Janos Peti-Peterdi

List of Publications by Citations

141 papers	5,921 citations	45 h-index	74 g-index
178 ext. papers	6,640 ext. citations	6.5 avg, IF	5.68 L-index

#	Paper	IF	Citations
141	Olfactory receptor responding to gut microbiota-derived signals plays a role in renin secretion and blood pressure regulation. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 4410-5	11.5	640
140	Angiotensin II directly stimulates ENaC activity in the cortical collecting duct via AT(1) receptors. *Journal of the American Society of Nephrology: JASN*, **2002**, 13, 1131-5	12.7	255
139	Macula densa cell signaling involves ATP release through a maxi anion channel. *Proceedings of the National Academy of Sciences of the United States of America*, **2003**, 100, 4322-7	11.5	247
138	Succinate receptor GPR91 provides a direct link between high glucose levels and renin release in murine and rabbit kidney. *Journal of Clinical Investigation*, **2008**, 118, 2526-34	15.9	188
137	Loss of the endothelial glycocalyx links albuminuria and vascular dysfunction. *Journal of the American Society of Nephrology: JASN*, **2012**, 23, 1339-50	12.7	166
136	The absence of intrarenal ACE protects against hypertension. *Journal of Clinical Investigation*, **2013**, 123, 2011-23	15.9	151
135	The collecting duct is the major source of prorenin in diabetes. *Hypertension*, **2008**, 51, 1597-604	8.5	133
134	Calcium wave of tubuloglomerular feedback. *American Journal of Physiology - Renal Physiology*, **2006**, 291, F473-80	4.3	127
133	A high-powered view of the filtration barrier. *Journal of the American Society of Nephrology: JASN*, **2010**, 21, 1835-41	12.7	123
132	Tracking the fate of glomerular epithelial cells in vivo using serial multiphoton imaging in new mouse models with fluorescent lineage tags. *Nature Medicine*, **2013**, 19, 1661-6	50.5	122
131	Quantitative imaging of basic functions in renal (patho)physiology. *American Journal of Physiology - Renal Physiology*, **2006**, 291, F495-502	4.3	121
130	Luminal NaCl delivery regulates basolateral PGE2 release from macula densa cells. *Journal of Clinical Investigation*, **2003**, 112, 76-82	15.9	117
129	Connexins and the kidney. *American Journal of Physiology - Regulatory Integrative and Comparative Physiology*, **2010**, 298, R1143-55	3.2	99
128	Activation of the succinate receptor GPR91 in macula densa cells causes renin release. *Journal of the American Society of Nephrology: JASN*, **2009**, 20, 1002-11	12.7	99
127	Macula densa cell signaling. *Annual Review of Physiology*, **2003**, 65, 481-500	23.1	99
126	Macula densa sensing and signaling mechanisms of renin release. *Journal of the American Society of Nephrology: JASN*, **2010**, 21, 1093-6	12.7	98
125	Connexin 30 deficiency impairs renal tubular ATP release and pressure natriuresis. *Journal of the American Society of Nephrology: JASN*, **2009**, 20, 1724-32	12.7	97

124	Multiphoton imaging of the glomerular permeability of angiotensinogen. *Journal of the American Society of Nephrology: JASN*, **2012**, 23, 1847-56	12.7	95
123	Angiotensin I conversion to angiotensin II stimulates cortical collecting duct sodium transport. *Hypertension*, **2003**, 42, 195-9	8.5	88
122	Renal intercalated cells maintain body fluid and electrolyte balance. *Journal of Clinical Investigation*, **2013**, 123, 4219-31	15.9	86
121	Laminar flow downregulates Notch activity to promote lymphatic sprouting. *Journal of Clinical Investigation*, **2017**, 127, 1225-1240	15.9	77
