

# Ebbe Boedtkjer

## List of Publications by Year in descending order

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64  
papers

2,470  
citations

236833

25  
h-index

206029

48  
g-index

67  
all docs

67  
docs citations

67  
times ranked

2205  
citing authors

#	ARTICLE	IF	CITATIONS
1	The Acidic Tumor Microenvironment as a Driver of Cancer. Annual Review of Physiology, 2020, 82, 103-126.	5.6	551
2	Disruption of Na <sup>+</sup> ,HCO <sub>3</sub> <sup>-</sup> Cotransporter NBCn1 (slc4a7) Inhibits NO-Mediated Vasorelaxation, Smooth Muscle Ca <sup>2+</sup> Sensitivity, and Hypertension Development in Mice. Circulation, 2011, 124, 1819-1829.	1.6	124
3	Physiology, Pharmacology and Pathophysiology of the pH Regulatory Transport Proteins NHE1 and NBCn1: Similarities, Differences, and Implications for Cancer Therapy. Current Pharmaceutical Design, 2012, 18, 1345-1371.	0.9	123
4	Regulation and roles of bicarbonate transporters in cancer. Frontiers in Physiology, 2014, 5, 130.	1.3	113
5	NBCn1 and NHE1 expression and activity in $\beta$ NERbB2 receptor-expressing MCF-7 breast cancer cells: Contributions to pH <sub>i</sub> regulation and chemotherapy resistance. Experimental Cell Research, 2010, 316, 2538-2553.	1.2	111
6	Contribution of Na <sup>+</sup> ,HCO <sub>3</sub> <sup>-</sup> cotransport to cellular pH control in human breast cancer: A role for the breast cancer susceptibility locus NBCn1 (SLC4A7). International Journal of Cancer, 2013, 132, 1288-1299.	2.3	104
7	NBCn1 (slc4a7) Mediates the Na <sup>+</sup> -Dependent Bicarbonate Transport Important for Regulation of Intracellular pH in Mouse Vascular Smooth Muscle Cells. Circulation Research, 2006, 98, 515-523.	2.0	81
8	Antibody-independent localization of the electroneutral Na <sup>+</sup> -HCO <sub>3</sub> <sup>-</sup> cotransporter NBCn1 (slc4a7) in mice. American Journal of Physiology - Cell Physiology, 2008, 294, C591-C603.	2.1	74
9	Disrupting Na <sup>+</sup> ,HCO <sub>3</sub> <sup>-</sup> -cotransporter NBCn1 (Slc4a7) delays murine breast cancer development. Oncogene, 2016, 35, 2112-2122.	2.6	73
10	The net acid extruders NHE1, NBCn1 and MCT4 promote mammary tumor growth through distinct but overlapping mechanisms. International Journal of Cancer, 2018, 142, 2529-2542.	2.3	63
11	TMEM16A knockdown abrogates two different Ca <sup>2+</sup> -activated Cl <sup>-</sup> currents and contractility of smooth muscle in rat mesenteric small arteries. Pflugers Archiv European Journal of Physiology, 2014, 466, 1391-1409.	1.3	59
12	Opening of Small and Intermediate Calcium-Activated Potassium Channels Induces Relaxation Mainly Mediated by Nitric-Oxide Release in Large Arteries and Endothelium-Derived Hyperpolarizing Factor in Small Arteries from Rat. Journal of Pharmacology and Experimental Therapeutics, 2011, 339, 842-850.	1.3	58
13	Intracellular pH in the Resistance Vasculature: Regulation and Functional Implications. Journal of Vascular Research, 2012, 49, 479-496.	0.6	52
14	Na <sup>+</sup> ,HCO <sub>3</sub> <sup>-</sup> cotransport is functionally upregulated during human breast carcinogenesis and required for the inverted pH gradient across the plasma membrane. Pflugers Archiv European Journal of Physiology, 2015, 467, 367-377.	1.3	52
15	Cation-Coupled Bicarbonate Transporters. , 2014, 4, 1605-1637.		48
16	NHE1 knockout reduces blood pressure and arterial media/lumen ratio with no effect on resting pH <sub>i</sub> in the vascular wall. Journal of Physiology, 2012, 590, 1895-1906.	1.3	47
17	Vasomotion has chloride-dependency in rat mesenteric small arteries. Pflugers Archiv European Journal of Physiology, 2008, 457, 389-404.	1.3	44
18	Na <sup>+</sup> , HCO <sub>3</sub> <sup>-</sup> cotransporter NBCn1 increases pH <sub>i</sub> gradients, filopodia, and migration of smooth muscle cells and promotes arterial remodelling. Cardiovascular Research, 2016, 111, 227-239.	1.8	41

