Alicia A Mcdonough

List of Publications by Year
in descending order

106 papers	5,302 citations	71102 41 h-index	91884 69 g-index
108 all docs	108 docs citations	108 times ranked	3841 citing authors

#	Article	IF	Citations
1	The sodium pump needs its Î² subunit. FASEB Journal, 1990, 4, 1598-1605.	0.5	331
2	Potassium homeostasis and management of dyskalemia in kidney diseases: conclusions from a Kidney Disease: Improving Global Outcomes (KDIGO) Controversies Conference. Kidney International, 2020, 97, 42-61.	5.2	260
3	AT 1A Angiotensin Receptors in the Renal Proximal Tubule Regulate Blood Pressure. Cell Metabolism, 2011, 13, 469-475.	16.2	220
4	Sexual Dimorphic Pattern of Renal Transporters and Electrolyte Homeostasis. Journal of the American Society of Nephrology: JASN, 2017, 28, 3504-3517.	6.1	202
5	Reduced Sodium Pump Î± ₁ , Î± ₃ , and Î² ₁ -Isoform Protein Levels and Na ⁺ ,K ⁺ -ATPase Activity but Unchanged Na ⁺ -Ca ²⁺ Exchanger Protein Levels in Human Heart Failure. Circulation, 1999, 99, 2105-2112.	1.6	181
6	The absence of intrarenal ACE protects against hypertension. Journal of Clinical Investigation, 2013, 123, 2011-2023.	8.2	176
7	Renal Transporter Activation During Angiotensin-II Hypertension is Blunted in Interferon-Î³ ^{âˆ’/âˆ’} and Interleukin-17A ^{âˆ’/âˆ’} Mice. Hypertension, 2015, 65, 569-576.	2.7	166
8	Mechanisms of proximal tubule sodium transport regulation that link extracellular fluid volume and blood pressure. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2010, 298, R851-R861.	1.8	148
9	Interleukin-17A Regulates Renal Sodium Transporters and Renal Injury in Angiotensin IIâ€“Induced Hypertension. Hypertension, 2016, 68, 167-174.	2.7	147
10	ANG II provokes acute trafficking of distal tubule Na⁺-Cl^{âˆ’}cotransporter to apical membrane. American Journal of Physiology - Renal Physiology, 2007, 293, F662-F669.	2.7	137
11	Increasing plasma [K⁺] by intravenous potassium infusion reduces NCC phosphorylation and drives kaliuresis and natriuresis. American Journal of Physiology - Renal Physiology, 2014, 306, F1059-F1068.	2.7	116
12	Interleukin-1 Receptor Activation Potentiates Salt Reabsorption in Angiotensin II-Induced Hypertension via the NKCC2 Co-transporter in the Nephron. Cell Metabolism, 2016, 23, 360-368.	16.2	113
13	Recent Advances in Understanding Integrative Control of Potassium Homeostasis. Annual Review of Physiology, 2009, 71, 381-401.	13.1	109
14	Differential regulation of Na⁺transporters along nephron during ANG II-dependent hypertension: distal stimulation counteracted by proximal inhibition. American Journal of Physiology - Renal Physiology, 2013, 305, F510-F519.	2.7	91
15	Potassium Homeostasis: The Knowns, the Unknowns, and the Health Benefits. Physiology, 2017, 32, 100-111.	3.1	90
16	Considerations when quantitating protein abundance by immunoblot. American Journal of Physiology - Cell Physiology, 2015, 308, C426-C433.	4.6	88
17	Skeletal muscle regulates extracellular potassium. American Journal of Physiology - Renal Physiology, 2002, 282, F967-F974.	2.7	85
18	Reversible effects of acute hypertension on proximal tubule sodium transporters. American Journal of Physiology - Cell Physiology, 1998, 274, C1090-C1100.	4.6	81

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19	Differential traffic of proximal tubule Na+transporters during hypertension or PTH: NHE3 to base of microvilli vs. NaPi2 to endosomes. American Journal of Physiology - Renal Physiology, 2004, 287, F896-F906.	2.7	79
20	Effects of dietary salt on renal Na⁺ transporter subcellular distribution, abundance, and phosphorylation status. American Journal of Physiology - Renal Physiology, 2008, 295, F1003-F1016.	2.7	76
