Zhen Chen

List of Publications by Year
in descending order

67 papers	3,420 citations	159525 30 h-index	149623 56 g-index
75 all docs	75 docs citations	75 times ranked	6168 citing authors

#	Article	IF	Citations
1	miR-103/107 Promote Metastasis of Colorectal Cancer by Targeting the Metastasis Suppressors DAPK and KLF4. Cancer Research, 2012, 72, 3631-3641.	0.4	279
2	Shear stress, SIRT1, and vascular homeostasis. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 10268-10273.	3.3	247
3	AMP-Activated Protein Kinase Functionally Phosphorylates Endothelial Nitric Oxide Synthase Ser633. Circulation Research, 2009, 104, 496-505.	2.0	230
4	Sterol Regulatory Element Binding Protein 2 Activation of NLRP3 Inflammasome in Endothelium Mediates Hemodynamic-Induced Atherosclerosis Susceptibility. Circulation, 2013, 128, 632-642.	1.6	215
5	Hypoxia-responsive miRNAs target argonaute 1 to promote angiogenesis. Journal of Clinical Investigation, 2013, 123, 1057-1067.	3.9	158
6	AMP-activated Protein Kinase Phosphorylation of Angiotensin-Converting Enzyme 2 in Endothelium Mitigates Pulmonary Hypertension. American Journal of Respiratory and Critical Care Medicine, 2018, 198, 509-520.	2.5	147
7	Epigenetic Regulation: A New Frontier for Biomedical Engineers. Annual Review of Biomedical Engineering, 2017, 19, 195-219.	5.7	135
8	Enhancer-associated long non-coding RNA LEENE regulates endothelial nitric oxide synthase and endothelial function. Nature Communications, 2018, 9, 292.	5.8	129
9	Oxidative Stress Activates Endothelial Innate Immunity via Sterol Regulatory Element Binding Protein 2 (SREBP2) Transactivation of MicroRNA-92a. Circulation, 2015, 131, 805-814.	1.6	127
10	Mechanosensitive microRNAsâ€"role in endothelial responses to shear stress and redox state. Free Radical Biology and Medicine, 2013, 64, 61-68.	1.3	116
11	Tyrosine phosphatase SHP2 negatively regulates NLRP3 inflammasome activation via ANT1-dependent mitochondrial homeostasis. Nature Communications, 2017, 8, 2168.	5.8	101
12	Systems biology analysis of longitudinal functional response of endothelial cells to shear stress. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 10990-10995.	3.3	95
13	miR-483 Targeting of CTGF Suppresses Endothelial-to-Mesenchymal Transition. Circulation Research, 2017, 120, 354-365.	2.0	93
14	MicroRNA-92a Mediates Endothelial Dysfunction in CKD. Journal of the American Society of Nephrology: JASN, 2017, 28, 3251-3261.	3.0	90
15	Regulation of SIRT1 by Oxidative Stress-Responsive miRNAs and a Systematic Approach to Identify Its Role in the Endothelium. Antioxidants and Redox Signaling, 2013, 19, 1522-1538.	2.5	78
16	Ca ²⁺ /calmodulin-dependent protein kinase kinase Î² phosphorylation of Sirtuin 1 in endothelium is atheroprotective. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, E2420-7.	3.3	72
17	Extracellular MicroRNA-92a Mediates Endothelial Cellâ€"Macrophage Communication. Arteriosclerosis, Thrombosis, and Vascular Biology, 2019, 39, 2492-2504.	1.1	65
18	LINC00341 exerts an anti-inflammatory effect on endothelial cells by repressing VCAM1. Physiological Genomics, 2017, 49, 339-345.	1.0	53

