Bernard C Rossier

List of Publications by Year
in descending order

110 papers	13,959 citations	36203 51 h-index	32761 100 g-index
117 all docs	117 docs citations	117 times ranked	6178 citing authors

#	Article	IF	Citations
1	Amiloride-sensitive epithelial Na+ channel is made of three homologous subunits. Nature, 1994, 367, 463-467.	13.7	1,904
2	Liddle's syndrome: Heritable human hypertension caused by mutations in the Î² subunit of the epithelial sodium channel. Cell, 1994, 79, 407-414.	13.5	1,230
3	Epithelial sodium channel related to proteins involved in neurodegeneration. Nature, 1993, 361, 467-470.	13.7	934
4	Early death due to defective neonatal lung liquid clearance in Î±ENaC-deficient mice. Nature Genetics, 1996, 12, 325-328.	9.4	841
5	Mutations in subunits of the epithelial sodium channel cause salt wasting with hyperkalaemic acidosis, pseudohypoaldosteronism type 1. Nature Genetics, 1996, 12, 248-253.	9.4	752
6	Hypertension caused by a truncated epithelial sodium channel Î³ subunit: genetic heterogeneity of Liddle syndrome. Nature Genetics, 1995, 11, 76-82.	9.4	725
7	An epithelial serine protease activates the amiloride-sensitive sodium channel. Nature, 1997, 389, 607-610.	13.7	492
8	Renal Ca2+ wasting, hyperabsorption, and reduced bone thickness in mice lacking TRPV5. Journal of Clinical Investigation, 2003, 112, 1906-1914.	3.9	406
9	Epithelial Sodium Channel and the Control of Sodium Balance: Interaction Between Genetic and Environmental Factors. Annual Review of Physiology, 2002, 64, 877-897.	5.6	361
10	Aldosterone induces rapid apical translocation of ENaC in early portion of renal collecting system: possible role of SGK. American Journal of Physiology - Renal Physiology, 2001, 280, F675-F682.	1.3	320
11	Lithium nephrotoxicity revisited. Nature Reviews Nephrology, 2009, 5, 270-276.	4.1	275
12	Corticosteroid-Dependent Sodium Transport in a Novel Immortalized Mouse Collecting Duct Principal Cell Line. Journal of the American Society of Nephrology: JASN, 1999, 10, 923-934.	3.0	268
13	Epithelial Sodium Transport and Its Control by Aldosterone: The Story of Our Internal Environment Revisited. Physiological Reviews, 2015, 95, 297-340.	13.1	217
14	Synergistic Activation of ENaC by Three Membrane-bound Channel-activating Serine Proteases (mCAP1,) Tj ETQq0 0 0 rgBT /Overlock 10 Journal of General Physiology, 2002, 120, 191-201.	0.9	210
15	Activation of the Amiloride-Sensitive Epithelial Sodium Channel by the Serine Protease mCAP1 Expressed in a Mouse Cortical Collecting Duct Cell Line. Journal of the American Society of Nephrology: JASN, 2000, 11, 828-834.	3.0	204
16	MineralocorticoidversusGlucocorticoid Receptor Occupancy Mediating Aldosterone-Stimulated Sodium Transport in a Novel Renal Cell Line. Journal of the American Society of Nephrology: JASN, 2005, 16, 878-891.	3.0	197
17	Activation of the Epithelial Sodium Channel (ENaC) by Serine Proteases. Annual Review of Physiology, 2009, 71, 361-379.	5.6	193
18	Collecting ductâ€“specific gene inactivation of Î±ENaC in the mouse kidney does not impair sodium and potassium balance. Journal of Clinical Investigation, 2003, 112, 554-565.	3.9	187