21	Paracellular epithelial sodium transport maximizes energy efficiency in the kidney. Journal of Clinical Investigation, 2016, 126, 2509-2518.	8.2	74
22	Skeletal Muscle Na,K-ATPase Î± and Î² Subunit Protein Levels Respond to Hypokalemic Challenge with Isoform and Muscle Type Specificity. Journal of Biological Chemistry, 1996, 271, 32653-32658.	3.4	70
23	Angiotensin II stimulates trafficking of NHE3, NaPi2, and associated proteins into the proximal tubule microvilli. American Journal of Physiology - Renal Physiology, 2010, 298, F177-F186.	2.7	69
24	Acute hypertension provokes internalization of proximal tubule NHE3 without inhibition of transport activity. American Journal of Physiology - Renal Physiology, 2002, 282, F730-F740.	2.7	68
25	The physiological role of glucagon-like peptide-1 in the regulation of renal function. American Journal of Physiology - Renal Physiology, 2016, 310, F123-F127.	2.7	68
26	Functional implications of sexual dimorphism of transporter patterns along the rat proximal tubule: modeling and analysis. American Journal of Physiology - Renal Physiology, 2018, 315, F692-F700.	2.7	68
27	In vivo PTH provokes apical NHE3 and NaPi2 redistribution and Na-K-ATPase inhibition. American Journal of Physiology - Renal Physiology, 1999, 276, F711-F719.	2.7	66
28	Redistribution of distal tubule Na+-Clâˆ’ cotransporter (NCC) in response to a high-salt diet. American Journal of Physiology - Renal Physiology, 2006, 291, F503-F508.	2.7	63
29	Mechanisms of Pressure Natriuresis. Annals of the New York Academy of Sciences, 2003, 986, 669-677.	3.8	62
30	Cardiovascular benefits associated with higher dietary K⁺ vs. lower dietary Na⁺: evidence from population and mechanistic studies. American Journal of Physiology - Endocrinology and Metabolism, 2017, 312, E348-E356.	3.5	62
31	Redistribution of Na⁺/H⁺ exchanger isoform NHE3 in proximal tubules induced by acute and chronic hypertension. American Journal of Physiology - Renal Physiology, 1998, 275, F565-F575.	2.7	60
32	Functional implications of the sex differences in transporter abundance along the rat nephron: modeling and analysis. American Journal of Physiology - Renal Physiology, 2019, 317, F1462-F1474.	2.7	56
33	Sex differences in solute transport along the nephrons: effects of Na⁺transport inhibition. American Journal of Physiology - Renal Physiology, 2020, 319, F487-F505.	2.7	56
34	The cardiac sodium pump: structure and function. Basic Research in Cardiology, 2002, 97, 1-1.	5.9	54
35	Effects of ACE inhibition on proximal tubule sodium transport. American Journal of Physiology - Renal Physiology, 2006, 290, F854-F863.	2.7	54
36	Proximal tubule specific knockout of the Na+/H+ exchanger NHE3: effects on bicarbonate absorption and ammonium excretion. Journal of Molecular Medicine, 2013, 91, 951-963.	3.9	54

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37	Proximal tubule Na transporter responses are the same during acute and chronic hypertension. American Journal of Physiology - Renal Physiology, 2000, 279, F358-F369.	2.7	53
38	Evidence for gut factor in K+ homeostasis. American Journal of Physiology - Renal Physiology, 2007, 293, F541-F547.	2.7	51
39	Collecting duct prorenin receptor knockout reduces renal function, increases sodium excretion, and mitigates renal responses in ANG II-induced hypertensive mice. American Journal of Physiology - Renal Physiology, 2017, 313, F1243-F1253.	2.7	49
40	Renal Angiotensin-Converting Enzyme Is Essential for the Hypertension Induced by Nitric Oxide Synthesis Inhibition. Journal of the American Society of Nephrology: JASN, 2014, 25, 2752-2763.	6.1	48
