Janet D Klein

List of Publications by Citations

114 papers	2,988 citations	34 h-index	49 g-index
120 ext. papers	3,358 ext. citations	4.9 avg, IF	5.01 L-index

#	Paper	IF	Citations
114	Cloning and characterization of two new isoforms of the rat kidney urea transporter: UT-A3 and UT-A4. *Journal of the American Society of Nephrology: JASN*, **1999**, 10, 230-7	12.7	117
113	Vasopressin rapidly increases phosphorylation of UT-A1 urea transporter in rat IMCDs through PKA. *American Journal of Physiology - Renal Physiology*, **2002**, 282, F85-90	4.3	113
112	Localization of the urea transporter UT-B protein in human and rat erythrocytes and tissues. *American Journal of Physiology - Cell Physiology*, **2001**, 281, C1318-25	5.4	102
111	Vasopressin increases plasma membrane accumulation of urea transporter UT-A1 in rat inner medullary collecting ducts. *Journal of the American Society of Nephrology: JASN*, **2006**, 17, 2680-6	12.7	74
110	Phosphorylation of UT-A1 urea transporter at serines 486 and 499 is important for vasopressin-regulated activity and membrane accumulation. *American Journal of Physiology - Renal Physiology*, **2008**, 295, F295-9	4.3	72
109	Changes in renal medullary transport proteins during uncontrolled diabetes mellitus in rats. *American Journal of Physiology - Renal Physiology*, **2003**, 285, F303-9	4.3	70
108	Forskolin stimulates phosphorylation and membrane accumulation of UT-A3. *American Journal of Physiology - Renal Physiology*, **2007**, 293, F1308-13	4.3	68
107	97- and 117-kDa forms of collecting duct urea transporter UT-A1 are due to different states of glycosylation. *American Journal of Physiology - Renal Physiology*, **2001**, 281, F133-43	4.3	68
106	Exosome-Mediated miR-29 Transfer Reduces Muscle Atrophy and Kidney Fibrosis in Mice. *Molecular Therapy*, **2019**, 27, 571-583	11.7	68
105	miRNA-23a/27a attenuates muscle atrophy and renal fibrosis through muscle-kidney crosstalk. *Journal of Cachexia, Sarcopenia and Muscle*, **2018**, 9, 755-770	10.3	66
104	Angiotensin II increases vasopressin-stimulated facilitated urea permeability in rat terminal IMCDs. *American Journal of Physiology - Renal Physiology*, **2000**, 279, F835-40	4.3	62
103	Down-regulation of urea transporters in the renal inner medulla of lithium-fed rats. *Kidney International*, **2002**, 61, 995-1002	9.9	61
102	Limits Muscle Wasting and Cardiac Fibrosis through Exosome-Mediated microRNA Transfer in Chronic Kidney Disease. *Theranostics*, **2019**, 9, 1864-1877	12.1	60
101	Upregulation of urea transporter UT-A2 and water channels AQP2 and AQP3 in mice lacking urea transporter UT-B. *Journal of the American Society of Nephrology: JASN*, **2004**, 15, 1161-7	12.7	57
100	Chronic kidney disease induces autophagy leading to dysfunction of mitochondria in skeletal muscle. *American Journal of Physiology - Renal Physiology*, **2017**, 312, F1128-F1140	4.3	54
99	Aging increases CCN1 expression leading to muscle senescence. *American Journal of Physiology - Cell Physiology*, **2014**, 306, C28-36	5.4	54
98	Identification and characterization of a Kidd antigen/UT-B urea transporter expressed in human colon. *American Journal of Physiology - Cell Physiology*, **2004**, 287, C30-5	5.4	53