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19	Epithelial Na+ channel subunits in rat taste cells: Localization and regulation by aldosterone. , 1999, 405, 406-420.		180
20	Cystic Fibrosis Transmembrane Conductance Regulator Inverts Protein Kinase A-mediated Regulation of Epithelial Sodium Channel Single Channel Kinetics. Journal of Biological Chemistry, 1997, 272, 14037-14040.	1.6	175
21	The transmembrane serine protease (TMPRSS3) mutated in deafness DFNB8/10 activates the epithelial sodium channel (ENaC) in vitro. Human Molecular Genetics, 2002, 11, 2829-2836.	1.4	153
22	Epithelial sodium channels. Current Opinion in Nephrology and Hypertension, 1994, 3, 487-496.	1.0	140
23	A Mouse Model for Liddle's Syndrome. Journal of the American Society of Nephrology: JASN, 1999, 10, 2527-2533.	3.0	128
24	Mutations in SPINT2 Cause a Syndromic Form of Congenital Sodium Diarrhea. American Journal of Human Genetics, 2009, 84, 188-196.	2.6	110
25	Functional expression of a pseudohypoaldosteronism type I mutated epithelial Na+ channel lacking the pore-forming region of its Î± subunit. Journal of Clinical Investigation, 1999, 104, 967-974.	3.9	106
26	Amiloride blocks lithium entry through the sodium channel thereby attenuating the resultant nephrogenic diabetes insipidus. Kidney International, 2009, 76, 44-53.	2.6	104
27	The Hypertension Pandemic: An Evolutionary Perspective. Physiology, 2017, 32, 112-125.	1.6	102
28	Epithelial sodium channel (ENaC) and the control of blood pressure. Current Opinion in Pharmacology, 2014, 15, 33-46.	1.7	97
29	Mineralocorticoid Effects in the Kidney: Correlation between Î±ENaC, GILZ, and Sgk-1 mRNA Expression and Urinary Excretion of Na+ and K+. Journal of the American Society of Nephrology: JASN, 2003, 14, 1107-1115.	3.0	96
30	Mutational Analysis of Cysteine-rich Domains of the Epithelium Sodium Channel (ENaC). Journal of Biological Chemistry, 1999, 274, 2743-2749.	1.6	94
31	In vivo nuclear translocation of mineralocorticoid and glucocorticoid receptors in rat kidney: differential effect of corticosteroids along the distal tubule. American Journal of Physiology - Renal Physiology, 2010, 299, F1473-F1485.	1.3	94
32	A Novel Neutrophil Elastase Inhibitor Prevents Elastase Activation and Surface Cleavage of the Epithelial Sodium Channel Expressed in Xenopus laevis Oocytes. Journal of Biological Chemistry, 2007, 282, 58-64.	1.6	88
33	Sodium and Potassium Balance Depends on Î±ENaC Expression in Connecting Tubule. Journal of the American Society of Nephrology: JASN, 2010, 21, 1942-1951.	3.0	88
34	Disturbances of Na/K Balance: Pseudohypoaldosteronism Revisited. Journal of the American Society of Nephrology: JASN, 2002, 13, 2399-2414.	3.0	87
35	ENaCâ€mediated alveolar fluid clearance and lung fluid balance depend on the channelâ€activating protease 1. EMBO Molecular Medicine, 2010, 2, 26-37.	3.3	87
36	Cell-Surface Expression of the Channel Activating Protease xCAP-1 Is Required for Activation of ENaC in the Xenopus Oocyte. Journal of the American Society of Nephrology: JASN, 2002, 13, 588-594.	3.0	79

