Keith Nehrke

List of Publications by Year
in descending order

#	Article	IF	Citations
1	Genome-Wide Search and Identification of a Novel Gel-Forming MucinMUC19/Muc19in Glandular Tissues. American Journal of Respiratory Cell and Molecular Biology, 2004, 30, 155-165.	2.9	195
2	Physiological Roles of the Intermediate Conductance, Ca2+-activated Potassium Channel Kcnn4. Journal of Biological Chemistry, 2004, 279, 47681-47687.	3.4	173
3	Anthranilate Fluorescence Marks a Calcium-Propagated Necrotic Wave That Promotes Organismal Death in C. elegans. PLoS Biology, 2013, 11, e1001613.	5.6	123
4	Acidic pH Is a Metabolic Switch for 2-Hydroxyglutarate Generation and Signaling. Journal of Biological Chemistry, 2016, 291, 20188-20197.	3.4	118
5	The hSK4 (KCNN4) isoform is the Ca2+-activated K+ channel (Gardos channel) in human red blood cells. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 7366-7371.	7.1	114
6	A Reduction in Intestinal Cell pH Due to Loss of the Caenorhabditis elegans Na+/H+ Exchanger NHX-2 Increases Life Span. Journal of Biological Chemistry, 2003, 278, 44657-44666.	3.4	108
7	cDNA Cloning and Expression of a Family of UDP-N-acetyl-dgalactosamine:PolypeptideN-Acetylgalactosaminyltransferase Sequence Homologs fromCaenorhabditis elegans. Journal of Biological Chemistry, 1998, 273, 8268-8277.	3.4	104
8	Loss of Hyperpolarization-activated Clâˆ’ Current in Salivary Acinar Cells from Clcn2 Knockout Mice. Journal of Biological Chemistry, 2002, 277, 23604-23611.	3.4	104
9	Secretion and cell volume regulation by salivary acinar cells from mice lacking expression of the <i>Clcn3</i> Cl^{âˆ’} channel gene. Journal of Physiology, 2002, 545, 207-216.	2.9	95
10	Altered GABAergic function accompanies hippocampal degeneration in mice lacking ClC-3 voltage-gated chloride channels. Brain Research, 2002, 958, 227-250.	2.2	94
11	Ste20-Type Kinases: Evolutionarily Conserved Regulators of Ion Transport and Cell Volume. Physiology, 2006, 21, 61-68.	3.1	91
12	Cardioprotection by the mitochondrial unfolded protein response requires ATF5. American Journal of Physiology - Heart and Circulatory Physiology, 2019, 317, H472-H478.	3.2	90
13	The Nck-interacting Kinase (NIK) Phosphorylates the Na+-H+ Exchanger NHE1 and Regulates NHE1 Activation by Platelet-derived Growth Factor. Journal of Biological Chemistry, 2001, 276, 31349-31356.	3.4	88
14	The NHX Family of Na+-H+ Exchangers in Caenorhabditis elegans. Journal of Biological Chemistry, 2002, 277, 29036-29044.	3.4	74
15	Defective Fluid Secretion and NaCl Absorption in the Parotid Glands of Na+/H+ Exchanger-deficient Mice. Journal of Biological Chemistry, 2001, 276, 27042-27050.	3.4	72
16	Ischemic preconditioning: The role of mitochondria and aging. Experimental Gerontology, 2012, 47, 1-7.	2.8	69
17	Molecular identification of Ca2+-activated K+ channels in parotid acinar cells. American Journal of Physiology - Cell Physiology, 2003, 284, C535-C546.	4.6	68
18	Metabolic Acidosis Increases Intracellular Calcium in Bone Cells Through Activation of the Proton Receptor OGR1. Journal of Bone and Mineral Research, 2009, 24, 305-313.	2.8	67

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19	Oscillatory Transepithelial H+ Flux Regulates a Rhythmic Behavior in C. elegans. Current Biology, 2008, 18, 297-302.	3.9	64
20	Molecular and Functional Characterization of a Murine Calcium-activated Chloride Channel Expressed in Smooth Muscle. Journal of Biological Chemistry, 2002, 277, 18586-18591.	3.4	63
