David E Stec

List of Publications by Year
in descending order

104 papers	3,755 citations	94269 37 h-index	143772 57 g-index
104 all docs	104 docs citations	104 times ranked	4018 citing authors

#	Article	IF	Citations
1	Obesity-induced Hypertension: Role of Sympathetic Nervous System, Leptin, and Melanocortins. Journal of Biological Chemistry, 2010, 285, 17271-17276.	1.6	399
2	Bilirubin in the Liverâ€“Gut Signaling Axis. Trends in Endocrinology and Metabolism, 2018, 29, 140-150.	3.1	147
3	Bilirubin Binding to PPARÎ± Inhibits Lipid Accumulation. PLoS ONE, 2016, 11, e0153427.	1.1	145
4	Functional polymorphism in human CYP4F2 decreases 20-HETE production. Physiological Genomics, 2007, 30, 74-81.	1.0	131
5	Protective Effect of Carbon Monoxideâ€“Releasing Compounds in Ischemia-Induced Acute Renal Failure. Journal of the American Society of Nephrology: JASN, 2005, 16, 950-958.	3.0	129
6	Biliverdin reductase isozymes in metabolism. Trends in Endocrinology and Metabolism, 2015, 26, 212-220.	3.1	111
7	Biliverdin Reductase A Attenuates Hepatic Steatosis by Inhibition of Glycogen Synthase Kinase (GSK) 3Î² Phosphorylation of Serine 73 of Peroxisome Proliferator-activated Receptor (PPAR) Î±. Journal of Biological Chemistry, 2016, 291, 25179-25191.	1.6	104
8	Induction of Heme Oxygenase 1 Attenuates Placental Ischemiaâ€“Induced Hypertension. Hypertension, 2011, 57, 941-948.	1.3	101
9	Bilirubin as a metabolic hormone: the physiological relevance of low levels. American Journal of Physiology - Endocrinology and Metabolism, 2021, 320, E191-E207.	1.8	90
10	Efficient Liver-specific Deletion of a Floxed Human Angiotensinogen Transgene by Adenoviral Delivery of Cre Recombinasein Vivo. Journal of Biological Chemistry, 1999, 274, 21285-21290.	1.6	82
11	Lean heart: Role of leptin in cardiac hypertrophy and metabolism. World Journal of Cardiology, 2015, 7, 511.	0.5	71
12	Bilirubin, a Cardiometabolic Signaling Molecule. Hypertension, 2018, 72, 788-795.	1.3	70
13	Renal vascular responses to CORM-A1 in the mouse. Pharmacological Research, 2006, 54, 24-29.	3.1	66
14	Mice with hyperbilirubinemia due to Gilbertâ€™s syndrome polymorphism are resistant to hepatic steatosis by decreased serine 73 phosphorylation of PPARÎ±. American Journal of Physiology - Endocrinology and Metabolism, 2017, 312, E244-E252.	1.8	66
15	Glucocorticoid Receptor Î² Induces Hepatic Steatosis by Augmenting Inflammation and Inhibition of the Peroxisome Proliferator-activated Receptor (PPAR) Î±. Journal of Biological Chemistry, 2016, 291, 25776-25788.	1.6	65
16	Biliverdin reductase and bilirubin in hepatic disease. American Journal of Physiology - Renal Physiology, 2018, 314, G668-G676.	1.6	65
17	Loss of hepatic PPARÎ± promotes inflammation and serum hyperlipidemia in diet-induced obesity. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2019, 317, R733-R745.	0.9	65
18	Systolic dysfunction in cardiac-specific ligand-inducible MerCreMer transgenic mice. American Journal of Physiology - Heart and Circulatory Physiology, 2011, 301, H253-H260.	1.5	64

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19	HO-1 induction lowers blood pressure and superoxide production in the renal medulla of angiotensin II hypertensive mice. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2007, 292, R1472-R1478.	0.9	61
20	Bilirubin remodels murine white adipose tissue by reshaping mitochondrial activity and the coregulator profile of peroxisome proliferatorâ€“activated receptor Î±. Journal of Biological Chemistry, 2020, 295, 9804-9822.	1.6	58