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37	Small proline-rich protein 1A is a gp130 pathway- and stress-inducible cardioprotective protein. EMBO Journal, 2004, 23, 4517-4525.	3.5	78
38	Activation of Epithelial Sodium Channels by Mouse Channel Activating Proteases (mCAP) Expressed in Xenopus Oocytes Requires Catalytic Activity of mCAP3 and mCAP2 but not mCAP1. Journal of the American Society of Nephrology: JASN, 2006, 17, 968-976.	3.0	76
39	The Epithelial Sodium Channel: Activation by Membrane-Bound Serine Proteases. Proceedings of the American Thoracic Society, 2004, 1, 4-9.	3.5	75
40	Thiazolidinedione-Induced Fluid Retention Is Independent of Collecting Duct Î±ENaC Activity. Journal of the American Society of Nephrology: JASN, 2009, 20, 721-729.	3.0	75
41	Î±ENaC-Mediated Lithium Absorption Promotes Nephrogenic Diabetes Insipidus. Journal of the American Society of Nephrology: JASN, 2011, 22, 253-261.	3.0	73
42	Dysfunction of the Epithelial Sodium Channel Expressed in the Kidney of a Mouse Model for Liddle Syndrome. Journal of the American Society of Nephrology: JASN, 2003, 14, 2219-2228.	3.0	72
43	In vitro and in vivo regulation of transepithelial lung alveolar sodium transport by serine proteases. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2005, 288, L1099-L1109.	1.3	70
44	Pseudohypoaldosteronisms, report on a 10-patient series. Nephrology Dialysis Transplantation, 2008, 23, 1636-1641.	0.4	69
45	Mineralocorticoid regulation of epithelial Na+ channels is maintained in a mouse model of Liddle's syndrome. American Journal of Physiology - Renal Physiology, 2003, 285, F310-F318.	1.3	67
46	Epithelial Sodium Channel. Hypertension, 2008, 52, 595-600.	1.3	67
47	Colon-Specific Deletion of Epithelial Sodium Channel Causes Sodium Loss and Aldosterone Resistance. Journal of the American Society of Nephrology: JASN, 2014, 25, 1453-1464.	3.0	62
48	Airway Surface Liquid Volume Regulation Determines Different Airway Phenotypes in Liddle Compared with Î²ENaC-overexpressing Mice. Journal of Biological Chemistry, 2010, 285, 26945-26955.	1.6	61
49	Genetic dissection of sodium and potassium transport along the aldosteroneâ€sensitive distal nephron: Importance in the control of blood pressure and hypertension. FEBS Letters, 2013, 587, 1929-1941.	1.3	60
50	Hormonal Regulation of the Epithelial Sodium Channel ENaC. Journal of General Physiology, 2002, 120, 67-70.	0.9	58
51	A direct relationship between plasma aldosterone and cardiac L-type Ca2+current in mice. Journal of Physiology, 2005, 569, 153-162.	1.3	58
52	Preferential Assembly of Epithelial Sodium Channel (ENaC) Subunits in Xenopus Oocytes. Journal of Biological Chemistry, 2008, 283, 7455-7463.	1.6	56
53	Aldosterone responsiveness of the epithelial sodium channel (ENaC) in colon is increased in a mouse model for Liddle's syndrome. Journal of Physiology, 2008, 586, 459-475.	1.3	50
54	Respective Roles of Calcitonin Receptor-like Receptor (CRLR) and Receptor Activity-modifying Proteins (RAMP) in Cell Surface Expression of CRLR/RAMP Heterodimeric Receptors. Journal of Biological Chemistry, 2002, 277, 14731-14737.	1.6	48