41	Short-term K⁺deprivation provokes insulin resistance of cellular K⁺uptake revealed with the K⁺clamp. American Journal of Physiology - Renal Physiology, 2001, 280, F95-F102.	2.7	47
42	Angiotensin II clamp prevents the second step in renal apical NHE3 internalization during acute hypertension. American Journal of Physiology - Renal Physiology, 2002, 283, F1142-F1150.	2.7	42
43	Renal NHE3 and NaPi2 partition into distinct membrane domains. American Journal of Physiology - Cell Physiology, 2009, 296, C900-C910.	4.6	41
44	Effects of K+-deficient diets with and without NaCl supplementation on Na+, K+, and H2O transporters' abundance along the nephron. American Journal of Physiology - Renal Physiology, 2012, 303, F92-F104.	2.7	40
45	Local pH domains regulate NHE3-mediated Na⁺reabsorption in the renal proximal tubule. American Journal of Physiology - Renal Physiology, 2014, 307, F1249-F1262.	2.7	40
46	Potassium Supplementation Prevents Sodium Chloride Cotransporter Stimulation During Angiotensin II Hypertension. Hypertension, 2016, 68, 904-912.	2.7	40
47	Characteristics of antibodies to guinea pig (Na++K+)-adenosine triphosphatase and their use in cell-free synthesis studies. Journal of Membrane Biology, 1982, 69, 13-22.	2.1	39
48	Modest dietary K+ restriction provokes insulin resistance of cellular K+ uptake and phosphorylation of renal outer medulla K+ channel without fall in plasma K+ concentration. American Journal of Physiology - Cell Physiology, 2006, 290, C1355-C1363.	4.6	39
49	Redistribution of Myosin VI from Top to Base of Proximal Tubule Microvilli during Acute Hypertension. Journal of the American Society of Nephrology: JASN, 2005, 16, 2890-2896.	6.1	38
50	Maintaining Balance Under Pressure. Hypertension, 2015, 66, 450-455.	2.7	37
51	Short-term nonpressor angiotensin II infusion stimulates sodium transporters in proximal tubule and distal nephron. Physiological Reports, 2015, 3, e12496.	1.7	36
52	Sex differences in solute and water handling in the human kidney: Modeling and functional implications. IScience, 2021, 24, 102667.	4.1	35
53	Electrolyte and transporter responses to angiotensin II induced hypertension in female and male rats and mice. Acta Physiologica, 2020, 229, e13448.	3.8	34
54	Reducing blood pressure in SHR with enalapril provokes redistribution of NHE3, NaPi2, and NCC and decreases NaPi2 and ACE abundance. American Journal of Physiology - Renal Physiology, 2007, 293, F1197-F1208.	2.7	33

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55	Effects of ACE inhibition and ANG II stimulation on renal Na-Cl cotransporter distribution, phosphorylation, and membrane complex properties. American Journal of Physiology - Cell Physiology, 2013, 304, C147-C163.	4.6	33
56	The Absence of the ACE N-Domain Decreases Renal Inflammation and Facilitates Sodium Excretion during Diabetic Kidney Disease. Journal of the American Society of Nephrology: JASN, 2018, 29, 2546-2561.	6.1	30
57	Temporal responses of oxidative vs. glycolytic skeletal muscles to K⁺deprivation: Na⁺pumps and cell cations. American Journal of Physiology - Cell Physiology, 1999, 276, C1411-C1419.	4.6	29
58	Independent Regulation of In Vivo Insulin Action on Glucose Versus K+ Uptake by Dietary Fat and K+ Content. Diabetes, 2002, 51, 915-920.	0.6	28
59	Acute hypertension provokes acute trafficking of distal tubule Na-Cl cotransporter (NCC) to subapical cytoplasmic vesicles. American Journal of Physiology - Renal Physiology, 2009, 296, F810-F818.	2.7	28
60	Dexamethasone treatment causes resistance to insulin-stimulated cellular potassium uptake in the rat. American Journal of Physiology - Cell Physiology, 2004, 287, C1229-C1237.	4.6	26
61	Renal Generation of Angiotensin II and the Pathogenesis of Hypertension. Current Hypertension Reports, 2014, 16, 477.	3.5	26
