Janos Peti-Peterdi

List of Publications by Year
in descending order

147 papers	7,240 citations	43973 48 h-index	58464 82 g-index
178 all docs	178 docs citations	178 times ranked	6410 citing authors

#	Article	IF	Citations
1	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, 4410-4415.	3.3	893
2	Angiotensin II Directly Stimulates ENaC Activity in the Cortical Collecting Duct via AT1 Receptors. Journal of the American Society of Nephrology: JASN, 2002, 13, 1131-1135.	3.0	281
3	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, 4322-4327.	3.3	263
4	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.	3.9	237
5	Loss of the Endothelial Glycocalyx Links Albuminuria and Vascular Dysfunction. Journal of the American Society of Nephrology: JASN, 2012, 23, 1339-1350.	3.0	206
6	The absence of intrarenal ACE protects against hypertension. Journal of Clinical Investigation, 2013, 123, 2011-2023.	3.9	176
7	The Collecting Duct Is the Major Source of Prorenin in Diabetes. Hypertension, 2008, 51, 1597-1604.	1.3	153
8	Quantitative imaging of basic functions in renal (patho)physiology. American Journal of Physiology - Renal Physiology, 2006, 291, F495-F502.	1.3	144
9	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, 1661-1666.	15.2	143
10	Calcium wave of tubuloglomerular feedback. American Journal of Physiology - Renal Physiology, 2006, 291, F473-F480.	1.3	142
11	A High-Powered View of the Filtration Barrier. Journal of the American Society of Nephrology: JASN, 2010, 21, 1835-1841.	3.0	140
12	Macula Densa Sensing and Signaling Mechanisms of Renin Release. Journal of the American Society of Nephrology: JASN, 2010, 21, 1093-1096.	3.0	134
13	Activation of the Succinate Receptor GPR91 in Macula Densa Cells Causes Renin Release. Journal of the American Society of Nephrology: JASN, 2009, 20, 1002-1011.	3.0	127
14	Luminal NaCl delivery regulates basolateral PGE2 release from macula densa cells. Journal of Clinical Investigation, 2003, 112, 76-82.	3.9	127
15	Macula Densa Cell Signaling. Annual Review of Physiology, 2003, 65, 481-500.	5.6	118
16	Connexins and the kidney. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2010, 298, R1143-R1155.	0.9	118
17	Laminar flow downregulates Notch activity to promote lymphatic sprouting. Journal of Clinical Investigation, 2017, 127, 1225-1240.	3.9	113
18	Multiphoton Imaging of the Glomerular Permeability of Angiotensinogen. Journal of the American Society of Nephrology: JASN, 2012, 23, 1847-1856.	3.0	108

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19	Connexin 30 Deficiency Impairs Renal Tubular ATP Release and Pressure Natriuresis. Journal of the American Society of Nephrology: JASN, 2009, 20, 1724-1732.	3.0	107
20	Renal Î2-intercalated cells maintain body fluid and electrolyte balance. Journal of Clinical Investigation, 2013, 123, 4219-4231.	3.9	107
21	Angiotensin I Conversion to Angiotensin II Stimulates Cortical Collecting Duct Sodium Transport. Hypertension, 2003, 42, 195-199.	1.3	97
22	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, 7928-7933.	3.3	92
23	Localization of the succinate receptor in the distal nephron and its signaling in polarized MDCK cells. Kidney International, 2009, 76, 1258-1267.	2.6	91
24	Two-photon excitation fluorescence imaging of the living juxtaglomerular apparatus. American Journal of Physiology - Renal Physiology, 2002, 283, F197-F201.	1.3	80
25	Macula densa Na⁺/H⁺exchange activities mediated by apical NHE2 and basolateral NHE4 isoforms. American Journal of Physiology - Renal Physiology, 2000, 278, F452-F463.	1.3	78
26	Sustained Calcium Entry through P2X Nucleotide Receptor Channels in Human Airway Epithelial Cells. Journal of Biological Chemistry, 2003, 278, 13398-13408.	1.6	77
27	Real-time imaging of renin release in vitro. American Journal of Physiology - Renal Physiology, 2004, 287, F329-F335.	1.3	77
28	High glucose and renin release: the role of succinate and GPR91. Kidney International, 2010, 78, 1214-1217.	2.6	77
29	Intravital imaging of podocyte calcium in glomerular injury and disease. Journal of Clinical Investigation, 2014, 124, 2050-2058.	3.9	76
30	Activation of the renal renin-angiotensin system in diabetes--new concepts. Nephrology Dialysis Transplantation, 2008, 23, 3047-3049.	0.4	75
31	Macula densa basolateral ATP release is regulated by luminal [NaCl] and dietary salt intake. American Journal of Physiology - Renal Physiology, 2004, 286, F1054-F1058.	1.3	70
32	Localization of connexin 30 in the luminal membrane of cells in the distal nephron. American Journal of Physiology - Renal Physiology, 2005, 289, F1304-F1312.	1.3	65
33	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-F1786.	1.3	63
34	Intrarenal localization of the plasma membrane ATP channel pannexin1. American Journal of Physiology - Renal Physiology, 2012, 303, F1454-F1459.	1.3	63
35	Oligomeric Structure and Minimal Functional Unit of the Electrogenic Sodium Bicarbonate Cotransporter NBCe1-A. Journal of Biological Chemistry, 2008, 283, 26782-26794.	1.6	62
36	Independent two-photon measurements of albumin GSC give low values. American Journal of Physiology - Renal Physiology, 2009, 296, F1255-F1257.	1.3	62