97	Urea transport in MDCK cells that are stably transfected with UT-A1. *American Journal of Physiology - Cell Physiology*, **2004**, 286, C1264-70	5.4	53
96	Urea transport in the kidney. *Comprehensive Physiology*, **2011**, 1, 699-729	7.7	52
95	Low-frequency electrical stimulation attenuates muscle atrophy in CKD--a potential treatment strategy. *Journal of the American Society of Nephrology: JASN*, **2015**, 26, 626-35	12.7	49
94	Loss of N-linked glycosylation reduces urea transporter UT-A1 response to vasopressin. *Journal of Biological Chemistry*, **2006**, 281, 27436-42	5.4	49
93	Regulation by cell volume of Na(+)-K(+)-2Cl- cotransport in vascular endothelial cells: role of protein phosphorylation. *Journal of Membrane Biology*, **1993**, 132, 243-52	2.3	49
92	Glucocorticoids mediate a decrease in AVP-regulated urea transporter in diabetic rat inner medulla. *American Journal of Physiology - Renal Physiology*, **1997**, 273, F949-53	4.3	48
91	Altered expression of urea transporters in response to ureteral obstruction. *American Journal of Physiology - Renal Physiology*, **2004**, 286, F1154-62	4.3	48
90	Role of vasopressin in diabetes mellitus-induced changes in medullary transport proteins involved in urine concentration in Brattleboro rats. *American Journal of Physiology - Renal Physiology*, **2004**, 286, F760-6	4.3	45
89	Potential role of purinergic signaling in urinary concentration in inner medulla: insights from P2Y2 receptor gene knockout mice. *American Journal of Physiology - Renal Physiology*, **2008**, 295, F1715-24	4.3	44
88	Urea transporters are distributed in endothelial cells and mediate inhibition of L-arginine transport. *American Journal of Physiology - Renal Physiology*, **2002**, 283, F578-82	4.3	44
87	Epac regulates UT-A1 to increase urea transport in inner medullary collecting ducts. *Journal of the American Society of Nephrology: JASN*, **2009**, 20, 2018-24	12.7	40
86	Regulation of UT-A1-mediated transepithelial urea flux in MDCK cells. *American Journal of Physiology - Cell Physiology*, **2006**, 291, C600-6	5.4	40
85	UT-A urea transporter protein expressed in liver: upregulation by uremia. *Journal of the American Society of Nephrology: JASN*, **1999**, 10, 2076-83	12.7	40
84	Molecular mechanisms of urea transport in health and disease. *Pflugers Archiv European Journal of Physiology*, **2012**, 464, 561-72	4.6	38
83	Ascending Vasa Recta Are Angiopoietin/Tie2-Dependent Lymphatic-Like Vessels. *Journal of the American Society of Nephrology: JASN*, **2018**, 29, 1097-1107	12.7	37
82	Urea transporter UT-A1 and aquaporin-2 proteins decrease in response to angiotensin II or norepinephrine-induced acute hypertension. *American Journal of Physiology - Renal Physiology*, **2006**, 291, F952-9	4.3	36
81	MDM2 E3 ubiquitin ligase mediates UT-A1 urea transporter ubiquitination and degradation. *American Journal of Physiology - Renal Physiology*, **2008**, 295, F1528-34	4.3	35
80	Mature N-linked glycans facilitate UT-A1 urea transporter lipid raft compartmentalization. *FASEB Journal*, **2011**, 25, 4531-9	0.9	34

79	Metformin, an AMPK activator, stimulates the phosphorylation of aquaporin 2 and urea transporter A1 in inner medullary collecting ducts. *American Journal of Physiology - Renal Physiology*, **2016**, 310, F1008-12	4.3	34
78	Metformin improves urine concentration in rodents with nephrogenic diabetes insipidus. *JCI Insight* , **2016**, 1,	9.9	33
77	Tissue distribution of UT-A and UT-B mRNA and protein in rat. *American Journal of Physiology - Regulatory Integrative and Comparative Physiology*, **2006**, 290, R1446-59	3.2	32
76	Impaired urine concentration and absence of tissue ACE: involvement of medullary transport proteins. *American Journal of Physiology - Renal Physiology*, **2002**, 283, F517-24	4.3	31
75	Urea may regulate urea transporter protein abundance during osmotic diuresis. *American Journal of Physiology - Renal Physiology*, **2005**, 288, F188-97	4.3	31
74	Acupuncture plus low-frequency electrical stimulation (Acu-LFES) attenuates denervation-induced muscle atrophy. *Journal of Applied Physiology*, **2016**, 120, 426-36	3.7	30
73	Acupuncture plus Low-Frequency Electrical Stimulation (Acu-LFES) Attenuates Diabetic Myopathy by Enhancing Muscle Regeneration. *PLoS ONE*, **2015**, 10, e0134511	3.7	30
72	The UT-A1 urea transporter interacts with snapin, a SNARE-associated protein. *Journal of Biological Chemistry*, **2007**, 282, 30097-106	5.4	29
71	Protein kinase C regulates urea permeability in the rat inner medullary collecting duct. *American Journal of Physiology - Renal Physiology*, **2010**, 299, F1401-6	4.3	28
70	Caveolin-1 directly interacts with UT-A1 urea transporter: the role of caveolae/lipid rafts in UT-A1 regulation at the cell membrane. *American Journal of Physiology - Renal Physiology*, **2009**, 296, F1514-20	4.3	28
69	Aldosterone decreases UT-A1 urea transporter expression via the mineralocorticoid receptor. *Journal of the American Society of Nephrology: JASN*, **2004**, 15, 558-65	12.7	28
68	Internalization of UT-A1 urea transporter is dynamin dependent and mediated by both caveolae- and clathrin-coated pit pathways. *American Journal of Physiology - Renal Physiology*, **2010**, 299, F1389-95	4.3	27
67	Urea transporters UT-A1 and UT-A3 accumulate in the plasma membrane in response to increased hypertonicity. *American Journal of Physiology - Renal Physiology*, **2008**, 295, F1336-41	4.3	27
66	Physiological insights into novel therapies for nephrogenic diabetes insipidus. *American Journal of Physiology - Renal Physiology*, **2016**, 311, F1149-F1152	4.3	26
65	Protein kinase C-□ mediates hypertonicity-stimulated increase in urea transporter phosphorylation in the inner medullary collecting duct. *American Journal of Physiology - Renal Physiology*, **2012**, 302, F1098-103	4.3	26
64	Expression of transporters involved in urine concentration recovers differently after cessation of lithium treatment. *American Journal of Physiology - Renal Physiology*, **2010**, 298, F601-8	4.3	25
63	Phosphorylation of UT-A1 on serine 486 correlates with membrane accumulation and urea transport activity in both rat IMCDs and cultured cells. *American Journal of Physiology - Renal Physiology*, **2010**, 298, F935-40	4.3	25
62	Exogenous miR-26a suppresses muscle wasting and renal fibrosis in obstructive kidney disease. *FASEB Journal*, **2019**, 33, 13590-13601	0.9	23

