Utpal Sen

List of Publications by Year
in descending order

97 papers	7,158 citations	159358 30 h-index	118652 62 g-index
97 all docs	97 docs citations	97 times ranked	16220 citing authors

#	Article	IF	Citations
1	Guidelines for the use and interpretation of assays for monitoring autophagy (3rd edition). Autophagy, 2016, 12, 1-222.	4.3	4,701
2	Endothelial Dysfunction: The Link Between Homocysteine and Hydrogen Sulfide. Current Medicinal Chemistry, 2014, 21, 3662-3672.	1.2	164
3	H₂S Protects Against Methionineâ€"Induced Oxidative Stress in Brain Endothelial Cells. Antioxidants and Redox Signaling, 2009, 11, 25-33.	2.5	149
4	Homocysteine to Hydrogen Sulfide or Hypertension. Cell Biochemistry and Biophysics, 2010, 57, 49-58.	0.9	148
5	Hydrogen sulfide ameliorates hyperhomocysteinemia-associated chronic renal failure. American Journal of Physiology - Renal Physiology, 2009, 297, F410-F419.	1.3	146
6	Increased endogenous H₂S generation by CBS, CSE, and 3MST gene therapy improves ex vivo renovascular relaxation in hyperhomocysteinemia. American Journal of Physiology - Cell Physiology, 2012, 303, C41-C51.	2.1	102
7	Regulation of homocysteine-induced MMP-9 by ERK1/2 pathway. American Journal of Physiology - Cell Physiology, 2006, 290, C883-C891.	2.1	90
8	Hydrogen Sulfide Regulates Homocysteine-Mediated Glomerulosclerosis. American Journal of Nephrology, 2010, 31, 442-455.	1.4	78
9	Toll-like Receptor 4 Deficiency Reduces Oxidative Stress and Macrophage Mediated Inflammation in Hypertensive Kidney. Scientific Reports, 2017, 7, 6349.	1.6	76
10	Hydrogen sulfide deficiency and diabetic renal remodeling: role of matrix metalloproteinase-9. American Journal of Physiology - Endocrinology and Metabolism, 2013, 304, E1365-E1378.	1.8	71
11	Cardioprotective Role of Sodium Thiosulfate on Chronic Heart Failure by Modulating Endogenous H₂S Generation. Pharmacology, 2008, 82, 201-213.	0.9	65
12	Regulation and involvement of matrix metalloproteinases in vascular diseases. Frontiers in Bioscience - Landmark, 2016, 21, 89-118.	3.0	63
13	Hydrogen sulfide mitigates transition from compensatory hypertrophy to heart failure. Journal of Applied Physiology, 2011, 110, 1093-1100.	1.2	61
14	Activation of GABAâ€A receptor ameliorates homocysteineâ€induced MMPâ€9 activation by ERK pathway. Journal of Cellular Physiology, 2009, 220, 257-266.	2.0	60
15	Cardiac specific deletion ofN-methyl-d-aspartate receptor 1 ameliorates mtMMP-9 mediated autophagy/mitophagy in hyperhomocysteinemia. Journal of Receptor and Signal Transduction Research, 2010, 30, 78-87.	1.3	60
16	Homocysteine and hydrogen sulfide in epigenetic, metabolic and microbiota related renovascular hypertension. Pharmacological Research, 2016, 113, 300-312.	3.1	60
17	Functional consequences of the collagen/elastin switch in vascular remodeling in hyperhomocysteinemic wild-type, eNOS^{âˆ'/âˆ'}, and iNOS^{âˆ'/âˆ'} mice. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2010, 299, L301-L311.	1.3	50
18	Fibrinogen-induced endothelin-1 production from endothelial cells. American Journal of Physiology - Cell Physiology, 2009, 296, C840-C847.	2.1	48

