Hanjoong Jo

List of Publications by Year in descending order

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230 papers

15,271 citations

67 h-index 20307 116 g-index

242 all docs 242 docs citations

times ranked

242

15752 citing authors

#	Article	IF	CITATIONS
1	Role of p47 phox in Vascular Oxidative Stress and Hypertension Caused by Angiotensin II. Hypertension, 2002, 40, 511-515.	1.3	533
2	Biological aspects of reactive nitrogen species. Biochimica Et Biophysica Acta - Bioenergetics, 1999, 1411, 385-400.	0.5	408
3	Partial carotid ligation is a model of acutely induced disturbed flow, leading to rapid endothelial dysfunction and atherosclerosis. American Journal of Physiology - Heart and Circulatory Physiology, 2009, 297, H1535-H1543.	1.5	396
4	Shear Stress Stimulates Phosphorylation of Endothelial Nitric-oxide Synthase at Ser1179 by Akt-independent Mechanisms. Journal of Biological Chemistry, 2002, 277, 3388-3396.	1.6	395
5	Role of xanthine oxidoreductase and NAD(P)H oxidase in endothelial superoxide production in response to oscillatory shear stress. American Journal of Physiology - Heart and Circulatory Physiology, 2003, 285, H2290-H2297.	1.5	392
6	Biomechanical factors in atherosclerosis: mechanisms and clinical implications. European Heart Journal, 2014, 35, 3013-3020.	1.0	359
7	Bone Morphogenic Protein 4 Produced in Endothelial Cells by Oscillatory Shear Stress Induces Monocyte Adhesion by Stimulating Reactive Oxygen Species Production From a Nox1-Based NADPH Oxidase. Circulation Research, 2004, 95, 773-779.	2.0	350
8	Caveolin-mediated regulation of signaling along the p42/44 MAP kinase cascade in vivo. FEBS Letters, 1998, 428, 205-211.	1.3	342
9	Flow-dependent regulation of endothelial nitric oxide synthase: role of protein kinases. American Journal of Physiology - Cell Physiology, 2003, 285, C499-C508.	2.1	326
10	Bone Morphogenic Protein 4 Produced in Endothelial Cells by Oscillatory Shear Stress Stimulates an Inflammatory Response. Journal of Biological Chemistry, 2003, 278, 31128-31135.	1.6	262
11	Oscillatory Shear Stress Stimulates Endothelial Production of O2- from p47 -dependent NAD(P)H Oxidases, Leading to Monocyte Adhesion. Journal of Biological Chemistry, 2003, 278, 47291-47298.	1.6	261
12	Flow-dependent epigenetic DNA methylation regulates endothelial gene expression and atherosclerosis. Journal of Clinical Investigation, 2014, 124, 3187-3199.	3.9	260
13	Differential Effect of Shear Stress on Extracellular Signal-regulated Kinase and N-terminal Jun Kinase in Endothelial Cells. Journal of Biological Chemistry, 1997, 272, 1395-1401.	1.6	245
14	Role of Flow-Sensitive microRNAs in Endothelial Dysfunction and Atherosclerosis. Arteriosclerosis, Thrombosis, and Vascular Biology, 2014, 34, 2206-2216.	1.1	230
15	Role of G proteins in shear stress-mediated nitric oxide production by endothelial cells. American Journal of Physiology - Cell Physiology, 1994, 267, C753-C758.	2.1	214
16	Compensatory Phosphorylation and Protein-Protein Interactions Revealed by Loss of Function and Gain of Function Mutants of Multiple Serine Phosphorylation Sites in Endothelial Nitric-oxide Synthase. Journal of Biological Chemistry, 2003, 278, 14841-14849.	1.6	214
17	Altered Shear Stress Stimulates Upregulation of Endothelial VCAM-1 and ICAM-1 in a BMP-4– and TGF-β1–Dependent Pathway. Arteriosclerosis, Thrombosis, and Vascular Biology, 2009, 29, 254-260.	1.1	212
18	Shear stress stimulates phosphorylation of eNOS at Ser ⁶³⁵ by a protein kinase A-dependent mechanism. American Journal of Physiology - Heart and Circulatory Physiology, 2002, 283, H1819-H1828.	1.5	205

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19	The atypical mechanosensitive microRNA-712 derived from pre-ribosomal RNA induces endothelial inflammation and atherosclerosis. Nature Communications, 2013, 4, 3000.	5.8	198
20	Cell signaling by reactive nitrogen and oxygen species in atherosclerosis. Free Radical Biology and Medicine, 2000, 28, 1780-1794.	1.3	196
21	MicroRNA-663 upregulated by oscillatory shear stress plays a role in inflammatory response of endothelial cells. American Journal of Physiology - Heart and Circulatory Physiology, 2011, 300, H1762-H1769.	1.5	186
22	Transcriptional Profiles of Valvular and Vascular Endothelial Cells Reveal Phenotypic Differences. Arteriosclerosis, Thrombosis, and Vascular Biology, 2006, 26, 69-77.	1.1	172
23	Elevated cyclic stretch alters matrix remodeling in aortic valve cusps: implications for degenerative aortic valve disease. American Journal of Physiology - Heart and Circulatory Physiology, 2009, 296, H756-H764.	1.5	172
24	KLF2 and KLF4 control endothelial identity and vascular integrity. JCI Insight, 2017, 2, e91700.	2.3	171
25	NAD(P)H Oxidase-derived Hydrogen Peroxide Mediates Endothelial Nitric Oxide Production in Response to Angiotensin II. Journal of Biological Chemistry, 2002, 277, 48311-48317.	1.6	164
26	Plasma Membrane Cholesterol Is a Key Molecule in Shear Stress-dependent Activation of Extracellular Signal-regulated Kinase. Journal of Biological Chemistry, 1998, 273, 32304-32311.	1.6	159
27	Chronic shear induces caveolae formation and alters ERK and Akt responses in endothelial cells. American Journal of Physiology - Heart and Circulatory Physiology, 2003, 285, H1113-H1122.	1.5	159
28	Mechanical Activation of Hypoxia-Inducible Factor $1\hat{1}$ Drives Endothelial Dysfunction at Atheroprone Sites. Arteriosclerosis, Thrombosis, and Vascular Biology, 2017, 37, 2087-2101.	1.1	154
29	The NADPH oxidase Nox4 has anti-atherosclerotic functions. European Heart Journal, 2015, 36, 3447-3456.	1.0	150
30	Multifunctional Nanoparticles Facilitate Molecular Targeting and miRNA Delivery to Inhibit Atherosclerosis in ApoE $<$ sup $>$ â \in " $ $ â \in " $<$ sup $>$ Mice. ACS Nano, 2015, 9, 8885-8897.	7.3	150
31	Shear stress and plaque development. Expert Review of Cardiovascular Therapy, 2010, 8, 545-556.	0.6	142
32	Elevated Cyclic Stretch Induces Aortic Valve Calcification in a Bone Morphogenic Protein-Dependent Manner. American Journal of Pathology, 2010, 177, 49-57.	1.9	138
33	Discovery of novel mechanosensitive genes in vivo using mouse carotid artery endothelium exposed to disturbed flow. Blood, 2010, 116, e66-e73.	0.6	136
34	Fluid Mechanics, Arterial Disease, and Gene Expression. Annual Review of Fluid Mechanics, 2014, 46, 591-614.	10.8	134
35	Activation of Mitogen-activated Protein Kinase Pathways by Cyclic GMP and Cyclic GMP-dependent Protein Kinase in Contractile Vascular Smooth Muscle Cells. Journal of Biological Chemistry, 1999, 274, 34301-34309.	1.6	131
36	Caveolin-1 regulates shear stress-dependent activation of extracellular signal-regulated kinase. American Journal of Physiology - Heart and Circulatory Physiology, 2000, 278, H1285-H1293.	1.5	122