61	Regulation of renal urea transport by vasopressin. *Transactions of the American Clinical and Climatological Association*, **2011**, 122, 82-92	0.9	22
60	Role of protein kinase C-δ in hypertonicity-stimulated urea permeability in mouse inner medullary collecting ducts. *American Journal of Physiology - Renal Physiology*, **2013**, 304, F233-8	4.3	21
59	Increased susceptibility to acute kidney injury due to endoplasmic reticulum stress in mice lacking tumor necrosis factor-α and its receptor 1. *Kidney International*, **2011**, 79, 613-623	9.9	21
58	Phosphatase inhibition increases AQP2 accumulation in the rat IMCD apical plasma membrane. *American Journal of Physiology - Renal Physiology*, **2016**, 311, F1189-F1197	4.3	20
57	Effect of Dapagliflozin Treatment on Fluid and Electrolyte Balance in Diabetic Rats. *American Journal of the Medical Sciences*, **2016**, 352, 517-523	2.2	20
56	Genetic restoration of aldose reductase to the collecting tubules restores maturation of the urine concentrating mechanism. *American Journal of Physiology - Renal Physiology*, **2006**, 291, F186-95	4.3	19
55	Urea transport and clinical potential of urearetics. *Current Opinion in Nephrology and Hypertension*, **2016**, 25, 444-51	3.5	18
54	Vasopressin increases urea permeability in the initial IMCD from diabetic rats. *American Journal of Physiology - Renal Physiology*, **2005**, 289, F531-5	4.3	17
53	Acidosis mediates the upregulation of UT-A protein in livers from uremic rats. *Journal of the American Society of Nephrology: JASN*, **2002**, 13, 581-587	12.7	17
52	PKC-δ contributes to high NaCl-induced activation of NFAT5 (TonEBP/OREBP) through MAPK ERK1/2. *American Journal of Physiology - Renal Physiology*, **2015**, 308, F140-8	4.3	16
51	Candesartan augments compensatory changes in medullary transport proteins in the diabetic rat kidney. *American Journal of Physiology - Renal Physiology*, **2008**, 294, F1448-52	4.3	16
50	Corin: an ANP protease that may regulate sodium reabsorption in nephrotic syndrome. *Kidney International*, **2010**, 78, 635-7	9.9	15
49	Lack of protein kinase C-δ leads to impaired urine concentrating ability and decreased aquaporin-2 in angiotensin II-induced hypertension. *American Journal of Physiology - Renal Physiology*, **2012**, 303, F37-44	4.3	15
48	Urea transporters and sweat response to uremia. *Physiological Reports*, **2016**, 4, e12825	2.6	14
47	GRHL2 Is Required for Collecting Duct Epithelial Barrier Function and Renal Osmoregulation. *Journal of the American Society of Nephrology: JASN*, **2018**, 29, 857-868	12.7	13
46	Transgenic Restoration of Urea Transporter A1 Confers Maximal Urinary Concentration in the Absence of Urea Transporter A3. *Journal of the American Society of Nephrology: JASN*, **2016**, 27, 1448-55	12.7	13
45	Urea and NaCl regulate UT-A1 urea transporter in opposing directions via TonEBP pathway during osmotic diuresis. *American Journal of Physiology - Renal Physiology*, **2009**, 296, F67-77	4.3	13
44	NSAIDs Alter Phosphorylated Forms of AQP2 in the Inner Medullary Tip. *PLoS ONE*, **2015**, 10, e0141714	3.7	12