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55	ERK1/2 Controls Na,K-ATPase Activity and Transepithelial Sodium Transport in the Principal Cell of the Cortical Collecting Duct of the Mouse Kidney. Journal of Biological Chemistry, 2004, 279, 51002-51012.	1.6	47
56	A novel TMPRSS3 missense mutation in a DFNB8/10 family prevents proteolytic activation of the protein. Human Genetics, 2005, 117, 528-535.	1.8	47
57	Expression cloning of the epithelial sodium channel. Kidney International, 1995, 48, 950-955.	2.6	41
58	A novel mutation of the epithelial Na + channel causes type 1 pseudohypoaldosteronism. Pediatric Nephrology, 2002, 17, 804-808.	0.9	41
59	A novel vasopressin-induced transcript promotes MAP kinase activation and ENaC downregulation. EMBO Journal, 2002, 21, 5109-5117.	3.5	41
60	Progesterone Down-regulates the Open Probability of the Amiloride-sensitive Epithelial Sodium Channel via a Nedd4-2-dependent Mechanism. Journal of Biological Chemistry, 2005, 280, 38264-38270.	1.6	41
61	NF-Î°B Inhibits Sodium Transport via Down-regulation of SGK1 in Renal Collecting Duct Principal Cells. Journal of Biological Chemistry, 2008, 283, 25671-25681.	1.6	41
62	Evolution of the epithelial sodium channel and the sodium pump as limiting factors of aldosterone action on sodium transport. Physiological Genomics, 2011, 43, 844-854.	1.0	39
63	Salt- And Angiotensin Ii-Dependent Variations In Amiloride-Sensitive Rectal Potential Difference In Mice. Clinical and Experimental Pharmacology and Physiology, 2000, 27, 60-66.	0.9	38
64	Conditional gene targeting of theScnn1a(Î±ENaC) gene locus. Genesis, 2002, 32, 169-172.	0.8	38
65	Functional expression of N-terminal truncated Î±-subunits of Na,K-ATPase inXenopus laevisoocytes. FEBS Letters, 1991, 290, 83-86.	1.3	37
66	Severe Saltâ€"Losing Syndrome and Hyperkalemia Induced by Adult Nephronâ€"Specific Knockout of the Epithelial Sodium Channel Î±-Subunit. Journal of the American Society of Nephrology: JASN, 2016, 27, 2309-2318.	3.0	36
67	Negative regulators of sodium transport in the kidney: Key factors in understanding salt-sensitive hypertension?. Journal of Clinical Investigation, 2003, 111, 947-950.	3.9	36
68	Increased Renal Responsiveness to Vasopressin and Enhanced V2 Receptor Signaling in RGS2âˆ'/âˆ' Mice. Journal of the American Society of Nephrology: JASN, 2007, 18, 1672-1678.	3.0	34
69	Adult nephron-specific MR-deficient mice develop a severe renal PHA-1 phenotype. Pflugers Archiv European Journal of Physiology, 2016, 468, 895-908.	1.3	33
70	Mechanosensitivity of the Epithelial Sodium Channel (ENaC): Controversy or Pseudocontroversy?. Journal of General Physiology, 1998, 112, 95-96.	0.9	32
71	Î²-Liddle mutation of the epithelial sodium channel increases alveolar fluid clearance and reduces the severity of hydrostatic pulmonary oedema in mice. Journal of Physiology, 2007, 582, 777-788.	1.3	30
72	A reappraisal of aldosterone effects on the kidney: new insight provided by epithelial sodium channel cloning. Current Opinion in Nephrology and Hypertension, 1997, 6, 35-39.	1.0	29

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73	Selected Contribution: Limiting Na+ transport rate in airway epithelia from Î±-ENaC transgenic mice: a model for pulmonary edema. Journal of Applied Physiology, 2002, 93, 1881-1887.	1.2	29
74	Epithelial sodium channel regulatory proteins identified by functional expression cloning. Kidney International, 1998, 54, S109-S114.	2.6	27
75	A Pathophysiological Model for COVID-19: Critical Importance of Transepithelial Sodium Transport upon Airway Infection. Function, 2020, 1, zqaa024.	1.1	24
76	Vasopressin-stimulated CFTR Clâˆ'currents are increased in the renal collecting duct cells of a mouse model of Liddle's syndrome. Journal of Physiology, 2005, 562, 271-284.	1.3	23
77	Plasma Potassium Determines NCC Abundance in Adult Kidney-Specific Î³ENaC Knockout. Journal of the American Society of Nephrology: JASN, 2018, 29, 977-990.	3.0	23
78	A conditional allele at the mouse channel activating protease 1 (Prss8) gene locus. Genesis, 2002, 32, 173-176.	0.8	21
79	Vasopressin-dependent coupling between sodium transport and water flow in a mouse cortical collecting duct cell line. Kidney International, 2011, 79, 843-852.	2.6	21
80	The Epithelial Sodium Channel: Recent Developments. Cellular Physiology and Biochemistry, 1993, 3, 283-294.	1.1	20
81	SCNN1, an Epithelial Cell Sodium Channel Gene in the Conserved Linkage Group on Mouse Chromosome 6 and Human Chromosome 12. Genomics, 1994, 24, 185-186.	1.3	20
82	Identification of corticosteroid-regulated genes in cardiomyocytes by serial analysis of gene expression. Genomics, 2007, 89, 370-377.	1.3	19
83	Role of the Epithelial Sodium Channel in Lung Liquid Clearance. Chest, 1997, 111, 113S.	0.4	18
84	Functional Analyses of a N-Terminal Splice Variant of the Î± Subunit of the Epithelial Sodium Channel. Cellular Physiology and Biochemistry, 2001, 11, 115-122.	1.1	17
85	Mineralocorticoid Action in the Aldosterone-Sensitive Distal Nephron. , 2008, , 889-924.		17
86	The ? Subunit Modulates Potassium Activation of the Na-K Pump. Annals of the New York Academy of Sciences, 1992, 671, 113-119.	1.8	16
87	Negative regulators of sodium transport in the kidney: Key factors in understanding salt-sensitive hypertension?. Journal of Clinical Investigation, 2003, 111, 947-950.	3.9	16
88	Renal Sodium Handling: The Role of the Epithelial Sodium Channel. Journal of the American Society of Nephrology: JASN, 2005, 16, 3151-3153.	3.0	13
89	Physiological and Pathophysiological Role of the Epithelial Sodium Channel in the Control of Blood Pressure. Kidney and Blood Pressure Research, 1996, 19, 160-165.	0.9	11
90	Osmoregulation during Long-Term Fasting in Lungfish and Elephant Seal: Old and New Lessons for the Nephrologist. Nephron, 2016, 134, 5-9.	0.9	11