#	ARTICLE	IF	CITATIONS
19	GYY4137, a Hydrogen Sulfide Donor Modulates miR194-Dependent Collagen Realignment in Diabetic Kidney. Scientific Reports, 2017, 7, 10924.	1.6	47
20	Hydrogen sulfide alleviates hypertensive kidney dysfunction through an epigenetic mechanism. American Journal of Physiology - Heart and Circulatory Physiology, 2017, 312, H874-H885.	1.5	46
21	Cystathionine Î²-synthase and cystathionine Î³-lyase double gene transfer ameliorate homocysteine-mediated mesangial inflammation through hydrogen sulfide generation. American Journal of Physiology - Cell Physiology, 2011, 300, C155-C163.	2.1	45
22	MMP-9- and NMDA receptor-mediated mechanism of diabetic renovascular remodeling and kidney dysfunction: Hydrogen sulfide is a key modulator. Nitric Oxide - Biology and Chemistry, 2015, 46, 172-185.	1.2	45
23	Homocysteine and Hypertension in Diabetes: Does PPAR<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>Î³</mml:mi></mml:math>Have a Regulatory Role?. PPAR Research, 2010, 2010, 1-12.	1.1	43
24	Hydrogen sulfide mitigates hyperglycemic remodeling via liver kinase B1-adenosine monophosphate-activated protein kinase signaling. Biochimica Et Biophysica Acta - Molecular Cell Research, 2014, 1843, 2816-2826.	1.9	43
25	Cystathionine-Î²-synthase gene transfer and 3-deazaadenosine ameliorate inflammatory response in endothelial cells. American Journal of Physiology - Cell Physiology, 2007, 293, C1779-C1787.	2.1	38
26	Ciglitazone, a PPARÎ³ agonist, ameliorates diabetic nephropathy in part through homocysteine clearance. American Journal of Physiology - Endocrinology and Metabolism, 2008, 295, E1205-E1212.	1.8	38
27	Atherogenesis: hyperhomocysteinemia interactions with LDL, macrophage function, paraoxonase 1, and exercise. Annals of the New York Academy of Sciences, 2016, 1363, 138-154.	1.8	37
28	More than just an enzyme: Dipeptidyl peptidase-4 (DPP-4) and its association with diabetic kidney remodelling. Pharmacological Research, 2019, 147, 104391.	3.1	37
29	Angiotensin-II induced hypertension and renovascular remodelling in tissue inhibitor of metalloproteinase 2 knockout mice. Journal of Hypertension, 2013, 31, 2270-2281.	0.3	36
30	DNA hypermethylation in hyperhomocysteinemia contributes to abnormal extracellular matrix metabolism in the kidney. FASEB Journal, 2015, 29, 4713-4725.	0.2	36
31	Blood flow interplays with elastin: collagen and MMP: TIMP ratios to maintain healthy vascular structure and function. Vascular Health and Risk Management, 2010, 6, 215.	1.0	35
32	Homocysteine-induced myofibroblast differentiation in mouse aortic endothelial cells. Journal of Cellular Physiology, 2006, 209, 767-774.	2.0	33
33	Matrix metalloproteinase inhibition mitigates renovascular remodeling in salt-sensitive hypertension. Physiological Reports, 2013, 1, e00063.	0.7	30
34	Folic Acid Mitigates Angiotensin-II-Induced Blood Pressure and Renal Remodeling. PLoS ONE, 2013, 8, e83813.	1.1	29
35	Matrix imbalance by inducing expression of metalloproteinase and oxidative stress in cochlea of hyperhomocysteinemic mice. Molecular and Cellular Biochemistry, 2009, 332, 215-224.	1.4	28
36	Hydrogen Sulfide Protects Hyperhomocysteinemia-Induced Renal Damage by Modulation of Caveolin and eNOS Interaction. Scientific Reports, 2019, 9, 2223.	1.6	27