43	High glucose reduces expression of podocin in cultured human podocytes by stimulating TRPC6. *American Journal of Physiology - Renal Physiology*, **2019**, 317, F1605-F1611	4.3	11
42	Urine concentration in the diabetic mouse requires both urea and water transporters. *American Journal of Physiology - Renal Physiology*, **2013**, 304, F103-11	4.3	11
41	The role of nitric oxide in the dysregulation of the urine concentration mechanism in diabetes mellitus. *Frontiers in Physiology*, **2012**, 3, 176	4.6	10
40	Acute calcineurin inhibition with tacrolimus increases phosphorylated UT-A1. *American Journal of Physiology - Renal Physiology*, **2012**, 302, F998-F1004	4.3	10
39	Protein abundance of urea transporters and aquaporin 2 change differently in nephrotic pair-fed vs. non-pair-fed rats. *American Journal of Physiology - Renal Physiology*, **2012**, 302, F1545-53	4.3	10
38	Activation of protein kinase C-□and Src kinase increases urea transporter A1 □2, 6 sialylation. *Journal of the American Society of Nephrology: JASN*, **2015**, 26, 926-34	12.7	9
37	Exogenous miR-29a Attenuates Muscle Atrophy and Kidney Fibrosis in Unilateral Ureteral Obstruction Mice. *Human Gene Therapy*, **2020**, 31, 367-375	4.8	9
36	Electrically stimulated acupuncture increases renal blood flow through exosome-carried miR-181. *American Journal of Physiology - Renal Physiology*, **2018**, 315, F1542-F1549	4.3	9
35	Functional characterization of the central hydrophilic linker region of the urea transporter UT-A1: cAMP activation and snapin binding. *American Journal of Physiology - Cell Physiology*, **2010**, 298, C1431-7	5.4	8
34	Stimulation of UT-A1-mediated transepithelial urea flux in MDCK cells by lithium. *American Journal of Physiology - Renal Physiology*, **2008**, 294, F518-24	4.3	8
33	Adaptive physiological water conservation explains hypertension and muscle catabolism in experimental chronic renal failure. *Acta Physiologica*, **2021**, 232, e13629	5.6	8
32	Downregulation of urea transporter UT-A1 activity by 14-3-3 protein. *American Journal of Physiology - Renal Physiology*, **2015**, 309, F71-8	4.3	7
31	Expression of urea transporters and their regulation. *Sub-Cellular Biochemistry*, **2014**, 73, 79-107	5.5	7
30	TRANSGENIC MICE EXPRESSING UT-A1, BUT LACKING UT-A3, HAVE INTACT URINE CONCENTRATING ABILITY. *FASEB Journal*, **2013**, 27, 1111.17	0.9	7
29	Hyperglycemia promotes microvillus membrane expression of DMT1 in intestinal epithelial cells in a PKC□dependent manner. *FASEB Journal*, **2019**, 33, 3549-3561	0.9	7
28	Glucagon infusion alters the hyperpolarized C-urea renal hemodynamic signature. *NMR in Biomedicine*, **2019**, 32, e4028	4.4	7
27	Candesartan Differentially Regulates Epithelial Sodium Channel in Cortex Versus Medulla of Streptozotocin-Induced Diabetic Rats. *Journal of Epithelial Biology & Pharmacology*, **2009**, 2, 23		6
26	Activation of protein kinase C□increases phosphorylation of the UT-A1 urea transporter at serine 494 in the inner medullary collecting duct. *American Journal of Physiology - Cell Physiology*, **2015**, 309, C608-15	5.4	5

