Gerardo Gamba

List of Publications by Citations

98 papers	9,678 citations	46 h-index	98 g-index
102 ext. papers	10,618 ext. citations	7.9 avg, IF	5.99 L-index

#	Paper	IF	Citations
98	Cloning and characterization of an extracellular Ca(2+)-sensing receptor from bovine parathyroid. *Nature*, **1993**, 366, 575-80	50.4	2224
97	Molecular physiology and pathophysiology of electroneutral cation-chloride cotransporters. *Physiological Reviews*, **2005**, 85, 423-93	47.9	613
96	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, 131-5	11.5	421
95	Molecular pathogenesis of inherited hypertension with hyperkalemia: the Na-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, 680-4	11.5	342
94	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, 2749-53	11.5	316
93	Roles of the cation-chloride cotransporters in neurological disease. *Nature Clinical Practice Neurology*, **2008**, 4, 490-503		294
92	Cloning and characterization of KCC3 and KCC4, new members of the cation-chloride cotransporter gene family. *Journal of Biological Chemistry*, **1999**, 274, 16355-62	5.4	229
91	Molecular physiology of cation-coupled Cl- cotransport: the SLC12 family. *Pflugers Archiv European Journal of Physiology*, **2004**, 447, 580-93	4.6	205
90	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, 4384-9	11.5	200
89	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, 8157-62	11.5	194
88	Activation of the renal Na+:Cl- cotransporter by angiotensin II is a WNK4-dependent process. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 7929-34	11.5	191
87	The Na+:Cl- cotransporter is activated and phosphorylated at the amino-terminal domain upon intracellular chloride depletion. *Journal of Biological Chemistry*, **2006**, 281, 28755-63	5.4	182
86	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, 16783-8	11.5	178
85	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, 8458-63	11.5	174
84	Identification and functional characterization of cation-chloride cotransporters in plants. *Plant Journal*, **2007**, 50, 278-92	6.9	164
83	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, 16777-82	11.5	156
82	Unique chloride-sensing properties of WNK4 permit the distal nephron to modulate potassium homeostasis. *Kidney International*, **2016**, 89, 127-34	9.9	148

81	Functional comparison of the K+-Cl- cotransporters KCC1 and KCC4. *Journal of Biological Chemistry*, **2000**, 275, 30326-34	5.4	138
80	Nedd4-2 modulates renal Na+-Cl- cotransporter via the aldosterone-SGK1-Nedd4-2 pathway. *Journal of the American Society of Nephrology: JASN*, **2011**, 22, 1707-19	12.7	127
79	Regulation of Renal Electrolyte Transport by WNK and SPAK-OSR1 Kinases. *Annual Review of Physiology*, **2016**, 78, 367-89	23.1	123
78	Mineralocorticoid receptor phosphorylation regulates ligand binding and renal response to volume depletion and hyperkalemia. *Cell Metabolism*, **2013**, 18, 660-71	24.6	122
77	Activation of the bumetanide-sensitive Na+,K+,2Cl- cotransporter (NKCC2) is facilitated by Tamm-Horsfall protein in a chloride-sensitive manner. *Journal of Biological Chemistry*, **2011**, 286, 30200-10	5.4	119
76	N-Glycosylation at two sites critically alters thiazide binding and activity of the rat thiazide-sensitive Na(+):Cl(-) cotransporter. *Journal of the American Society of Nephrology: JASN*, **2003**, 14, 271-82	12.7	107
75	The Effect of WNK4 on the Na+-Cl- Cotransporter Is Modulated by Intracellular Chloride. *Journal of the American Society of Nephrology: JASN*, **2015**, 26, 1781-6	12.7	102
74	Thick ascending limb: the Na(+):K (+):2Cl (-) co-transporter, NKCC2, and the calcium-sensing receptor, CaSR. *Pflugers Archiv European Journal of Physiology*, **2009**, 458, 61-76	4.6	101
73	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, 1976-81	11.5	100
72	WNK protein kinases modulate cellular Cl- flux by altering the phosphorylation state of the Na-K-Cl and K-Cl cotransporters. *Physiology*, **2006**, 21, 326-35	9.8	98
71	Molecular, functional, and genomic characterization of human KCC2, the neuronal K-Cl cotransporter. *Molecular Brain Research*, **2002**, 103, 91-105		98
70	Functional properties of the apical Na+-K+-2Cl- cotransporter isoforms. *Journal of Biological Chemistry*, **2002**, 277, 11004-12	5.4	96
69	The SLC12 family of electroneutral cation-coupled chloride cotransporters. *Molecular Aspects of Medicine*, **2013**, 34, 288-98	16.7	93
68	Aldosterone paradox: differential regulation of ion transport in distal nephron. *Physiology*, **2011**, 26, 115-23	9.8	88
67	Hyperkalemic hypertension-associated cullin 3 promotes WNK signaling by degrading KLHL3. *Journal of Clinical Investigation*, **2014**, 124, 4723-36	15.9	87
66	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, F245-52	4.3	85
65	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, 2509-16	12.7	82
64	Spironolactone prevents chronic kidney disease caused by ischemic acute kidney injury. *Kidney International*, **2013**, 83, 93-103	9.9	81

