Gerardo Gamba

List of Publications by Year
in descending order

102 papers	11,324 citations	50273 46 h-index	32838 100 g-index
102 all docs	102 docs citations	102 times ranked	6723 citing authors

#	Article	IF	Citations
1	Cloning and characterization of an extracellular Ca2+-sensing receptor from bovine parathyroid. Nature, 1993, 366, 575-580.	27.8	2,533
2	Molecular Physiology and Pathophysiology of Electroneutral Cation-Chloride Cotransporters. Physiological Reviews, 2005, 85, 423-493.	28.8	697
3	Cloning and functional expression of a rat kidney extracellular calcium/polyvalent cation-sensing receptor.. Proceedings of the National Academy of Sciences of the United States of America, 1995, 92, 131-135.	7.1	454
4	Molecular pathogenesis of inherited hypertension with hyperkalemia: The Naâ€“Cl cotransporter is inhibited by wild-type but not mutant WNK4. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 680-684.	7.1	375
5	Primary structure and functional expression of a cDNA encoding the thiazide-sensitive, electroneutral sodium-chloride cotransporter.. Proceedings of the National Academy of Sciences of the United States of America, 1993, 90, 2749-2753.	7.1	354
6	Roles of the cationâ€“chloride cotransporters in neurological disease. Nature Clinical Practice Neurology, 2008, 4, 490-503.	2.5	354
7	Cloning and Characterization of KCC3 and KCC4, New Members of the Cation-Chloride Cotransporter Gene Family. Journal of Biological Chemistry, 1999, 274, 16355-16362.	3.4	261
8	Molecular physiology of cation-coupled Cl? cotransport: the SLC12 family. Pflugers Archiv European Journal of Physiology, 2004, 447, 580-593.	2.8	237
9	Activation of the renal Na ⁺ :Cl ^{âˆ’} cotransporter by angiotensin II is a WNK4-dependent process. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 7929-7934.	7.1	230
10	Angiotensin II signaling increases activity of the renal Na-Cl cotransporter through a WNK4-SPAK-dependent pathway. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 4384-4389.	7.1	215
11	The Na+:Clâ€“ Cotransporter Is Activated and Phosphorylated at the Amino-terminal Domain upon Intracellular Chloride Depletion. Journal of Biological Chemistry, 2006, 281, 28755-28763.	3.4	212
12	Deranged transcriptional regulation of cell-volume-sensitive kinase hSGK in diabetic nephropathy. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 8157-8162.	7.1	205
13	Regulation of NKCC2 by a chloride-sensing mechanism involving the WNK3 and SPAK kinases. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 8458-8463.	7.1	199
14	WNK3 modulates transport of Cl- in and out of cells: Implications for control of cell volume and neuronal excitability. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 16783-16788.	7.1	195
15	Unique chloride-sensing properties of WNK4 permit the distal nephron to modulate potassium homeostasis. Kidney International, 2016, 89, 127-134.	5.2	195
16	Identification and functional characterization of cation-chloride cotransporters in plants. Plant Journal, 2007, 50, 278-292.	5.7	189
17	WNK3 kinase is a positive regulator of NKCC2 and NCC, renal cation-Cl ⁻ cotransporters required for normal blood pressure homeostasis. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 16777-16782.	7.1	167
18	Regulation of Renal Electrolyte Transport by WNK and SPAK-OSR1 Kinases. Annual Review of Physiology, 2016, 78, 367-389.	13.1	160