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37	Simulated microgravity using the Random Positioning Machine inhibits differentiation and alters gene expression profiles of 2T3 preosteoblasts. American Journal of Physiology - Cell Physiology, 2005, 288, C1211-C1221.	2.1	120
38	Bone Morphogenic Protein Antagonists Are Coexpressed With Bone Morphogenic Protein 4 in Endothelial Cells Exposed to Unstable Flow In Vitro in Mouse Aortas and in Human Coronary Arteries. Circulation, 2007, 116, 1258-1266.	1.6	120
39	Nitric Oxide-Dependent Induction of Glutathione Synthesis through Increased Expression of \hat{I}^3 -Glutamylcysteine Synthetase. Archives of Biochemistry and Biophysics, 1998, 358, 74-82.	1.4	118
40	Bone Morphogenic Protein-4 Induces Hypertension in Mice. Circulation, 2006, 113, 2818-2825.	1.6	117
41	Reactive oxygen species-selective regulation of aortic inflammatory gene expression in Type 2 diabetes. American Journal of Physiology - Heart and Circulatory Physiology, 2007, 292, H2073-H2082.	1.5	117
42	The induction of GSH synthesis by nanomolar concentrations of NO in endothelial cells: a role for \hat{I}^3 -glutamylcysteine synthetase and \hat{I}^3 -glutamyl transpeptidase. FEBS Letters, 1999, 448, 292-296.	1.3	115
43	Mechanisms of Cell Signaling by Nitric Oxide and Peroxynitrite: From Mitochondria to MAP Kinases. Antioxidants and Redox Signaling, 2001, 3, 215-229.	2.5	112
44	An Ex Vivo Study of the Biological Properties of Porcine Aortic Valves in Response to Circumferential Cyclic Stretch. Annals of Biomedical Engineering, 2006, 34, 1655-1665.	1.3	110
45	Endothelial Reprogramming by Disturbed Flow Revealed by Single-Cell RNA and Chromatin Accessibility Study. Cell Reports, 2020, 33, 108491.	2.9	109
46	Peroxiredoxin 2 Deficiency Exacerbates Atherosclerosis in Apolipoprotein E–Deficient Mice. Circulation Research, 2011, 109, 739-749.	2.0	107
47	Expression of cathepsin K is regulated by shear stress in cultured endothelial cells and is increased in endothelium in human atherosclerosis. American Journal of Physiology - Heart and Circulatory Physiology, 2007, 292, H1479-H1486.	1.5	104
48	Expression of CYP1A1 and CYP1B1 in human endothelial cells: regulation by fluid shear stress. Cardiovascular Research, 2009, 81, 669-677.	1.8	98
49	Discovery of shear- and side-specific mRNAs and miRNAs in human aortic valvular endothelial cells. American Journal of Physiology - Heart and Circulatory Physiology, 2011, 301, H856-H867.	1.5	96
50	Endothelial albumin permeability is shear dependent, time dependent, and reversible. American Journal of Physiology - Heart and Circulatory Physiology, 1991, 260, H1992-H1996.	1.5	94
51	Role of NADPH Oxidases in Disturbed Flow- and BMP4- Induced Inflammation and Atherosclerosis. Antioxidants and Redox Signaling, 2006, 8, 1609-1619.	2.5	92
52	Protein kinase B/Akt activates c-Jun NH ₂ -terminal kinase by increasing NO production in response to shear stress. Journal of Applied Physiology, 2001, 91, 1574-1581.	1.2	91
53	Aortic Valve: Mechanical Environment and Mechanobiology. Annals of Biomedical Engineering, 2013, 41, 1331-1346.	1.3	91
54	Prevention of Abdominal Aortic Aneurysm by Anti–MicroRNA-712 or Anti–MicroRNA-205 in Angiotensin II–Infused Mice. Arteriosclerosis, Thrombosis, and Vascular Biology, 2014, 34, 1412-1421.	1.1	90