21	GCK-3, a Newly Identified Ste20 Kinase, Binds To and Regulates the Activity of a Cell Cycleâ€“dependent ClC Anion Channel. Journal of General Physiology, 2005, 125, 113-125.	1.9	63
22	SLO-2 Is Cytoprotective and Contributes to Mitochondrial Potassium Transport. PLoS ONE, 2011, 6, e28287.	2.5	62
23	Charge Distribution of Flanking Amino Acids Influences O-Glycan Acquisition in Vivo. Journal of Biological Chemistry, 1996, 271, 7061-7065.	3.4	61
24	Genetic hypercalciuric stone-forming rats. Current Opinion in Nephrology and Hypertension, 2006, 15, 403-418.	2.0	59
25	Loss of the apical V-ATPase a-subunit VHA-6 prevents acidification of the intestinal lumen during a rhythmic behavior in<i>C. elegans</i>. American Journal of Physiology - Cell Physiology, 2009, 297, C1071-C1081.	4.6	59
26	A Quaternary Transcription Termination Complex. Journal of Molecular Biology, 1994, 243, 830-839.	4.2	54
27	Cardioprotection by nicotinamide mononucleotide (NMN): Involvement of glycolysis and acidic pH. Journal of Molecular and Cellular Cardiology, 2018, 121, 155-162.	1.9	53
28	A Novel Mitochondrial K _{ATP} Channel Assay. Circulation Research, 2010, 106, 1190-1196.	4.5	52
29	Quantitative Analysis of the Voltage-dependent Gating of Mouse Parotid ClC-2 Chloride Channel. Journal of General Physiology, 2005, 126, 591-603.	1.9	49
30	Function of a STIM1 Homologue in C. elegans: Evidence that Store-operated Ca2+ Entry Is Not Essential for Oscillatory Ca2+ Signaling and ER Ca2+ Homeostasis. Journal of General Physiology, 2006, 128, 443-459.	1.9	45
31	Into Ion Channel and Transporter Function. Caenorhabditis elegans ClC-type chloride channels: novel variants and functional expression. American Journal of Physiology - Cell Physiology, 2000, 279, C2052-C2066.	4.6	40
32	Intestinal Ca²⁺wave dynamics in freely moving<i>C. elegans</i>coordinate execution of a rhythmic motor program. American Journal of Physiology - Cell Physiology, 2008, 294, C333-C344.	4.6	40
33	Fndc-1 contributes to paternal mitochondria elimination in C.Âelegans. Developmental Biology, 2019, 454, 15-20.	2.0	39
34	Mitochondrial Fragmentation Leads to Intracellular Acidification in<i>Caenorhabditis elegans</i>and Mammalian Cells. Molecular Biology of the Cell, 2010, 21, 2191-2201.	2.1	38
35	Kir6.2 is not the mitochondrial K_{ATP} channel but is required for cardioprotection by ischemic preconditioning. American Journal of Physiology - Heart and Circulatory Physiology, 2013, 304, H1439-H1445.	3.2	38
36	The Slo(w) path to identifying the mitochondrial channels responsible for ischemic protection. Biochemical Journal, 2017, 474, 2067-2094.	3.7	36

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37	Tauopathy-associated tau modifications selectively impact neurodegeneration and mitophagy in a novel C. elegans single-copy transgenic model. Molecular Neurodegeneration, 2020, 15, 65.	10.8	35
38	A non-cardiomyocyte autonomous mechanism of cardioprotection involving the SLO1 BK channel. PeerJ, 2013, 1, e48.	2.0	34
39	The Mitochondrial Unfolded Protein Response Protects against Anoxia in Caenorhabditis elegans. PLoS ONE, 2016, 11, e0159989.	2.5	33
40	The abts and sulp families of anion transporters from Caenorhabditis elegans. American Journal of Physiology - Cell Physiology, 2005, 289, C341-C351.	4.6	32
41	Isoform-specific O-glycosylation by murine UDP-GalNAc:polypeptide N-acetylgalactosaminyltransferase-T3, in vivo. Glycobiology, 1998, 8, 367-371.	2.5	31