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19	Functional Comparison of the K+-Clâˆ’Cotransporters KCC1 and KCC4. Journal of Biological Chemistry, 2000, 275, 30326-30334.	3.4	153
20	Mineralocorticoid Receptor Phosphorylation Regulates Ligand Binding and Renal Response to Volume Depletion and Hyperkalemia. Cell Metabolism, 2013, 18, 660-671.	16.2	152
21	Activation of the Bumetanide-sensitive Na+,K+,2Clâˆ’ Cotransporter (NKCC2) Is Facilitated by Tamm-Horsfall Protein in a Chloride-sensitive Manner. Journal of Biological Chemistry, 2011, 286, 30200-30210.	3.4	148
22	Nedd4-2 Modulates Renal Na+-Clâˆ’ Cotransporter via the Aldosterone-SGK1-Nedd4-2 Pathway. Journal of the American Society of Nephrology: JASN, 2011, 22, 1707-1719.	6.1	144
23	The Effect of WNK4 on the Na+â€“Clâˆ’ Cotransporter Is Modulated by Intracellular Chloride. Journal of the American Society of Nephrology: JASN, 2015, 26, 1781-1786.	6.1	137
24	The SLC12 family of electroneutral cation-coupled chloride cotransporters. Molecular Aspects of Medicine, 2013, 34, 288-298.	6.4	129
25	N-Glycosylation at Two Sites Critically Alters Thiazide Binding and Activity of the Rat Thiazide-sensitive Na+. Journal of the American Society of Nephrology: JASN, 2003, 14, 271-282.	6.1	123
26	Thick ascending limb: the Na+:K+:2Clâˆ’ co-transporter, NKCC2, and the calcium-sensing receptor, CaSR. Pflugers Archiv European Journal of Physiology, 2009, 458, 61-76.	2.8	116
27	Hyperkalemic hypertensionâ€“associated cullin 3 promotes WNK signaling by degrading KLHL3. Journal of Clinical Investigation, 2014, 124, 4723-4736.	8.2	112
28	Aldosterone Paradox: Differential Regulation of Ion Transport in Distal Nephron. Physiology, 2011, 26, 115-123.	3.1	111
29	Molecular, functional, and genomic characterization of human KCC2, the neuronal Kâ€“Cl cotransporter. Molecular Brain Research, 2002, 103, 91-105.	2.3	106
30	WNK3 bypasses the tonicity requirement for K-Cl cotransporter activation via a phosphatase-dependent pathway. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 1976-1981.	7.1	106
31	WNK Protein Kinases Modulate Cellular Clâˆ’ Flux by Altering the Phosphorylation State of the Na-K-Cl and K-Cl Cotransporters. Physiology, 2006, 21, 326-335.	3.1	105
32	Role of WNK kinases in regulating tubular salt and potassium transport and in the development of hypertension. American Journal of Physiology - Renal Physiology, 2005, 288, F245-F252.	2.7	101
33	Functional Properties of the Apical Na+-K+-2Clâˆ’ Cotransporter Isoforms. Journal of Biological Chemistry, 2002, 277, 11004-11012.	3.4	98
34	Thiazide Diuretics Directly Induce Osteoblast Differentiation and Mineralized Nodule Formation by Interacting with a Sodium Chloride Co-Transporter in Bone. Journal of the American Society of Nephrology: JASN, 2007, 18, 2509-2516.	6.1	98
35	Spironolactone prevents chronic kidney disease caused by ischemic acute kidney injury. Kidney International, 2013, 83, 93-103.	5.2	96
36	Modulation of NCC activity by low and high K⁺ intake: insights into the signaling pathways involved. American Journal of Physiology - Renal Physiology, 2014, 306, F1507-F1519.	2.7	95

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37	The thiazide-sensitive Na⁺-Cl^{âˆ'}cotransporter: molecular biology, functional properties, and regulation by WNKs. American Journal of Physiology - Renal Physiology, 2009, 297, F838-F848.	2.7	86
38	AT1 receptor antagonism before ischemia prevents the transition of acute kidney injury to chronic kidney disease. Kidney International, 2016, 89, 363-373.	5.2	77