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37	Nitrotyrosinylation, remodeling and endothelialâ€myocyte uncoupling in iNOS, cystathionine beta synthase (CBS) knockouts and iNOS/CBS double knockout mice. Journal of Cellular Biochemistry, 2009, 106, 119-126.	1.2	26
38	Hydrogen sulfide inhibits Ca²⁺-induced mitochondrial permeability transition pore opening in type-1 diabetes. American Journal of Physiology - Endocrinology and Metabolism, 2019, 317, E269-E283.	1.8	25
39	Synergism between AT1 receptor and hyperhomocysteinemia during vascular remodeling. Clinical Chemistry and Laboratory Medicine, 2007, 45, 1771-6.	1.4	24
40	Exogenous hydrogen sulfide and miR-21 antagonism attenuates macrophage-mediated inflammation in ischemia reperfusion injury of the aged kidney. GeroScience, 2021, 43, 1349-1367.	2.1	23
41	Hydrogen sulphide mitigates homocysteine-induced apoptosis and matrix remodelling in mesangial cells through Akt/FOXO1 signalling cascade. Cellular Signalling, 2019, 61, 66-77.	1.7	19
42	PPAR gamma agonist normalizes glomerular filtration rate, tissue levels of homocysteine, and attenuates endothelial-myocyte uncoupling in alloxan induced diabetic mice. International Journal of Biological Sciences, 2008, 4, 236-244.	2.6	18
43	Homocysteine in renovascular complications: Hydrogen sulfide is a modulator and plausible anaerobic ATP generator. Nitric Oxide - Biology and Chemistry, 2014, 41, 27-37.	1.2	17
44	Hypertension exaggerates renovascular resistance via miR-122-associated stress response in aging. Journal of Hypertension, 2018, 36, 2226-2236.	0.3	17
45	Cystathionine beta synthase gene dose dependent vascular remodeling in murine model of hyperhomocysteinemia. International Journal of Physiology, Pathophysiology and Pharmacology, 2011, 3, 210-22.	0.8	17
46	Altered microRNA regulation of short chain fatty acid receptors in the hypertensive kidney is normalized with hydrogen sulfide supplementation. Pharmacological Research, 2018, 134, 157-165.	3.1	16
47	Methylation-dependent antioxidant-redox imbalance regulates hypertensive kidney injury in aging. Redox Biology, 2020, 37, 101754.	3.9	14
48	Homocysteine-induced biochemical stress predisposes to cytoskeletal remodeling in stretched endothelial cells. Molecular and Cellular Biochemistry, 2007, 302, 133-143.	1.4	12
49	Toll-like receptor 4 mutation protects the kidney from Ang-II-induced hypertensive injury. Pharmacological Research, 2022, 175, 106030.	3.1	12
50	Mini-review: diabetic renal complications, a potential stinky remedy. American Journal of Physiology - Renal Physiology, 2016, 310, F119-F122.	1.3	10
51	GYY4137 Regulates Extracellular Matrix Turnover in the Diabetic Kidney by Modulating Retinoid X Receptor Signaling. Biomolecules, 2021, 11, 1477.	1.8	9
52	Chronic hyperhomocysteinemia causes vascular remodelling by instigating vein phenotype in artery. Archives of Physiology and Biochemistry, 2011, 117, 270-282.	1.0	8
53	Homocysteine attenuates blood brain barrier function by inducing oxidative stress and the junctional proteins. FASEB Journal, 2008, 22, 734.7.	0.2	5
54	Collagen receptor- and metalloproteinase-dependent hypertensive stress response in mesangial and glomerular endothelial cells. Molecular and Cellular Biochemistry, 2020, 466, 1-15.	1.4	4

