	cAMP increases K+ secretion via activation of apical IsK/KvLQT1 channels in strial marginal cells. Hearing Research, 1997, 114, 107-116.	2.0	46
36	Endolymphatic sodium homeostasis by REISSNERâ€™s membrane. Neuroscience, 2003, 119, 3-8.	2.3	44

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37	Response of cochlear potentials to presumed alterations of ionic conductance: Endolymphatic perfusion of barium, valinomycin and nystatin. Hearing Research, 1983, 12, 17-30.	2.0	42
38	Divalent cations inhibit IsK/KvLQT1 channels in excised membrane patches of strial marginal cells. Hearing Research, 1998, 123, 157-167.	2.0	39
39	Two types of chloride channel in the basolateral membrane of vestibular dark cells. Hearing Research, 1993, 69, 124-132.	2.0	38
40	The membrane potential of vestibular dark cells is controlled by a large Clâˆ’ conductance. Hearing Research, 1992, 62, 149-156.	2.0	37
41	Nongenomic Effects of Corticosteroids on Ion Transport by Stria vascularis. Audiology and Neuro-Otology, 2002, 7, 100-106.	1.3	37
42	Chloride secretion by semicircular canal duct epithelium is stimulated via Î²₂-adrenergic receptors. American Journal of Physiology - Cell Physiology, 2002, 283, C1752-C1760.	4.6	37
43	EphB2 and ephrin-B2 regulate the ionic homeostasis of vestibular endolymph. Hearing Research, 2007, 223, 93-104.	2.0	35
44	Purinergic signaling in the inner ear. Hearing Research, 2008, 235, 1-7.	2.0	33
45	Adenosine Stimulates Anion Secretion Across Cultured and Native Adult Human Vas Deferens Epithelia1. Biology of Reproduction, 2003, 68, 1027-1034.	2.7	32
46	Apical P2Y₄ purinergic receptor controls K⁺ secretion by vestibular dark cell epithelium. American Journal of Physiology - Cell Physiology, 2001, 281, C282-C289.	4.6	29
47	Membrane potential measurements of transitional cells from the crista ampullaris of the Gerbil. Pflugers Archiv European Journal of Physiology, 1989, 414, 656-662.	2.8	26
48	Specificity of action of vanadate to the organ of corti. Hearing Research, 1981, 5, 231-243.	2.0	25
49	Membrane transport parameters in frog corneal epithelium measured using impedance analysis techniques. Journal of Membrane Biology, 1986, 91, 213-225.	2.1	22
50	Apical membrane P2Y4 purinergic receptor controls K+ secretion by strial marginal cell epithelium. Cell Communication and Signaling, 2005, 3, 13.	6.5	20
51	Slc26a7 Chloride Channel Activity and Localization in Mouse Reissnerâ€™s Membrane Epithelium. PLoS ONE, 2014, 9, e97191.	2.5	20
52	Comparison of the non-adrenergic action of phentolamine with that of vanadate on cochlear function. Hearing Research, 1982, 7, 233-246.	2.0	18
53	Endolymphatic Sodium Homeostasis by Extramacular Epithelium of the Saccule. Journal of Neuroscience, 2009, 29, 15851-15858.	3.6	18
54	The Na+/H+ exchanger in transitional cells of the inner ear. Hearing Research, 1993, 69, 107-114.	2.0	16