120	Sustained calcium entry through P2X nucleotide receptor channels in human airway epithelial cells. *Journal of Biological Chemistry*, **2003**, 278, 13398-408	5.4	75
119	Renal intercalated cells are rather energized by a proton than a sodium pump. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 7928-33	11.5	71
118	Two-photon excitation fluorescence imaging of the living juxtaglomerular apparatus. *American Journal of Physiology - Renal Physiology*, **2002**, 283, F197-201	4.3	70
117	Macula densa Na(+)/H(+) exchange activities mediated by apical NHE2 and basolateral NHE4 isoforms. *American Journal of Physiology - Renal Physiology*, **2000**, 278, F452-63	4.3	70
116	Localization of the succinate receptor in the distal nephron and its signaling in polarized MDCK cells. *Kidney International*, **2009**, 76, 1258-67	9.9	69
115	Real-time imaging of renin release in vitro. *American Journal of Physiology - Renal Physiology*, **2004**, 287, F329-35	4.3	69
114	Macula densa basolateral ATP release is regulated by luminal [NaCl] and dietary salt intake. *American Journal of Physiology - Renal Physiology*, **2004**, 286, F1054-8	4.3	67
113	High glucose and renin release: the role of succinate and GPR91. *Kidney International*, **2010**, 78, 1214-7	9.9	66
112	Intravital imaging of podocyte calcium in glomerular injury and disease. *Journal of Clinical Investigation*, **2014**, 124, 2050-8	15.9	62
111	Localization of connexin 30 in the luminal membrane of cells in the distal nephron. *American Journal of Physiology - Renal Physiology*, **2005**, 289, F1304-12	4.3	61
110	Purinergic inhibition of ENaC produces aldosterone escape. *Journal of the American Society of Nephrology: JASN*, **2010**, 21, 1903-11	12.7	56
109	Intrarenal localization of the plasma membrane ATP channel pannexin1. *American Journal of Physiology - Renal Physiology*, **2012**, 303, F1454-9	4.3	56
108	Evidence for restriction of fluid and solute movement across the glomerular capillary wall by the subpodocyte space. *American Journal of Physiology - Renal Physiology*, **2007**, 293, F1777-86	4.3	56
107	Independent two-photon measurements of albumin GSC give low values. *American Journal of Physiology - Renal Physiology*, **2009**, 296, F1255-7	4.3	54

106	The first decade of using multiphoton microscopy for high-power kidney imaging. *American Journal of Physiology - Renal Physiology*, **2012**, 302, F227-33	4.3	54
105	Oligomeric structure and minimal functional unit of the electrogenic sodium bicarbonate cotransporter NBCe1-A. *Journal of Biological Chemistry*, **2008**, 283, 26782-94	5.4	53
104	Luminal NaCl delivery regulates basolateral PGE2 release from macula densa cells. *Journal of Clinical Investigation*, **2003**, 112, 76-82	15.9	53
103	Multiphoton imaging of renal tissues in vitro. *American Journal of Physiology - Renal Physiology*, **2005**, 288, F1079-83	4.3	51
102	A new look at electrolyte transport in the distal tubule. *Annual Review of Physiology*, **2012**, 74, 325-49	23.1	50
101	Connexin 40 and ATP-dependent intercellular calcium wave in renal glomerular endothelial cells. *American Journal of Physiology - Regulatory Integrative and Comparative Physiology*, **2008**, 294, R1769-76	3.2	50
100	Connexin45 is expressed in the juxtaglomerular apparatus and is involved in the regulation of renin secretion and blood pressure. *American Journal of Physiology - Regulatory Integrative and Comparative Physiology*, **2008**, 295, R371-80	3.2	50
99	Novel regulation of cell [Na(+)] in macula densa cells: apical Na(+) recycling by H-K-ATPase. *American Journal of Physiology - Renal Physiology*, **2002**, 282, F324-9	4.3	50