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37	Purinergic Inhibition of ENaC Produces Aldosterone Escape. Journal of the American Society of Nephrology: JASN, 2010, 21, 1903-1911.	3.0	62
38	Luminal NaCl delivery regulates basolateral PGE2 release from macula densa cells. Journal of Clinical Investigation, 2003, 112, 76-82.	3.9	62
39	A New Look at Electrolyte Transport in the Distal Tubule. Annual Review of Physiology, 2012, 74, 325-349.	5.6	61
40	InÂVivo Developmental Trajectories of Human Podocyte Inform InÂVitro Differentiation of Pluripotent Stem Cell-Derived Podocytes. Developmental Cell, 2019, 50, 102-116.e6.	3.1	60
41	The first decade of using multiphoton microscopy for high-power kidney imaging. American Journal of Physiology - Renal Physiology, 2012, 302, F227-F233.	1.3	59
42	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-R1776.	0.9	58
43	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-R380.	0.9	57
44	ORAI1 Activates Proliferation of Lymphatic Endothelial Cells in Response to Laminar Flow Through KrÃ¼ppel-Like Factors 2 and 4. Circulation Research, 2017, 120, 1426-1439.	2.0	55
45	Neuronal Nitric Oxide Synthase: Its Role and Regulation in Macula Densa Cells. Journal of the American Society of Nephrology: JASN, 2003, 14, 2475-2483.	3.0	54
46	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-H607.	1.5	54
47	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-F329.	1.3	53
48	Multiphoton imaging of renal tissues in vitro. American Journal of Physiology - Renal Physiology, 2005, 288, F1079-F1083.	1.3	53
49	Angiotensin II directly stimulates macula densa Na-2Cl-K cotransport via apical AT1 receptors. American Journal of Physiology - Renal Physiology, 2002, 282, F301-F306.	1.3	49
50	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, 2978-2987.	3.0	49
51	Aldosterone induces albuminuria via matrix metalloproteinaseâ€“dependent damage of the endothelial glycocalyx. Kidney International, 2019, 95, 94-107.	2.6	49
52	Multiphoton Imaging of Renal Regulatory Mechanisms. Physiology, 2009, 24, 88-96.	1.6	48
53	Novel in vivo techniques to visualize kidney anatomy and function. Kidney International, 2015, 88, 44-51.	2.6	48
54	Electrotonic vascular signal conduction and nephron synchronization. American Journal of Physiology - Renal Physiology, 2009, 296, F751-F761.	1.3	47