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91	Chapter 4 Structureâ€“Function Relationship of Na,K-ATPase: The Digitalis Receptor. Current Topics in Membranes, 1994, 41, 71-85.	0.5	6
92	Inhibition of the anti-natriuretic action of aldosterone by thyroid hormone in the rat. Pflugers Archiv European Journal of Physiology, 1980, 385, 91-93.	1.3	4
93	Three ATPase Activities Have an Abnormal Developmental Time Course in Trembler Sciatic Nerves. Developmental Neuroscience, 1987, 9, 45-52.	1.0	4
94	Establishment of Renal Cell Lines Derived from S₂ Segments of the Proximal Tubule. Kidney and Blood Pressure Research, 1991, 14, 128-139.	0.9	4
95	Summary: Symposium on the Organization of Membrane Polarity in Epithelial Cells. Kidney International, 1990, 38, 1-4.	2.6	3
96	Hypertension finds a new rhythm. Nature Medicine, 2010, 16, 27-28.	15.2	3
97	Cell and molecular biology of epithelial transport. Current Opinion in Nephrology and Hypertension, 1999, 8, 579-580.	1.0	2
98	Compensatory up-regulation of angiotensin II subtype 1 receptors in Î±ENaC knockout heterozygous mice. Kidney International, 2001, 59, 2216.	2.6	2
99	SARS-CoV-2 et le transport de sodium: une stratÃ©gie diabolique. Revue Medicale Suisse, 2020, 16, 1450-1455.	0.0	1
100	Molecular mechanisms of transport protein regulation. Current Opinion in Nephrology and Hypertension, 1997, 6, 423-424.	1.0	0
101	Molcular cell biology and physiology of solute transport. Current Opinion in Nephrology and Hypertension, 1998, 7, 495-496.	1.0	0
102	CFTR: A chloride channel, channel regulator, or both?. Kidney International, 2002, 62, 1517-1518.	2.6	0
103	Rewarding excellence in biomedical research. EMBO Molecular Medicine, 2010, 2, 111-112.	3.3	0
104	Excellence in biomedical research: ubiquitin family proteins and grid cells. EMBO Molecular Medicine, 2011, 3, 67-68.	3.3	0
105	Rewarding excellence in biomedical research. EMBO Molecular Medicine, 2012, 4, 69-70.	3.3	0
106	The Louisâ€Jeantet Prize 2013: Michael Stratton, Peter Hegemann and Georg Nagel. EMBO Molecular Medicine, 2013, 5, 167-168.	3.3	0
107	Role of Golgi apparatus and microtubules for aldosterone and vasopressinâ€“dependent regulation of ENaC activity. FASEB Journal, 2008, 22, 1201.22.	0.2	0
108	Collecting ductâ€specific gene inactivation of Î±ENaC in the mouse kidney does not attenuate rosiglitazoneâ€induced weight gain. FASEB Journal, 2008, 22, 947.14.	0.2	0

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109	Pendrin gene ablation reduces ENaC surface expression and open probability. FASEB Journal, 2013, 27, .	0.2	0
110	Inactivation of the epithelial sodium channel (ENaC) in the aldosteroneâ€sensitive connecting tubule. FASEB Journal, 2013, 27, 911.7.	0.2	0