98	Neuronal nitric oxide synthase: its role and regulation in macula densa cells. *Journal of the American Society of Nephrology: JASN*, **2003**, 14, 2475-83	12.7	47
97	Angiotensin receptor-mediated oxidative stress is associated with impaired cardiac redox signaling and mitochondrial function in insulin-resistant rats. *American Journal of Physiology - Heart and Circulatory Physiology*, **2013**, 305, H599-607	5.2	45
96	Angiotensin II directly stimulates macula densa Na-2Cl-K cotransport via apical AT(1) receptors. *American Journal of Physiology - Renal Physiology*, **2002**, 282, F301-6	4.3	43
95	ORAI1 Activates Proliferation of Lymphatic Endothelial Cells in Response to Laminar Flow Through Krüppel-Like Factors 2 and 4. *Circulation Research*, **2017**, 120, 1426-1439	15.7	42
94	Novel in vivo techniques to visualize kidney anatomy and function. *Kidney International*, **2015**, 88, 44-51	9.9	41
93	Multiphoton imaging of renal regulatory mechanisms. *Physiology*, **2009**, 24, 88-96	9.8	41
92	Fluid flow in the juxtaglomerular interstitium visualized in vivo. *American Journal of Physiology - Renal Physiology*, **2006**, 291, F1241-7	4.3	41
91	Immunolocalization of a microsomal prostaglandin E synthase in rabbit kidney. *American Journal of Physiology - Renal Physiology*, **2003**, 285, F558-64	4.3	40
90	Regulation of macula densa Na:H exchange by angiotensin II. *Kidney International*, **1998**, 54, 2021-8	9.9	39
89	P2Y12 Receptor Localizes in the Renal Collecting Duct and Its Blockade Augments Arginine Vasopressin Action and Alleviates Nephrogenic Diabetes Insipidus. *Journal of the American Society of Nephrology: JASN*, **2015**, 26, 2978-87	12.7	38

88	Electrotonic vascular signal conduction and nephron synchronization. *American Journal of Physiology - Renal Physiology*, **2009**, 296, F751-61	4.3	37
87	Purinergic receptor signaling at the basolateral membrane of macula densa cells. *Journal of the American Society of Nephrology: JASN*, **2002**, 13, 1145-51	12.7	37
86	Tracking the stochastic fate of cells of the renin lineage after podocyte depletion using multicolor reporters and intravital imaging. *PLoS ONE*, **2017**, 12, e0173891	3.7	36
85	ATP releasing connexin 30 hemichannels mediate flow-induced calcium signaling in the collecting duct. *Frontiers in Physiology*, **2013**, 4, 292	4.6	36
84	Cytosolic [Ca2+] signaling pathway in macula densa cells. *American Journal of Physiology - Renal Physiology*, **1999**, 277, F472-6	4.3	36
83	A novel source of cultured podocytes. *PLoS ONE*, **2013**, 8, e81812	3.7	34
82	Diminished paracrine regulation of the epithelial Na+ channel by purinergic signaling in mice lacking connexin 30. *Journal of Biological Chemistry*, **2011**, 286, 1054-60	5.4	31
81	On the Origin of Urinary Renin: A Translational Approach. *Hypertension*, **2016**, 67, 927-33	8.5	30
80	In Vivo Developmental Trajectories of Human Podocyte Inform In Vitro Differentiation of Pluripotent Stem Cell-Derived Podocytes. *Developmental Cell*, **2019**, 50, 102-116.e6	10.2	28
79	Aldosterone induces albuminuria via matrix metalloproteinase-dependent damage of the endothelial glycocalyx. *Kidney International*, **2019**, 95, 94-107	9.9	28
78	Local pH domains regulate NHE3-mediated Na+ reabsorption in the renal proximal tubule. *American Journal of Physiology - Renal Physiology*, **2014**, 307, F1249-62	4.3	27
77	Direct demonstration of tubular fluid flow sensing by macula densa cells. *American Journal of Physiology - Renal Physiology*, **2010**, 299, F1087-93	4.3	27