21	ENaC proteins contribute to VSMC migration. American Journal of Physiology - Heart and Circulatory Physiology, 2006, 291, H3076-H3086.	1.5	57
22	Loss of biliverdin reductase-A promotes lipid accumulation and lipotoxicity in mouse proximal tubule cells. American Journal of Physiology - Renal Physiology, 2018, 315, F323-F331.	1.3	54
23	RNA sequencing in human HepG2 hepatocytes reveals PPAR-Î± mediates transcriptome responsiveness of bilirubin. Physiological Genomics, 2019, 51, 234-240.	1.0	53
24	Inhibition of bilirubin metabolism induces moderate hyperbilirubinemia and attenuates ANG II-dependent hypertension in mice. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2009, 297, R738-R743.	0.9	52
25	Kidney-Specific Induction of Heme Oxygenase-1 Prevents Angiotensin II Hypertension. Hypertension, 2008, 52, 660-665.	1.3	51
26	Lentiviral-Human Heme Oxygenase Targeting Endothelium Improved Vascular Function in Angiotensin II Animal Model of Hypertension. Human Gene Therapy, 2011, 22, 271-282.	1.4	51
27	Bilirubin Nanoparticles Reduce Diet-Induced Hepatic Steatosis, Improve Fat Utilization, and Increase Plasma Î²-Hydroxybutyrate. Frontiers in Pharmacology, 2020, 11, 594574.	1.6	50
28	Fenofibrate Prevents the Development of Angiotensin IIâ€“Dependent Hypertension in Mice. Hypertension, 2005, 45, 730-735.	1.3	48
29	Induction of heme oxygenase-1 attenuates sFlt-1-induced hypertension in pregnant rats. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2011, 301, R1495-R1500.	0.9	47
30	Heme oxygenase, a novel target for the treatment of hypertension and obesity?. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2012, 302, R207-R214.	0.9	44
31	Bilirubin Safeguards Cardiorenal and Metabolic Diseases: a Protective Role in Health. Current Hypertension Reports, 2019, 21, 87.	1.5	44
32	Does bilirubin prevent hepatic steatosis through activation of the PPARÎ± nuclear receptor?. Medical Hypotheses, 2016, 95, 54-57.	0.8	42
33	Distribution of cytochromeP-450 4A and 4F isoforms along the nephron in mice. American Journal of Physiology - Renal Physiology, 2003, 284, F95-F102.	1.3	41
34	Role of Carbon Monoxide in Blood Pressure Regulation. Hypertension, 2008, 51, 597-604.	1.3	41
35	Moderate hyperbilirubinemia improves renal hemodynamics in ANG II-dependent hypertension. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2010, 299, R1044-R1049.	0.9	41
36	Biliverdin Reductase A (BVRA) Knockout in Adipocytes Induces Hypertrophy and Reduces Mitochondria in White Fat of Obese Mice. Biomolecules, 2020, 10, 387.	1.8	41

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37	Rescue of cardiac leptin receptors indb/dbmice prevents myocardial triglyceride accumulation. American Journal of Physiology - Endocrinology and Metabolism, 2014, 307, E316-E325.	1.8	37
38	Natural Product Heme Oxygenase Inducers as Treatment for Nonalcoholic Fatty Liver Disease. International Journal of Molecular Sciences, 2020, 21, 9493.	1.8	36
39	Genetic suppression of HO-1 exacerbates renal damage: reversed by an increase in the antiapoptotic signaling pathway. American Journal of Physiology - Renal Physiology, 2007, 292, F148-F157.	1.3	34
40	Cardiomyocyte-specific deletion of leptin receptors causes lethal heart failure in Cre-recombinase-mediated cardiotoxicity. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2012, 303, R1241-R1250.	0.9	33