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19	Extracellular $\text{pH}$ is sensed by mouse cerebral arteries: Regulation of tone by receptor protein tyrosine phosphatase $\beta$ . <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2016, 36, 965-980.	2.4	40
20	$\text{Na}^+$ , $\text{HCO}_3^-$ -cotransporter NBCn1 (Slc4a7) accelerates ErbB2-induced breast cancer development and tumor growth in mice. <i>Oncogene</i> , 2018, 37, 5569-5584.	2.6	38
21	Insulin inhibits $\text{Na}^+/\text{H}^+$ exchange in vascular smooth muscle and endothelial cells in situ: involvement of $\text{H}_2\text{O}_2$ and tyrosine phosphatase SHP-2. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2009, 296, H247-H255.	1.5	32
22	Splice Cassette II of $\text{Na}^+$ , $\text{HCO}_3^-$ Cotransporter NBCn1 (slc4a7) Interacts with Calcineurin A. <i>Journal of Biological Chemistry</i> , 2013, 288, 8146-8155.	1.6	32
23	Acid-base regulation and sensing: Accelerators and brakes in metabolic regulation of cerebrovascular tone. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2018, 38, 588-602.	2.4	30
24	$\text{Na}^+$ , $\text{HCO}_3^-$ cotransporter NBCn1 accelerates breast carcinogenesis. <i>Cancer and Metastasis Reviews</i> , 2019, 38, 165-178.	2.7	30
25	Endothelial alkalinisation inhibits gap junction communication and endothelium-derived hyperpolarisations in mouse mesenteric arteries. <i>Journal of Physiology</i> , 2013, 591, 1447-1461.	1.3	28
26	Gram-scale Synthesis of Selective Sodium Bicarbonate Co-transport Inhibitor S0859: in vitro Efficacy Studies in Breast Cancer Cells. <i>ChemMedChem</i> , 2012, 7, 1808-1814.	1.6	27
27	Intracellular Acidification Alters Myogenic Responsiveness and Vasomotion of Mouse Middle Cerebral Arteries. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2014, 34, 161-168.	2.4	26
28	Acid-base transporters modulate cell migration, growth and proliferation: Implications for structure development and remodeling of resistance arteries?. <i>Trends in Cardiovascular Medicine</i> , 2013, 23, 59-65.	2.3	24
29	The bestrophin- and TMEM16A-associated $\text{Ca}^{2+}$ -activated $\text{Cl}^-$ channels in vascular smooth muscles. <i>Channels</i> , 2014, 8, 361-369.	1.5	23
30	Carbonic anhydrase inhibitors modify intracellular pH transients and contractions of rat middle cerebral arteries during $\text{CO}_2/\text{HCO}_3^-$ fluctuations. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2018, 38, 492-505.	2.4	22
31	Increased NBCn1 expression, $\text{Na}^+/\text{HCO}_3^-$ co-transport and intracellular pH in human vascular smooth muscle cells with a risk allele for hypertension. <i>Human Molecular Genetics</i> , 2017, 26, ddx015.	1.4	21
32	Acid-base transporters and pH dynamics in human breast carcinomas predict proliferative activity, metastasis, and survival. <i>ELife</i> , 2021, 10, .	2.8	21
33	Disturbed acid-base transport: an emerging cause of hypertension. <i>Frontiers in Physiology</i> , 2013, 4, 388.	1.3	20
34	Targeting the Acidic Tumor Microenvironment: Unexpected Pro-Neoplastic Effects of Oral $\text{NaHCO}_3$ Therapy in Murine Breast Tissue. <i>Cancers</i> , 2020, 12, 891.	1.7	19
35	Synthesis of N-cyano-substituted sulfilimine and sulfoximine derivatives of S0859 and their biological evaluation as sodium bicarbonate co-transport inhibitors. <i>MedChemComm</i> , 2015, 6, 2163-2169.	3.5	18
36	Extracellular acidosis and very low $[\text{Na}^+]$ inhibit NBCn1- and NHE1-mediated net acid extrusion from mouse vascular smooth muscle cells. <i>Acta Physiologica</i> , 2017, 221, 129-141.	1.8	18