25	Urea Transporter B and MicroRNA-200c Differ in Kidney Outer Versus Inner Medulla Following Dehydration. *American Journal of the Medical Sciences*, **2016**, 352, 296-301	2.2	5
24	Protein kinase C□deletion causes hypotension and decreased vascular contractility. *Journal of Hypertension*, **2018**, 36, 510-519	1.9	5
23	Adrenomedullin Inhibits Osmotic Water Permeability in Rat Inner Medullary Collecting Ducts. *Cells*, **2020**, 9,	7.9	4
22	Cyclooxygenase-2 in the kidney: good, BAD, or both?. *Kidney International*, **2011**, 80, 905-907	9.9	3
21	Inhibition of urea transporter ameliorates uremic cardiomyopathy in chronic kidney disease. *FASEB Journal*, **2020**, 34, 8296-8309	0.9	2
20	Aldosterone Decreases Vasopressin-Stimulated Water Reabsorption in Rat Inner Medullary Collecting Ducts. *Cells*, **2020**, 9,	7.9	2
19	14-3-3□a novel regulator of the large-conductance Ca-activated K channel. *American Journal of Physiology - Renal Physiology*, **2020**, 319, F52-F62	4.3	1
18	Increased urinary concentrating ability of P2Y2 receptor null mice is associated with marked increase in protein abundances of AQP2 and UT-A in renal medulla. *FASEB Journal*, **2007**, 21, A905	0.9	1
17	Downregulation of let-7 by Electrical Acupuncture Increases Protein Synthesis in Mice. *Frontiers in Physiology*, **2021**, 12, 697139	4.6	1
16	UT-A1/A3 knockout mice show reduced fibrosis following unilateral ureteral obstruction. *American Journal of Physiology - Renal Physiology*, **2020**, 318, F1160-F1166	4.3	0
15	GDE5 inhibition accumulates intracellular glycerophosphocholine and suppresses adipogenesis at a mitotic clonal expansion stage. *American Journal of Physiology - Cell Physiology*, **2019**, 316, C162-C174	5.4	0
14	The role of SNARE proteins in trafficking and function of Urea Transporter UT-A1. *FASEB Journal*, **2007**, 21, A906	0.9	
13	Candesartan differentially regulates distal sodium transporters and channel subunits in cortex versus medulla in streptozotocin-induced diabetic rats.. *FASEB Journal*, **2007**, 21, A1331	0.9	
12	The apical membrane is the rate-determining barrier for vasopressin-regulated trans-epithelial urea transport in MDCK-UTA1 cells. *FASEB Journal*, **2007**, 21, A906	0.9	
11	AVP causes transient formation of cAMP and activation of phosphodiesterase activity in MDCK cells. *FASEB Journal*, **2008**, 22, 1216.13	0.9	
10	Increased glucocorticoid hormone actions induce skin-specific Na+ and water loss in melanocortin 3 receptor knockout mice. *Proceedings for Annual Meeting of the Japanese Pharmacological Society*, **2018**, WCP2018, PO2-4-26	0	
9	Inner Medullary Urea Transporters Contribute to Development of Renal Fibrosis in Mice With Unilateral Ureteral Obstruction. *FASEB Journal*, **2019**, 33, 575.9	0.9	
8	Role of adrenomedullin in mediating water reabsorption in rat inner medullary collecting ducts. *FASEB Journal*, **2019**, 33, 750.3	0.9	

7	Electrically-stimulated acupuncture improves muscle function and increases renal blood flow through exosomes-carried miR-181. *FASEB Journal*, **2019**, 33, 701.4	0.9
6	Urea Transporters in Health and Disease. *Physiology in Health and Disease*, **2020**, 381-424	0.2
5	Epac Regulation of Urea Transport and the UT-A1 Urea Transporter in Rat Inner Medullary Collecting Duct.. *FASEB Journal*, **2009**, 23, 970.9	0.9
4	Hypertonicity Increases Urea Permeability through PKC in Inner Medullary Collecting Ducts. *FASEB Journal*, **2010**, 24, 1024.20	0.9
3	Role of PKC□n Hypertonicity-stimulated Urea Permeability. *FASEB Journal*, **2012**, 26, 885.12	0.9
2	The urea transporter UT-A1 is phosphorylated at serines 486 and 499 downstream of cyclic AMP production. *FASEB Journal*, **2012**, 26, 885.11	0.9
1	RNA-Seq analysis of glycosylation related gene expression in Streptozotocin-induced diabetic rat kidney inner medulla. *FASEB Journal*, **2013**, 27, 1111.16	0.9