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55	Flow-Dependent Epigenetic DNA Methylation in Endothelial Gene Expression and Atherosclerosis. Arteriosclerosis, Thrombosis, and Vascular Biology, 2015, 35, 1562-1569.	1.1	89
56	Endothelial NO synthase phosphorylated at SER635 produces NO without requiring intracellular calcium increase. Free Radical Biology and Medicine, 2003, 35, 729-741.	1.3	86
57	Identification of mechanosensitive genes in osteoblasts by comparative microarray studies using the rotating wall vessel and the random positioning machine. Journal of Cellular Biochemistry, 2007, 101, 587-599.	1.2	85
58	Role of flow-sensitive microRNAs and long noncoding RNAs in vascular dysfunction and atherosclerosis. Vascular Pharmacology, 2019, 114, 76-92.	1.0	84
59	Evidence for peroxynitrite as a signaling molecule in flow-dependent activation of c-Jun NH2-terminal kinase. American Journal of Physiology - Heart and Circulatory Physiology, 1999, 277, H1647-H1653.	1.5	81
60	Laminar Shear Stress Up-regulates Peroxiredoxins (PRX) in Endothelial Cells. Journal of Biological Chemistry, 2008, 283, 1622-1627.	1.6	81
61	Anti-Inflammatory and Antiatherogenic Role of BMP Receptor II in Endothelial Cells. Arteriosclerosis, Thrombosis, and Vascular Biology, 2013, 33, 1350-1359.	1.1	81
62	HuR regulates the expression of stress-sensitive genes and mediates inflammatory response in human umbilical vein endothelial cells. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 6858-6863.	3.3	80
63	Recent advances in nanomaterials for therapy and diagnosis for atherosclerosis. Advanced Drug Delivery Reviews, 2021, 170, 142-199.	6.6	80
64	Mechanosensitive PPAP2B Regulates Endothelial Responses to Atherorelevant Hemodynamic Forces. Circulation Research, 2015, 117, e41-e53.	2.0	75
65	Laminar Shear Inhibits Tubule Formation and Migration of Endothelial Cells by an Angiopoietin-2–Dependent Mechanism. Arteriosclerosis, Thrombosis, and Vascular Biology, 2007, 27, 2150-2156.	1.1	74
66	Target accessibility and signal specificity in live-cell detection of BMP-4 mRNA using molecular beacons. Nucleic Acids Research, 2008, 36, e30-e30.	6.5	74
67	The effect of varying albumin concentration and hydrostatic pressure on hydraulic conductivity and albumin permeability of cultured endothelial monolayers. Microvascular Research, 1991, 41, 390-407.	1.1	73
68	Simulated Microgravity and 3D Culture Enhance Induction, Viability, Proliferation and Differentiation of Cardiac Progenitors from Human Pluripotent Stem Cells. Scientific Reports, 2016, 6, 30956.	1.6	73
69	Accelerated atherosclerosis development in C57Bl6 mice by overexpressing AAV-mediated PCSK9 and partial carotid ligation. Laboratory Investigation, 2017, 97, 935-945.	1.7	72
70	Caveolin-1 Knockout Mice Have Increased Bone Size and Stiffness. Journal of Bone and Mineral Research, 2007, 22, 1408-1418.	3.1	70
71	Animal, <i>In Vitro </i> , and <i>Ex Vivo </i> Models of Flow-Dependent Atherosclerosis: Role of Oxidative Stress. Antioxidants and Redox Signaling, 2011, 15, 1433-1448.	2.5	68
72	Piperlongumine inhibits atherosclerotic plaque formation and vascular smooth muscle cell proliferation by suppressing PDGF receptor signaling. Biochemical and Biophysical Research Communications, 2012, 427, 349-354.	1.0	68

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73	Laminar Shear Stress Inhibits Cathepsin L Activity in Endothelial Cells. Arteriosclerosis, Thrombosis, and Vascular Biology, 2006, 26, 1784-1790.	1.1	67
74	Design of an Ex Vivo Culture System to Investigate the Effects of Shear Stress on Cardiovascular Tissue. Journal of Biomechanical Engineering, 2008, 130, 035001.	0.6	67
75	Preferential Activation of SMAD1/5/8 on the Fibrosa Endothelium in Calcified Human Aortic Valves - Association with Low BMP Antagonists and SMAD6. PLoS ONE, 2011, 6, e20969.	1.1	67
76	Affinity-Driven Design of Cargo-Switching Nanoparticles to Leverage a Cholesterol-Rich Microenvironment for Atherosclerosis Therapy. ACS Nano, 2020, 14, 6519-6531.	7.3	67
77	Role of Noncoding RNAs in the Pathogenesis of Abdominal Aortic Aneurysm. Circulation Research, 2019, 124, 619-630.	2.0	66
78	Differential proinflammatory and prooxidant effects of bone morphogenetic protein-4 in coronary and pulmonary arterial endothelial cells. American Journal of Physiology - Heart and Circulatory Physiology, 2008, 295, H569-H577.	1.5	64
79	Effects of pyrrolidine dithiocarbamate on endothelial cells: protection against oxidative stress. Free Radical Biology and Medicine, 1999, 26, 1138-1145.	1.3	62
80	Vascular Semaphorin 7A Upregulation by Disturbed Flow Promotes Atherosclerosis Through Endothelial Î ² 1 Integrin. Arteriosclerosis, Thrombosis, and Vascular Biology, 2018, 38, 335-343.	1.1	62
81	The novel coronary artery disease risk gene <i>JCAD/KIAA1462</i> promotes endothelial dysfunction and atherosclerosis. European Heart Journal, 2019, 40, 2398-2408.	1.0	60
82	Coordinated regulation of endothelial nitric oxide synthase activity by phosphorylation and subcellular localization. Free Radical Biology and Medicine, 2006, 41, 144-153.	1.3	56
83	Angiopoietin-2 Stimulates Blood Flow Recovery After Femoral Artery Occlusion by Inducing Inflammation and Arteriogenesis. Arteriosclerosis, Thrombosis, and Vascular Biology, 2008, 28, 1989-1995.	1.1	56
84	The role of epigenetics in the endothelial cell shear stress response and atherosclerosis. International Journal of Biochemistry and Cell Biology, 2015, 67, 167-176.	1.2	54
85	Disturbed Flow Increases UBE2C (Ubiquitin E2 Ligase C) via Loss of miR-483-3p, Inducing Aortic Valve Calcification by the pVHL (von Hippel-Lindau Protein) and HIF-1α (Hypoxia-Inducible Factor-1α) Pathway in Endothelial Cells. Arteriosclerosis, Thrombosis, and Vascular Biology, 2019, 39, 467-481.	1.1	54
86	Phosphatidylinositol 3-kinase \hat{I}^3 mediates shear stress-dependent activation of JNK in endothelial cells. American Journal of Physiology - Heart and Circulatory Physiology, 1998, 275, H1898-H1904.	1.5	53
87	A Model of Disturbed Flow-Induced Atherosclerosis in Mouse Carotid Artery by Partial Ligation and a Simple Method of RNA Isolation from Carotid Endothelium. Journal of Visualized Experiments, 2010, , .	0.2	53
88	The role of endothelial mechanosensitive genes in atherosclerosis andÂomics approaches. Archives of Biochemistry and Biophysics, 2016, 591, 111-131.	1.4	53
89	Downregulation of Bone Morphogenetic Protein 4 Expression in Coronary Arterial Endothelial Cells. Arteriosclerosis, Thrombosis, and Vascular Biology, 2007, 27, 776-782.	1.1	51
90	GTP Cyclohydrolase I Phosphorylation and Interaction With GTP Cyclohydrolase Feedback Regulatory Protein Provide Novel Regulation of Endothelial Tetrahydrobiopterin and Nitric Oxide. Circulation Research, 2010, 106, 328-336.	2.0	51