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37	Negative News: Cl <sup>+</sup> and HCO <sub>3</sub> <sup>-</sup> in the Vascular Wall. <i>Physiology</i> , 2016, 31, 370-383.	1.6	16
38	Vaginal, Cervical and Uterine pH in Women with Normal and Abnormal Vaginal Microbiota. <i>Pathogens</i> , 2021, 10, 90.	1.2	16
39	PTPRG is an ischemia risk locus essential for HCO <sub>3</sub> <sup>-</sup> -dependent regulation of endothelial function and tissue perfusion. <i>ELife</i> , 2020, 9, .	2.8	15
40	Perivascular tissue inhibits rho-kinase-dependent smooth muscle Ca <sup>2+</sup> sensitivity and endothelium-dependent H <sub>2</sub> S signalling in rat coronary arteries. <i>Journal of Physiology</i> , 2015, 593, 4747-4764.	1.3	14
41	Crosstalk between cardiomyocyte-rich perivascular tissue and coronary arteries is reduced in the Zucker Diabetic Fatty rat model of type 2 diabetes mellitus. <i>Acta Physiologica</i> , 2017, 219, 227-238.	1.8	14
42	Enhanced nitric oxide signaling amplifies vasorelaxation of human colon cancer feed arteries. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2019, 316, H245-H254.	1.5	13
43	Murine breast cancer feed arteries are thin-walled with reduced Î±1A-adrenoceptor expression and attenuated sympathetic vasoconstriction. <i>Breast Cancer Research</i> , 2018, 20, 20.	2.2	10
44	Upregulated Na <sup>+</sup> /H <sup>+</sup> -Exchange Protects Human Colon Cancer Tissue against Intracellular Acidification. <i>BioMed Research International</i> , 2019, 2019, 1-5.	0.9	10
45	Increased Contractile Function of Human Saphenous Vein Grafts Harvested by "No-Touch" Technique. <i>Frontiers in Physiology</i> , 2018, 8, 1135.	1.3	8
46	Ion Channels, Transporters, and Sensors Interact with the Acidic Tumor Microenvironment to Modify Cancer Progression. <i>Reviews of Physiology, Biochemistry and Pharmacology</i> , 2021, , 39-84.	0.9	8
47	The solution to bicarbonate. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2022, 322, H685-H686.	1.5	8
48	New roles of factors from perivascular tissue in regulation of vascular tone. <i>Acta Physiologica</i> , 2016, 216, 159-162.	1.8	7
49	A novel method to isolate retinal and brain microvessels from individual rats: Microscopic and molecular biological characterization and application in hyperglycemic animals. <i>Vascular Pharmacology</i> , 2018, 110, 24-30.	1.0	7
50	Sodium bicarbonate cotransporter NBCn1/Slc4a7 affects locomotor activity and hearing in mice. <i>Behavioural Brain Research</i> , 2021, 401, 113065.	1.2	7
51	NBCn1 Increases NH <sub>4</sub> <sup>+</sup> Reabsorption Across Thick Ascending Limbs, the Capacity for Urinary NH <sub>4</sub> <sup>+</sup> Excretion, and Early Recovery from Metabolic Acidosis. <i>Journal of the American Society of Nephrology: JASN</i> , 2021, 32, 852-865.	3.0	7
52	Increased Alcohol Consumption in Mice Lacking Sodium Bicarbonate Transporter NBCn1. <i>Scientific Reports</i> , 2020, 10, 11017.	1.6	6
53	Acidosis inhibits rhythmic contractions of human thoracic ducts. <i>Physiological Reports</i> , 2019, 7, e14074.	0.7	5
54	Amplified Ca <sup>2+</sup> dynamics and accelerated cell proliferation in breast cancer tissue during purinergic stimulation. <i>International Journal of Cancer</i> , 2022, 151, 1150-1165.	2.3	5

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55	Loss of RPTP <sup>β</sup> primes breast tissue for acid extrusion, promotes malignant transformation and results in early tumour recurrence and shortened survival. <i>British Journal of Cancer</i> , 2022, 127, 1226-1238.	2.9	4
56	LBOS 02-04 BLOOD PRESSURE-ASSOCIATED POLYMORPHISMS IN SLC4A7 (SODIUM/BICARBONATE) TRANSPORTER IN PATIENTS WITH Essential Hypertension, 2016, 34, e549-e550.	0.3	1
57	Prior renovascular hypertension does not predispose to atherosclerosis in mice. <i>Atherosclerosis</i> , 2016, 249, 157-163.	0.4	1
58	Localization of NBCn1 (slc4a7) by a non-immunological method. <i>FASEB Journal</i> , 2007, 21, A1283.	0.2	1
59	482 Acid-extruding Proteins as Potential Novel Targets in Human Breast Cancer. <i>European Journal of Cancer</i> , 2012, 48, S116.	1.3	0
60	P069 Na <sup>+</sup> /HCO <sub>3</sub> <sup>-</sup> cotransport mediates upregulated acid extrusion during human breast carcinogenesis. <i>Breast</i> , 2015, 24, S50-S51.	0.9	0
61	Mechanism of net acid extrusion from human breast cancer tissue depends on histopathology and the expression of sex hormone and growth factor receptors. <i>European Journal of Cancer</i> , 2018, 92, S126-S127.	1.3	0
62	The mechanisms of net acid extrusion and intracellular pH control in human breast cancer tissue associate with histology, proliferative activity, and expression of growth factor receptors. <i>Breast</i> , 2019, 44, S30.	0.9	0
63	Chloride substitution inhibits vasomotion in rat mesenteric resistance arteries. <i>FASEB Journal</i> , 2007, 21, A521.	0.2	0
64	Abstract P3-03-02: Na <sup>+</sup> /HCO <sub>3</sub> <sup>-</sup> cotransport is the major mechanism of cellular acid extrusion in human and murine breast cancer. , 2013, , .		0