

Christoph Korbmacher

List of Publications by Year in descending order

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62
papers

2,748
citations

159358

30
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182168

51
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64
all docs

64
docs citations

64
times ranked

2400
citing authors

#	ARTICLE	IF	CITATIONS
1	Plasmin in Nephrotic Urine Activates the Epithelial Sodium Channel. <i>Journal of the American Society of Nephrology: JASN</i> , 2009, 20, 299-310.	3.0	236
2	A Novel Pathway of Epithelial Sodium Channel Activation Involves a Serum- and Glucocorticoid-inducible Kinase Consensus Motif in the C Terminus of the Channel's β -Subunit. <i>Journal of Biological Chemistry</i> , 2004, 279, 38134-38142.	1.6	155
3	Cathepsin S Causes Inflammatory Pain via Biased Agonism of PAR2 and TRPV4. <i>Journal of Biological Chemistry</i> , 2014, 289, 27215-27234.	1.6	153
4	Regulated sodium transport in the renal connecting tubule (CNT) via the epithelial sodium channel (ENaC). <i>Pflügers Archiv European Journal of Physiology</i> , 2009, 458, 111-135.	1.3	142
5	Neutrophil Elastase Activates Protease-activated Receptor-2 (PAR2) and Transient Receptor Potential Vanilloid 4 (TRPV4) to Cause Inflammation and Pain. <i>Journal of Biological Chemistry</i> , 2015, 290, 13875-13887.	1.6	134
6	ATP stimulates Cl^- secretion and reduces amiloride-sensitive Na^+ absorption in α mouse cortical collecting duct cells. <i>Journal of Physiology</i> , 2000, 524, 77-90.	1.3	112
7	The role of individual Nedd4 ² (KIAA0439) WW domains in binding and regulating epithelial sodium channels. <i>FASEB Journal</i> , 2003, 17, 70-72.	0.2	96
8	Cleavage in the β -subunit of the epithelial sodium channel (ENaC) plays an important role in the proteolytic activation of near-silent channels. <i>Journal of Physiology</i> , 2008, 586, 4587-4608.	1.3	87
9	Regulation of the Epithelial Sodium Channel by N4WBP5A, a Novel Nedd4/Nedd4-2-interacting Protein. <i>Journal of Biological Chemistry</i> , 2002, 277, 29406-29416.	1.6	85
10	A mutation of the epithelial sodium channel associated with atypical cystic fibrosis increases channel open probability and reduces Na^+ self inhibition. <i>Journal of Physiology</i> , 2010, 588, 1211-1225.	1.3	83
11	Aldosterone-dependent and -independent regulation of the epithelial sodium channel (ENaC) in mouse distal nephron. <i>American Journal of Physiology - Renal Physiology</i> , 2012, 303, F1289-F1299.	1.3	82
12	Aprotinin prevents proteolytic epithelial sodium channel (ENaC) activation and volume retention in nephrotic syndrome. <i>Kidney International</i> , 2018, 93, 159-172.	2.6	77
13	Basolateral proteinase-activated receptor (PAR ²) induces chloride secretion in α mouse renal cortical collecting duct cells. <i>Journal of Physiology</i> , 1999, 521, 3-17.	1.3	70
14	The β -Subunit of the Epithelial Sodium Channel (ENaC) Enhances Channel Activity and Alters Proteolytic ENaC Activation. <i>Journal of Biological Chemistry</i> , 2009, 284, 29024-29040.	1.6	67
15	Mechanisms of Renal Control of Potassium Homeostasis in Complete Aldosterone Deficiency. <i>Journal of the American Society of Nephrology: JASN</i> , 2015, 26, 425-438.	3.0	66
16	Stimulation of the Epithelial Sodium Channel (ENaC) by cAMP Involves Putative ERK Phosphorylation Sites in the C Termini of the Channel's β - and γ -Subunit. <i>Journal of Biological Chemistry</i> , 2006, 281, 9859-9868.	1.6	60
17	Basolateral PAR ² receptors mediate KCl secretion and inhibition of Na^+ absorption in the mouse distal colon. <i>Journal of Physiology</i> , 2002, 539, 209-222.	1.3	58
18	Proteolytic activation of the epithelial sodium channel (ENaC) by the cysteine protease cathepsin-S. <i>Pflügers Archiv European Journal of Physiology</i> , 2012, 464, 353-365.	1.3	54