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91	Early determinants of H2O2-induced endothelial dysfunction. Free Radical Biology and Medicine, 2006, 41, 810-817.	1.3	50
92	Tetrahydrobiopterin Deficiency and Nitric Oxide Synthase Uncoupling Contribute to Atherosclerosis Induced by Disturbed Flow. Arteriosclerosis, Thrombosis, and Vascular Biology, 2011, 31, 1547-1554.	1.1	50
93	Embryonic Stem Cell-Derived Endothelial Cells May Lack Complete Functional Maturation in vitro. Journal of Vascular Research, 2006, 43, 411-421.	0.6	49
94	The Effects of Combined Cyclic Stretch and Pressure on the Aortic Valve Interstitial Cell Phenotype. Annals of Biomedical Engineering, 2011, 39, 1654-1667.	1.3	49
95	The interplay of nitric oxide and peroxynitrite with signal transduction pathways: Implications for disease. Seminars in Perinatology, 1997, 21, 351-366.	1.1	48
96	Disturbed flow induces systemic changes in metabolites in mouse plasma: a metabolomics study using ApoE ^{â^'/â^'} mice with partial carotid ligation. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2015, 308, R62-R72.	0.9	48
97	Disturbed Flow Promotes Arterial Stiffening Through Thrombospondin-1. Circulation, 2017, 136, 1217-1232.	1.6	48
98	Flow-dependent expression of ectonucleotide tri(di)phosphohydrolase-1 and suppression of atherosclerosis. Journal of Clinical Investigation, 2015, 125, 3027-3036.	3.9	47
99	Plasma membrane requirements for $1\hat{l}\pm,25(OH)2D3$ dependent PKC signaling in chondrocytes and osteoblasts. Steroids, 2006, 71, 286-290.	0.8	46
100	Angiotensin II induces DNA damage via AT1 receptor and NADPH oxidase isoform Nox4. Mutagenesis, 2012, 27, 673-681.	1.0	46
101	Altered Amygdala Resting-State Functional Connectivity and Hemispheric Asymmetry in Patients With Social Anxiety Disorder. Frontiers in Psychiatry, 2018, 9, 164.	1.3	45
102	Low magnitude and high frequency mechanical loading prevents decreased bone formation responses of 2T3 preosteoblasts. Journal of Cellular Biochemistry, 2009, 106, 306-316.	1.2	44
103	Oxidized phospholipids regulate amino acid metabolism through MTHFD2 to facilitate nucleotide release in endothelial cells. Nature Communications, 2018, 9, 2292.	5.8	44
104	Identification of side- and shear-dependent microRNAs regulating porcine aortic valve pathogenesis. Scientific Reports, 2016, 6, 25397.	1.6	43
105	3D Imaging and Quantitative Analysis of Vascular Networks: A Comparison of Ultramicroscopy and Micro-Computed Tomography. Theranostics, 2018, 8, 2117-2133.	4.6	41
106	Regulation of Growth Plate Chondrocytes by 1,25-Dihydroxyvitamin D3 Requires Caveolae and Caveolin-1. Journal of Bone and Mineral Research, 2006, 21, 1637-1647.	3.1	40
107	Shear-Sensitive Genes in Aortic Valve Endothelium. Antioxidants and Redox Signaling, 2016, 25, 401-414.	2.5	40
108	Cyclic pressure and shear stress regulate matrix metalloproteinases and cathepsin activity in porcine aortic valves. Journal of Heart Valve Disease, 2006, 15, 622-9.	0.5	40