62	Chronic renal injury-induced hypertension alters renal NHE3 distribution and abundance. American Journal of Physiology - Renal Physiology, 2003, 284, F1056-F1065.	2.7	25
63	How does potassium supplementation lower blood pressure?. American Journal of Physiology - Renal Physiology, 2012, 302, F1224-F1225.	2.7	24
64	Report of the National Heart, Lung, and Blood Institute Working Group on Hypertension. Hypertension, 2020, 75, 902-917.	2.7	24
65	Potassium homeostasis: sensors, mediators, and targets. Pflugers Archiv European Journal of Physiology, 2022, 474, 853-867.	2.8	23
66	Need to quickly excrete K + ? Turn off NCC. Kidney International, 2013, 83, 779-782.	5.2	22
67	Salt Sensitivity in Response to Renal Injury Requires Renal Angiotensin-Converting Enzyme. Hypertension, 2015, 66, 534-542.	2.7	22
68	Diuretic response to acute hypertension is blunted during angiotensin II clamp. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2002, 283, R837-R842.	1.8	21
69	Responses of proximal tubule sodium transporters to acute injury-induced hypertension. American Journal of Physiology - Renal Physiology, 2003, 284, F313-F322.	2.7	20
70	Collecting Duct Nitric Oxide Synthase 1ÃŸ Activation Maintains Sodium Homeostasis During High Sodium Intake Through Suppression of Aldosterone and Renal Angiotensin II Pathways. Journal of the American Heart Association, 2017, 6, .	3.7	20
71	Downstream Shift in Sodium Pump Activity along the Nephron during Acute Hypertension. Journal of the American Society of Nephrology: JASN, 2001, 12, 2231-2240.	6.1	20
72	Blood pressure regulation by the angiotensin type 1 receptor in the proximal tubule. Current Opinion in Nephrology and Hypertension, 2018, 27, 1-7.	2.0	19

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73	Isolation of partial cDNAs for rat liver and muscle glycogen phosphorylase isozymes. FEBS Letters, 1986, 202, 282-288.	2.8	17
74	Renal Collectrin Protects against Salt-Sensitive Hypertension and Is Downregulated by Angiotensin II. Journal of the American Society of Nephrology: JASN, 2017, 28, 1826-1837.	6.1	17
75	Sex-specific adaptations to high-salt diet preserve electrolyte homeostasis with distinct sodium transporter profiles. American Journal of Physiology - Cell Physiology, 2021, 321, C897-C909.	4.6	17
76	Proximal tubule NHE3 activity is inhibited by beta-arrestin-biased angiotensin II type 1 receptor signaling. American Journal of Physiology - Cell Physiology, 2015, 309, C541-C550.	4.6	15
77	Renal NCC is unchanged in the midpregnant rat and decreased in the late pregnant rat despite avid renal Na+ retention. American Journal of Physiology - Renal Physiology, 2015, 309, F63-F70.	2.7	15
78	The intrarenal generation of angiotensin II is required for experimental hypertension. Current Opinion in Pharmacology, 2015, 21, 73-81.	3.5	14
79	Coordinate adaptations of skeletal muscle and kidney to maintain extracellular [K⁺] during K⁺-deficient diet. American Journal of Physiology - Cell Physiology, 2020, 319, C757-C770.	4.6	14
80	Metabolic Basis of Solute Transport. , 2012, , 138-157.		13
81	Phenol injury-induced hypertension stimulates proximal tubule Na+/H+ exchanger activity. American Journal of Physiology - Renal Physiology, 2006, 290, F1543-F1550.	2.7	12
82	Renal tubular angiotensin converting enzyme isÂresponsible for nitro-L-arginine methyl esterÂ(L-NAME)-induced salt sensitivity. Kidney International, 2017, 91, 856-867.	5.2	12
83	Impact of angiotensin II-mediated stimulation of sodium transporters in the nephron assessed by computational modeling. American Journal of Physiology - Renal Physiology, 2019, 317, F1656-F1668.	2.7	12