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19	Atomic Force Microscopy Reveals the Architecture of the Epithelial Sodium Channel (ENaC). <i>Journal of Biological Chemistry</i> , 2011, 286, 31944-31952.	1.6	53
20	Cholesterol Depletion of the Plasma Membrane Prevents Activation of the Epithelial Sodium Channel (ENaC) by SGK1. <i>Cellular Physiology and Biochemistry</i> , 2009, 24, 605-618.	1.1	51
21	Aldosterone responsiveness of the epithelial sodium channel (ENaC) in colon is increased in a mouse model for Liddle's syndrome. <i>Journal of Physiology</i> , 2008, 586, 459-475.	1.3	50
22	Association of Plasminuria with Overhydration in Patients with CKD. <i>Clinical Journal of the American Society of Nephrology: CJASN</i> , 2016, 11, 761-769.	2.2	46
23	Trypsin can activate the epithelial sodium channel (ENaC) in microdissected mouse distal nephron. <i>American Journal of Physiology - Renal Physiology</i> , 2008, 295, F1052-F1062.	1.3	44
24	Plasmin and chymotrypsin have distinct preferences for channel activating cleavage sites in the β^3 subunit of the human epithelial sodium channel. <i>Journal of General Physiology</i> , 2012, 140, 375-389.	0.9	41
25	mTORC2 critically regulates renal potassium handling. <i>Journal of Clinical Investigation</i> , 2016, 126, 1773-1782.	3.9	37
26	Urokinase-type plasminogen activator (uPA) is not essential for epithelial sodium channel (ENaC)-mediated sodium retention in experimental nephrotic syndrome. <i>Acta Physiologica</i> , 2019, 227, e13286.	1.8	36
27	In Liddle Syndrome, Epithelial Sodium Channel Is Hyperactive Mainly in the Early Part of the Aldosterone-Sensitive Distal Nephron. <i>Hypertension</i> , 2016, 67, 1256-1262.	1.3	34
28	Extracellular Na ⁺ removal attenuates rundown of the epithelial Na ⁺ -channel (ENaC) by reducing the rate of channel retrieval. <i>Pflügers Archiv European Journal of Physiology</i> , 2004, 447, 884-894.	1.3	33
29	Sulfonylurea receptors inhibit the epithelial sodium channel (ENaC) by reducing surface expression. <i>Pflügers Archiv European Journal of Physiology</i> , 2001, 442, 752-761.	1.3	32
30	Proteolytic Activation of the Human Epithelial Sodium Channel by Trypsin IV and Trypsin I Involves Distinct Cleavage Sites. <i>Journal of Biological Chemistry</i> , 2014, 289, 19067-19078.	1.6	31
31	Four Subunits (β^1 - β^4) of the Epithelial Sodium Channel (ENaC) Are Expressed in the Human Eye in Various Locations. , 2012, 53, 596.		29
32	Stimulation of the epithelial sodium channel (ENaC) by the serum- and glucocorticoid-inducible kinase (Sgk) involves the PY motifs of the channel but is independent of sodium feedback inhibition. <i>Pflügers Archiv European Journal of Physiology</i> , 2006, 452, 290-299.	1.3	27
33	Functional Characterization of a Partial Loss-of-Function Mutation of the Epithelial Sodium Channel (ENaC) Associated with Atypical Cystic Fibrosis. <i>Cellular Physiology and Biochemistry</i> , 2010, 25, 145-158.	1.1	27
34	Protein Kinase B Alpha (PKB α) Stimulates the Epithelial Sodium Channel (ENaC) Heterologously Expressed in <i>Xenopus laevis</i> Oocytes by Two Distinct Mechanisms. <i>Cellular Physiology and Biochemistry</i> , 2010, 26, 913-924.	1.1	25
35	A mutation in the β^2 -subunit of ENaC identified in a patient with cystic fibrosis-like symptoms has a gain-of-function effect. <i>American Journal of Physiology - Lung Cellular and Molecular Physiology</i> , 2013, 304, L43-L55.	1.3	25
36	Critical role of the mineralocorticoid receptor in aldosterone-dependent and aldosterone-independent regulation of ENaC in the distal nephron. <i>American Journal of Physiology - Renal Physiology</i> , 2021, 321, F257-F268.	1.3	24