39	WNK-SPAK-NCC Cascade Revisited. Hypertension, 2014, 64, 1047-1053.	2.7	76
40	WNK2 Kinase Is a Novel Regulator of Essential Neuronal Cation-Chloride Cotransporters. Journal of Biological Chemistry, 2011, 286, 30171-30180.	3.4	73
41	Electroneutral Cation-Chloride Cotransporters in the Central Nervous System. Neurochemical Research, 2004, 29, 17-25.	3.3	68
42	Insulin increases the functional activity of the renal NaCl cotransporter. Journal of Hypertension, 2013, 31, 303-311.	0.5	66
43	Potassium and Its Discontents. Journal of the American Society of Nephrology: JASN, 2016, 27, 981-989.	6.1	65
44	Regulation of the renal Na⁺-Cl^{âˆ'}cotransporter by phosphorylation and ubiquitylation. American Journal of Physiology - Renal Physiology, 2012, 303, F1573-F1583.	2.7	62
45	Hsp72 is an early and sensitive biomarker to detect acute kidney injury. EMBO Molecular Medicine, 2011, 3, 5-20.	6.9	56
46	Recovery from ischemic acute kidney injury by spironolactone administration. Nephrology Dialysis Transplantation, 2012, 27, 3160-3169.	0.7	55
47	Affinity-defining Domains in the Na-Cl Cotransporter. Journal of Biological Chemistry, 2006, 281, 17266-17275.	3.4	50
48	Revisiting the NaCl cotransporter regulation by with-no-lysine kinases. American Journal of Physiology - Cell Physiology, 2015, 308, C779-C791.	4.6	47
49	Phosphorylation by PKC and PKA regulate the kinase activity and downstream signaling of WNK4. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E879-E886.	7.1	47
50	Gender Differences in the Acute Kidney Injury to Chronic Kidney Disease Transition. Scientific Reports, 2017, 7, 12270.	3.3	47
51	WNK Kinases, Renal Ion Transport and Hypertension. American Journal of Nephrology, 2008, 28, 860-870.	3.1	43
52	SPAK and OSR1 play essential roles in potassium homeostasis through actions on the distal convoluted tubule. Journal of Physiology, 2016, 594, 4945-4966.	2.9	43
53	Mini-review: regulation of the renal NaCl cotransporter by hormones. American Journal of Physiology - Renal Physiology, 2016, 310, F10-F14.	2.7	43
54	Ovarian hormones and prolactin increase renal NaCl cotransporter phosphorylation. American Journal of Physiology - Renal Physiology, 2015, 308, F799-F808.	2.7	42

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55	Gain-of-function missense variant in SLC12A2, encoding the bumetanide-sensitive NKCC1 cotransporter, identified in human schizophrenia. Journal of Psychiatric Research, 2016, 77, 22-26.	3.1	40
56	Kidney-specific WNK1 isoform (KS-WNK1) is a potent activator of WNK4 and NCC. American Journal of Physiology - Renal Physiology, 2018, 315, F734-F745.	2.7	40
57	N-terminal Serine Dephosphorylation Is Required for KCC3 Cotransporter Full Activation by Cell Swelling. Journal of Biological Chemistry, 2013, 288, 31468-31476.	3.4	38
58	Phorbol ester stimulation of RasGRP1 regulates the sodium-chloride cotransporter by a PKC-independent pathway. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 20120-20125.	7.1	37
59	A novel protein kinase signaling pathway essential for blood pressure regulation in humans. Trends in Endocrinology and Metabolism, 2008, 19, 91-95.	7.1	37
60	Renal potassium-chloride cotransporters. Current Opinion in Nephrology and Hypertension, 2001, 10, 685-691.	2.0	35