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19	Genome-wide colocalization of RNAâ€“DNA interactions and fusion RNA pairs. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 3328-3337.	3.3	52
20	Cholesterol loading increases the translocation of ATP synthase Î² chain into membrane caveolae in vascular endothelial cells. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2006, 1761, 1182-1190.	1.2	47
21	Shear stress activation of nuclear receptor PXR in endothelial detoxification. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 13174-13179.	3.3	47
22	Extracellular RNA in a single droplet of human serum reflects physiologic and disease states. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 19200-19208.	3.3	46
23	Atheroprotective Flow Upregulates ITPR3 (Inositol 1,4,5-Trisphosphate Receptor 3) in Vascular Endothelium via KLF4 (KrÃ¼ppel-Like Factor 4)-Mediated Histone Modifications. Arteriosclerosis, Thrombosis, and Vascular Biology, 2019, 39, 902-914.	1.1	45
24	Suppression of Endothelial AGO1 Promotes Adipose Tissue Browning and Improves Metabolic Dysfunction. Circulation, 2020, 142, 365-379.	1.6	44
25	Glucagon regulates ACC activity in adipocytes through the CAMKKÎ²/AMPK pathway. American Journal of Physiology - Endocrinology and Metabolism, 2012, 302, E1560-E1568.	1.8	43
26	TIFA as a crucial mediator for NLRP3 inflammasome. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 15078-15083.	3.3	43
27	Longitudinal shear stress response in human endothelial cells to atheroprone and atheroprotective conditions. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	43
28	Î²-Lapachone and Paclitaxel Combination Micelles with Improved Drug Encapsulation and Therapeutic Synergy as Novel Nanotherapeutics for NQO1-Targeted Cancer Therapy. Molecular Pharmaceutics, 2015, 12, 3999-4010.	2.3	40
29	Stress-induced RNAâ€“chromatin interactions promote endothelial dysfunction. Nature Communications, 2020, 11, 5211.	5.8	39
30	Cardiovascular Protective Effect of Metformin and Telmisartan: Reduction of PARP1 Activity via the AMPK-PARP1 Cascade. PLoS ONE, 2016, 11, e0151845.	1.1	38
31	Mapping RNAâ€“chromatin interactions by sequencing with iMARGI. Nature Protocols, 2019, 14, 3243-3272.	5.5	36
32	Endothelial dysfunction. Current Opinion in Lipidology, 2014, 25, 339-349.	1.2	35
33	Presymptomatic Increase of an Extracellular RNA in Blood Plasma Associates with the Development of Alzheimerâ€™s Disease. Current Biology, 2020, 30, 1771-1782.e3.	1.8	32
34	Treatment of hypertension by increasing impaired endothelial <scp>TRPV</scp> 4â€•<scp>KC</scp> a2.3 interaction. EMBO Molecular Medicine, 2017, 9, 1491-1503.	3.3	30
35	Orai1 is critical for Notch-driven aggressiveness under hypoxic conditions in triple-negative breast cancers. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2018, 1864, 975-986.	1.8	29
36	Revealing protein-protein interactions at the transcriptome scale by sequencing. Molecular Cell, 2021, 81, 4091-4103.e9.	4.5	28