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109	Endothelial NOS-dependent activation of c-Jun NH2- terminal kinase by oxidized low-density lipoprotein. American Journal of Physiology - Heart and Circulatory Physiology, 2001, 281, H2705-H2713.	1.5	39
110	NFKB1 promoter variation implicates shear-induced NOS3 gene expression and endothelial function in prehypertensives and stage I hypertensives. American Journal of Physiology - Heart and Circulatory Physiology, 2007, 293, H2320-H2327.	1.5	39
111	The histone demethylase JMJD2B regulates endothelial-to-mesenchymal transition. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 4180-4187.	3.3	39
112	Nitric oxide, free radicals and cell signalling in cardiovascular disease. Biochemical Society Transactions, 1997, 25, 925-929.	1.6	38
113	Dynamic Immune Cell Accumulation During Flow-Induced Atherogenesis in Mouse Carotid Artery. Arteriosclerosis, Thrombosis, and Vascular Biology, 2012, 32, 623-632.	1.1	38
114	The Role of Mechanical Stimulation in Recovery of Bone Loss—High versus Low Magnitude and Frequency of Force. Life, 2014, 4, 117-130.	1.1	38
115	Delivery of Antiâ€microRNAâ€712 to Inflamed Endothelial Cells Using Poly(<i>β</i> à€amino ester) Nanoparticles Conjugated with VCAMâ€1 Targeting Peptide. Advanced Healthcare Materials, 2021, 10, e2001894.	3.9	38
116	Mechanical forces regulate endothelial-to-mesenchymal transition and atherosclerosis via an Alk5-Shc mechanotransduction pathway. Science Advances, $2021, 7, \ldots$	4.7	37
117	lîºBî±-dependent regulation of low-shear flow-induced NF-κB activity: role of nitric oxide. American Journal of Physiology - Cell Physiology, 2003, 284, C1039-C1047.	2.1	36
118	The role of the vascular dendritic cell network in atherosclerosis. American Journal of Physiology - Cell Physiology, 2013, 305, C1-C21.	2.1	36
119	Tyrosine-Phosphorylated Calmodulin Has Reduced Biological Activity. Archives of Biochemistry and Biophysics, 1994, 315, 119-126.	1.4	34
120	Ascorbic acid synthesis due to l-gulono-1,4-lactone oxidase expression enhances NO production in endothelial cells. Biochemical and Biophysical Research Communications, 2006, 345, 1657-1662.	1.0	34
121	Development of immortalized mouse aortic endothelial cell lines. Vascular Cell, 2014, 6, 7.	0.2	33
122	Activation of c-Jun N-Terminal Kinase and Apoptosis in Endothelial Cells Mediated by Endogenous Generation of Hydrogen Peroxide. Biological Chemistry, 2002, 383, 693-701.	1.2	32
123	X-Linked Inhibitor of Apoptosis Protein Is an Important Regulator of Vascular Endothelial Growth Factor–Dependent Bovine Aortic Endothelial Cell Survival. Circulation Research, 2008, 102, 896-904.	2.0	32
124	Mechanosensitive microRNA-181b Regulates Aortic Valve Endothelial Matrix Degradation by Targeting TIMP3. Cardiovascular Engineering and Technology, 2018, 9, 141-150.	0.7	32
125	An improved method to measure nitrate/nitrite with an NO-selective electrochemical sensor. Nitric Oxide - Biology and Chemistry, 2007, 16, 306-312.	1.2	30
126	Differences in valvular and vascular cell responses to strain in osteogenic media. Biomaterials, 2011, 32, 2885-2893.	5.7	30

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127	ZBTB46 is a shear-sensitive transcription factor inhibiting endothelial cell proliferation via gene expression regulation of cell cycle proteins. Laboratory Investigation, 2019, 99, 305-318.	1.7	30
128	8-Hydroxy-2-deoxyguanosine prevents plaque formation and inhibits vascular smooth muscle cell activation through Rac1 inactivation. Free Radical Biology and Medicine, 2012, 53, 109-121.	1.3	29
129	Mechanical Inhibition of RANKL Expression Is Regulated by H-Ras-GTPase. Journal of Biological Chemistry, 2006, 281, 1412-1418.	1.6	28
130	High glucose induced NF-κB DNA-binding activity in HAEC is maintained under low shear stress but inhibited under high shear stress: role of nitric oxide. Atherosclerosis, 2003, 171, 225-234.	0.4	27
131	Reversible Glutathiolation of Caspase-3 by Glutaredoxin as a Novel Redox Signaling Mechanism in Tumor Necrosis Factor-α–Induced Cell Death. Circulation Research, 2007, 100, 152-154.	2.0	27
132	Optimization of Isolation and Functional Characterization of Primary Murine Aortic Endothelial Cells. Endothelium: Journal of Endothelial Cell Research, 2003, 10, 103-109.	1.7	26
133	Laminar shear stress upregulates endothelial Ca ²⁺ -activated K ⁺ channels KCa2.3 and KCa3.1 via a Ca ²⁺ /calmodulin-dependent protein kinase kinase/Akt/p300 cascade. American Journal of Physiology - Heart and Circulatory Physiology, 2013, 305, H484-H493.	1.5	26
134	Identification, partial purification, and characterization of two guanosine triphosphate-binding proteins associated with insulin receptors Endocrinology, 1992, 131, 2855-2862.	1.4	25
135	Vascular Injury Involves the Overoxidation of Peroxiredoxin Type II and Is Recovered by the Peroxiredoxin Activity Mimetic That Induces Reendothelialization. Circulation, 2013, 128, 834-844.	1.6	25
136	Flow-dependent regulation of genome-wide mRNA and microRNA expression in endothelial cells in vivo. Scientific Data, 2014, 1, 140039.	2.4	25
137	Disturbed Flow Enhances Inflammatory Signaling and Atherogenesis by Increasing Thioredoxin-1 Level in Endothelial Cell Nuclei. PLoS ONE, 2014, 9, e108346.	1.1	25
138	X-linked inhibitor of apoptosis protein controls \hat{l}_{\pm} (sub>5 (/sub>-integrin-mediated cell adhesion and migration. American Journal of Physiology - Heart and Circulatory Physiology, 2010, 299, H300-H309.	1.5	24
139	The bone morphogenic protein inhibitor, noggin, reduces glycemia and vascular inflammation in <i>db/db</i> mice. American Journal of Physiology - Heart and Circulatory Physiology, 2013, 305, H747-H755.	1.5	24
140	Deep transcriptomic profiling reveals the similarity between endothelial cells cultured under static and oscillatory shear stress conditions. Physiological Genomics, 2016, 48, 660-666.	1.0	23
141	An insulin receptor peptide (1135-1156) stimulates guanosine 5′-[ĵ³-thio]triphosphate binding to the 67 kDa G-protein associated with the insulin receptor. Biochemical Journal, 1993, 294, 19-24.	1.7	21
142	Serum BMP-4 levels in relation to arterial stiffness and carotid atherosclerosis in patients with Type 2 diabetes. Biomarkers in Medicine, 2011, 5, 827-835.	0.6	21
143	Recent Progress in in vitro Models for Atherosclerosis Studies. Frontiers in Cardiovascular Medicine, 2021, 8, 790529.	1.1	21
144	Laminar shear stress inhibits lipid peroxidation induced by high glucose plus arachidonic acid in endothelial cells. American Journal of Physiology - Heart and Circulatory Physiology, 2008, 295, H1966-H1973.	1.5	20