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55	On the Origin of Urinary Renin. Hypertension, 2016, 67, 927-933.	1.3	46
56	Fluid flow in the juxtaglomerular interstitium visualized in vivo. American Journal of Physiology - Renal Physiology, 2006, 291, F1241-F1247.	1.3	45
57	Regulation of macula densa Na:H exchange by angiotensin II. Kidney International, 1998, 54, 2021-2028.	2.6	44
58	ATP Releasing Connexin 30 Hemichannels Mediate Flow-Induced Calcium Signaling in the Collecting Duct. Frontiers in Physiology, 2013, 4, 292.	1.3	43
59	Immunolocalization of a microsomal prostaglandin E synthase in rabbit kidney. American Journal of Physiology - Renal Physiology, 2003, 285, F558-F564.	1.3	41
60	Cytosolic [Ca²⁺] signaling pathway in macula densa cells. American Journal of Physiology - Renal Physiology, 1999, 277, F472-F476.	1.3	40
61	Local pH domains regulate NHE3-mediated Na⁺reabsorption in the renal proximal tubule. American Journal of Physiology - Renal Physiology, 2014, 307, F1249-F1262.	1.3	40
62	Symmetry breaking of tissue mechanics in wound induced hair follicle regeneration of laboratory and spiny mice. Nature Communications, 2021, 12, 2595.	5.8	40
63	Purinergic Receptor Signaling at the Basolateral Membrane of Macula Densa Cells. Journal of the American Society of Nephrology: JASN, 2002, 13, 1145-1151.	3.0	39
64	Maintenance of vascular integrity by pericytes is essential for normal kidney function. American Journal of Physiology - Renal Physiology, 2016, 311, F1230-F1242.	1.3	39
65	Tracking the stochastic fate of cells of the renin lineage after podocyte depletion using multicolor reporters and intravital imaging. PLoS ONE, 2017, 12, e0173891.	1.1	39
66	A Novel Source of Cultured Podocytes. PLoS ONE, 2013, 8, e81812.	1.1	39
67	Diminished Paracrine Regulation of the Epithelial Na+ Channel by Purinergic Signaling in Mice Lacking Connexin 30. Journal of Biological Chemistry, 2011, 286, 1054-1060.	1.6	35
68	Direct demonstration of tubular fluid flow sensing by macula densa cells. American Journal of Physiology - Renal Physiology, 2010, 299, F1087-F1093.	1.3	33
69	The macula densa prorenin receptor is essential in renin release and blood pressure control. American Journal of Physiology - Renal Physiology, 2018, 315, F521-F534.	1.3	33
70	Regulation of Vascular and Renal Function by Metabolite Receptors. Annual Review of Physiology, 2016, 78, 391-414.	5.6	32
71	Imaging Renin Content and Release in the Living Kidney. Nephron Physiology, 2006, 103, p71-p74.	1.5	30
72	Increased renal renin content in mice lacking the Na⁺/H⁺ exchanger NHE2. American Journal of Physiology - Renal Physiology, 2008, 294, F937-F944.	1.3	30

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73	Metabolic control of renin secretion. Pflugers Archiv European Journal of Physiology, 2013, 465, 53-58.	1.3	28
74	Loss of renal microvascular integrity in postnatal Crim1 hypomorphic transgenic mice. Kidney International, 2009, 76, 1161-1171.	2.6	27
75	Imaging the reninâ€"angiotensin system: An important target of anti-hypertensive therapy. Advanced Drug Delivery Reviews, 2006, 58, 824-833.	6.6	25
76	Characterization of connexin30.3-deficient mice suggests a possible role of connexin30.3 in olfaction. European Journal of Cell Biology, 2007, 86, 683-700.	1.6	25
77	Angiotensin Receptor Blockade Recovers Hepatic UCP2 Expression and Aconitase and SDH Activities and Ameliorates Hepatic Oxidative Damage in Insulin Resistant Rats. Endocrinology, 2012, 153, 5746-5759.	1.4	23
78	Long-Term Cell Fate Tracking of Individual Renal Cells Using Serial Intravital Microscopy. Methods in Molecular Biology, 2019, 2150, 25-44.	0.4	23
79	Connexin 30.3 Is Expressed in the Kidney But Not Regulated by Dietary Salt or High Blood Pressure. Cell Communication and Adhesion, 2008, 15, 219-230.	1.0	21
80	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.	3.9	20
81	Calcineurin-inhibition Results in Upregulation of Local Renin and Subsequent Vascular Endothelial Growth Factor Production in Renal Collecting Ducts. Transplantation, 2016, 100, 325-333.	0.5	19
82	Advances in Renal Cell Imaging. Seminars in Nephrology, 2018, 38, 52-62.	0.6	19
83	Heterogeneity of the afferent arterioleâ€"correlations between morphology and function. Nephrology Dialysis Transplantation, 2006, 21, 2703-2707.	0.4	18
84	Clopidogrel attenuates lithium-induced alterations in renal water and sodium channels/transporters in mice. Purinergic Signalling, 2015, 11, 507-518.	1.1	17
85	Intravital imaging in the kidney. Current Opinion in Nephrology and Hypertension, 2016, 25, 168-173.	1.0	16
86	Essential role and therapeutic targeting of the glomerular endothelial glycocalyx in lupus nephritis. JCI Insight, 2020, 5, .	2.3	16
87	Mitochondrial TCA cycle intermediates regulate body fluid and acid-base balance. Journal of Clinical Investigation, 2013, 123, 2788-2790.	3.9	15
88	Just Look! Intravital Microscopy as the Best Means to Study Kidney Cell Death Dynamics. Seminars in Nephrology, 2016, 36, 220-236.	0.6	14
89	A new view of macula densa cell microanatomy. American Journal of Physiology - Renal Physiology, 2021, 320, F492-F504.	1.3	13
90	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-F1305.	1.3	12

