Walter F Boron

List of Publications by Year
in descending order

231 papers	14,503 citations	24978 57 h-index	19690 117 g-index
234 all docs	234 docs citations	234 times ranked	8827 citing authors

#	Article	IF	Citations
1	Cloning and characterization of a mammalian proton-coupled metal-ion transporter. Nature, 1997, 388, 482-488.	13.7	2,895
2	Expression cloning of a mammalian proton-coupled oligopeptide transporter. Nature, 1994, 368, 563-566.	13.7	838
3	Expression cloning and characterization of a renal electrogenic Na+ /HCO3â^' cotransporter. Nature, 1997, 387, 409-413.	13.7	415
4	The SLC4 family of HCO3 ? transporters. Pflugers Archiv European Journal of Physiology, 2004, 447, 495-509.	1.3	394
5	Lysosome recruitment and fusion are early events required for trypanosome invasion of mammalian cells. Cell, 1992, 71, 1117-1130.	13.5	374
6	Effect of expressing the water channel aquaporin-1 on the CO₂permeability ofXenopusoocytes. American Journal of Physiology - Cell Physiology, 1998, 274, C543-C548.	2.1	329
7	Regulation of intracellular pH. American Journal of Physiology - Advances in Physiology Education, 2004, 28, 160-179.	0.8	298
8	The SLC4 family of bicarbonate transporters. Molecular Aspects of Medicine, 2013, 34, 159-182.	2.7	287
9	Arginine vasopressin enhances pHi regulation in the presence of HCOâ^'3 by stimulating three acid-base transport systems. Nature, 1989, 337, 648-651.	13.7	281
10	Transport of H+ and of ionic weak acids and bases. Journal of Membrane Biology, 1983, 72, 1-16.	1.0	277
11	The Divergence, Actions, Roles, and Relatives of Sodium-Coupled Bicarbonate Transporters. Physiological Reviews, 2013, 93, 803-959.	13.1	237
12	Relative CO ₂ /NH ₃ selectivities of AQP1, AQP4, AQP5, AmtB, and RhAG. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 5406-5411.	3.3	235
13	An electroneutral sodium/bicarbonate cotransporter NBCn1 and associated sodium channel. Nature, 2000, 405, 571-575.	13.7	225
14	Role of chloride transport in regulation of intracellular pH. Nature, 1976, 264, 73-74.	13.7	218
15	Evidence that aquaporin 1 is a major pathway for CO 2 transport across the human erythrocyte membrane. FASEB Journal, 2006, 20, 1974-1981.	0.2	198
16	ELECTROGENIC Na+/HCOâ^'3COTRANSPORTERS: Cloning and Physiology. Annual Review of Physiology, 1999, 61, 699-723.	5.6	191
17	Exploring gas permeability of cellular membranes and membrane channels with molecular dynamics. Journal of Structural Biology, 2007, 157, 534-544.	1.3	184
18	Electrogenic Properties of the Epithelial and Neuronal High Affinity Glutamate Transporter. Journal of Biological Chemistry, 1995, 270, 16561-16568.	1.6	169

#	Article	IF	Citations
19	Cloning and characterization of a human electrogenic Na⁺- HCO 3 â^' cotransporter isoform (hhNBC). American Journal of Physiology - Cell Physiology, 1999, 276, C576-C584.	2.1	161
20	Unusual permeability properties of gastric gland cells. Nature, 1994, 368, 332-335.	13.7	155
21	Effect of PCMBS on CO₂permeability ofXenopusoocytes expressing aquaporin 1 or its C189S mutant. American Journal of Physiology - Cell Physiology, 1998, 275, C1481-C1486.	2.1	155
22	Acid-Base Transport by the Renal Proximal Tubule. Journal of the American Society of Nephrology: JASN, 2006, 17, 2368-2382.	3.0	155
23	An electrogenic Na⁺- HCO 3 â^' cotransporter (NBC) with a novel COOH-terminus, cloned from rat brain. American Journal of Physiology - Cell Physiology, 2000, 278, C1200-C1211.	2.1	148
24	Cloning, Characterization, and Chromosomal Mapping of a Human Electroneutral Na+-driven Cl-HCO3Exchanger. Journal of Biological Chemistry, 2001, 276, 8358-8363.	1.6	144