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145	Redox-sensitive Akt and Src regulate coronary collateral growth in metabolic syndrome. American Journal of Physiology - Heart and Circulatory Physiology, 2009, 296, H1811-H1821.	1.5	20
146	Caveolin-1 is transiently dephosphorylated by shear stress-activated protein tyrosine phosphatase mu. Biochemical and Biophysical Research Communications, 2006, 339, 737-741.	1.0	19
147	Delivery of siRNA to Endothelial Cells In Vivo Using Lysine/Histidine Oligopeptide-Modified Poly(β-amino) Tj ETQq1	1 0.7843	 14 rgBT 19
148	Stable flow-induced expression of KLK10 inhibits endothelial inflammation and atherosclerosis. ELife, 2022, 11, .	2.8	19
149	A role for PYK2 in ANG II-dependent regulation of the PHAS-1-eIF4E complex by multiple signaling cascades in vascular smooth muscle. American Journal of Physiology - Cell Physiology, 2003, 285, C1437-C1444.	2.1	17
150	Endothelial metallothionein expression and intracellular free zinc levels are regulated by shear stress. American Journal of Physiology - Cell Physiology, 2010, 299, C1461-C1467.	2.1	17
151	Inorganic Phosphate Induces Mammalian Growth Plate Chondrocyte Apoptosis in a Mitochondrial Pathway Involving Nitric Oxide and JNK MAP Kinase. Calcified Tissue International, 2011, 88, 96-108.	1.5	17
152	Discovery of novel peptides targeting pro-atherogenic endothelium in disturbed flow regions -Targeted siRNA delivery to pro-atherogenic endothelium in vivo. Scientific Reports, 2016, 6, 25636.	1.6	17
153	Disturbed Flow Induces Atherosclerosis by Annexin A2-Mediated Integrin Activation. Circulation Research, 2020, 127, 1091-1093.	2.0	17
154	Targeted Intravenous Nanoparticle Delivery: Role of Flow and Endothelial Glycocalyx Integrity. Annals of Biomedical Engineering, 2020, 48, 1941-1954.	1.3	17
155	Strain Magnitude-Dependent Calcific Marker Expression in Valvular and Vascular Cells. Cells Tissues Organs, 2013, 197, 372-383.	1.3	16
156	Targeted Delivery of Antiâ€miRâ€₹12 by VCAM1â€Binding Au Nanospheres for Atherosclerosis Therapy. ChemNanoMat, 2016, 2, 400-406.	1.5	16
157	Conserved Gene Microsynteny Unveils Functional Interaction Between Protein Disulfide Isomerase and Rho Guanine-Dissociation Inhibitor Families. Scientific Reports, 2017, 7, 17262.	1.6	16
158	Hypoxia inducible factor $1\hat{l}_{\pm}$ inhibitor PX-478 reduces atherosclerosis in mice. Atherosclerosis, 2022, 344, 20-30.	0.4	16
159	Redox Going with Vascular Shear Stress. Antioxidants and Redox Signaling, 2011, 15, 1367-1368.	2.5	15
160	Disturbed flow: p53 SUMOylation in the turnover of endothelial cells. Journal of Cell Biology, 2011, 193, 805-807.	2.3	15
161	Omicsâ€based approaches to understand mechanosensitive endothelial biology and atherosclerosis. Wiley Interdisciplinary Reviews: Systems Biology and Medicine, 2016, 8, 378-401.	6.6	15
162	<i>Maturing EPCs into endothelial cells: may the force be with the EPCs</i> . Focus on "Fluid shear stress induces differentiation of circulating phenotype endothelial progenitor cells― American Journal of Physiology - Cell Physiology, 2012, 303, C589-C591.	2.1	14

#	Article	IF	Citations
163	Angiotensin type I receptor blockade in conjunction with enhanced Akt activation restores coronary collateral growth in the metabolic syndrome. American Journal of Physiology - Heart and Circulatory Physiology, 2011, 300, H1938-H1949.	1.5	13
164	Deletion of NoxO1 limits atherosclerosis development in female mice. Redox Biology, 2020, 37, 101713.	3.9	13
165	Combined LXR and RXR Agonist Therapy Increases ABCA1 Protein Expression and Enhances ApoAl-Mediated Cholesterol Efflux in Cultured Endothelial Cells. Metabolites, 2021, 11, 640.	1.3	13
166	miR-214 is Stretch-Sensitive in Aortic Valve and Inhibits Aortic Valve Calcification. Annals of Biomedical Engineering, 2019, 47, 1106-1115.	1.3	12
167	Micro-CT Technique Is Well Suited for Documentation of Remodeling Processes in Murine Carotid Arteries. PLoS ONE, 2015, 10, e0130374.	1.1	11
168	Insulin Stimulates Association of a 41-kDa G-Protein (GIR41) with the Insulin Receptor. Biochemical and Biophysical Research Communications, 1993, 196, 99-106.	1.0	10
169	Systems Analysis of the Role of Bone Morphogenic Protein 4 in Endothelial Inflammation. Annals of Biomedical Engineering, 2010, 38, 291-307.	1.3	10
170	Intimal cushions and endothelial nuclear elongation around mouse aortic branches and their spatial correspondence with patterns of lipid deposition. American Journal of Physiology - Heart and Circulatory Physiology, 2010, 298, H536-H544.	1.5	10
171	The flagellin-TLR5-Nox4 axis promotes the migration of smooth muscle cells in atherosclerosis. Experimental and Molecular Medicine, 2019, 51, 1-13.	3.2	10
172	Conditional Deoxyribozyme–Nanoparticle Conjugates for miRNA-Triggered Gene Regulation. ACS Applied Materials & Deoxyribozyme–Nanoparticle Conjugates for miRNA-Triggered Gene Regulation. ACS Applied Materials & Deoxyribozyme–Nanoparticle Conjugates for miRNA-Triggered Gene Regulation. ACS Applied Materials & Deoxyribozyme–Nanoparticle Conjugates for miRNA-Triggered Gene Regulation. ACS Applied Materials & Deoxyribozyme–Nanoparticle Conjugates for miRNA-Triggered Gene Regulation. ACS Applied Materials & Deoxyribozyme–Nanoparticle Conjugates for miRNA-Triggered Gene Regulation. ACS Applied Materials & Deoxyribozyme—Nanoparticle Conjugates for miRNA-Triggered Gene Regulation. ACS Applied Materials & Deoxyribozyme—Nanoparticle Conjugates for miRNA-Triggered Gene Regulation. ACS Applied Materials & Deoxyribozyme—Nanoparticle Conjugates for miRNA-Triggered Gene Regulation. ACS Applied Materials & Deoxyribozyme—Nanoparticle Conjugates for miRNA-Triggered Gene Regulation. ACS Applied Materials & Deoxyribozyme—Nanoparticle Conjugates for miRNA-Triggered Gene Regulation. ACS Applied Materials & Deoxyribozyme†(Nanoparticle Conjugates) Accordance (Nanoparticle Conj	4.0	10
173	Targeting mechanosensitive endothelial TXNDC5 to stabilize eNOS and reduce atherosclerosis in vivo. Science Advances, 2022, 8, eabl8096.	4.7	10
174	Vascular Proteomics Reveal Novel Proteins Involved in SMC Phenotypic Change: OLR1 as a SMC Receptor Regulating Proliferation and Inflammatory Response. PLoS ONE, 2015, 10, e0133845.	1.1	8
175	High glucose and palmitate increases bone morphogenic protein 4 expression in human endothelial cells. Korean Journal of Physiology and Pharmacology, 2016, 20, 169.	0.6	8
176	Conditional Antisense Oligonucleotides Triggered by miRNA. ACS Chemical Biology, 2021, 16, 2255-2267.	1.6	8
177	Hemodynamic Features in Stenosed Coronary Arteries: CFD Analysis Based on Histological Images. Journal of Applied Mathematics, 2013, 2013, 1-11.	0.4	7
178	Functional screening of mammalian mechanosensitive genes using Drosophila RNAi library– Smarcd3/Bap60 is a mechanosensitive pro-inflammatory gene. Scientific Reports, 2016, 6, 36461.	1.6	7
179	Tyrosine phosphorylation of phosphatase inhibitor 2. Journal of Cellular Biochemistry, 1995, 57, 415-422.	1.2	6
180	Emerging Role of IGF-1R in Stretch-Induced Neointimal Hyperplasia in Venous Grafts. Arteriosclerosis, Thrombosis, and Vascular Biology, 2007, 27, 1679-1681.	1.1	6