41	Adipose-Specific PPARÎ± Knockout Mice Have Increased Lipogenesis by PASKâ€“SREBP1 Signaling and a Polarity Shift to Inflammatory Macrophages in White Adipose Tissue. Cells, 2022, 11, 4.	1.8	33
42	Bilirubin, a new therapeutic for kidney transplant?. Transplantation Reviews, 2018, 32, 234-240.	1.2	31
43	ENaC proteins are required for NGF-induced neurite growth. American Journal of Physiology - Cell Physiology, 2006, 290, C404-C410.	2.1	30
44	Cold Press Pomegranate Seed Oil Attenuates Dietary-Obesity Induced Hepatic Steatosis and Fibrosis through Antioxidant and Mitochondrial Pathways in Obese Mice. International Journal of Molecular Sciences, 2020, 21, 5469.	1.8	30
45	Heme oxygenase attenuates angiotensin II-mediated superoxide production in cultured mouse thick ascending loop of Henle cells. American Journal of Physiology - Renal Physiology, 2008, 295, F1158-F1165.	1.3	28
46	Altered myogenic vasoconstriction and regulation of whole kidney blood flow in the ASIC2 knockout mouse. American Journal of Physiology - Renal Physiology, 2015, 308, F339-F348.	1.3	28
47	CRISPR Cas9-mediated deletion of biliverdin reductase A (BVRA) in mouse liver cells induces oxidative stress and lipid accumulation. Archives of Biochemistry and Biophysics, 2019, 672, 108072.	1.4	28
48	Renal inflammation and elevated blood pressure in a mouse model of reduced Î²-ENaC. American Journal of Physiology - Renal Physiology, 2011, 301, F443-F449.	1.3	27
49	Heme Oxygenase-1 Induction Does Not Improve Vascular Relaxation in Angiotensin II Hypertensive Mice. American Journal of Hypertension, 2008, 21, 189-193.	1.0	26
50	Heme Oxygenase Inhibition Increases Blood Pressure in Pregnant Rats. American Journal of Hypertension, 2013, 26, 924-930.	1.0	26
51	Chronic treatment with a carbon monoxide releasing molecule reverses dietary induced obesity in mice. Adipocyte, 2016, 5, 1-10.	1.3	26
52	Cold-Pressed Nigella Sativa Oil Standardized to 3% Thymoquinone Potentiates Omega-3 Protection against Obesity-Induced Oxidative Stress, Inflammation, and Markers of Insulin Resistance Accompanied with Conversion of White to Beige Fat in Mice. Antioxidants, 2020, 9, 489.	2.2	25
53	A Novel Fluorescence-Based Assay for the Measurement of Biliverdin Reductase Activity. , 2018, 5, 35-45.		25
54	Expression of Heme Oxygenase-1 in Thick Ascending Loop of Henle Attenuates Angiotensin II-Dependent Hypertension. Journal of the American Society of Nephrology: JASN, 2012, 23, 834-841.	3.0	24

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55	Antihypertensive Actions of Moderate Hyperbilirubinemia: Role of Superoxide Inhibition. American Journal of Hypertension, 2013, 26, 918-923.	1.0	24
56	Positive Effects of Heme Oxygenase Upregulation on Adiposity and Vascular Dysfunction: Gene Targeting vs. Pharmacologic Therapy. International Journal of Molecular Sciences, 2019, 20, 2514.	1.8	24
57	Bilirubin, Renal Hemodynamics, and Blood Pressure. Frontiers in Pharmacology, 2012, 3, 18.	1.6	23
58	Rats Genetically Selected for High Aerobic Exercise Capacity Have Elevated Plasma Bilirubin by Upregulation of Hepatic Biliverdin Reductase-A (BVRA) and Suppression of UGT1A1. Antioxidants, 2020, 9, 889.	2.2	22
59	Reactive Oxygen Species (ROS) and Antioxidants as Immunomodulators in Exercise: Implications for Heme Oxygenase and Bilirubin. Antioxidants, 2022, 11, 179.	2.2	22
60	Targeting Heme Oxygenase-1 in Cardiovascular and Kidney Disease. Antioxidants, 2019, 8, 181.	2.2	18
61	Carbon Monoxide (CO) Protects Renal Tubular Epithelial Cells against Cold-Rewarm Apoptosis. Renal Failure, 2007, 29, 543-548.	0.8	16
