Keith Nehrke

List of Publications by Year
in descending order

83 papers	3,491 citations	109321 35 h-index	149698 56 g-index
89 all docs	89 docs citations	89 times ranked	4431 citing authors

#	Article	IF	Citations
1	Defining the Role of Mitochondrial Fission in Corneal Myofibroblast Differentiation. , 2022, 63, 2.		2
2	FNDC-1-mediated mitophagy and ATFS-1 coordinate to protect against hypoxia-reoxygenation. Autophagy, 2021, 17, 3389-3401.	9.1	13
3	Tau Post-Translational Modifications: Potentiators of Selective Vulnerability in Sporadic Alzheimerâ€™s Disease. Biology, 2021, 10, 1047.	2.8	14
4	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
5	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
6	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
7	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
8	Cardioprotection by the mitochondrial unfolded protein response requires ATF5. American Journal of Physiology - Heart and Circulatory Physiology, 2019, 317, H472-H478.	3.2	90
9	Fndc-1 contributes to paternal mitochondria elimination in C.Âelegans. Developmental Biology, 2019, 454, 15-20.	2.0	39
10	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
11	Cardioprotection by nicotinamide mononucleotide (NMN): Involvement of glycolysis and acidic pH. Journal of Molecular and Cellular Cardiology, 2018, 121, 155-162.	1.9	53
12	The Slo(w) path to identifying the mitochondrial channels responsible for ischemic protection. Biochemical Journal, 2017, 474, 2067-2094.	3.7	36
13	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
14	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
15	Chromophore-Assisted Light Inactivation of Mitochondrial Electron Transport Chain Complex II in Caenorhabditis elegans. Scientific Reports, 2016, 6, 29695.	3.3	28
16	Acidic pH Is a Metabolic Switch for 2-Hydroxyglutarate Generation and Signaling. Journal of Biological Chemistry, 2016, 291, 20188-20197.	3.4	118
17	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
18	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

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19	The Mitochondrial Unfolded Protein Response Protects against Anoxia in Caenorhabditis elegans. PLoS ONE, 2016, 11, e0159989.	2.5	33
20	A C. elegans model of electronic cigarette use: Physiological effects of e-liquids in nematodes. BMC Pharmacology & Toxicology, 2015, 16, 32.	2.4	17
21	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
22	An Anoxia-starvation Model for Ischemia/Reperfusion in C. elegans. Journal of Visualized Experiments, 2014, , .	0.3	2
23	Membrane ion transport in non-excitable tissues. WormBook, 2014, , 1-22.	5.3	4
24	Bicarbonate modulates oxidative and functional damage in ischemiaâ€"reperfusion. Free Radical Biology and Medicine, 2013, 55, 46-53.	2.9	16
25	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
26	Anthranilate Fluorescence Marks a Calcium-Propagated Necrotic Wave That Promotes Organismal Death in C. elegans. PLoS Biology, 2013, 11, e1001613.	5.6	123
27	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
28	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
29	A non-cardiomyocyte autonomous mechanism of cardioprotection involving the SLO1 BK channel. PeerJ, 2013, 1, e48.	2.0	34
30	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
31	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
32	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
33	The inositol 1,4,5â€trisphosphate receptor in <i>C. elegans</i>. Environmental Sciences Europe, 2012, 1, 321-328.	5.5	4
34	Ischemic preconditioning: The role of mitochondria and aging. Experimental Gerontology, 2012, 47, 1-7.	2.8	69
35	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
36	Identification of a nuclear carbonic anhydrase in Caenorhabditis elegans. Biochimica Et Biophysica Acta - Molecular Cell Research, 2012, 1823, 808-817.	4.1	9