25	Specificity of Anion Exchange Mediated by Mouse Slc26a6. Journal of Biological Chemistry, 2002, 277, 33963-33967.	1.6	140
26	Intracellular pH regulation by acid-base transporters in mammalian neurons. Frontiers in Physiology, 2014, 5, 43.	1.3	138
27	Active proton transport stimulated by CO2/HCO3â^', blocked by cyanide. Nature, 1976, 259, 240-241.	13.7	131
28	Cloning and functional expression of rNBC, an electrogenic Na⁺- HCO 3 â^' cotransporter from rat kidney. American Journal of Physiology - Renal Physiology, 1998, 274, F425-F432.	1.3	130
29	Reconstitution of CO₂ Regulation of SLAC1 Anion Channel and Function of CO₂-Permeable PIP2;1 Aquaporin as CARBONIC ANHYDRASE4 Interactor. Plant Cell, 2016, 28, 568-582.	3.1	130
30	Intracellular pH regulation in single cultured astrocytes from rat forebrain. Glia, 1993, 8, 241-248.	2.5	128
31	Modular structure of sodium-coupled bicarbonate transporters. Journal of Experimental Biology, 2009, 212, 1697-1706.	0.8	121
32	Sodium Kinetics of Na,K-ATPase Î± Isoforms in Intact Transfected HeLa Cells. Journal of General Physiology, 1997, 110, 201-213.	0.9	114
33	Immunolocalization of the electrogenic Na⁺- HCO 3 â^' cotransporter in mammalian and amphibian kidney. American Journal of Physiology - Renal Physiology, 1999, 276, F27-F38.	1.3	113
34	Functional characterization of human NBC4 as an electrogenic Na⁺-HCO 3 â^' cotransporter (NBCe2). American Journal of Physiology - Cell Physiology, 2002, 282, C1278-C1289.	2.1	111
35	The electrogenic Na/HCO3 cotransporter. Kidney International, 1989, 36, 392-402.	2.6	110
36	Na/HCO₃ Cotransporters in Rat Brain: Expression in Glia, Neurons, and Choroid Plexus. Journal of Neuroscience, 2000, 20, 6839-6848.	1.7	110

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37	Intracellular pH Regulation in Cultured Astrocytes from Rat Hippocampus. Journal of General Physiology, 1997, 110, 467-483.	0.9	103
38	Transport of volatile solutes through AQP1. Journal of Physiology, 2002, 542, 17-29.	1.3	100
39	Relative CO₂/NH₃selectivities of mammalian aquaporins 0â€“9. American Journal of Physiology - Cell Physiology, 2013, 304, C985-C994.	2.1	95
40	Immunoelectron Microscopic Localization of the Electrogenic Na/HCO3 Cotransporter in Rat and Ambystoma Kidney. Journal of the American Society of Nephrology: JASN, 2000, 11, 2179-2189.	3.0	88
41	The human NBCe1-A mutant R881C, associated with proximal renal tubular acidosis, retains function but is mistargeted in polarized renal epithelia. American Journal of Physiology - Cell Physiology, 2006, 291, C788-C801.	2.1	86
42	Influence of cyclic AMP on intracellular pH regulation and chloride fluxes in barnacle muscle fibres. Nature, 1978, 276, 511-513.	13.7	85
43	Effects of CGRP, forskolin, PMA, and ionomycin on pH_idependence of Na-H exchange in UMR-106 cells. American Journal of Physiology - Cell Physiology, 1994, 266, C1083-C1092.	2.1	83
44	Characterization of Human SLC4A10 as an Electroneutral Na/HCO3 Cotransporter (NBCn2) with Clâ€“ Self-exchange Activity. Journal of Biological Chemistry, 2008, 283, 12777-12788.	1.6	83
45	Intracellular pH Regulation in Cultured Astrocytes from Rat Hippocampus. Journal of General Physiology, 1997, 110, 453-465.	0.9	81
46	Sharpeyâ€Schafer Lecture: Gas channels. Experimental Physiology, 2010, 95, 1107-1130.	0.9	81
47	Distinct Cellular Locations of Carbonic Anhydrases Mediate Carbon Dioxide Control of Stomatal Movements. Plant Physiology, 2015, 169, 1168-1178.	2.3	78
48	Na+-dependent HCO3â^' uptake into the rat choroid plexus epithelium is partially DIDS sensitive. American Journal of Physiology - Cell Physiology, 2005, 289, C1448-C1456.	2.1	77