84	Î±2A-Adrenoceptors Modulate Renal Sympathetic Neurotransmission and Protect against Hypertensive Kidney Disease. Journal of the American Society of Nephrology: JASN, 2020, 31, 783-798.	6.1	9
85	Paradoxical activation of the sodium chloride cotransporter (NCC) without hypertension in kidney deficient in a regulatory subunit of Na,K-ATPase, FXYD2. Physiological Reports, 2014, 2, e12226.	1.7	8
86	Immunodetection of Na,K-ATPase in guinea-pig retinal layers, cornea and lens. Experimental Eye Research, 1985, 40, 667-674.	2.6	7
87	Motoring down the microvilli. Focus on â€œPTH-induced internalization of apical membrane NaPi2a: role of actin and myosin VIâ€. American Journal of Physiology - Cell Physiology, 2009, 297, C1331-C1332.	4.6	6
88	ISN Forefronts Symposium 2015: Maintaining Balance Under Pressureâ€"Hypertension and theÂProximalÂTubule. Kidney International Reports, 2016, 1, 166-176.	0.8	6
89	Local and downstream actions of proximal tubule angiotensin II signaling on Na+ transporters in the mouse nephron. American Journal of Physiology - Renal Physiology, 2021, 321, F69-F81.	2.7	5
90	Vascular control of kidney epithelial transporters. American Journal of Physiology - Renal Physiology, 2021, 320, F1080-F1092.	2.7	4

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91	Of mice and men: modeling cardiovascular complexity in diabetes. Focus on â€œMitochondrial inefficiencies and anoxic ATP hydrolysis capacities in diabetic rat heartâ€• American Journal of Physiology - Cell Physiology, 2014, 307, C497-C498.	4.6	3
92	Moving the Needle on Hypertension. Nutrition Today, 2019, 54, 248-256.	1.0	3
93	Renal responses to short term nonâ€pressor AngII Â± intrarenal RAS blockade in rats. FASEB Journal, 2013, 27, 909.2.	0.5	3
94	Estimating In Vivo Potassium Distribution and Fluxes with Stable Potassium Isotopes. American Journal of Physiology - Cell Physiology, 2022, , .	4.6	2
95	Impact of Casein- versus Grain-Based Diets on Rat Renal Sodium Transportersâ€™ Abundance and Regulation. Kidney360, 2021, 2, 519-523.	2.1	1
96	A New Stable Isotope Method for Quantifying Potassium Distribution and Fluxes <i>In Vivo</i>. FASEB Journal, 2021, 35, .	0.5	0
97	Angiotensin II stimulated phosphorylation and trafficking of Na+â€Clâ€•cotransporter (NCC) into apical plasma membrane (APM) inhibited by Tempol. FASEB Journal, 2011, 25, .	0.5	0
98	Renal sympathetic nerve activity (RSNA) and adrenergic stimulation increase Naâ€Cl cotransporter (NCC) phosphorylation and trafficking to the apical plasma membrane (APM). FASEB Journal, 2011, 25, 1078.6.	0.5	0
99	Effects of Kâ€deficient diets Â± Na supplementation on Na, K, and H 2 O transportersâ€™ abundance along the nephron. FASEB Journal, 2012, 26, 1103.14.	0.5	0
100	Blue native PAGE resolution of renal sodium transporters. FASEB Journal, 2012, 26, 1066.4.	0.5	0
101	Blunted hypertensive response to Ang II infusion in IFNâ€g knockout mice: molecular mechanisms. FASEB Journal, 2013, 27, 906.12.	0.5	0
102	Sodium balance and resistance to Ang IIâ€induced hypertension, despite NCC and NKCC2 activation, in mice with global deletion of Na,Kâ€ATPase regulatory subunit FXYD2. FASEB Journal, 2015, 29, 960.7.	0.5	0
103	Adaptation to K + deficiency in mouse: coordinate regulation of muscle and kidney electrolyte transporters. FASEB Journal, 2019, 33, 575.3.	0.5	0
104	Mechanism and Pathophysiology. Nephrology Self-assessment Program: NephSAP, 2020, 19, 43-57.	3.0	0
105	Acute Pressure Natriuresis and Na⁺ Transporter Regulation More Robust in Female vs. Male Sprague Dawley Rats. FASEB Journal, 2020, 34, 1-1.	0.5	0
106	Exploring Sex Differences in Renal Sodium Transporters with Four Core Genotype (FCG) Model. FASEB Journal, 2022, 36, .	0.5	0