42	Acute inhibition of brain-specific Na⁺/H⁺exchanger isoform 5 by protein kinases A and C and cell shrinkage. American Journal of Physiology - Cell Physiology, 2001, 281, C1146-C1157.	4.6	31
43	Charge distribution of flanking amino acids inhibits O-glycosylation of several single-site acceptors in vivo. Glycobiology, 1997, 7, 1053-1060.	2.5	29
44	The C. elegans mitochondrial K+ATP channel: A potential target for preconditioning. Biochemical and Biophysical Research Communications, 2008, 376, 625-628.	2.1	28
45	Chromophore-Assisted Light Inactivation of Mitochondrial Electron Transport Chain Complex II in Caenorhabditis elegans. Scientific Reports, 2016, 6, 29695.	3.3	28
46	Alternative splicing of N- and C-termini of aC. elegansClC channel alters gating and sensitivity to external Clâ^'and H+. Journal of Physiology, 2004, 555, 97-114.	2.9	26
47	The Crosstalk Between Pathological Tau Phosphorylation and Mitochondrial Dysfunction as a Key to Understanding and Treating Alzheimerâ€™s Disease. Molecular Neurobiology, 2020, 57, 5103-5120.	4.0	26
48	Overproduced rho factor from p39AS has lysine replacing glutamic acid at residue 155 in the linker region between its RNA and ATP binding domains. Nucleic Acids Research, 1992, 20, 6107-6107.	14.5	25
49	Cardiac metabolic effects of K_{Na}1.2 channel deletion and evidence for its mitochondrial localization. FASEB Journal, 2018, 32, 6135-6149.	0.5	23
50	Sex Modifies Genetic Effects on Residual Variance in Urinary Calcium Excretion in Rat (<i>Rattus) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 2	2.9	22
51	Carboxy Terminus Splice Variation Alters ClC Channel Gating and Extracellular Cysteine Reactivity. Biophysical Journal, 2006, 90, 3570-3581.	0.5	21
52	Regulation of acid-base transporters by reactive oxygen species following mitochondrial fragmentation. American Journal of Physiology - Cell Physiology, 2012, 302, C1045-C1054.	4.6	20
53	Mitochondrial ATPâ€sensitive potassium channel activity and hypoxic preconditioning are independent of an inwardly rectifying potassium channel subunit in <i>Caenorhabditis elegans</i>. FEBS Letters, 2012, 586, 428-434.	2.8	19
54	Intracellular pH Measurements In Vivo Using Green Fluorescent Protein Variants. , 2006, 351, 223-240.		18

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55	miR-786 Regulation of a Fatty-Acid Elongase Contributes to Rhythmic Calcium-Wave Initiation in C.Âelegans. Current Biology, 2012, 22, 2213-2220.	3.9	17
56	A C. elegans model of electronic cigarette use: Physiological effects of e-liquids in nematodes. BMC Pharmacology & Toxicology, 2015, 16, 32.	2.4	17
57	Cardiac<i>Slo2.1</i>Is Required for Volatile Anesthetic Stimulation of K+ Transport and Anesthetic Preconditioning. Anesthesiology, 2016, 124, 1065-1076.	2.5	17
58	Potential mechanisms linking SIRT activity and hypoxic 2-hydroxyglutarate generation: no role for direct enzyme (de)acetylation. Biochemical Journal, 2017, 474, 2829-2839.	3.7	17
59	A calcineurin homologous protein is required for sodium-proton exchange events in the C. elegans intestine. American Journal of Physiology - Cell Physiology, 2011, 301, C1389-C1403.	4.6	16
60	Bicarbonate modulates oxidative and functional damage in ischemiaâ€“reperfusion. Free Radical Biology and Medicine, 2013, 55, 46-53.	2.9	16
61	Tau Post-Translational Modifications: Potentiators of Selective Vulnerability in Sporadic Alzheimerâ€™s Disease. Biology, 2021, 10, 1047.	2.8	14