49	Effect of Human Carbonic Anhydrase II on the Activity of the Human Electrogenic Na/HCO3 Cotransporter NBCe1-A in Xenopus Oocytes. Journal of Biological Chemistry, 2006, 281, 19241-19250.	1.6	77
50	Localization of Sodium Bicarbonate Cotransporter (NBC) Protein and Messenger Ribonucleic Acid in Rat Epididymis1. Biology of Reproduction, 1999, 60, 573-579.	1.2	71
51	Evaluating the role of carbonic anhydrases in the transport of HCO3â^'-related species. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2010, 1804, 410-421.	1.1	71
52	Evidence against a Direct Interaction between Intracellular Carbonic Anhydrase II and Pure C-terminal Domains of SLC4 Bicarbonate Transporters. Journal of Biological Chemistry, 2007, 282, 1409-1421.	1.6	69
53	Expression and distribution of the Na+- HCO 3 â^' cotransporter in human pancreas. American Journal of Physiology - Renal Physiology, 1999, 277, G487-G494.	1.6	68
54	Immunolocalization of electroneutral Na-HCO₃^{â^'}cotransporter in rat kidney. American Journal of Physiology - Renal Physiology, 2000, 279, F901-F909.	1.3	66

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55	Out-of-equilibrium CO2/HCO3â˜ solutions and their use in characterizing a new K/HCO3 cotransporter. Nature, 1995, 374, 636-639.	13.7	65
56	Symmetry of H+ Binding to the Intra- and Extracellular Side of the H+-coupled Oligopeptide Cotransporter PepT1. Journal of Biological Chemistry, 1997, 272, 7777-7785.	1.6	63
57	Use of BCECF and propidium iodide to assess membrane integrity of acutely isolated CA1 neurons from rat hippocampus. Journal of Neuroscience Methods, 1995, 58, 61-75.	1.3	60
58	Relief of autoinhibition of the electrogenic Na-HCO₃cotransporter NBCe1-B: role of IRBIT vs. amino-terminal truncation. American Journal of Physiology - Cell Physiology, 2012, 302, C518-C526.	2.1	60
59	Reversible and irreversible interactions of DIDS with the human electrogenic Na/HCO3 cotransporter NBCe1-A: role of lysines in the KKMIK motif of TM5. American Journal of Physiology - Cell Physiology, 2007, 292, C1787-C1798.	2.1	56
60	Intrinsic CO₂ Permeability of Cell Membranes and Potential Biological Relevance of CO₂ Channels. ChemPhysChem, 2011, 12, 1017-1019.	1.0	56
61	Localization of electrogenic Na/bicarbonate cotransporter NBCe1 variants in rat brain. Neuroscience, 2008, 155, 818-832.	1.1	51
62	Role of Carbonic Anhydrases and Inhibitors in Acidâ€“Base Physiology: Insights from Mathematical Modeling. International Journal of Molecular Sciences, 2019, 20, 3841.	1.8	51
63	Using fluorometry and ion-sensitive microelectrodes to study the functional expression of heterologously-expressed ion channels and transporters in Xenopus oocytes. Methods, 2010, 51, 134-145.	1.9	49
64	Evidence from renal proximal tubules that HCO3 and solute reabsorption are acutely regulated not by pH but by basolateral HCO3 and CO2. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 3875-3880.	3.3	48
65	NBCe1 (SLC4A4) a potential pH regulator in enamel organ cells during enamel development in the mouse. Cell and Tissue Research, 2014, 358, 433-442.	1.5	47
66	Cloning and functional expression of an MIP (AQP0) homolog from killifish (Fundulus heteroclitus) lens. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2001, 281, R1994-R2003.	0.9	45
67	The buffer value of weak acids and bases: origin of the concept, and first mathematical derivation and application to physico-chemical systems the work of M. Koppel and K. Spiro (1914). Respiration Physiology, 1980, 40, 1-32.	2.8	44