61	A Single Nucleotide Polymorphism Alters the Activity of the Renal Na+:Cl- Cotransporter and Reveals a Role for Transmembrane Segment 4 in Chloride and Thiazide Affinity. Journal of Biological Chemistry, 2004, 279, 16553-16560.	3.4	35
62	Molecular evidence for a role for K⁺-Cl^{âˆ’} cotransporters in the kidney. American Journal of Physiology - Renal Physiology, 2013, 305, F1402-F1411.	2.7	35
63	Exonic Mutations in the SLC12A3 Gene Cause Exon Skipping and Premature Termination in Gitelman Syndrome. Journal of the American Society of Nephrology: JASN, 2015, 26, 271-279.	6.1	35
64	Physiological role of SLC12 family members in the kidney. American Journal of Physiology - Renal Physiology, 2016, 311, F131-F144.	2.7	34
65	The Many Roles of the Calcium-Sensing Receptor in Health and Disease. Archives of Medical Research, 1999, 30, 436-448.	3.3	33
66	WNK3 is a Putative Chloride-sensing Kinase. Cellular Physiology and Biochemistry, 2011, 28, 1123-1134.	1.6	33
67	Molecular biology of distal nephron sodium transport mechanisms. Kidney International, 1999, 56, 1606-1622.	5.2	32
68	NKCC2 Surface Expression in Mammalian Cells. Journal of Biological Chemistry, 2007, 282, 33817-33830.	3.4	32
69	Mutation affecting the conserved acidic WNK1 motif causes inherited hyperkalemic hyperchloremic acidosis. Journal of Clinical Investigation, 2020, 130, 6379-6394.	8.2	32
70	The Effect of Spironolactone on Acute Kidney Injury After Cardiac Surgery: A Randomized, Placebo-Controlled Trial. American Journal of Kidney Diseases, 2017, 69, 192-199.	1.9	31
71	The Calcium-Sensing Receptor Increases Activity of the Renal NCC through the WNK4-SPAK Pathway. Journal of the American Society of Nephrology: JASN, 2018, 29, 1838-1848.	6.1	31
72	Mechanisms of sodiumâ€“chloride cotransporter modulation by angiotensin II. Current Opinion in Nephrology and Hypertension, 2012, 21, 516-522.	2.0	29

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73	WNK3-SPAK Interaction is Required for the Modulation of NCC and other Members of the SLC12 Family. Cellular Physiology and Biochemistry, 2012, 29, 291-302.	1.6	29
74	Increased phosphorylation of the renal Na+-Clâˆ’cotransporter in male kidney transplant recipient patients with hypertension: a prospective cohort. American Journal of Physiology - Renal Physiology, 2015, 309, F836-F842.	2.7	27
75	WNK3 abrogates the NEDD4-2-mediated inhibition of the renal Na⁺-Cl^{âˆ’}cotransporter. American Journal of Physiology - Renal Physiology, 2014, 307, F275-F286.	2.7	23
76	WNK3 and WNK4 exhibit opposite sensitivity with respect to cell volume and intracellular chloride concentration. American Journal of Physiology - Cell Physiology, 2020, 319, C371-C380.	4.6	17
77	Heat shock protein 72 (Hsp72) specific induction and temporal stability in urine samples as a reliable biomarker of acute kidney injury (AKI). Biomarkers, 2015, 20, 453-459.	1.9	16
78	The thiazide sensitive sodium chloride co-transporter NCC is modulated by site-specific ubiquitylation. Scientific Reports, 2017, 7, 12981.	3.3	16
79	Intra-renal transfection of heat shock protein 90 alpha or beta (Hsp90Â or Hsp90Â) protects against ischemia/reperfusion injury. Nephrology Dialysis Transplantation, 2014, 29, 301-312.	0.7	15
80	Molecular mechanisms for the modulation of blood pressure and potassium homeostasis by the distal convoluted tubule. EMBO Molecular Medicine, 2022, 14, e14273.	6.9	14
81	Inactivation of SPAK kinase reduces body weight gain in mice fed a high-fat diet by improving energy expenditure and insulin sensitivity. American Journal of Physiology - Endocrinology and Metabolism, 2018, 314, E53-E65.	3.5	12