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37	Pharmacological and electrophysiological characterization of the human bile acid-sensitive ion channel (hBASIC). <i>Pflügers Archiv European Journal of Physiology</i> , 2014, 466, 253-263.	1.3	23
38	Activation of the Human Epithelial Sodium Channel (ENaC) by Bile Acids Involves the Degenerin Site. <i>Journal of Biological Chemistry</i> , 2016, 291, 19835-19847.	1.6	23
39	Norepinephrine stimulates the epithelial Na ⁺ channel in cortical collecting duct cells via β_2 -adrenoceptors. <i>American Journal of Physiology - Renal Physiology</i> , 2015, 308, F450-F458.	1.3	20
40	Zymogen-locked mutant prostaticin (Prss8) leads to incomplete proteolytic activation of the epithelial sodium channel (ENaC) and severely compromises triamterene tolerance in mice. <i>Acta Physiologica</i> , 2021, 232, e13640.	1.8	18
41	Proteolytic activation of the epithelial sodium channel (ENaC) by factor VII activating protease (FSAP) and its relevance for sodium retention in nephrotic mice. <i>Pflügers Archiv European Journal of Physiology</i> , 2022, 474, 217-229.	1.3	17
42	Ubiquitination of renal ENaC subunits in vivo. <i>American Journal of Physiology - Renal Physiology</i> , 2020, 318, F1113-F1121.	1.3	16
43	Sensitisation of TRPV4 by PAR2 is independent of intracellular calcium signalling and can be mediated by the biased agonist neutrophil elastase. <i>Pflügers Archiv European Journal of Physiology</i> , 2015, 467, 687-701.	1.3	14
44	β -ENaC is inhibited by CFTR but stimulated by cAMP in <i>Xenopus laevis</i> oocytes. <i>American Journal of Physiology - Lung Cellular and Molecular Physiology</i> , 2017, 312, L277-L287.	1.3	13
45	The phosphorylation site T613 in the β -subunit of rat epithelial Na ⁺ channel (ENaC) modulates channel inhibition by Nedd4-2. <i>Pflügers Archiv European Journal of Physiology</i> , 2018, 470, 649-660.	1.3	13
46	Prostaglandin E2 stimulates the epithelial sodium channel (ENaC) in cultured mouse cortical collecting duct cells in an autocrine manner. <i>Journal of General Physiology</i> , 2020, 152, .	0.9	13
47	Inhibitors of the proteasome stimulate the epithelial sodium channel (ENaC) through SGK1 and mimic the effect of aldosterone. <i>Pflügers Archiv European Journal of Physiology</i> , 2018, 470, 295-304.	1.3	12
48	PGE2 stimulates Cl ⁻ secretion in murine M-1 cortical collecting duct cells in an autocrine manner. <i>Pflügers Archiv European Journal of Physiology</i> , 2004, 448, 411-21.	1.3	11
49	Bile acids potentiate proton-activated currents in <i>Xenopus laevis</i> oocytes expressing human acid-sensing ion channel (ASIC1a). <i>Physiological Reports</i> , 2017, 5, e13132.	0.7	11
50	Contributions of bile acids to gastrointestinal physiology as receptor agonists and modifiers of ion channels. <i>American Journal of Physiology - Renal Physiology</i> , 2022, 322, G201-G222.	1.6	11
51	High baseline ROMK activity in the mouse late distal convoluted and early connecting tubule probably contributes to aldosterone-independent K ⁺ secretion. <i>American Journal of Physiology - Renal Physiology</i> , 2022, 322, F42-F54.	1.3	10
52	Bile acids inhibit human purinergic receptor P2X4 in a heterologous expression system. <i>Journal of General Physiology</i> , 2019, 151, 820-833.	0.9	9
53	Inhibition of the epithelial sodium channel (ENaC) by connexin 30 involves stimulation of clathrin-mediated endocytosis. <i>Journal of Biological Chemistry</i> , 2021, 296, 100404.	1.6	9
54	Basolateral adrenoceptor activation mediates noradrenaline-induced Cl ⁻ secretion in M-1 mouse cortical collecting duct cells. <i>Pflügers Archiv European Journal of Physiology</i> , 2002, 445, 381-389.	1.3	8

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55	An Inhibitory Peptide Derived from the α -subunit of the Epithelial Sodium Channel (ENaC) Shows a Helical Conformation. <i>Cellular Physiology and Biochemistry</i> , 2012, 29, 761-774.	1.1	8
56	The degenerin region of the human bile acid-sensitive ion channel (BASIC) is involved in channel inhibition by calcium and activation by bile acids. <i>Pflügers Archiv European Journal of Physiology</i> , 2018, 470, 1087-1102.	1.3	8
57	Transmembrane serine protease 2 (TMPRSS2) proteolytically activates the epithelial sodium channel (ENaC) by cleaving the channel's β -subunit. <i>Journal of Biological Chemistry</i> , 2022, 298, 102004.	1.6	6
58	Demonstration of Proteolytic Activation of the Epithelial Sodium Channel (ENaC) by Combining Current Measurements with Detection of Cleavage Fragments. <i>Journal of Visualized Experiments</i> , 2014, 11, .	0.2	4
59	Rebuttal to editorial: Sodium retention by uPA in nephrotic syndrome?. <i>Acta Physiologica</i> , 2020, 228, e13427.	1.8	3
60	Effects of syntaxins 2, 3, and 4 on rat and human epithelial sodium channel (ENaC) in <i>Xenopus laevis</i> oocytes. <i>Pflügers Archiv European Journal of Physiology</i> , 2020, 472, 461-471.	1.3	2
61	A polycystin-2 protein with modified channel properties leads to an increased diameter of renal tubules and to renal cysts. <i>Journal of Cell Science</i> , 2021, 134, .	1.2	2
62	Two adjacent phosphorylation sites in the C-terminus of the channel's β -subunit have opposing effects on epithelial sodium channel (ENaC) activity. <i>Pflügers Archiv European Journal of Physiology</i> , 2022, 474, 681-697.	1.3	2