76	Increased renal renin content in mice lacking the Na+/H+ exchanger NHE2. *American Journal of Physiology - Renal Physiology*, **2008**, 294, F937-44	4.3	27
75	Loss of renal microvascular integrity in postnatal Crim1 hypomorphic transgenic mice. *Kidney International*, **2009**, 76, 1161-71	9.9	26
74	Imaging renin content and release in the living kidney. *Nephron Physiology*, **2006**, 103, p71-4		25
73	Maintenance of vascular integrity by pericytes is essential for normal kidney function. *American Journal of Physiology - Renal Physiology*, **2016**, 311, F1230-F1242	4.3	25
72	The macula densa prorenin receptor is essential in renin release and blood pressure control. *American Journal of Physiology - Renal Physiology*, **2018**, 315, F521-F534	4.3	23
71	Metabolic control of renin secretion. *Pflugers Archiv European Journal of Physiology*, **2013**, 465, 53-8	4.6	23

70	Characterization of connexin30.3-deficient mice suggests a possible role of connexin30.3 in olfaction. *European Journal of Cell Biology*, **2007**, 86, 683-700	6.1	23
69	Regulation of Vascular and Renal Function by Metabolite Receptors. *Annual Review of Physiology*, **2016**, 78, 391-414	23.1	22
68	Imaging the renin-angiotensin system: an important target of anti-hypertensive therapy. *Advanced Drug Delivery Reviews*, **2006**, 58, 824-33	18.5	20
67	Angiotensin receptor blockade recovers hepatic UCP2 expression and aconitase and SDH activities and ameliorates hepatic oxidative damage in insulin resistant rats. *Endocrinology*, **2012**, 153, 5746-59	4.8	19
66	Connexin 30.3 is expressed in the kidney but not regulated by dietary salt or high blood pressure. *Cell Communication and Adhesion*, **2008**, 15, 219-30		17
65	Heterogeneity of the afferent arteriole--correlations between morphology and function. *Nephrology Dialysis Transplantation*, **2006**, 21, 2703-7	4.3	17
64	Calcineurin-inhibition Results in Upregulation of Local Renin and Subsequent Vascular Endothelial Growth Factor Production in Renal Collecting Ducts. *Transplantation*, **2016**, 100, 325-333	1.8	16
63	Advances in Renal Cell Imaging. *Seminars in Nephrology*, **2018**, 38, 52-62	4.8	15
62	Intravital imaging in the kidney. *Current Opinion in Nephrology and Hypertension*, **2016**, 25, 168-73	3.5	13
61	Long-Term Cell Fate Tracking of Individual Renal Cells Using Serial Intravital Microscopy. *Methods in Molecular Biology*, **2020**, 2150, 25-44	1.4	13
60	Mitochondrial TCA cycle intermediates regulate body fluid and acid-base balance. *Journal of Clinical Investigation*, **2013**, 123, 2788-90	15.9	13
59	Clopidogrel attenuates lithium-induced alterations in renal water and sodium channels/transporters in mice. *Purinergic Signalling*, **2015**, 11, 507-18	3.8	12
58	Angiotensin receptor blockade improves cardiac mitochondrial activity in response to an acute glucose load in obese insulin resistant rats. *Redox Biology*, **2018**, 14, 371-378	11.3	12
57	Cellular localization of adenine receptors in the rat kidney and their functional significance in the inner medullary collecting duct. *American Journal of Physiology - Renal Physiology*, **2013**, 305, F1298-305	4.3	11
56	Essential role and therapeutic targeting of the glomerular endothelial glycocalyx in lupus nephritis. *JCI Insight*, **2020**, 5,	9.9	10
55	Just Look! Intravital Microscopy as the Best Means to Study Kidney Cell Death Dynamics. *Seminars in Nephrology*, **2016**, 36, 220-36	4.8	9