82	Regulation of the renal NaCl cotransporter by the WNK/SPAK pathway: lessons learned from genetically altered animals. American Journal of Physiology - Renal Physiology, 2019, 316, F146-F158.	2.7	12
83	Structure-function relationships in the renal NaCl cotransporter (NCC). Current Topics in Membranes, 2019, 83, 177-204.	0.9	12
84	With no lysine L-WNK1 isoforms are negative regulators of the K+-Clâˆ’ cotransporters. American Journal of Physiology - Cell Physiology, 2016, 311, C54-C66.	4.6	11
85	SIRT7 modulates the stability and activity of the renal Kâ€Cl cotransporter KCC4 through deacetylation. EMBO Reports, 2021, 22, e50766.	4.5	11
86	Role of KLHL3 and dietary K⁺ in regulating KS-WNK1 expression. American Journal of Physiology - Renal Physiology, 2021, 320, F734-F747.	2.7	11
87	The European Eel NCCÎ² Gene Encodes a Thiazide-resistant Na-Cl Cotransporter. Journal of Biological Chemistry, 2016, 291, 22472-22481.	3.4	10
88	Insulin and SGK1 reduce the function of Na⁺/monocarboxylate transporter 1 (SMCT1/SLC5A8). American Journal of Physiology - Cell Physiology, 2016, 311, C720-C734.	4.6	9
89	The regulation of Na+Clâˆ’ cotransporter by with-no-lysine kinase 4. Current Opinion in Nephrology and Hypertension, 2016, 25, 417-423.	2.0	7
90	Mexneurin is a novel precursor of peptides in the central nervous system of rodents. FEBS Letters, 2017, 591, 1627-1636.	2.8	7

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91	Geraniin is a diuretic by inhibiting the Na⁺-K⁺-2Cl^{âˆ’}cotransporter NKCC2. American Journal of Physiology - Renal Physiology, 2018, 314, F240-F250.	2.7	7
92	Resilience to acute kidney injury in offspring of maternal protein restriction. American Journal of Physiology - Renal Physiology, 2019, 317, F1637-F1648.	2.7	7
93	The nanopeptide hormone vasopressin is a new player in the modulation of renal Na+â€“Clâˆ’ cotransporter activity. Kidney International, 2010, 78, 127-129.	5.2	5
94	An RBD-Based Diagnostic Method Useful for the Surveillance of Protective Immunity against SARS-CoV-2 in the Population. Diagnostics, 2022, 12, 1629.	2.6	5
95	Familial Hyperkalemic Hypertension Genotype With a Negative Phenotype: A CUL3 Mosaicism. American Journal of Hypertension, 2020, 33, 278-281.	2.0	4
96	Regulation of NKCC2 activity by SPAK truncated isoforms. American Journal of Physiology - Renal Physiology, 2014, 306, F49-F50.	2.7	3
97	On the molecular mechanism of renal salt excretion modulation by extracellular potassium. Journal of Physiology, 2016, 594, 6071-6072.	2.9	3
98	The evolving field of salt transport regulation in the Steve Hebert Lecture. American Journal of Physiology - Renal Physiology, 2016, 311, F68-F70.	2.7	2
99	Disruption of the with no lysine kinaseâ€“STE20-proline alanine-rich kinase pathway reduces the hypertension induced by angiotensin II. Journal of Hypertension, 2018, 36, 361-367.	0.5	1
100	(Pro)renin Receptor Deletion in Distal Convoluted Tubule 1 Produces Salt-Sensitive Hypertension. Hypertension, 2021, 78, 1039-1041.	2.7	1
101	In Reply to â€˜Assessing the Effect of Spironolactone on Acute Kidney Injury After Cardiac Surgeryâ€™. American Journal of Kidney Diseases, 2017, 70, 152-153.	1.9	0
102	Letter to the editor: Remembering Steve Hebert (1946â€“2008). American Journal of Physiology - Cell Physiology, 2018, 315, C122-C123.	4.6	0