68	Cloning and Functional Characterization of a Novel Aquaporin fromXenopus laevis Oocytes. Journal of Biological Chemistry, 2002, 277, 40610-40616.	1.6	44
69	Use of a new polyclonal antibody to study the distribution and glycosylation of the sodium-coupled bicarbonate transporter NCBE in rodent brain. Neuroscience, 2008, 151, 374-385.	1.1	44
70	Effect of extracellular acid-base disturbances on the intracellular pH of neurones cultured from rat medullary raphe or hippocampus. Journal of Physiology, 2004, 559, 85-101.	1.3	43
71	Expression and localization of Na-driven Cl-HCO3â˜ exchanger (SLC4A8) in rodent CNS. Neuroscience, 2008, 153, 162-174.	1.1	42
72	Cloning of a Na⁺-driven Cl/HCO₃exchanger from squid giant fiber lobe. American Journal of Physiology - Cell Physiology, 2003, 285, C771-C780.	2.1	41

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73	Role of glycosylation in the renal electrogenic Na+-HCO 3 â˜ cotransporter (NBCe1). American Journal of Physiology - Renal Physiology, 2003, 284, F1199-F1206.	1.3	40
74	Colony-Stimulating Factor-1 Increases Osteoclast Intracellular pH and Promotes Survival via the Electroneutral Na/HCO3 Cotransporter NBCn1. Endocrinology, 2007, 148, 831-840.	1.4	40
75	Extracellular Êœ á´„ á´ƁÌ... is sensed by mouse cerebral arteries: Regulation of tone by receptor protein tyrosine phosphatase Î³. Journal of Cerebral Blood Flow and Metabolism, 2016, 36, 965-980.	2.4	40
76	Immunolocalization of anion exchanger AE2 and Na⁺- HCO 3 â˜ cotransporter in rat parotid and submandibular glands. American Journal of Physiology - Renal Physiology, 1999, 277, G1288-G1296.	1.6	39
77	Cell activation: The â€˜basicâ€™ connection. Nature, 1984, 312, 312-312.	13.7	38
78	Cloning and characterization of a zebrafish homologue of human AQP1: a bifunctional water and gas channel. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2010, 299, R1163-R1174.	0.9	38
79	Functionalized Phenylbenzamides Inhibit Aquaporin-4 Reducing Cerebral Edema and Improving Outcome in Two Models of CNS Injury. Neuroscience, 2019, 404, 484-498.	1.1	38
80	Relative CO2/NH3 Permeabilities of Human RhAG, RhBG and RhCG. Journal of Membrane Biology, 2013, 246, 915-926.	1.0	36
81	Acid-base transport by the renal proximal tubule. Journal of Nephrology, 2010, 23 Suppl 16, S4-18.	0.9	36
82	Cloning and characterization of novel humanSLC4A8gene products encoding Na⁺-driven Cl^{â˜'}/HCO₃^{â˜'}exchanger variants NDCBE-A, -C, and -D. Physiological Genomics, 2008, 34, 265-276.	1.0	35
83	A reactionâ€“diffusion model of CO2 influx into an oocyte. Journal of Theoretical Biology, 2012, 309, 185-203.	0.8	33
84	Mathematical modeling of acid-base physiology. Progress in Biophysics and Molecular Biology, 2015, 117, 43-58.	1.4	33
85	Extracellular Hco3â˜' Dependence of Electrogenic Na/Hco3 Cotransporters Cloned from Salamander and Rat Kidney. Journal of General Physiology, 2000, 115, 533-546.	0.9	32
86	Concentration-Dependent Effects on Intracellular and Surface pH of Exposing Xenopus oocytes to Solutions Containing NH3/NH4 +. Journal of Membrane Biology, 2009, 228, 15-31.	1.0	32
87	Splice Cassette II of Na+,HCO3â˜' Cotransporter NBCn1 (slc4a7) Interacts with Calcineurin A. Journal of Biological Chemistry, 2013, 288, 8146-8155.	1.6	32
88	Role of an extracellular loop in determining the stoichiometry of Na⁺â€“HCO₃^{â˜'} cotransporters. Journal of Physiology, 2011, 589, 877-890.	1.3	30
89	Role of Receptor Protein Tyrosine Phosphatase Î³ in Sensing Extracellular CO2 and HCO3 â˜'. Journal of the American Society of Nephrology: JASN, 2016, 27, 2616-2621.	3.0	28