63	Modulation of NCC activity by low and high K(+) intake: insights into the signaling pathways involved. *American Journal of Physiology - Renal Physiology*, **2014**, 306, F1507-19	4.3	73
62	The thiazide-sensitive Na+-Cl- cotransporter: molecular biology, functional properties, and regulation by WNKs. *American Journal of Physiology - Renal Physiology*, **2009**, 297, F838-48	4.3	68
61	WNK2 kinase is a novel regulator of essential neuronal cation-chloride cotransporters. *Journal of Biological Chemistry*, **2011**, 286, 30171-80	5.4	67
60	AT1 receptor antagonism before ischemia prevents the transition of acute kidney injury to chronic kidney disease. *Kidney International*, **2016**, 89, 363-73	9.9	62
59	Electroneutral cation-chloride cotransporters in the central nervous system. *Neurochemical Research*, **2004**, 29, 17-25	4.6	61
58	WNK-SPAK-NCC cascade revisited: WNK1 stimulates the activity of the Na-Cl cotransporter via SPAK, an effect antagonized by WNK4. *Hypertension*, **2014**, 64, 1047-53	8.5	60
57	Regulation of the renal Na+-Cl- cotransporter by phosphorylation and ubiquitylation. *American Journal of Physiology - Renal Physiology*, **2012**, 303, F1573-83	4.3	55
56	Insulin increases the functional activity of the renal NaCl cotransporter. *Journal of Hypertension*, **2013**, 31, 303-11	1.9	54
55	Potassium and Its Discontents: New Insight, New Treatments. *Journal of the American Society of Nephrology: JASN*, **2016**, 27, 981-9	12.7	51
54	Hsp72 is an early and sensitive biomarker to detect acute kidney injury. *EMBO Molecular Medicine*, **2011**, 3, 5-20	12	49
53	Recovery from ischemic acute kidney injury by spironolactone administration. *Nephrology Dialysis Transplantation*, **2012**, 27, 3160-9	4.3	46
52	Affinity-defining domains in the Na-Cl cotransporter: a different location for Cl- and thiazide binding. *Journal of Biological Chemistry*, **2006**, 281, 17266-17275	5.4	42
51	WNK kinases, renal ion transport and hypertension. *American Journal of Nephrology*, **2008**, 28, 860-70	4.6	40
50	Revisiting the NaCl cotransporter regulation by with-no-lysine kinases. *American Journal of Physiology - Cell Physiology*, **2015**, 308, C779-91	5.4	38
49	SPAK and OSR1 play essential roles in potassium homeostasis through actions on the distal convoluted tubule. *Journal of Physiology*, **2016**, 594, 4945-66	3.9	36
48	N-terminal serine dephosphorylation is required for KCC3 cotransporter full activation by cell swelling. *Journal of Biological Chemistry*, **2013**, 288, 31468-76	5.4	35
47	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, 20120-5	11.5	34
46	Renal potassium-chloride cotransporters. *Current Opinion in Nephrology and Hypertension*, **2001**, 10, 685-91	3.3	34

45	Mini-review: regulation of the renal NaCl cotransporter by hormones. *American Journal of Physiology - Renal Physiology*, **2016**, 310, F10-4	4.3	33
44	A novel protein kinase signaling pathway essential for blood pressure regulation in humans. *Trends in Endocrinology and Metabolism*, **2008**, 19, 91-5	8.8	33
43	Ovarian hormones and prolactin increase renal NaCl cotransporter phosphorylation. *American Journal of Physiology - Renal Physiology*, **2015**, 308, F799-808	4.3	32
42	WNK3 is a putative chloride-sensing kinase. *Cellular Physiology and Biochemistry*, **2011**, 28, 1123-34	3.9	32
41	Gain-of-function missense variant in SLC12A2, encoding the bumetanide-sensitive NKCC1 cotransporter, identified in human schizophrenia. *Journal of Psychiatric Research*, **2016**, 77, 22-6	5.2	31
40	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, 16553-60	5.4	31
39	Molecular biology of distal nephron sodium transport mechanisms. *Kidney International*, **1999**, 56, 1606-22	9.9	30
38	Mechanisms of sodium-chloride cotransporter modulation by angiotensin II. *Current Opinion in Nephrology and Hypertension*, **2012**, 21, 516-22	3.5	29
37	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	3.9	29
36	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	11.5	28
35	Gender Differences in the Acute Kidney Injury to Chronic Kidney Disease Transition. *Scientific Reports*, **2017**, 7, 12270	4.9	28
34	NKCC2 surface expression in mammalian cells: down-regulation by novel interaction with aldolase B. *Journal of Biological Chemistry*, **2007**, 282, 33817-33830	5.4	28
33	The many roles of the calcium-sensing receptor in health and disease. *Archives of Medical Research*, **1999**, 30, 436-48	6.6	28
32	Molecular evidence for a role for K(+)-Cl(-) cotransporters in the kidney. *American Journal of Physiology - Renal Physiology*, **2013**, 305, F1402-11	4.3	27
31	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, 271-9	12.7	26
30	Physiological role of SLC12 family members in the kidney. *American Journal of Physiology - Renal Physiology*, **2016**, 311, F131-44	4.3	24
29	Kidney-specific WNK1 isoform (KS-WNK1) is a potent activator of WNK4 and NCC. *American Journal of Physiology - Renal Physiology*, **2018**, 315, F734-F745	4.3	23
28	Increased phosphorylation of the renal Na+-Cl- cotransporter in male kidney transplant recipient patients with hypertension: a prospective cohort. *American Journal of Physiology - Renal Physiology*, **2015**, 309, F836-42	4.3	18