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55	Inhibitory Effect of Erythromycin on Ion Transport by Stria Vascularis and Vestibular Dark Cells. Acta Oto-Laryngologica, 1996, 116, 572-575.	0.9	16
56	Endolymphatic Na+ and K+ Concentrations during Cochlear Growth and Enlargement in Mice Lacking Slc26a4/pendrin. PLoS ONE, 2013, 8, e65977.	2.5	15
57	Vibrating Probes: New Technology for Investigation of Endolymph Homeostasis.. Keio Journal of Medicine, 1996, 45, 301-305.	1.1	15
58	Transepithelial electrical responses to sodium and potassium of nonsensory region of gerbil utricle. Hearing Research, 1990, 44, 13-23.	2.0	14
59	cAMP-stimulated Cl- secretion is increased by glucocorticoids and inhibited by bumetanide in semicircular canal duct epithelium. BMC Physiology, 2013, 13, 6.	3.6	14
60	Evidence for Purinergic Receptors in Vestibular Dark Cell and Strial Marginal Cell Epithelia of Gerbil. Auditory Neuroscience, 1995, 1, 331-340.	0.2	14
61	Respiratory quotient of stria vascularis of guinea pig in vitro. Archives of Oto-rhino-laryngology, 1978, 221, 97-103.	0.5	13
62	Dependence of endocochlear potential on vascular pH. Hearing Research, 1987, 31, 1-7.	2.0	11
63	Ototoxic Effect of Erythromycin on Cochlear Potentials in the Guinea Pig. Annals of Otology, Rhinology and Laryngology, 1997, 106, 599-603.	1.1	11
64	The gastric H,K-ATPase in stria vascularis contributes to pH regulation of cochlear endolymph but not to K secretion. BMC Physiology, 2017, 17, 1.	3.6	10
65	I(sK) Channel in Strial Marginal Cells. Voltage-Dependence, Ion-Selectivity, Inhibition by 293B and Sensitivity to Clofilium. Auditory Neuroscience, 1997, 3, 215-230.	0.2	10
66	Cerebellar Ataxia Caused by Type II Unipolar Brush Cell Dysfunction in the Asic5 Knockout Mouse. Scientific Reports, 2020, 10, 2168.	3.3	9
67	Transepithelial cation movements in gerbil utricles. American Journal of Otolaryngology - Head and Neck Medicine and Surgery, 1985, 6, 268-274.	1.3	8
68	Inward-rectifier chloride currents in Reissnerâ€™s membrane epithelial cells. Biochemical and Biophysical Research Communications, 2010, 394, 434-438.	2.1	8
69	Sodium selectivity of Reissner's membrane epithelial cells. BMC Physiology, 2011, 11, 4.	3.6	8
70	Na+absorption by Claudius' cells is regulated by purinergic signaling in the cochlea. Acta Oto-Laryngologica, 2012, 132, S103-S108.	0.9	7
71	Ion and Fluid Homeostasis in the Cochlea. Springer Handbook of Auditory Research, 2017, , 253-286.	0.7	7
72	Ion transport regulation by P2Y receptors, protein kinase C and phosphatidylinositol 3-kinase within the semicircular canal duct epithelium. BMC Research Notes, 2010, 3, 100.	1.4	6

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73	Acoustic Transduction. , 2012, , 649-668.		6
74	Inner ear fluid homeostasis. , 2010, , .		5
75	Claudin expression during early postnatal development of the murine cochlea. BMC Physiology, 2018, 18, 1.	3.6	5
76	P2RX2 and P2RX4 receptors mediate cation absorption in transitional cells and supporting cells of the utricular macula. Hearing Research, 2020, 386, 107860.	2.0	5
77	Photometric determination of picomole quantities of calcium. Analytical Chemistry, 1972, 44, 1523-1525.	6.5	4
78	Acoustic Transduction. , 2001, , 775-791.		4
79	Cochlear and Vestibular Function and Dysfunction. , 2010, , 425-437.		3
80	Purinergic signaling in the inner ear. Purinergic Signalling, 0, , .	2.2	2
81	Sodium selectivity of semicircular canal duct epithelial cells. BMC Research Notes, 2011, 4, 355.	1.4	2
82	Microarray Analysis of Ion Transportâ€Related Genes in Reissnerâ€™s Membrane. FASEB Journal, 2006, 20, A345.	0.5	0
83	Epithelial calcium channel (TRPV5) regulates cochlear and vestibular calcium via vitamin Dâ€responsive pathway. FASEB Journal, 2006, 20, A800.	0.5	0
84	Regulation of ENaCâ€mediated sodium transport by glucocorticoids in Reissner's membrane epithelium. FASEB Journal, 2008, 22, 934.7.	0.5	0
85	Targeted expression of SLC26A4 rescues hearing and balance in Slc26a4 Î"/Î" mice. FASEB Journal, 2013, 27, 736.3.	0.5	0
86	Ion Transport Across Inner Ear Epithelia. Physiology in Health and Disease, 2020, , 279-305.	0.3	0