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55	Sodium-hydrogen exchanger regulatory factor-1 (NHERF1) confers salt sensitivity in both male and female models of hypertension in aging. Life Sciences, 2020, 243, 117226.	2.0	4
56	Remodeling in vein expresses arterial phenotype in hyperhomocysteinemia. International Journal of Physiology, Pathophysiology and Pharmacology, 2011, 3, 266-79.	0.8	4
57	Cardiac Synchronous and Dys-synchronous Remodeling in Diabetes Mellitus. Antioxidants and Redox Signaling, 2007, 9, 971-978.	2.5	3
58	Activation of GABAÂ¬A receptor Protects Mitochondria and Reduces Cerebral ischemia.. FASEB Journal, 2009, 23, 614.8.	0.2	2
59	Differential Expression of the GABA _A receptor subunits in the Kidney and Cardiovascular system. FASEB Journal, 2007, 21, A497.	0.2	1
60	Homocysteine alters Redox Regulation through Thioredoxinâ€Interacting Protein: A Novel role of Forkhead Transcription Factor (FOXOâ€3a/FKHRâ€L1). FASEB Journal, 2006, 20, A1456.	0.2	1
61	Early onset of atherosclerosis in ApoEâ€knockout mice is induced by in utero arsenic exposure. FASEB Journal, 2007, 21, A810.	0.2	1
62	Cerebroprotective role of Tetrahydro Curcumin in hyperhomocysteinemic ischemic mice by regulating NFâ€kappa B. FASEB Journal, 2009, 23, 614.7.	0.2	1
63	Nimbidiol ameliorates adverse renal remodeling and dysfunction in diabetic nephropathy. FASEB Journal, 2021, 35, .	0.2	0
64	Homocysteine induces endothelialâ€myofibroblast differentiation through activation of focal adhesion kinase. FASEB Journal, 2006, 20, A1465.	0.2	0
65	Activation of GABA A receptor ameliorate homocysteineâ€induced MMPâ€9 by ERK pathway. FASEB Journal, 2007, 21, A497.	0.2	0
66	Mechanism of homocysteineâ€induced dementia/spasm. FASEB Journal, 2008, 22, 734.9.	0.2	0
67	Ex vivo realâ€time MMP activation in kidney in hyperhomocysteinemia. FASEB Journal, 2008, 22, 942.10.	0.2	0
68	Effect of hydrogen sulfide on methionineâ€induced oxidative stress in brain endothelial cells. FASEB Journal, 2008, 22, 734.8.	0.2	0
69	Hyperhomocysteinemia causes cardiac rhythm disturbances due to a shift in atrial and ventricular gap junction protein distribution. FASEB Journal, 2008, 22, 971.10.	0.2	0
70	Role of Copper and Homocysteine in Pressure Overload Heart Failure. FASEB Journal, 2008, 22, 1210.16.	0.2	0
71	Cardioprotective role of sodium thiosulfate on chronic heart failure by modulating endogenous H2S generation. FASEB Journal, 2008, 22, .	0.2	0
72	Hydrogen sulfide mitigates homocysteineâ€induced glomerular injury. FASEB Journal, 2009, 23, 604.9.	0.2	0

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73	Structural and Functional Heterogeneity in Vascular Remodeling. FASEB Journal, 2009, 23, 593.20.	0.2	0
74	Role of MicroRNAs in homocysteine induced oxidative stress. FASEB Journal, 2009, 23, 1038.9.	0.2	0
75	Blood Flow Regulates Vasculature by Maintaining Collagen/elastin and MMP/TIMP ratio. FASEB Journal, 2010, 24, 790.3.	0.2	0
76	Role of dicer in diabetic cardiomyopathy through dysregulation of MMPâ€9 and TIMPâ€4. FASEB Journal, 2010, 24, 978.19.	0.2	0