62	Inhibition of biliverdin reductase increases ANG II-dependent superoxide levels in cultured renal tubular epithelial cells. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2009, 297, R1546-R1553.	0.9	16
63	Carbon Monoxide Releasing Molecules Blunt Placental Ischemia-Induced Hypertension. American Journal of Hypertension, 2017, 30, 931-937.	1.0	16
64	Heme oxygenase-1 is a potent inhibitor of placental ischemia-mediated endothelin-1 production in cultured human glomerular endothelial cells. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2018, 314, R427-R432.	0.9	16
65	Deletion of Biliverdin Reductase A in Myeloid Cells Promotes Chemokine Expression and Chemotaxis in Part via a Complement C5aÂâ€“C5aR1 Pathway. Journal of Immunology, 2019, 202, 2982-2990.	0.4	16
66	Increased Sirt1 secreted from visceral white adipose tissue is associated with improved glucose tolerance in obese Nrf2-deficient mice. Redox Biology, 2021, 38, 101805.	3.9	16
67	Heme-oxygenase and lipid mediators in obesity and associated cardiometabolic diseases: Therapeutic implications. , 2021, , 107975.		16
68	Blood pressure and renal blow flow responses in heme oxygenase-2 knockout mice. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2009, 297, R1822-R1828.	0.9	15
69	Heme oxygenase induction attenuates TNF-Î±-induced hypertension in pregnant rodents. Frontiers in Pharmacology, 2015, 6, 165.	1.6	15
70	Milk thistle seed cold press oil attenuates markers of the metabolic syndrome in a mouse model of dietaryâ€induced obesity. Journal of Food Biochemistry, 2020, 44, e13522.	1.2	13
71	Î²ENaC Acts as a Mechanosensor in Renal Vascular Smooth Muscle Cells That Contributes to Renal Myogenic Blood Flow Regulation, Protection From Renal Injury and Hypertension. Journal of Nephrology Research, 2015, 1, 1-9.	1.0	12
72	Sex-specific effects of heme oxygenase-2 deficiency on renovascular hypertension. Journal of the American Society of Hypertension, 2013, 7, 328-335.	2.3	11

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73	Sex-Dependent Effects of HO-1 Deletion from Adipocytes in Mice. International Journal of Molecular Sciences, 2017, 18, 611.	1.8	11
74	Renal Inhibition of Heme Oxygenase-1 Increases Blood Pressure in Angiotensin II-Dependent Hypertension. International Journal of Hypertension, 2012, 2012, 1-8.	0.5	10
75	Vascular smooth muscle-specific deletion of the leptin receptor attenuates leptin-induced alterations in vascular relaxation. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2016, 310, R960-R967.	0.9	10
76	In vivo inhibition of renal heme oxygenase with an imidazole-dioxolane inhibitor. Pharmacological Research, 2010, 61, 525-530.	3.1	9
77	Renal intramedullary infusion of tempol normalizes the blood pressureÂresponse to intrarenal blockade of heme oxygenase-1 inÂangiotensin IIâ€“dependent hypertension. Journal of the American Society of Hypertension, 2016, 10, 346-351.	2.3	5
78	Changes in urinary metabolome related to body fat involve intermediates of choline processing by gut microbiota. Heliyon, 2019, 5, e01497.	1.4	5
79	Inhalation of carbon monoxide is ineffective as a long-term therapy to reduce obesity in mice fed a high fat diet. BMC Obesity, 2014, 1, 6.	3.1	4
80	Bilirubin: A Ligand of the PPARÎ± Nuclear Receptor. , 2021, , 463-482.		3
81	Pharmacological and Clinical Significance of Heme Oxygenase-1. Antioxidants, 2021, 10, 854.	2.2	3