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91	Serial intravital imaging captures dynamic and functional endothelial remodeling with single-cell resolution. JCI Insight, 2021, 6, .	2.3	12
92	Interleukin-2-Dependent Mechanisms Are Involved in the Development of Glomerulosclerosis after Partial Renal Ablation in Rats. Nephron Experimental Nephrology, 2001, 9, 133-141.	2.4	11
93	Confocal imaging and function of the juxtaglomerular apparatus. Current Opinion in Nephrology and Hypertension, 2005, 14, 53-57.	1.0	11
94	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.	1.3	11
95	Novel fluorescence techniques to quantitate renal cell biology. Methods in Cell Biology, 2019, 154, 85-107.	0.5	11
96	Newly Stemming Functions of Macula Densaâ€"Derived Prostanoids. Hypertension, 2015, 65, 987-988.	1.3	10
97	Prasugrel suppresses development of lithium-induced nephrogenic diabetes insipidus in mice. Purinergic Signalling, 2017, 13, 239-248.	1.1	10
98	From In Vitro to In Vivo: Imaging from the Single Cell to the Whole Organism. Current Protocols in Cytometry, 2008, 44, Unit 12.12.	3.7	8
99	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, 1318-1330.	2.7	8
100	Recent advances in tissue pro renin imaging. Frontiers in Bioscience - Elite, 2010, E2, 1227-1233.	0.9	8
101	Confocal and Two-Photon Microscopy. , 2003, 86, 129-138.		7
102	Renal Stem Cells, Tissue Regeneration, and Stem Cell Therapies for Renal Diseases. Stem Cells International, 2015, 2015, 1-2.	1.2	7
103	A new view of macula densa cell protein synthesis. American Journal of Physiology - Renal Physiology, 2021, 321, F689-F704.	1.3	7
104	Intravital imaging reveals glomerular capillary distension and endothelial and immune cell activation early in Alport syndrome. JCI Insight, 2022, 7, .	2.3	7
105	The role of TRPC6 calcium channels and P2 purinergic receptors in podocyte mechanical and metabolic sensing. Physiology International, 2022, 109, 31-45.	0.8	6
106	Hemodynamics of gastric microcirculation in rats. American Journal of Physiology - Heart and Circulatory Physiology, 1998, 275, H1404-H1410.	1.5	5
107	Can Kidney Regeneration Be Visualized. Nephron Experimental Nephrology, 2014, 126, 86-90.	2.4	5
108	Genetic Deletion of P2Y2 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.	1.3	5

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109	New Endothelial Mechanisms in Glomerular (Patho)biology and Proteinuria Development Captured by Intravital Multiphoton Imaging. Frontiers in Medicine, 2021, 8, 765356.	1.2	4
110	An ectopic renin-secreting adrenal corticoadenoma in a child with malignant hypertension. Physiological Reports, 2016, 4, e12728.	0.7	3
111	A practical new way to measure kidney fibrosis. Kidney International, 2016, 90, 941-942.	2.6	3
112	In vivo microscopy. Nephrologie Et Therapeutique, 2016, 12, S21-S24.	0.2	3
113	Phenotypic dissection of the mouse Ren1d knockout by complementation with human renin. Journal of Biological Chemistry, 2018, 293, 1151-1162.	1.6	3
114	Renomedullary Interstitial Cell Endothelin A Receptors Regulate BP and Renal Function. Journal of the American Society of Nephrology: JASN, 2020, 31, 1555-1568.	3.0	3
115	Localization and proliferation of lymphatic vessels in the tympanic membrane in normal state and regeneration. Biochemical and Biophysical Research Communications, 2013, 440, 371-373.	1.0	2
116	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.	1.0	2
117	A true champion of Hungarian kidney research and nephrology education â€" Tribute to LÃ¡szlÃ³ Rosivall. Acta Physiologica Hungarica, 2009, 96, 375-382.	0.9	1
118	Intercellular Junctions. , 2013, , 347-368.		1
119	ATPâ€mediated intercellular calcium wave in renal (juxta)glomerular endothelial cells (GENC). FASEB Journal, 2007, 21, A499.	0.2	1
120	Uric acid acutely triggers renin release and causes glomerular hyperfiltration. FASEB Journal, 2007, 21, A502.	0.2	1
121	Pannexin1 is a novel renal ATP release mechanism. FASEB Journal, 2010, 24, 606.27.	0.2	1
122	An important role of renal angiotensinâ€converting enzyme in the development of saltâ€sensitivity during renal parenchyma inflammation. FASEB Journal, 2013, 27, 909.8.	0.2	1
123	<i>A novel tool to visualize the cell secretory pathway</i>. Focus on â€œA fluorimetry-based ssYFP secretion assay to monitor vasopressin-induced exocytosis in LLC-PK₁ cells expressing aquaporin-2â€. American Journal of Physiology - Cell Physiology, 2008, 295, C1473-C1473.	2.1	0
124	Imaging of Glomerular Regeneration. , 2017, , 1005-1011.		0
125	In vivo imaging of the kidney in early diabetes. FASEB Journal, 2006, 20, A1170.	0.2	0
126	Intraâ€renal localization of Connexin 30.3. FASEB Journal, 2006, 20, A766.	0.2	0