90	Effect of chronic elevated carbon dioxide on the expression of acid-base transporters in the neonatal and adult mouse. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2007, 293, R1294-R1302.	0.9	27

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91	Chronic continuous hypoxia decreases the expression of SLC4A7 (NBCn1) and SLC4A10 (NCBE) in mouse brain. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2007, 293, R2412-R2420.	0.9	27
92	Secretagogue stimulation enhances NBCe1 (electrogenic Na+/HCO3â˜' cotransporter) surface expression in murine colonic crypts. American Journal of Physiology - Renal Physiology, 2009, 297, G1223-G1231.	1.6	27
93	Monitoring Ion Activities In and Around Cells Using Ion-Selective Liquid-Membrane Microelectrodes. Sensors, 2013, 13, 984-1003.	2.1	27
94	Movement of NH₃through the human urea transporter B: a new gas channel. American Journal of Physiology - Renal Physiology, 2013, 304, F1447-F1457.	1.3	27
95	Comment on â€œLocal impermeant anions establish the neuronal chloride concentrationâ€• Science, 2014, 345, 1130-1130.	6.0	27
96	Role of a tyrosine kinase in the CO2-induced stimulation of HCO3â˜' reabsorption by rabbit S2 proximal tubules. American Journal of Physiology - Renal Physiology, 2006, 291, F358-F367.	1.3	26
97	Evidence from simultaneous intracellular- and surface-pH transients that carbonic anhydrase IV enhances CO₂fluxes acrossXenopusoocyte plasma membranes. American Journal of Physiology - Cell Physiology, 2014, 307, C814-C840.	2.1	26
98	Effect of isolated removal of either basolateral HCO3-or basolateral CO2on HCO3-reabsorption by rabbit S2 proximal tubule. American Journal of Physiology - Renal Physiology, 2003, 285, F359-F369.	1.3	25
99	Effects of metabolic acidosis on intracellular pH responses in multiple cell types. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2014, 307, R1413-R1427.	0.9	25
100	Na+/HCO3 â€“ Cotransporter NBCn2 Mediates HCO3 â˜' Reclamation in the Apical Membrane of Renal Proximal Tubules. Journal of the American Society of Nephrology: JASN, 2017, 28, 2409-2419.	3.0	25
101	Increased cerebral vascularization and decreased water exchange across the blood-brain barrier in aquaporin-4 knockout mice. PLoS ONE, 2019, 14, e0218415.	1.1	25
102	Carbon dioxide transport across membranes. Interface Focus, 2021, 11, 20200090.	1.5	25
103	HCO₃^{â˜'}â€independent conductance with a mutant Na⁺/HCO₃^{â˜'} cotransporter (SLC4A4) in a case of proximal renal tubular acidosis with hypokalaemic paralysis. Journal of Physiology, 2012, 590, 2009-2034.	1.3	24
104	Shrinkage-induced activation of Na+/H+exchange in rat renal mesangial cells. American Journal of Physiology - Cell Physiology, 1999, 276, C674-C683.	2.1	23
105	Cloning and characterization of an electrogenic Na/HCO3â˜' cotransporter from the squid giant fiber lobe. American Journal of Physiology - Cell Physiology, 2007, 292, C2032-C2045.	2.1	23
106	Cloning, localization, and functional expression of the electrogenic Na⁺bicarbonate cotransporter (NBCe1) from zebrafish. American Journal of Physiology - Cell Physiology, 2009, 297, C865-C875.	2.1	23
107	Effects of acute hypoxia on intracellular-pH regulation in astrocytes cultured from rat hippocampus. Brain Research, 2008, 1193, 143-152.	1.1	22
108	The electrogenicity of the rat sodium-bicarbonate cotransporter NBCe1 requires interactions among transmembrane segments of the transporter. Journal of Physiology, 2007, 578, 131-142.	1.3	21

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109	Substrate specificity of the electrogenic sodium/bicarbonate cotransporter NBCe1-A (SLC4A4, variant) Tj ETQq1 1 0.784314 rgBT /Ov	1.3	21