#	Article	IF	CITATIONS
181	Detection of Low Levels of Nitric Oxide Using an Electrochemical Sensor. Methods in Molecular Biology, 2011, 704, 81-89.	0.4	6
182	Special issue on mechanobiology and diseases. Biomedical Engineering Letters, 2015, 5, 159-161.	2.1	6
183	Focal Adhesion Kinase Activity and Localization is Critical for TNF-α-Induced Nuclear Factor-κB Activation. Inflammation, 2021, 44, 1130-1144.	1.7	6
184	Endothelial Poldip2 regulates sepsis-induced lung injury via Rho pathway activation. Cardiovascular Research, 2022, 118, 2506-2518.	1.8	6
185	[52] In vitro system to study role of blood flow on nitric oxide production and cell signaling in endothelial cells. Methods in Enzymology, 1999, 301, 513-522.	0.4	5
186	Biomechanical regulation of endothelial function in atherosclerosis., 2021,, 3-47.		5
187	Atorvastatin and blood flow regulate expression of distinctive sets of genes in mouse carotid artery endothelium. Current Topics in Membranes, 2021, 87, 97-130.	0.5	4
188	Novel Animal Models of Atherosclerosis. Biomedical Engineering Letters, 2015, 5, 181-187.	2.1	3
189	Is Endothelial Dysfunction a Therapeutic Target for Peripheral Artery Disease?: PRDM16 is going out on a limb. Circulation Research, 2021, 129, 78-80.	2.0	3
190	Hemodynamics and Mechanobiology of Endothelium. , 2010, , .		3
190	Hemodynamics and Mechanobiology of Endothelium. , 2010, , . Shear- and Side-dependent microRNAs and Messenger RNAs in Aortic Valvular Endothelium. , 2012, , .		3
		0.2	
191	Shear- and Side-dependent microRNAs and Messenger RNAs in Aortic Valvular Endothelium. , 2012, , . Isolation of Endothelial Cells from the Lumen of Mouse Carotid Arteries for Single-cell Multi-omics	0.2	3
191 192	Shear- and Side-dependent microRNAs and Messenger RNAs in Aortic Valvular Endothelium., 2012, , . Isolation of Endothelial Cells from the Lumen of Mouse Carotid Arteries for Single-cell Multi-omics Experiments. Journal of Visualized Experiments, 2021, , . Characterization of Poldip2 knockout mice: Avoiding incorrect gene targeting. PLoS ONE, 2021, 16,		3
191 192 193	Shear- and Side-dependent microRNAs and Messenger RNAs in Aortic Valvular Endothelium., 2012, , . Isolation of Endothelial Cells from the Lumen of Mouse Carotid Arteries for Single-cell Multi-omics Experiments. Journal of Visualized Experiments, 2021, , . Characterization of Poldip2 knockout mice: Avoiding incorrect gene targeting. PLoS ONE, 2021, 16, e0247261. Spatial control of robust transgene expression in mouse artery endothelium under ultrasound	1.1	3 3
191 192 193	Shear- and Side-dependent microRNAs and Messenger RNAs in Aortic Valvular Endothelium., 2012,,. Isolation of Endothelial Cells from the Lumen of Mouse Carotid Arteries for Single-cell Multi-omics Experiments. Journal of Visualized Experiments, 2021,,. Characterization of Poldip2 knockout mice: Avoiding incorrect gene targeting. PLoS ONE, 2021, 16, e0247261. Spatial control of robust transgene expression in mouse artery endothelium under ultrasound guidance. Signal Transduction and Targeted Therapy, 2022, 7,. Identification of Candidate MicroRNA as Pathological Markers of Pediatric Heart Transplant	7.1	3 3 3
191 192 193 194	Shear- and Side-dependent microRNAs and Messenger RNAs in Aortic Valvular Endothelium., 2012, , . Isolation of Endothelial Cells from the Lumen of Mouse Carotid Arteries for Single-cell Multi-omics Experiments. Journal of Visualized Experiments, 2021, , . Characterization of Poldip2 knockout mice: Avoiding incorrect gene targeting. PLoS ONE, 2021, 16, e0247261. Spatial control of robust transgene expression in mouse artery endothelium under ultrasound guidance. Signal Transduction and Targeted Therapy, 2022, 7, . Identification of Candidate MicroRNA as Pathological Markers of Pediatric Heart Transplant Rejection. Journal of Heart and Lung Transplantation, 2015, 34, S162. Editorial: Special Issue on Heart Valve Mechanobiology. Cardiovascular Engineering and Technology,	1.1 7.1 0.3	3 3 3 2