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37	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
38	SLO-2 Is Cytoprotective and Contributes to Mitochondrial Potassium Transport. PLoS ONE, 2011, 6, e28287.	2.5	62
39	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
40	A Novel Mitochondrial K _{ATP} Channel Assay. Circulation Research, 2010, 106, 1190-1196.	4.5	52
41	Calcineurin homologous protein is required for a protonâ€activated muscle contraction in Caenorhabditis elegans. FASEB Journal, 2010, 24, 815.15.	0.5	0
42	Calciumâ€dependent regulation of proton signaling during a rhythmic behavior in C. elegans. FASEB Journal, 2010, 24, 815.14.	0.5	0
43	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
44	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
45	Oscillatory Transepithelial H+ Flux Regulates a Rhythmic Behavior in C. elegans. Current Biology, 2008, 18, 297-302.	3.9	64
46	The C. elegans mitochondrial K+ATP channel: A potential target for preconditioning. Biochemical and Biophysical Research Communications, 2008, 376, 625-628.	2.1	28
47	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
48	Carboxy Terminus Splice Variation Alters ClC Channel Gating and Extracellular Cysteine Reactivity. Biophysical Journal, 2006, 90, 3570-3581.	0.5	21
49	Genetic hypercalciuric stone-forming rats. Current Opinion in Nephrology and Hypertension, 2006, 15, 403-418.	2.0	59
50	Ste20-Type Kinases: Evolutionarily Conserved Regulators of Ion Transport and Cell Volume. Physiology, 2006, 21, 61-68.	3.1	91
51	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
52	Intracellular pH Measurements In Vivo Using Green Fluorescent Protein Variants. , 2006, 351, 223-240.		18
53	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
54	C. elegans NHXâ€2 influences nutrient uptake and insulin signaling. FASEB Journal, 2006, 20, A843.	0.5	1

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55	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
56	The abts and sulp families of anion transporters from Caenorhabditis elegans. American Journal of Physiology - Cell Physiology, 2005, 289, C341-C351.	4.6	32
57	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
58	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
59	Physiological Roles of the Intermediate Conductance, Ca2+-activated Potassium Channel Kcnn4. Journal of Biological Chemistry, 2004, 279, 47681-47687.	3.4	173
60	Alternative splicing of N- and C-termini of aC. elegansClC channel alters gating and sensitivity to external Clâˆ’and H+. Journal of Physiology, 2004, 555, 97-114.	2.9	26
61	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
62	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
63	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
64	Molecular identification of Ca2+-activated K+ channels in parotid acinar cells. American Journal of Physiology - Cell Physiology, 2003, 284, C535-C546.	4.6	68
65	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
66	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
67	The NHX Family of Na+-H+ Exchangers in Caenorhabditis elegans. Journal of Biological Chemistry, 2002, 277, 29036-29044.	3.4	74
68	Ca2+-activated Clâˆ’ currents in salivary and lacrimal glands. Current Topics in Membranes, 2002, , 209-230.	0.9	10
69	Altered GABAergic function accompanies hippocampal degeneration in mice lacking ClC-3 voltage-gated chloride channels. Brain Research, 2002, 958, 227-250.	2.2	94
70	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
71	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
72	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

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73	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
74	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
75	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
76	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
77	Isoform-specific O-glycosylation by murine UDP-GalNAc:polypeptide N-acetylgalactosaminyltransferase-T3, in vivo. Glycobiology, 1998, 8, 367-371.	2.5	31
78	Charge distribution of flanking amino acids inhibits O-glycosylation of several single-site acceptors in vivo. Glycobiology, 1997, 7, 1053-1060.	2.5	29
79	Biosynthesis of a low-molecular-mass rat submandibular gland mucin glycoprotein in COS7 cells. Biochemical Journal, 1997, 323, 497-502.	3.7	6
80	Charge Distribution of Flanking Amino Acids Influences O-Glycan Acquisition in Vivo. Journal of Biological Chemistry, 1996, 271, 7061-7065.	3.4	61
81	A Quaternary Transcription Termination Complex. Journal of Molecular Biology, 1994, 243, 830-839.	4.2	54
82	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
83	Distinct roles for two Caenorhabditis elegans acid-sensing ion channels in an ultradian clock. ELife, 0, 11, .	6.0	6