110	Aquaporin-7: A Dynamic Aquaglyceroporin With Greater Water and Glycerol Permeability Than Its Bacterial Homolog GlpF. Frontiers in Physiology, 2020, 11, 728.	1.3	21
111	Expression and purification of the cytoplasmic N-terminal domain of the Na/HCO3 cotransporter NBCe1-A: Structural insights from a generalized approach. Protein Expression and Purification, 2006, 49, 228-234.	0.6	20
112	Effects of chronic continuous hypoxia on the expression of SLC4A8 (NDCBE) in neonatal versus adult mouse brain. Brain Research, 2008, 1238, 85-92.	1.1	20
113	Mutation of a single amino acid converts the human water channel aquaporin 5 into an anion channel. American Journal of Physiology - Cell Physiology, 2013, 305, C663-C672.	2.1	20
114	Linaclotide improves gastrointestinal transit in cystic fibrosis mice by inhibiting sodium/hydrogen exchanger 3. American Journal of Physiology - Renal Physiology, 2018, 315, G868-G878.	1.6	20
115	A conductive pathway generated from fragments of the human red cell anion exchanger AE1. Journal of Physiology, 2007, 581, 33-50.	1.3	19
116	Evidence from mathematical modeling that carbonic anhydrase II and IV enhance CO₂ fluxes across Xenopus oocyte plasma membranes. American Journal of Physiology - Cell Physiology, 2014, 307, C841-C858.	2.1	19
117	Distribution of NBCn2 (SLC4A10) splice variants in mouse brain. Neuroscience, 2010, 169, 951-964.	1.1	18
118	Evidence from simultaneous intracellular- and surface-pH transients that carbonic anhydrase II enhances CO₂ fluxes across Xenopus oocyte plasma membranes. American Journal of Physiology - Cell Physiology, 2014, 307, C791-C813.	2.1	18
119	Preliminary X-ray diffraction analysis of the cytoplasmic N-terminal domain of the Na/HCO3cotransporter NBCe1-A. Acta Crystallographica Section F: Structural Biology Communications, 2006, 62, 534-537.	0.7	17
120	Role of endogenously secreted angiotensin II in the CO₂-induced stimulation of HCO₃reabsorption by renal proximal tubules. American Journal of Physiology - Renal Physiology, 2008, 294, F245-F252.	1.3	17
121	Effects of optional structural elements, including two alternative amino termini and a new splicing cassette IV, on the function of the sodiumâ€"bicarbonate cotransporter NBCn1 (SLC4A7). Journal of Physiology, 2013, 591, 4983-5004.	1.3	16
122	Sodium-Coupled Bicarbonate Transporters. , 2008, , 1481-1497.		16
123	Role of the AT1A receptor in the CO2-induced stimulation of HCO3â^' reabsorption by renal proximal tubules. American Journal of Physiology - Renal Physiology, 2007, 293, F110-F120.	1.3	15
124	NH4Cl and other weak bases in the activation of sea urchin eggs. Nature, 1978, 274, 190-190.	13.7	14
125	Intracellular Clâ^' Dependence of Na-H Exchange in Barnacle Muscle Fibers under Normotonic and Hypertonic Conditions. Journal of General Physiology, 1997, 110, 629-639.	0.9	14
126	CrossTalk proposal: Physiological CO₂ exchange can depend on membrane channels. Journal of Physiology, 2015, 593, 5025-5028.	1.3	14

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127	Regulation of Intracellular pH in Renal Mesangial Cells. Annals of the New York Academy of Sciences, 1989, 574, 321-332.	1.8	13
128	Effects of angiotensin II on the CO2 dependence of HCO3â˜' reabsorption by the rabbit S2 renal proximal tubule. American Journal of Physiology - Renal Physiology, 2006, 290, F666-F673.	1.3	13
129	Control of Intracellular pH. , 2013, , 1773-1835.		12
130	Role of Cl^{â˜'}â€"HCO₃^{â˜'} exchanger AE3 in intracellular pH homeostasis in cultured murine hippocampal neurons, and in crosstalk to adjacent astrocytes. Journal of Physiology, 2017, 595, 93-124.	1.3	12