#	Article	IF	CITATIONS
199	Low and Unsteady Shear Stresses Upregulate Calcification Response of the Aortic Valve Leaflets. , 2011,		2
200	Bovine Caveolin-2 Cloning and Effects of Shear Stress on Its Localization in Bovine Aortic Endothelial Cells. Endothelium: Journal of Endothelial Cell Research, 2004, 11, 189-198.	1.7	1
201	Fibronectinâ€dependent cell adhesion is required for shearâ€dependent ERK activation. Korean Journal of Biological Sciences, 2004, 8, 27-32.	0.1	1
202	The atypical mechanosensitive microrna-712 derived from pre-ribosomal RNA induces endothelial inflammation and atherosclerosis. Atherosclerosis, 2014, 235, e40-e41.	0.4	1
203	Special Issue on Professor John M. Tarbell's Contribution to Cardiovascular Engineering. Cardiovascular Engineering and Technology, 2021, 12, 1-8.	0.7	1
204	Very late vasomotor responses and gene expression with bioresorbable scaffolds and metallic drugâ€eluting stents. Catheterization and Cardiovascular Interventions, 2021, 98, 723-732.	0.7	1
205	Calcification of Aortic Valve leaflets is Shear Dependent and Side-specific., 2012, , .		1
206	Oscillatory shear stress promotes endothelial cell migration and angiogenesis. FASEB Journal, 2006, 20, A289.	0.2	1
207	Laminar Shear Stress Upâ€regulates Endothelial CD73 Expression by Activating Calmodulinâ€dependent Kinase Kinase. FASEB Journal, 2010, 24, 784.16.	0.2	1
208	Identification of target proteins of shear stressâ€related miRNAs in endothelial cells. FASEB Journal, 2012, 26, 776.6.	0.2	1
209	Shear stress regulates endothelial NO synthase (eNOS) by the protein kinase A (PKA)-dependent mechanisms. , 0, , .		1
210	NITRIC OXIDE, FREE RADICALS AND CELL SIGNALLING IN CARDIOVASCULAR DISEASE. Biochemical Society Transactions, 1997, 25, 384S-384S.	1.6	0
211	OSCILLATORY SHEAR STRESS (OS) UPREGULATES CATHEPSIN EXPRESSION WHILE INHIBITING CYSTATIN C EXPRESSION IN ENDOTHELIAL CELLS (EC) - IMPLICATION IN ATHEROSCLEROSIS. Cardiovascular Pathology, 2004, 13, 155.	0.7	0
212	A Promoter Polymorphism Regulates NFKB1 Gene Transactivity in Human Endothelial Cells under Laminar Shear Stress. Medicine and Science in Sports and Exercise, 2006, 38, S4.	0.2	0
213	Differential Osteogenic Marker Expression by Human Vascular and Valvular Cells in Tissue-Engineered Collagen Constructs. , 2010, , .		0
214	Peroxiredoxins as Mechanosensitive Antioxidants in a Subcellularâ€Specific Manner. FASEB Journal, 2006, 20, A1453.	0.2	0
215	Laminar shear stress inhibits cathepsin L activity in endothelial cells (EC). FASEB Journal, 2006, 20, .	0.2	0
216	Low Magnitude and High Frequency Vibration Prevents Simulated Microgravity-Induced Decrease in a Bone Formation Response in Osteoblasts. , 2006, , .		0

#	Article	IF	Citations
217	Live Cell Detection of Specific Messenger RNA for Molecular Analysis of Plaque Formation., 2007,,.		0
218	Safety characteristics analysis of Korean standard communication protocol for railway signalling. WIT Transactions on the Built Environment, 2007, , .	0.0	0
219	Downâ€regulation of BMPâ€4 Expression in Coronary Arterial Endothelial Cells: Role of Shear Stress and the cAMP/PKA Pathway. FASEB Journal, 2008, 22, 1145.1.	0.2	O
220	Mechanical loading prevents decreased bone formation responses of osteoblasts by a bone morphogenic proteinâ€dependent mechanism. FASEB Journal, 2008, 22, 774.3.	0.2	0
221	Peroxiredoxin 1 is Upregulated by Laminar Shear Stress via Nrf2 Transcription Factor. FASEB Journal, 2008, 22, 964.5.	0.2	O
222	Angiopoietinâ€2 inhibition impairs blood flow recovery during hindlimb ischemia. FASEB Journal, 2008, 22, 746.5.	0.2	0
223	NO negatively regulates cell surface expression of CD73 in sheared endothelial cells. FASEB Journal, 2010, 24, 784.14.	0.2	0
224	Oral Tetrahydrobiopterin Treatment Prevents Accelerated Atherosclerosis Caused by Oscillatory Shear Stress. FASEB Journal, 2010, 24, lb565.	0.2	0
225	Intimal Thickening Sourced From Low Wall Shear Stress in Human Left Coronary Artery Was Observed by Optical Coherence Tomography. , $2011, \ldots$		0
226	Discovery of Side- and Shear-Dependent miRNAs and mRNAs in Human Aortic Valvular Endothelial Cells. , $2011, , .$		0
227	Abstract 40: Disturbed Flow Alters Genomewide DNA Methylation Patterns, Regulating Endothelial Gene Expression and Atherosclerosis. Arteriosclerosis, Thrombosis, and Vascular Biology, 2014, 34, .	1.1	0
228	Disturbed Blood Flow induces Arterial Stiffening Through Thrombospondinâ€1. FASEB Journal, 2018, 32, 143.1.	0.2	0
229	Role of Biomechanical Stress and Mechanosensitive miRNAs in Calcific Aortic Valve Disease. Contemporary Cardiology, 2020, , 117-135.	0.0	0
230	Abstract 17221: Stable Flow-Induced Expression of KLK10 Inhibits Endothelial Inflammation and Atherosclerosis. Circulation, 2020, 142, .	1.6	0