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37	Natural display of nuclear-encoded RNA on the cell surface and its impact on cell interaction. Genome Biology, 2020, 21, 225.	3.8	27
38	A Compendium on Peripheral Arterial Disease. Circulation Research, 2015, 116, 1505-1508.	2.0	23
39	T lymphocyte SHP2-deficiency triggers anti-tumor immunity to inhibit colitis-associated cancer in mice. Oncotarget, 2017, 8, 7586-7597.	0.8	23
40	Endothelial mechanobiology. APL Bioengineering, 2020, 4, 010904.	3.3	22
41	Role of endothelial cells in pulmonary fibrosis via SREBP2 activation. JCI Insight, 2021, 6, .	2.3	21
42	miR-379 deletion ameliorates features of diabetic kidney disease by enhancing adaptive mitophagy via FIS1. Communications Biology, 2021, 4, 30.	2.0	20
43	Long Non-Coding RNA Modulation of VEGF-A during Hypoxia. Non-coding RNA, 2018, 4, 34.	1.3	15
44	Differential gene expression and AKT targeting in triple negative breast cancer. Oncotarget, 2019, 10, 4356-4368.	0.8	14
45	Integrative Omics Analyses Reveal Epigenetic Memory in Diabetic Renal Cells Regulating Genes Associated With Kidney Dysfunction. Diabetes, 2020, 69, 2490-2502.	0.3	11
46	RAMP2-AS1 Regulates Endothelial Homeostasis and Aging. Frontiers in Cell and Developmental Biology, 2021, 9, 635307.	1.8	10
47	Rainbow-Seq: Combining Cell Lineage Tracing with Single-Cell RNA Sequencing in Preimplantation Embryos. IScience, 2018, 7, 16-29.	1.9	9
48	Abnormalities of vascular histology and collagen fiber configuration in patients with advanced chronic kidney disease. Journal of Vascular Access, 2019, 20, 31-40.	0.5	9
49	Circulating microRNA changes in patients with impaired glucose regulation. Adipocyte, 2020, 9, 443-453.	1.3	9
50	Tumor Mutation Burden Predicts Relapse in Papillary Thyroid Carcinoma With Changes in Genes and Immune Microenvironment. Frontiers in Endocrinology, 2021, 12, 674616.	1.5	9
51	Genomic profiling of synchronous triple primary tumors of the lung, thyroid and kidney in a young female patient: A case report. Oncology Letters, 2018, 16, 6089-6094.	0.8	8
52	Epigenetic Risk Profile of Diabetic Kidney Disease in High-Risk Populations. Current Diabetes Reports, 2019, 19, 9.	1.7	8
53	Endotheliumâ€“gut communication: IGFâ€‘1Rs crosstalk with microbiota. EMBO Reports, 2021, 22, e52896.	2.0	4
54	Vascular Regulation by Super Enhancer-Derived LINC00607. Frontiers in Cardiovascular Medicine, 0, 9, .	1.1	4

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55	Identifying Thyroid Carcinoma-Related Genes by Integrating GWAS and eQTL Data. Frontiers in Cell and Developmental Biology, 2021, 9, 645275.	1.8	3
56	Prediction of Genetic Factors of Hyperthyroidism Based on Gene Interaction Network. Frontiers in Cell and Developmental Biology, 2021, 9, 700355.	1.8	3
57	Heme Oxygenase-1 at the Nexus of Endothelial Cell Fate Decision Under Oxidative Stress. Frontiers in Cell and Developmental Biology, 2021, 9, 702974.	1.8	3
58	What Makes a Great Mentor: Interviews With Recipients of the ATVB Mentor of Women Award. Arteriosclerosis, Thrombosis, and Vascular Biology, 2021, 41, 2641-2647.	1.1	3
59	Isolation and Profiling of Human Primary Mesenteric Arterial Endothelial Cells at the Transcriptome Level. Journal of Visualized Experiments, 2022, , .	0.2	3
60	Reply to Verwilt et al.: Experimental evidence against DNA contamination in SILVER-seq. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 18937-18938.	3.3	2
61	Shear-Stress Activation of AMP-Activated Protein Kinase in Endothelial Homeostasis. Cellular and Molecular Bioengineering, 2011, 4, 538-546.	1.0	1
62	Epigenetic profiling with ultralow DNA amounts. Nature Biomedical Engineering, 2018, 2, 146-147.	11.6	1
63	Reply to Hartl and Gao: Lack of between-batch difference in the distributions of measured extracellular RNA levels. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 1851-1852.	3.3	0
64	â€œEnhancingâ€•mechanosensing: Enhancers and enhancer-derived long non-coding RNAs in endothelial response to flow. Current Topics in Membranes, 2021, 87, 153-169.	0.5	0
65	Abstract 685: Sterol Regulatory Element-Binding Protein 2-Mediated Endothelial-to-Mesenchymal Transition Contributes to Pulmonary Fibrosis. Arteriosclerosis, Thrombosis, and Vascular Biology, 2018, 38, .	1.1	0
66	Abstract 250: Endothelial functional Regulation by Enhancer-Associated Long Non-Coding RNAs. Arteriosclerosis, Thrombosis, and Vascular Biology, 2018, 38, .	1.1	0
67	Mitochondrial RNAâ€Chromatin Interactome Regulates Endothelialâ€Mesenchymal Transition. FASEB Journal, 2020, 34, 1-1.	0.2	0