54	Confocal imaging and function of the juxtaglomerular apparatus. *Current Opinion in Nephrology and Hypertension*, **2005**, 14, 53-7	3.5	9
53	Combined use of electron microscopy and intravital imaging captures morphological and functional features of podocyte detachment. *Pflugers Archiv European Journal of Physiology*, **2017**, 469, 965-974	4.6	8

52	Prasugrel suppresses development of lithium-induced nephrogenic diabetes insipidus in mice. *Purinergic Signalling*, **2017**, 13, 239-248	3.8	7
51	A Mouse Model That Reproduces the Developmental Pathways and Site Specificity of the Cancers Associated With the Human BRCA1 Mutation Carrier State. *EBioMedicine*, **2015**, 2, 1318-30	8.8	7
50	Confocal and two-photon microscopy. *Methods in Molecular Medicine*, **2003**, 86, 129-38		7
49	Interleukin-2-dependent mechanisms are involved in the development of glomerulosclerosis after partial renal ablation in rats. *Nephron Experimental Nephrology*, **2001**, 9, 133-41		7
48	Symmetry breaking of tissue mechanics in wound induced hair follicle regeneration of laboratory and spiny mice. *Nature Communications*, **2021**, 12, 2595	17.4	7
47	Renal Stem Cells, Tissue Regeneration, and Stem Cell Therapies for Renal Diseases. *Stem Cells International*, **2015**, 2015, 302792	5	6
46	From in vitro to in vivo: imaging from the single cell to the whole organism. *Current Protocols in Cytometry*, **2008**, Chapter 12, Unit 12.12	3.6	6
45	Recent advances in tissue (pro)renin imaging. *Frontiers in Bioscience - Elite*, **2010**, 2, 1227-33	1.6	6
44	Novel fluorescence techniques to quantitate renal cell biology. *Methods in Cell Biology*, **2019**, 154, 85-107	1.8	5
43	Can kidney regeneration be visualized?. *Nephron Experimental Nephrology*, **2014**, 126, 86		5
42	Hemodynamics of gastric microcirculation in rats. *American Journal of Physiology - Heart and Circulatory Physiology*, **1998**, 275, H1404-10	5.2	4
41	Serial intravital imaging captures dynamic and functional endothelial remodeling with single-cell resolution. *JCI Insight*, **2021**, 6,	9.9	3
40	An ectopic renin-secreting adrenal corticoadenoma in a child with malignant hypertension. *Physiological Reports*, **2016**, 4, e12728	2.6	3
39	A new view of macula densa cell microanatomy. *American Journal of Physiology - Renal Physiology*, **2021**, 320, F492-F504	4.3	3
38	Genetic Deletion of P2Y Receptor Offers Long-Term (5 Months) Protection Against Lithium-Induced Polyuria, Natriuresis, Kaliuresis, and Collecting Duct Remodeling and Cell Proliferation. *Frontiers in Physiology*, **2018**, 9, 1765	4.6	3
37	A practical new way to measure kidney fibrosis. *Kidney International*, **2016**, 90, 941-942	9.9	2
36	Localization and proliferation of lymphatic vessels in the tympanic membrane in normal state and regeneration. *Biochemical and Biophysical Research Communications*, **2013**, 440, 371-3	3.4	2
35	Prox1 expression in the endolymphatic sac revealed by whole-mount fluorescent imaging of Prox1-GFP transgenic mice. *Biochemical and Biophysical Research Communications*, **2015**, 457, 19-22	3.4	2

34	Intravital imaging reveals glomerular capillary distension and endothelial and immune cell activation early in Alport syndrome. *JCI Insight*, **2021**,	9.9	2
33	Phenotypic dissection of the mouse knockout by complementation with human renin. *Journal of Biological Chemistry*, **2018**, 293, 1151-1162	5.4	2
32	In vivo microscopy. *Nephrologie Et Therapeutique*, **2016**, 12 Suppl 1, S21-4	0.6	1
31	Intercellular Junctions **2013**, 347-368		1
30	A true champion of Hungarian kidney research and nephrology education--tribute to L□zl□ Rosivall. *Acta Physiologica Hungarica*, **2009**, 96, 375-82		1