62	Altered gating and regulation of a carboxy-terminal ClC channel mutant expressed in the Caenorhabditis elegans oocyte. American Journal of Physiology - Cell Physiology, 2006, 290, C1109-C1118.	4.6	13
63	Semaphorin 3A potentiates the profibrotic effects of transforming growth factor-Î²1 in the cornea. Biochemical and Biophysical Research Communications, 2020, 521, 333-339.	2.1	13
64	FNDC-1-mediated mitophagy and ATFS-1 coordinate to protect against hypoxia-reoxygenation. Autophagy, 2021, 17, 3389-3401.	9.1	13
65	Effect of <i>Caenorhabditis elegans</i> age and genotype on horizontal gene transfer in intestinal bacteria. FASEB Journal, 2013, 27, 760-768.	0.5	11
66	Ca2+-activated Clâˆ' currents in salivary and lacrimal glands. Current Topics in Membranes, 2002, , 209-230.	0.9	10
67	Identification of a nuclear carbonic anhydrase in Caenorhabditis elegans. Biochimica Et Biophysica Acta - Molecular Cell Research, 2012, 1823, 808-817.	4.1	9
68	Analysis of Ca2+ Signaling Motifs That Regulate Proton Signaling through the Na+/H+ Exchanger NHX-7 during a Rhythmic Behavior in Caenorhabditis elegans*. Journal of Biological Chemistry, 2013, 288, 5886-5895.	3.4	8
69	Expression of the CHOP-inducible carbonic anhydrase CAVI-b is required for BDNF-mediated protection from hypoxia. Brain Research, 2014, 1543, 28-37.	2.2	8
70	Calcineurin homologous proteins regulate the membrane localization and activity of sodium/proton exchangers in C. elegans. American Journal of Physiology - Cell Physiology, 2016, 310, C233-C242.	4.6	7
71	Mucin-Type O-Glycosylation in C.elegans Is Initiated by a Family of Glycosyltransferases.. Trends in Glycoscience and Glycotechnology, 2001, 13, 463-479.	0.1	7
72	Biosynthesis of a low-molecular-mass rat submandibular gland mucin glycoprotein in COS7 cells. Biochemical Journal, 1997, 323, 497-502.	3.7	6

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73	Distinct roles for two Caenorhabditis elegans acid-sensing ion channels in an ultradian clock. ELife, 0, 11, .	6.0	6
74	H(OH), H(OH), H(OH): a holiday perspective. Focus on â€œMouse Slc4a11 expressed in Xenopus oocytes is an ideally selective H+/OHâˆ’ conductance pathway that is stimulated by rises in intracellular and extracellular pHâ€ American Journal of Physiology - Cell Physiology, 2016, 311, C942-C944.	4.6	5
75	The inositol 1,4,5â€trisphosphate receptor in <i>C. elegans</i>. Environmental Sciences Europe, 2012, 1, 321-328.	5.5	4
76	Membrane ion transport in non-excitable tissues. WormBook, 2014, , 1-22.	5.3	4
77	An Anoxia-starvation Model for Ischemia/Reperfusion in C. elegans. Journal of Visualized Experiments, 2014, , .	0.3	2
78	Defining the Role of Mitochondrial Fission in Corneal Myofibroblast Differentiation. , 2022, 63, 2.		2
79	C. elegans NHXâ€2 influences nutrient uptake and insulin signaling. FASEB Journal, 2006, 20, A843.	0.5	1
80	A T231E Mutant that Mimics Pathologic Phosphorylation of Tau in Alzheimer's disease Causes Activation of the Mitochondrial Unfolded Protein Response in touch neurons. MicroPublication Biology, 2020, 2020, .	0.1	1
81	Splice variation of the cytoplasmic Câ€terminus of a C. elegans ClC channel alters functional properties and glutamate gate accessibility to extracellular ions. FASEB Journal, 2006, 20, .	0.5	0
82	Calcineurin homologous protein is required for a protonâ€activated muscle contraction in Caenorhabditis elegans. FASEB Journal, 2010, 24, 815.15.	0.5	0
83	Calciumâ€dependent regulation of proton signaling during a rhythmic behavior in C. elegans. FASEB Journal, 2010, 24, 815.14.	0.5	0