77	Inhibition of Matrix Metalloproteinaseâ€9 (MMPâ€9) Reverses Changes in Vascular Wall Structure and Function of Thoracic Aorta of Dahl Saltâ€Sensitive (DSS) Rats. FASEB Journal, 2010, 24, 599.4.	0.2	0
78	Folic acid mitigated homocysteineâ€mediated decrease in bone blood flow and bone remodeling. FASEB Journal, 2010, 24, 630.7.	0.2	0
79	Activation of renal NMDA by Hcy causes ECM remodeling by modulating MMP/TIMP axis. FASEB Journal, 2010, 24, .	0.2	0
80	Tetrahydrocurcumin ameliorates mtMMPâ€9 mediated mitophagy and mitochondria remodeling in Stroke. FASEB Journal, 2010, 24, 604.4.	0.2	0
81	Folic Acid Mitigated Cardiac Dysfunction by Normalizing the Levels of Tissue Inhibitor of Metalloproteinase and homocysteineâ€metabolizing enzymes Post myocardial Infarction in Mice.. FASEB Journal, 2010, 24, 600.5.	0.2	0
82	Functional heterogeneity in vascular remodeling (MMPâ€9â^'/â^' and PARâ€1â^'/+) in hyperhomocysteinemic (CBSâ€/+) and diabetic (Akita, Ins2â^'/+) mice.. FASEB Journal, 2010, 24, 599.6.	0.2	0
83	Cystathionine Î²â€synthase and cystathionine Î³â€lyase double gene transfer ameliorated homocysteineâ€mediated mesangial inflammation through hydrogen sulfide generation. FASEB Journal, 2010, 24, 590.6.	0.2	0
84	The siRNA targeting MMPâ€9 mitigates Homocysteine induced dysruption of barrier integrity in Human intestinal microvascular cells. FASEB Journal, 2011, 25, 1066.7.	0.2	0
85	Renovascular remodeling in Angiotensinâ€II induced hypertension is strainâ€"dependent. FASEB Journal, 2012, 26, lb809.	0.2	0
86	Role Of MMP9 In Cardiac Stem Cell Differentiation And Autophagy. FASEB Journal, 2012, 26, .	0.2	0
87	Hydrogen sulfide mitigates diabetic nephropathy through NMDA receptor mediated renal remodeling. FASEB Journal, 2012, 26, 687.5.	0.2	0
88	Hydrogen sulfide mitigates renovascular matrix pathobiology in hyperhomocysteinemia. FASEB Journal, 2012, 26, 866.4.	0.2	0
89	Matrix Metalloproteinase Inhibition Protects Kidney from Adverse Remodeling Induced by Hypertension. FASEB Journal, 2013, 27, 906.6.	0.2	0
90	H 2 S Therapy Improves MMPâ€9 and NMDA Receptor Mediated Diabetic Renovascular Remodeling. FASEB Journal, 2013, 27, 702.9.	0.2	0

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91	C3H Mice are Resistant to Hypertensive Renovascular Remodeling Due to Decreased Mitochondrial Oxidative Stress. FASEB Journal, 2013, 27, 704.13.	0.2	0
92	Comparison of protein expression in kidney tubular apical and basolateral membranes in young and old rats. FASEB Journal, 2015, 29, 969.9.	0.2	0
93	Deregulation of miRâ€21 Contributes to Differential Macrophage Activation in Acute Kidney Injury in Aged Mice. FASEB Journal, 2015, 29, 807.9.	0.2	0
94	Hydrogen Sulfide Inhibits Ca 2+ â€induced M itochondrial Permeability Transition Pore Opening in Typeâ€1 Diabetes. FASEB Journal, 2015, 29, 959.11.	0.2	0
95	Linking Tollâ€like Receptor 4, Gut Microbiota, and Doxycycline in the Hypertensive Kidney. FASEB Journal, 2018, 32, 716.14.	0.2	0
96	Exercise Induced Irisin Alleviates Type 1 Diabetic Nephropathy by Promoting Mitochondria Biogenesis and Function. FASEB Journal, 2019, 33, 567.10.	0.2	0
97	Glucosidase Inhibitor Alleviates Inflammation and Fibrosis in Typeâ€1 Diabetic Kidney. FASEB Journal, 2022, 36, .	0.2	0