29	A new view of macula densa cell protein synthesis. *American Journal of Physiology - Renal Physiology* , **2021**, 321, F689-F704	4.3	1
28	New Endothelial Mechanisms in Glomerular (Patho)biology and Proteinuria Development Captured by Intravital Multiphoton Imaging. *Frontiers in Medicine*, **2021**, 8, 765356	4.9	1
27	ATP-mediated intercellular calcium wave in renal (juxta)glomerular endothelial cells (GENC). *FASEB Journal*, **2007**, 21, A499	0.9	1
26	Pannexin1 is a novel renal ATP release mechanism. *FASEB Journal*, **2010**, 24, 606.27	0.9	1
25	An important role of renal angiotensin-converting enzyme in the development of salt-sensitivity during renal parenchyma inflammation. *FASEB Journal*, **2013**, 27, 909.8	0.9	1
24	Renomedullary Interstitial Cell Endothelin A Receptors Regulate BP and Renal Function. *Journal of the American Society of Nephrology: JASN*, **2020**, 31, 1555-1568	12.7	0
23	Imaging of Glomerular Regeneration **2017**, 1005-1011		
22	In vivo imaging of the kidney in early diabetes. *FASEB Journal*, **2006**, 20, A1170	0.9	
21	Intra-renal localization of Connexin 30.3. *FASEB Journal*, **2006**, 20, A766	0.9	
20	Localization of connexin 45 in the kidney. *FASEB Journal*, **2007**, 21, A1333	0.9	
19	Uric acid acutely triggers renin release and causes glomerular hyperfiltration. *FASEB Journal*, **2007**, 21, A502	0.9	
18	GPR91 triggers paracrine signaling in the JGA. *FASEB Journal*, **2007**, 21, A498	0.9	
17	Multiphoton imaging of sub-podocyte space in isolated perfused glomeruli. *FASEB Journal*, **2007**, 21, A503	0.9	

16	Direct demonstration of tubular fluid flow sensing by macula densa cells. *FASEB Journal*, **2008**, 22, 761.28	0.9
15	(Pro)renin Receptor Activation Causes Acute Production of Macula Densa Prostaglandins. *FASEB Journal*, **2008**, 22, 761.29	0.9
14	Localization and function of connexin 45 in the renal cortical vasculature. *FASEB Journal*, **2008**, 22, 761.9	0.9
13	Macula densa cells detect altered tissue metabolism via succinate and GPR91. *FASEB Journal*, **2008**, 22, 761.17	0.9
12	Glomerular Endothelial Cell Calcium Dynamics Visualized in vivo. *FASEB Journal*, **2018**, 32, 721.18	0.9
11	nNOS in Embryonic Kidney Contributes to Glomerular Maturation. *FASEB Journal*, **2018**, 32, 721.17	0.9
10	Wnt signaling regulates macula densa structure and function. *FASEB Journal*, **2018**, 32, 721.14	0.9
9	Imaging of Glomerular Endothelial Cell Calcium Dynamics in vivo Identifies Endothelial Progenitor Cell Subpopulation. *FASEB Journal*, **2019**, 33, 751.1	0.9
8	Bradykinin stimulates renal collecting duct prorenin. *FASEB Journal*, **2009**, 23, 804.16	0.9
7	Urinary renin activity as a novel biomarker for diabetic nephropathy. *FASEB Journal*, **2011**, 25, 664.14	0.9
6	Localization and signaling of FPR2 in the kidney. *FASEB Journal*, **2011**, 25, 666.11	0.9
5	Development of a renal collecting duct homing peptide using phage display. *FASEB Journal*, **2011**, 25, 665.19	0.9
4	Succinate activates the collecting duct renin-angiotensin system (RAS). *FASEB Journal*, **2011**, 25, 664.15	0.9
3	REGULATION OF ENaC BY ATP RELEASE THROUGH Cx30 IS REQUIRED FOR ALDOSTERONE - ESCAPE. *FASEB Journal*, **2011**, 25, 1041.7	0.9
2	The role of GPR91 in the Akita model of diabetic nephropathy (DN). *FASEB Journal*, **2012**, 26, 876.12	0.9
1	The Classic Renovascular (Goldblatt) Hypertension (RVHT) is Mediated by Succinate/GPR91 Signaling. *FASEB Journal*, **2012**, 26, 690.22	0.9