131	Carbonic anhydrases enhance activity of endogenous Naâ€H exchangers and not the electrogenic Na/HCO₃ cotransporter NBCe1â€A, expressed in Xenopus oocytes. Journal of Physiology, 2020, 598, 5821-5856.	1.3	12
132	Intracellular pH Regulation. , 1987, , 39-51.		12
133	Chapter 1 Intracellular pH Regulation. Current Topics in Membranes and Transport, 1980, 13, 3-22.	0.6	11
134	Effect of Simultaneously Replacing Putative TM6 and TM12 of Human NBCe1-A with Those from NBCn1 on Surface Abundance in Xenopus Oocytes. Journal of Membrane Biology, 2012, 245, 131-140.	1.0	11
135	Expression of a mammalian Naâ€"H exchanger in muscle fibres of the giant barnacle. Nature, 1985, 315, 756-758.	13.7	10
136	Exploring the autoinhibitory domain of the electrogenic Na + /HCO 3 â˜' transporter NBCe1â€B, from residues 28 to 62. Journal of Physiology, 2018, 596, 3637-3653.	1.3	10
137	A Novel Stopped-Flow Assay for Quantitating Carbonic-Anhydrase Activity and Assessing Red-Blood-Cell Hemolysis. Frontiers in Physiology, 2017, 8, 169.	1.3	9
138	Active control of intracellular pH. Respiration Physiology, 1978, 33, 59-62.	2.8	8
139	An increase in intracellular calcium concentration that is induced by basolateral CO₂in rabbit renal proximal tubule. American Journal of Physiology - Renal Physiology, 2003, 285, F674-F687.	1.3	8
140	Control of Intracellular pH. , 2008, , 1429-1480.		8
141	[12] Manipulation and regulation ofcytosolic pH. Methods in Neurosciences, 1995, , 252-273.	0.5	7
142	NIH Funding of the Independent Investigator. Physiology, 2006, 21, 300-301.	1.6	7
143	Expression and distribution of NBCn2 (Slc4a10) splice variants in mouse brain: Cloning of novel variant NBCn2-D. Brain Research, 2011, 1390, 33-40.	1.1	7
144	Effect of acute acid-base disturbances on ErbB1/2 tyrosine phosphorylation in rabbit renal proximal tubules. American Journal of Physiology - Renal Physiology, 2013, 305, F1747-F1764.	1.3	7

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145	Expression, Localization, and Effect of High Salt Intake on Electroneutral Na+/HCO3â€“ Cotransporter NBCn2 in Rat Small Intestine: Implication in Intestinal NaCl Absorption. Frontiers in Physiology, 2019, 10, 1334.	1.3	7
146	Evidence that AQP1 is a functional CO 2 channel in proximal tubules. FASEB Journal, 2006, 20, A1225.	0.2	6
147	Immunocytochemical identification of electroneutral Na+-coupled <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:mrow><mml:msubsup><mml:mrow><mml:mspace width="0.35em" height="0.8ex" /><mml:mtext>HCO</mml:mtext></mml:mrow><mml:mrow><mml:mn mathvariant="bold">3</mml:mn></mml:mrow><mml:mrow><mml:mo>-</mml:mo></mml:mrow></mml:msubsup></mml:mrow></mml:m transporters in freshly dissociated mouse medullary raphÃ© neurons. Neuroscience, 2013, 246, 451-467.	1.1	5
148	Effect of acute acid-base disturbances on the phosphorylation of phospholipase C-Î³1 and Erk1/2 in the renal proximal tubule. Physiological Reports, 2015, 3, e12280.	0.7	5
149	Intracellular pH Regulation. , 1986, , 423-435.		5
150	The New Physiology. Physiology, 2004, 19, 160-160.	1.6	5
151	Multiple acidâ€base and electrolyte disturbances upregulate NBCn1, NBCn2, IRBIT and Lâ€IRBIT in the mTAL. Journal of Physiology, 2020, 598, 3395-3415.	1.3	4
152	Computational Model of Electrode-Induced Microenvironmental Effects on pH Measurements Near a Cell Membrane. Multiscale Modeling and Simulation, 2020, 18, 1053-1075.	0.6	4
153	Distinguishing HCO 3 â€•from CO 3 = transport by the electrogenic Na/HCO 3 cotransporter NBCe1 (SLC4A4) (1098.7). FASEB Journal, 2014, 28, 1098.7.	0.2	4
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