82	Inhibition of bilirubin metabolism attenuates angiotensinâ€II dependent hypertension in mice. FASEB Journal, 2008, 22, 183-183.	0.2	3
83	Novel Function for Bilirubin as a Metabolic Signaling Molecule: Implications for Kidney Diseases. Kidney360, 0, , 10.34067/KID.0000062022.	0.9	2
84	Progress in heme oxygenase research. Archives of Biochemistry and Biophysics, 2020, 685, 108321.	1.4	1
85	Moderate Hyperbilirubinemia Improves Renal Hemodynamics in Angiotensin IIâ€Dependent Hypertension. FASEB Journal, 2010, 24, 1025.11.	0.2	1
86	Antihypertensive Actions of Moderate Hyperbilirubinemia: Role of Superoxide Inhibition. FASEB Journal, 2012, 26, 878.6.	0.2	1
87	The Effect of Gut Bacterial Î²â€Glucuronidase on Serum Bilirubin Levels. FASEB Journal, 2018, 32, 875.1.	0.2	1
88	Î²ENaC and ASIC2 associate in VSMCs to mediate pressure-induced constriction in the renal afferent arteriole. American Journal of Physiology - Renal Physiology, 2022, 322, F498-F511.	1.3	1
89	Heme Oxygenase and the Kidney. Colloquium Series on Integrated Systems Physiology From Molecule To Function, 2011, 3, 1-80.	0.3	0
90	Bilirubin nanoparticles activate PPARalpha to remodel the hepatic lipidome and produce hepatic ketones in obese mice, improving liver function. FASEB Journal, 2021, 35, .	0.2	0

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91	Editorial: Oxidative Stress, Antioxidants, Transcription Factors, and Assimilation of Signal Transduction Pathways in Obesity-Related Disorders. Frontiers in Pharmacology, 2021, 12, 759468.	1.6	0
92	Renal Medullary Infusion of CoPP Prevents Angiotensinâ€II Dependent Hypertension in Mice. FASEB Journal, 2007, 21, A895.	0.2	0
93	Rapid cardiac dysfunction caused by inducible cardiac specific leptin receptor deletion. FASEB Journal, 2008, 22, 743.3.	0.2	0
94	Rescue of cardiac leptin receptor improves diastolic function and prevents cardiac lipid accumulation in db/db mice. FASEB Journal, 2009, 23, 953.7.	0.2	0
95	Two common variants in the human CYP4F2 gene result in substantial alterations in vitamin Eâ€‰â€hydroxylase specific activity. FASEB Journal, 2010, 24, 552.2.	0.2	0
96	In vivo Inhibition of Renal Heme Oxygenaseâ€1 with an Imidazoleâ€Dioxolane Inhibitor, QCâ€13.. FASEB Journal, 2010, 24, 1025.4.	0.2	0
97	Chronic Carbon Monoxide Treatment Attenuates the Development of Obesity and Remodels Adipocytes in Mice Fed a High Fat Diet. FASEB Journal, 2013, 27, 1154.4.	0.2	0
98	Renal Intramedullary Infusion of Tempol Normalizes the Blood Pressure Response to Intrarenal Blockade of Heme Oxygenaseâ€1 in Angiotensin IIâ€Dependent Hypertension. FASEB Journal, 2013, 27, 1115.1.	0.2	0
99	Vascular smooth muscle specific deletion of the leptin receptor attenuates leptinâ€induced vascular dysfunction. FASEB Journal, 2013, 27, 1114.9.	0.2	0
100	Liver specific knockout of biliverdin reductaseâ€A (BVRA) enhances high fat diet induced hepatic steatosis and type II diabetes in mice. FASEB Journal, 2015, 29, 1004.6.	0.2	0
101	Bilirubin Induces the Burning of Fat via the Nuclear Receptor PPARÎ±. FASEB Journal, 2018, 32, 603.5.	0.2	0
102	Loss of biliverdin reductaseâ€A (BVRA) promotes lipid accumulation and lipotoxicity in mouse proximal tubule cells. FASEB Journal, 2018, 32, 849.1.	0.2	0
103	Sexâ€dependent protection from high fat dietâ€induced metabolic disease in mice lackingDegenerin proteins. FASEB Journal, 2019, 33, 592.3.	0.2	0
104	The Loss of PPARÎ± in Adipocytes Induces Lipogenesis via the PASKâ€SREBP1 Signaling Axis. FASEB Journal, 2022, 36, .	0.2	0