27	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	7.4	18
26	WNK3 abrogates the NEDD4-2-mediated inhibition of the renal Na+-Cl- cotransporter. *American Journal of Physiology - Renal Physiology*, **2014**, 307, F275-86	4.3	18
25	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, 453-9	2.6	15
24	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	12.7	15
23	Intra-renal transfection of heat shock protein 90 alpha or beta (Hsp90 or Hsp90 protects against ischemia/reperfusion injury. *Nephrology Dialysis Transplantation*, **2014**, 29, 301-12	4.3	13
22	Mutation affecting the conserved acidic WNK1 motif causes inherited hyperkalemic hyperchloremic acidosis. *Journal of Clinical Investigation*, **2020**, 130, 6379-6394	15.9	11
21	The thiazide sensitive sodium chloride co-transporter NCC is modulated by site-specific ubiquitylation. *Scientific Reports*, **2017**, 7, 12981	4.9	10
20	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	6	9
19	With no lysine L-WNK1 isoforms are negative regulators of the K+-Cl- cotransporters. *American Journal of Physiology - Cell Physiology*, **2016**, 311, C54-66	5.4	9
18	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	4.3	9
17	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	5.4	7
16	The regulation of Na+Cl- cotransporter by with-no-lysine kinase 4. *Current Opinion in Nephrology and Hypertension*, **2016**, 25, 417-23	3.5	7
15	Insulin and SGK1 reduce the function of Na+/monocarboxylate transporter 1 (SMCT1/SLC5A8). *American Journal of Physiology - Cell Physiology*, **2016**, 311, C720-C734	5.4	6
14	Geraniin is a diuretic by inhibiting the Na-K-2Cl cotransporter NKCC2. *American Journal of Physiology - Renal Physiology*, **2018**, 314, F240-F250	4.3	5
13	Mexneurin is a novel precursor of peptides in the central nervous system of rodents. *FEBS Letters*, **2017**, 591, 1627-1636	3.8	5
12	The nanopeptide hormone vasopressin is a new player in the modulation of renal Na(+)-Cl(-) cotransporter activity. *Kidney International*, **2010**, 78, 127-9	9.9	5
11	The European Eel NCC Gene Encodes a Thiazide-resistant Na-Cl Cotransporter. *Journal of Biological Chemistry*, **2016**, 291, 22472-22481	5.4	4
10	Structure-function relationships in the renal NaCl cotransporter (NCC). *Current Topics in Membranes* , **2019**, 83, 177-204	2.2	3

9	Resilience to acute kidney injury in offspring of maternal protein restriction. *American Journal of Physiology - Renal Physiology*, **2019**, 317, F1637-F1648	4.3	3
8	SIRT7 modulates the stability and activity of the renal K-Cl cotransporter KCC4 through deacetylation. *EMBO Reports*, **2021**, 22, e50766	6.5	3
7	On the molecular mechanism of renal salt excretion modulation by extracellular potassium. *Journal of Physiology*, **2016**, 594, 6071-6072	3.9	2
6	Role of KLHL3 and dietary K in regulating KS-WNK1 expression. *American Journal of Physiology - Renal Physiology*, **2021**, 320, F734-F747	4.3	2
5	Molecular mechanisms for the modulation of blood pressure and potassium homeostasis by the distal convoluted tubule.. *EMBO Molecular Medicine*, **2021**, e14273	12	2
4	Disruption of the with no lysine kinase-STE20-proline alanine-rich kinase pathway reduces the hypertension induced by angiotensin II. *Journal of Hypertension*, **2018**, 36, 361-367	1.9	1
3	Familial Hyperkalemic Hypertension Genotype With a Negative Phenotype: A CUL3 Mosaicism. *American Journal of Hypertension*, **2020**, 33, 278-281	2.3	1
2	In Reply to UAssessing the Effect of Spironolactone on Acute Kidney Injury After Cardiac SurgeryU *American Journal of Kidney Diseases*, **2017**, 70, 152-153	7.4	
1	Letter to the editor: Remembering Steve Hebert (1946-2008). *American Journal of Physiology - Cell Physiology*, **2018**, 315, C122-C123	5.4	