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127	Localization of connexin 45 in the kidney. FASEB Journal, 2007, 21, A1333.	0.2	0
128	GPR91 triggers paracrine signaling in the JGA. FASEB Journal, 2007, 21, A498.	0.2	0
129	Multiphoton imaging of subâ€podocyte space in isolated perfused glomeruli. FASEB Journal, 2007, 21, A503.	0.2	0
130	Direct demonstration of tubular fluid flow sensing by macula densa cells. FASEB Journal, 2008, 22, 761.28.	0.2	0
131	(Pro)renin Receptor Activation Causes Acute Production of Macula Densa Prostaglandins. FASEB Journal, 2008, 22, 761.29.	0.2	0
132	Localization and function of connexin 45 in the renal cortical vasculature. FASEB Journal, 2008, 22, 761.9.	0.2	0
133	Macula densa cells detect altered tissue metabolism via succinate and GPR91. FASEB Journal, 2008, 22, 761.17.	0.2	0
134	Bradykinin stimulates renal collecting duct prorenin. FASEB Journal, 2009, 23, 804.16.	0.2	0
135	Urinary renin activity as a novel biomarker for diabetic nephropathy. FASEB Journal, 2011, 25, 664.14.	0.2	0
136	Localization and signaling of FPR2 in the kidney. FASEB Journal, 2011, 25, 666.11.	0.2	0
137	Development of a renal collecting duct homing peptide using phage display. FASEB Journal, 2011, 25, 665.19.	0.2	0
138	Succinate activates the collecting duct reninâ€angiotensin system (RAS). FASEB Journal, 2011, 25, 664.15.	0.2	0
139	REGULAR OSCILLATIONS IN PODOCYTE CALCIUM IN VIVO. FASEB Journal, 2011, 25, .	0.2	0
140	REGULATION OF ENaC BY ATP RELEASE THROUGH Cx30 IS REQUIRED FOR ALDOSTERONE â€•ESCAPE. FASEB Journal, 2011, 25, 1041.7.	0.2	0
141	The role of GPR91 in the Akita model of diabetic nephropathy (DN). FASEB Journal, 2012, 26, 876.12.	0.2	0
142	The Classic Renovascular (Goldblatt) Hypertension (RVHT) is Mediated by Succinate/GPR91 Signaling. FASEB Journal, 2012, 26, 690.22.	0.2	0
143	Glomerular Endothelial Cell Calcium Dynamics Visualized in vivo. FASEB Journal, 2018, 32, 721.18.	0.2	0
144	nNOS in Embryonic Kidney Contributes to Glomerular Maturation. FASEB Journal, 2018, 32, 721.17.	0.2	0

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145	Wnt signaling regulates macula densa structure and function. FASEB Journal, 2018, 32, 721.14.	0.2	0
146	Imaging of Glomerular Endothelial Cell Calcium Dynamics in vivo Identifies Endothelial Progenitor Cell Subpopulation. FASEB Journal, 2019, 33, 751.1.	0.2	0
147	Macula densa cells control glomerular immune cell homing. FASEB Journal, 2022, 36, .	0.2	0